TO: ALL HOLDERS OF RUDDER ASSEMBLY OVERHAUL MANUAL, 55-40-10

REVISION NO. 7, DATED JUL 1/08

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage	IPL	L/Overhaul
Replaced 65-53620-( ) fairings with 65C13849-( ) fairings as specified in Service Bulletin 737-27-1252						X						X	

RUDDER ASSEMBLY

55-40-10

BOEING P/N 65-73788-1 thru -7, -501 thru -504
65-75339-1, -14 thru -16
65-75957-1, -2

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30782	Feb 15/69
		PRR 31282	Feb 15/69
55-1010		PRR 31527	Mar 10/71
24-1006		PRR 31558	Mar 10/71
55-1017			Dec 25/72
23-1009		PRR 32121-3	Mar 25/73
		MC 3430	Dec 25/75
27-1099		PRR 32941	Jul 5/80
27-1107			Jul 5/82
		PRR 33191	Jul 5/83
27-1252	55-6	PRR 35436-R	Jul 1/08
27-1252	55-6	PRR 35005-272RS	Jul 1/08

LIST OF EFFECTIVE PAGES

* Indicates pages revised, added or deleted in latest revision
F Indicates foldout pages - print one side only

	PAGE	DATE		PAGE	DATE		PAGE	DATE
55-40-10				1116	Jul 5/81			
*	T-1	Jul 1/08		1117	Jul 1/98			
	T-2	BLANK		1118	Jul 5/81			
*	LEP-1	Jul 1/08	*	1119	Jul 1/08			
	LEP-2	BLANK		1120	Jul 1/98			
	T/C-1	Feb 15/69	*	1121	Jul 1/08			
	T/C-2	BLANK		1122	BLANK			
	1	Jul 5/81						
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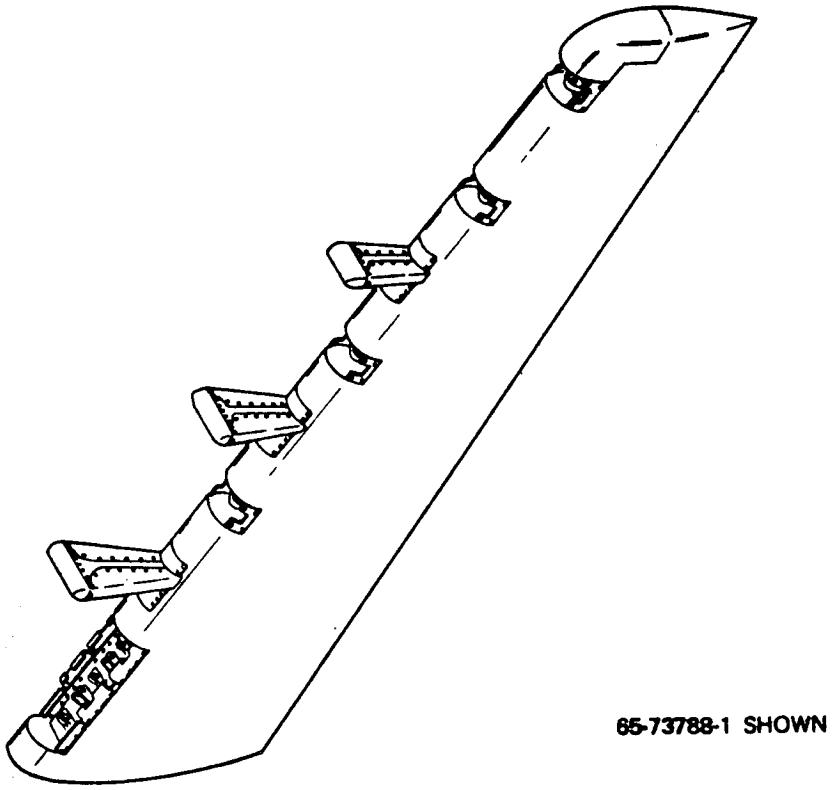
RUDDER ASSEMBLY

Boeing Part Numbers: 65-73788-1 thru -7, -501 thru -504;
65-75339-1, -14, -15, -16; 65-75957-1, -2



Rudder Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

   A. The rudder is basically an aluminum frame structure, made up of a front spar with chordwise ribs. This framework is covered with fiberglass reinforced plastic honeycomb skin panels. Internal areas of the structure are accessible through access doors, strategically placed on the right side of the assembly. The rudder is attached to the rear spar of the vertical stabilizer with seven hinge assemblies mounted on the front spar. These hinge assemblies are fabricated from cast aluminum alloy, with steel roller bearings.

B. The completely assembled rudder is balanced about the hinge centerline. Three mass balance weights are installed on the front spar to effect a nominal balance. This balance is adjusted and refined to a final perfect balance by installation of a group of small weights on the bottom balance weight support assembly.

2. Operation

A. The rudder is operated hydraulically to control the yaw attitude of the airplane.

DISASSEMBLY

1. Place rudder in a suitable holding fixture and disassemble as follows:

A. If installed, remove decoupled static dischargers (22, figure 1101) from retainers by removing setscrew.

NOTE: Do not remove retainers (11 and 15) unless repair or replacement is necessary.

B. Remove tip. (See figure 1102.)

(1) Remove bolts (2). Remove fairing (1) and shims (3).

(2) Remove bolts (5). Remove fairing (4).

(3) Remove bolts (7). Remove fairing (6).

C. Remove access doors and covers. (See figure 1103.)

(1) Remove door assembly (1) by removing bolts (2).

(2) Remove covers (3 and 4) by removing bolts (5).

(3) Remove covers (6 and 7) by removing bolts (8).

(4) Remove covers (9 and 10) by removing bolts (11).

(5) Remove covers (12 and 13) by removing bolts (14).

(6) Remove fairing (15) by removing bolts (16). If P/N 65-53734-2 is used, remove fairing (27) also by removing two bolts (28).

(7) Remove fairing (17) by removing bolts (18).

(8) Remove fairing (19) by removing bolts (20).

(9) Remove fairing (21) by removing bolts (22). If P/N 65-53734-3 is used, remove fairing (27) also by removing two bolts (28).

(10) Remove bolts (24). Remove fairing (23).

(11) Remove bolts (26). Remove fairing (25).

(12) Remove bolts (30 and 31) and skin (29); or remove bolts (48) and skin assembly (47).

(13) Remove bolts (33 and 34) and skin (32), if applicable.

(14) Remove bolts (36 and 37). Remove skin (35).

(15) Remove bolts (39 and 40). Remove skin (38).

(16) Remove bolts (42 and 43). Remove skin (41).

(17) Remove bolts (45 and 46). Remove skin (44).

D. Remove bottom balance weights and support, if applicable. (See figure 1104.)

NOTE: Support (23) and attaching parts are shown for reference only. Do not remove unless replacement is necessary.

(1) Remove fairing skins (1 and 2) by removing bolts (3).

(2) Remove nuts (6) and bolts (7, 8, 9, and 10). Remove balance weight (4), mass balance weight (5), and shims (11).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(3) Remove nuts (13), washers (14), and bolts (15 through 20). Remove support fitting assembly (12) and shims (21 and 22).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(4) Remove balance weights (30) by removing bolts (31).

NOTE: Record number of weights removed from each location. Same number of weights must be returned to same position when rudder is reassembled.

E. Remove center balance weight and support. (See figure 1105.)

NOTE: Support (19) and attaching hardware are shown for reference only. Do not remove unless replacement is necessary.

(1) Remove bolts (3). Remove fairing skins (1 and 2).

(2) Remove nuts (5) and bolts (6, 7, and 8). Remove balance weight (4) and shims (9).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(3) Remove nuts (11), washers (12), and bolts (13, 14, 15, and 16). Remove support assembly (10) and shims (17 and 18).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(4) If installed, remove balance weights (26) by removing bolts (27).

NOTE: Record number of weights removed from each location. Same number of weights must be returned to same position when rudder is reassembled.

F. Remove top balance weight and support. (See figure 1106.)

NOTE: Support (20) and attaching hardware are shown for reference only. Do not remove unless replacement is necessary.

(1) Remove bolts (3 and 4). Remove fairing skins (1 and 2).

(2) Remove nuts (6) and bolts (7 and 8). Remove balance weight (5) and shims (9).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(3) Remove nuts (11), washers (12), and bolts (13, 14, 15, 16, and 17). Remove support assembly (10) and shims (18 and 19).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

G. Remove attach fittings. (See figure 1107.)

NOTE: Support fitting assemblies (24 and 29) and their components, together with attaching hardware, are shown for reference only. Do not remove unless replacement is necessary.

(1) Remove bolts (5) and washers (6). Remove hinge fitting assemblies (1) and shims (7).

NOTE: Measure and record thickness of shims for fabrication of new shims if replacement is necessary.

(2) Remove bolts (12) and washers (13). Remove hinge fitting assembly (8) and shim (14).

NOTE: Measure and record thickness of shim for fabrication of new shim if replacement is necessary.

(3) Remove bolts (22) and washers (23). Remove thrust hinge fitting assembly (15).

(4) Disassemble thrust hinge fitting assembly made up of cap (16), base (17), nuts (18), bolts (19), washers (20), and bearing (21).

CAUTION: CAP (16) AND BASE (17) MAKE UP A MATCHED ASSEMBLY. TAG PARTS AS SUCH AND KEEP TOGETHER.

CLEANING

1. General

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

      NOTE: Exterior skin panels are fiberglass reinforced plastic.

   B. Remove stubborn accumulations of dirt with a stiff-bristle brush. Do not use a metallic brush.

   C. Dry parts thoroughly with clean, lint-free cloth, or with clean, dry air.

2. Bearings

   A. Clean all bearings as directed in 20-30-01, Cleaning and Relubricating Antifriction Bearings.

3. Clean exterior skin panels as follows:

   A. Remove greases and other contaminants by scrubbing with clean cheesecloth saturated with solvent, Series 83 (SOPM 20-30-83). Wipe surface dry with clean cheesecloth.

      CAUTION: DO NOT ABRADE GLASS FIBER REINFORCEMENT.

   B. Remove residual coatings and surface roughness by hand sanding surface with 240 grit or finer abrasive paper. Remove sanding dust per step 3.A.

INSPECTION/CHECK

1. Visual Checks

A. Examine all metal parts for pits, scratches, cracks, corrosion, and damage, using strong light and minimum of 10-power magnification.

B. Examine all bearing, bushing and bolt holes for excessive or eccentric wear.

C. Examine internal areas of basic rudder assembly for loose fasteners and corrosion.

D. Examine all painted and plated surfaces for blisters and flaking.

E. Check honeycomb panels for evidence of delamination, internal moisture, scratches, and contour defects.

(1) Tap surface of honeycomb structure lightly with a coin or plastic rod. Go over entire surface. Normal structure will produce a solid, metallic sound; delaminated areas will produce a dull, hollow sound; and areas containing moisture will produce a dull, solid sound.

(2) Examine areas suspected of containing moisture radiographically to determine extent of damage.

(3) Determine contour defects by laying a straightedge across surface of panel. Raised areas indicate delamination. Warp of panels also can be determined with the straightedge.

(4) Examine edges of panels carefully for cuts and abrasions. Delamination starts very easily from damage to an edge member of a honeycomb panel.

F. Check decoupled static dischargers (22, figure 1101).

NOTE: The parts identified in this procedure are installation items and may not be with the assembly during overhaul.

(1) Check that dischargers are intact and secure on retainers.

(2) Check for lightning damage as evidenced by burning and roughening of black conductive coating on dischargers, and pitting of retainers (11 or 15).

(3) Check for broken, bent or blunted tungsten pins.

(4) Check for excessive erosion of discharger coating or peeling of tip cap. Leading edge erosion should not extend back more than one third the width of discharger.

(5) Check that electrical resistance between discharger pin and airplane structure is between 5 and 100 megohms.

2. Special Checks

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

(1) Penetrant check -- fitting (12, figure 1104) and support (23), supports (10 and 19, figure 1105), supports (10 and 20, figure 1106), and fittings (1, 25 and 30, figure 1107) per 20-20-02, Penetrant Methods of Inspection.

(2) Magnetic particle check -- fitting (9, figure 1107), cap (16) and base (17) per 20-20-01, Magnetic Particle Inspection.

REPAIR

1. Repair

   A. Remove minor scratches and corrosion from structural surfaces by polishing lightly with abrasive cloth, No. 200 grit or finer. Refinish as necessary for protection against corrosion.

   B. For repairs to fiberglass reinforced plastic honeycomb panels, refer to the Boeing 737 Structural Repair Manual, D6-15565, 51-40-09.

   C. For repairs to plastic glass fabric parts (4 and 6, Fig. 1102; 3 and 4, Fig. 1103; 1 and 2, Fig. 1104, 1105, and 1106) refer to the Boeing 737 Structural Repair Manual, 51-40-07 and 51-40-08.

   D. For general structural repairs, refer to the Boeing Structural Repair Manual, 51-00, Structures - General, and 51-10, Structural Repairs - General.

2. Refinish

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

   A. Restore defective finish as necessary on listed parts:

      (1) Fairing (1, Fig. 1102) -- Apply SRF-2.30 all over, followed by F-14.9863-707 on outer surface only. Material: Al Alloy.

      (2) Fairing (4 and 6, Fig. 1102) -- Apply SRF-2.30 all over. On outer surface only, apply SRF-14.672, followed by SRF-14.68, followed by F-19.46 exterior surface. Interior overspray acceptable. Omit primer in all bolt countersinks and a minimum of every third rivet countersinks. Material: Al Alloy.

      (3) Door assembly (1, Fig. 1103) -- Apply SRF-2.30 all over. Material: Al Alloy.

      (4) Cover (3 and 4, Fig. 1103) -- Apply SRF-2.30 all over. On outer surface only, apply SRF-14.672, followed by SRF-14.68, followed by SRF-14.9815, color to suit operator. Material: Al Alloy.

      (5) Cover (6, 7, 9, 10, 12, and 13, Fig. 1103) -- Apply SRF-2.30 all over, followed by SRF-14.9625 on outer surface only. Material: Al Alloy.

      (6) Fairing (P/N 65-53620-2, -3, -8, -9, -10, -11, -12, -13, and -14, Fig. 1103) -- Apply SRF-2.30 all over, followed by SRF-14.9625 on outer surface only. Material: Al alloy.

(7) Fairing (P/N 65-53620-19, -20, -21, -23, and -24, Fig. 1103) -- Apply F-17.01 all over, followed by F-20.02 on interior surface and edges, followed by F-19.46 on outer surfaces. Interior overspray acceptable. Material: Al alloy.

(8) Skin (29, 32, 35, 38, 41, and 44, Fig. 1103) -- Apply SRF-14.672 all over followed by SRF-14.68 exterior surface only followed by F-19.46 exterior surface only. Interior overspray acceptable. Material: Al Alloy.

(9) Fairing skin (1 and 2, Fig. 1104, 1105, and 1106) -- Apply SRF-2.30 all over. On outer surface only, apply SRF-14.672, followed by SRF-14.68, followed by SRF-14.9815, color to suit operator. Material: Al Alloy.

(10) Balance weight (4, Fig. 1104, 1105, and 5, Fig. 1106) -- Apply F-17.09 all over, followed by F20.03 interiour surface and edges on surfaces that fay with fairings and supports followed by F-19.46 exterior surface. Material: CRES 347

(11) Support fitting assembly (12, Fig. 1104; 10, Fig. 1105; 10, Fig. 1106) -- Apply SRF-2.114, followed by SRF-12.63 on all surfaces. Material: Al Alloy.

(12) Hinge fitting (2, Fig. 1107) -- Apply SRF-2.30 all over except in bearing bore. Material: Al Alloy.

(13) Fitting (9, Fig. 1107) -- Apply SRF-1.285 all over except in bearing bore and grease fitting hole. Apply F-1.1923 in bearing bore. Hold inside diameter to between 1.4365 and 1.4370 inches after plating. Material: Steel AMS 4340, 180-200 ksi.

(14) Cap and base (16 and 17, Fig. 1107) -- Apply F-1.1923 in bearing bore and on faying surfaces between cap and base. Hold inside diameter dimension of bearing bore to 1.5615 to 1.5620 inches after plating. Material: Steel AMS 4340, 180-200 ksi.

NOTE: Cap and base are a matched set. Refinish together.

B. Touch up interior surfaces of basic assembly as necessary with primer, BMS 10-11, type 1.

C. Touch up exterior surfaces of rudder skin panels as follows:

(1) Rudder assemblies with flame sprayed aluminum surface -- Repair flame sprayed aluminum coatings per 737 Structural Repair Manual, Document D6-15565, 51-40-09.

(2) Rudder assemblies with painted exterior surfaces -- Apply F-14.672 plus SRF-14.68 plus F-19.46 to exterior surface, followed by exterior decorative paint to suit individual operator.

NOTE: Interior overspray of F-19.46 acceptable.

3. Replacement

A. Replace all parts worn or damaged beyond simple repair.

B. Replace damaged shims (11, 21, and 22, Fig. 1104; 9, 17, and 18, Fig. 1105; 9, 18, and 19, Fig. 1106; 7 and 14, Fig. 1107) as follows:

(1) Adjust thickness of new basic shim to dimension recorded when shim was removed by removing 0.003-inch laminations.

(2) Drill or punch holes through shim to match holes in adjacent parts.

(3) Deburr and coat shim with primer, BMS 10-11, type 1.

C. Replace worn bushings (26, 27, 33, and 34, Fig. 1107) as follows:

(1) Press old bushing out of housing with a mandrel.

(2) Coat new bushing with primer, BMS 10-11, type 1, and press bushing into housing while primer is wet. Seat shoulder firmly.

(3) Machine holes in bushings as follows:

(a) Bushings (26 and 27) -- Line machine to 0.5620- to 0.5625-inch diameter.

(b) Bushing (33) -- Machine to 0.6245- to 0.6250-inch diameter.

(c) Bushing (34) -- Machine to 0.8735- to 0.8745-inch diameter.

(4) Install wear plate (27A, Fig. 1107) under flange of bushing (27) with faying surface seal of BMS 5-95.

D. Replace defective bearings (3 and 10, Fig. 1107) as follows:

(1) Remove bearing (3 or 10) as shown in 20-50-03.

(2) Install bearing (3 or 10) in hinge fitting (1 or 9), respectively, and ball stake as shown in 20-50-03 and Fig. 2.

CAUTION: MANUAL CHECKING OF THE BEARING SHALL BE ACCOMPLISHED WITH FINGERS ONLY WITHOUT THE ASSISTANCE FROM TOOLS.

(3) After installing the bearing, it shall be possible to manually rotate the inner race continuously in either direction and to manually misalign the races of the bearing to either side at any position.

NOTE: A tendency to stick shall not be cause for rejection provided that rotation or misalignment can be maintained in one direction continuously through the tight spot.

E. If bonding jumper assembly (11, Fig. 1101) is replaced, install new bonding jumper assembly. Check for electrical resistance of 0.1 ohm or less.

F. If decoupled static dischargers (22, Fig. 1101) require replacement, remove setscrew securing discharger to retainer and install replacement in retainer. Take care to avoid damaging setscrew.

G. Replace decoupled static discharger retainers (11 or 15, Fig. 1101).

(1) Remove retainers as follows:

(a) Remove rivets (12 and 13) and carefully peel retainer (11) from surface.

CAUTION: TAKE CARE TO AVOID DAMAGE TO SURFACE.

(b) Remove rivets (20 and 21) and screw (19) attaching strap (16 or 18) to rudder structure.

(c) Carefully peel strap (16 or 18) and attached retainer from surface.

CAUTION: TAKE CARE TO AVOID DAMAGE TO SURFACE.

(d) Remove rivets (17) and pry or peel retainer from strap.

(2) Remove adhesive residue from strap and surface with plastic or wooden scraper and clean cloth dampened with solvent, Series 95 (SOPM 20-30-95).

(3) Check skin surface and strap (16) for corrosion. Remove corrosion, if present, by polishing with abrasive cloth, 200-grit or finer.

(4) Apply chemical film treatment, Alodine or Iridite, to skin or strap surface followed by one coat of primer, BMS 10-11, type 1, in faying surface area.

(5) Clean faying surfaces of retainer (11 or 15) and strap (16) with solvent, Series 95 (SOPM 20-30-95) applied with clean cloth. Wipe off solvent before it evaporates.

(6) Apply a corrosion protection faying surface seal of sealant, BMS 5-95, about 0.01 inch thick, to faying surface of retainer (11 or 16).

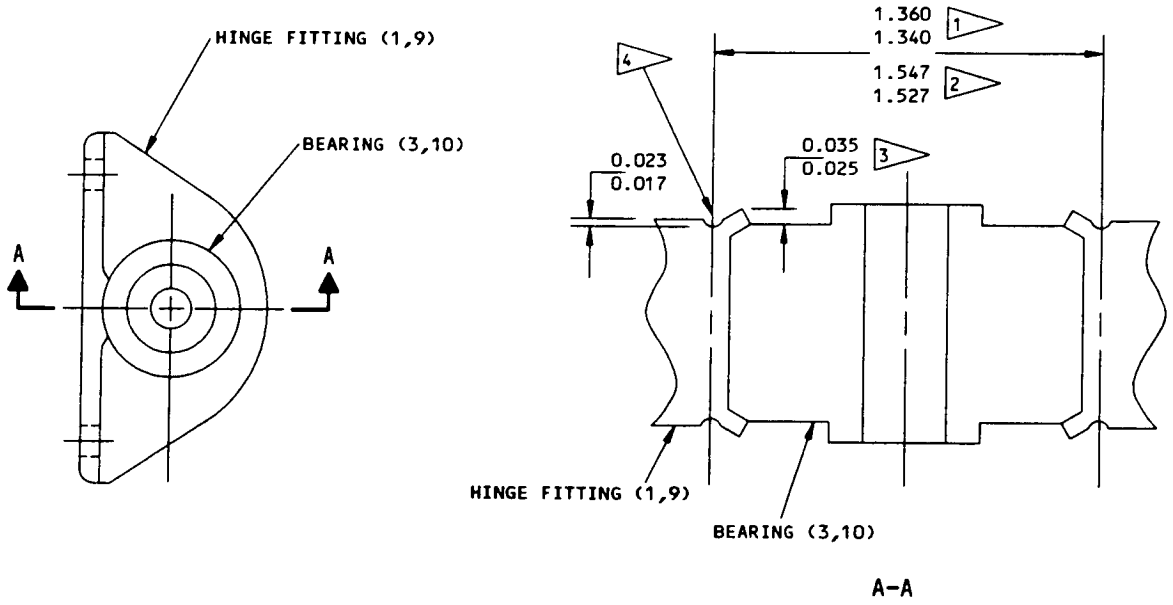
(7) Install retainer (11) on rudder using rivets (12 and 13).

(8) Install retainer (15) on strap (16) using rivet (17).

(9) Bond strap (16) to rudder trailing edge skin with adhesive per 20-50-12, using type 44 adhesive. Align rivet holes in strap with mating holes in structure.

(10) Install rivets (20 and 21) and screw (19).

(11) Install dischargers (22) in retainers (11 and 15).



1> HINGE FITTING ASSEMBLY, P/N 69-40300-1

2> HINGE FITTING ASSEMBLY, P/N 69-41882-1

3> BEFORE STAKING

4> 0.094-0.100 SPHERICAL RADIUS BALL. BALL STAKE 4 POINTS FOR 1> AND 5 POINTS FOR 2> BOTH SIDES OF THE FITTING EQUALLY SPACED ±0.03 INCH. THE BEARING BORE AND STAKING MUST BE CONCENTRIC WITHIN 0.010 INCH.

69-40300-1
69-41882-1

Ball Staking Requirements
Figure 2

(12) Check that electrical resistance between discharger pin and airplane structure is between 5 and 100 megohms.

4. Materials

NOTE: Use listed materials or equivalent substitutes.

A. Adhesive -- type 44, (Ref 20-50-12

B. Solvent – Series 95 (Ref 20-30-95)

C. Primer -- BMS 10-11, type 1, BMS 10-79, type 2 under decorative enamel (F-19.46)

D. Sealant -- BMS 5-95

ASSEMBLY

1. Place basic rudder in a suitable holding fixture and build up as follows:

   A. Install attach fittings. (See figure 1107.)

      (1) Assemble cap (16), base (17), bearing (21), bolts (19), washers (20), and nuts (18) to make up thrust hinge fitting assembly (15).

      (2) Tighten nuts (18) within torque range of 220 to 360 pound-inches.

      (3) Install thrust hinge fitting assembly (15) on front spar with bolts (22) and washers (23).

      (4) Locate hinge fitting assembly (8) and laminated shim (14). Install bolts (12) and washers (13).

      (5) Locate hinge fitting assemblies (1) and laminated shims (7) in five places. Install bolts (5) and washers (6).

      (6) Tighten bolts (5) within torque range of 70 to 80 pound-inches.

   B. Install top balance weight and support. (See figure 1106.)

      (1) Locate support assembly (10) and shims (18 and 19). Install bolts (13, 14, 15, 16, and 17), washers (12), and nuts (11).

      (2) Locate balance weight (5) and shims (9). Install bolts (7 and 8) and nuts (6).

      (3) Locate fairing skins (1 and 2). Install bolts (3 and 4).

   C. Install center balance weight and support. (See figure 1105.)

      (1) Locate support assembly (10) and shims (17 and 18). Install bolts (13, 14, 15, and 16), washers (12), and nuts (11).

      (2) If required, install balance weights (26) on support fitting assembly (10) with bolts (27).

          NOTE: Install same number of weights in same locations noted when weights were removed.

      (3) Locate balance weight (4) and shims (9). Install bolts (6, 7, and 8) and nuts (5).

      (4) Locate fairing skins (1 and 2). Install bolts (3).

D. Install bottom balance weights and support. (See figure 1104.)

(1) Locate support fitting assembly (12) and shims (21 and 22). Install bolts (15, 16, 17, 18, 19, and 20), washers (14) and nuts (13).

(2) Install balance weights (30) on support fitting assembly (12) with bolts (31).

NOTE: Install same number of weights in same locations recorded when weights were removed.

(3) Locate mass balance weight (5), balance weight (4), and shims (11). Install bolts (7, 8, 9, and 10) and nuts (6).

(4) Locate fairing skins (1 and 2). Install bolts (3).

E. Install access doors and covers. (See figure 1103.)

(1) Install 18 door assemblies (1) with bolts (2).

(2) Install covers (3 and 4) with bolts (5).

(3) Install covers (6 and 7) with bolts (8).

(4) Install covers (9 and 10) with bolts (11).

(5) Install covers (12 and 13) with bolts (14).

(6) Locate fairing (15). Install bolts (16). If fairing P/N 65-53620-2 is used, install fairing (27) also with two bolts (28).

(7) Install fairing (17) with bolts (18). Fill the gap between the fairing and rudder with BMS 5-95 sealant.

(8) Install fairing (19) with bolts (20).

(9) Install fairing (21) with bolts (22). If fairing, P/N 65-53620-3 is used, install fairing (27) also with two bolts (28).

(10) Install fairing (23) with bolts (24). Fill the gap between the fairing and rudder with BMS 5-95 sealant.

(11) Install fairing (25) with bolts (26).

(12) Locate skin (29) and install bolts (30 and 31); or locate skin assembly (47) and secure with bolts (48).

(13) Locate skin (32) and install bolts (33 and 34), if applicable.

(14) Locate skin (35). Install bolts (36 and 37).

(15) Locate skin (38). Install bolts (39 and 40).

(16) Locate skin (41). Install bolts (42 and 43).

(17) Locate skin (44). Install bolts (45 and 46).

F. Build up tip (Fig. 1102)

(1) Install fairing (6) with bolts (7).

(2) Install fairing (4) with bolts (5).

(3) Locate fairing (1) and shims (3). Install bolts (2).

G. Lubrication

(1) Inject grease through lubrication fittings (4, 11, and 17A, Fig. 1107).

(2) Coat surfaces of all bearings and bushings with grease.

2. Balancing

A. Check balance of completed rudder assembly, and rebalance as necessary. Refer to 51-80-07, the Boeing 737 Structural Repair Manual.

3. Material

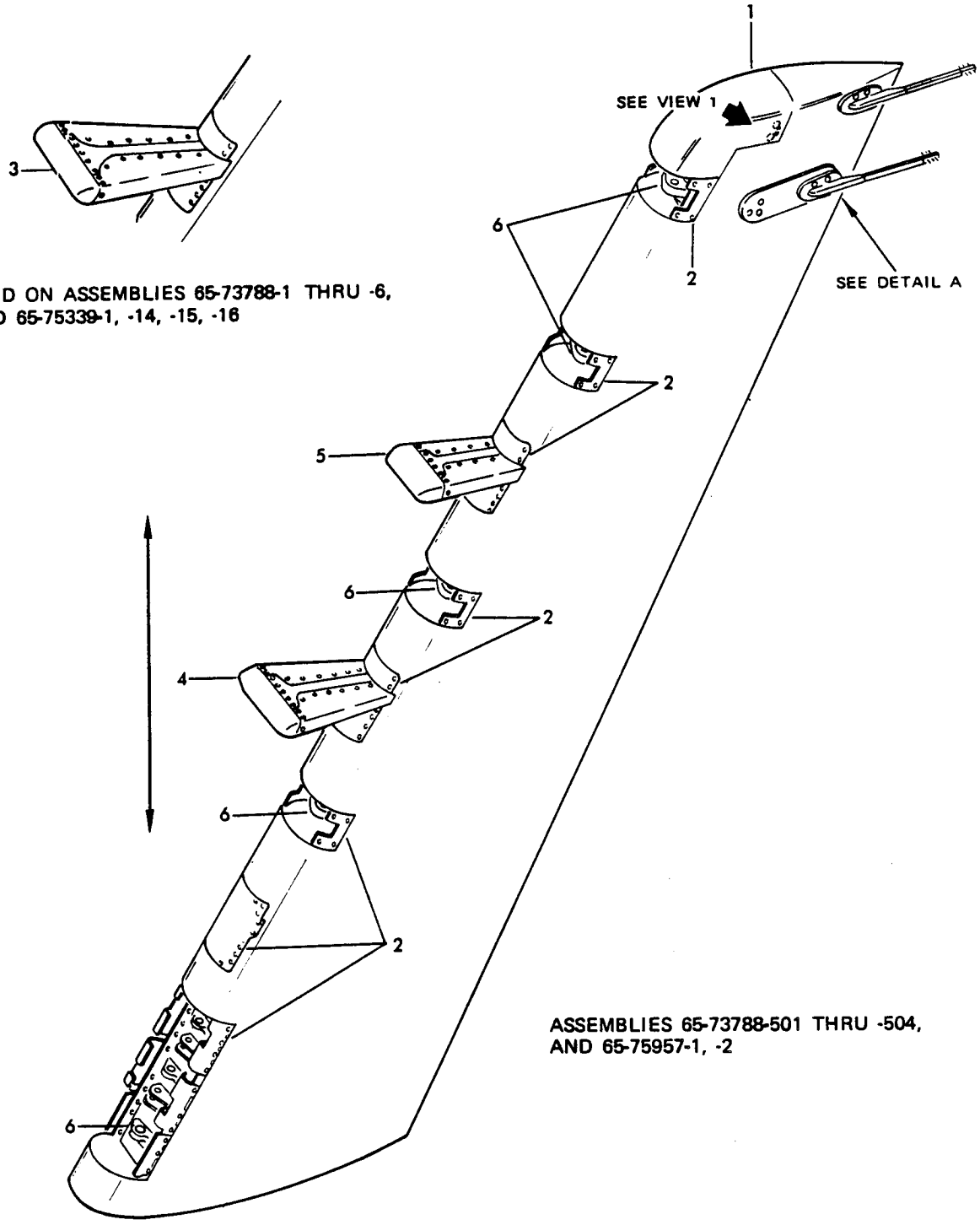
A. Grease -- Specification MIL-G-23827

STORAGE INSTRUCTIONS

1. Wrap or cover entire assembly with nonabsorbent material.

2. Store assembly in a cool, dry area, preferably humidity controlled. Place where it will not be moved frequently and handled roughly.

3. For further storage instructions, refer to Subjects 20-70-01, "Protection, Storage, and Handling of Airplane Components," and 20-44-02, "Temporary Protective Coatings."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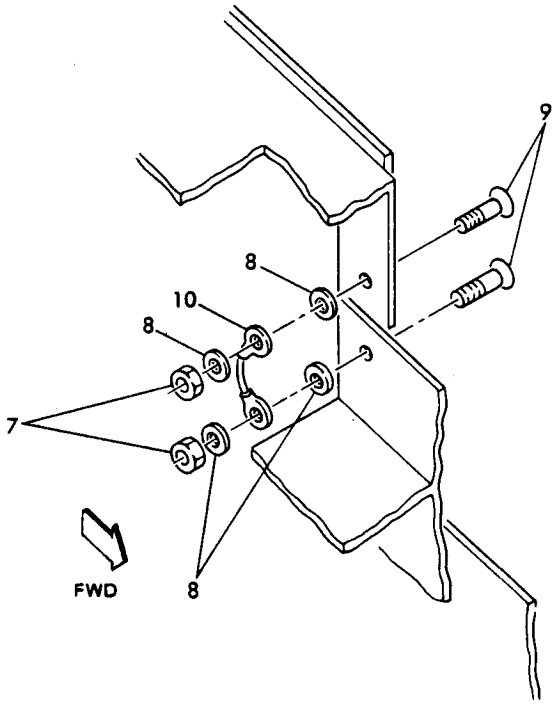
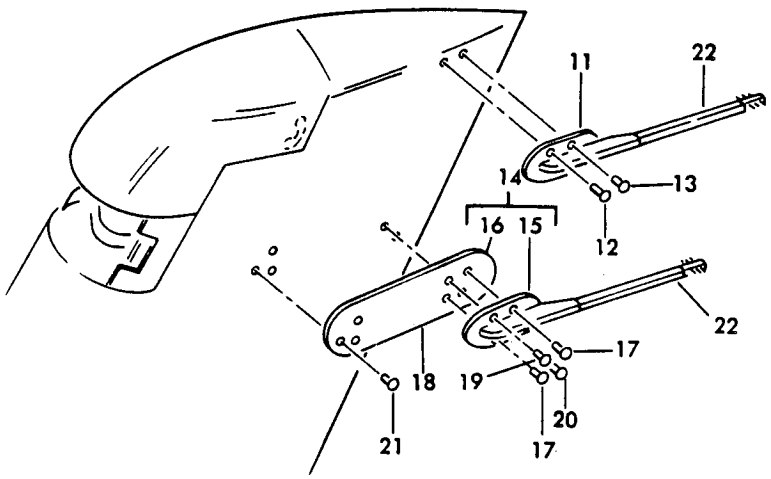
6
USED ON ASSEMBLIES 65-73788-1 THRU -6,
AND 65-75339-1, -14, -15, -16
ASSEMBLIES 65-73788-501 THRU -504,
AND 65-75957-1, -2



VIEW 1



DETAIL A

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-73788-1		RUDDER ASSY	A	RF
	65-73788-2		RUDDER ASSY	B	RF
	65-73788-3		RUDDER ASSY	C	RF
	65-73788-4		RUDDER ASSY	D	RF
	65-73788-5		RUDDER ASSY	E	RF
	65-73788-6		RUDDER ASSY	F	RF
	65-73788-7		RUDDER ASSY	G	RF
	65-73788-501		RUDDER ASSY	H	RF
	65-73788-502		RUDDER ASSY	I	RF
	65-73788-503		RUDDER ASSY	J	RF
	65-73788-504		RUDDER ASSY (SB 55-1010)	K	RF
	65-75339-1		RUDDER ASSY	L	RF
	65-75339-14		RUDDER ASSY	M	RF
	65-75339-15		RUDDER ASSY	N	RF
	65-75339-16		RUDDER ASSY	O	RF
	65-75957-1		RUDDER ASSY (SB 55-1010)	P	RF
	65-75957-2		RUDDER ASSY (SB 55-1010)	Q	RF
1			. RUDDER TIP BUILDUP (FIG. 1102)		
2			. ACCESS DOORS AND COVERS (FIG. 1103)		
3	65-53610-1		. BALANCE WT INST, LWR (FIG. 1104) (PRE SB 55-1010)	A-FL-O	1
4	65-53611-1		. BALANCE WT INST, CTR (FIG. 1105)	A-FK-O	1
4	65-53611-501		. BALANCE WT INST, CTR (FIG. 1105) (POST SB 55-1010)	G-JPQ	1
5	65-53612-1		. BALANCE WT INST, TOP (FIG. 1106)		1
6	65-47600-1		. FRONT SPAR INST (FIG. 1107)	A-FK-Q	1
6	65-47600-502		. FRONT SPAR INST (FIG. 1107)	G-J	1
7	BACN10JC08		. NUT		2
8	AN960PD8		. WASHER		4
9	BACB30LU2-4		. BOLT		2
10	BACJ40AB20-2		. JUMPER ASSY, BONDING (SB 24-1006)		1
11	610-1009		. RETAINER, V08935 *[1]		1
11	65-47648-510		. RETAINER (SB 23-1009)		1
12	BACR15DJ5-2		. RIVET, BLIND		1
13	MS20426D5		. RIVET		1
14	65-47648-508		. RETAINER - STRAP ASSY (SB 23-1009)		1
15	65-47648-510		. . RETAINER		1
16	65-47648-509		. . STRAP (REPLS 65-47648-31)		1
17	MS20426A4-2		. . RIVET		2
18	65-47648-31		. STRAP *[1](REPLD BY 65-47648-509)		1

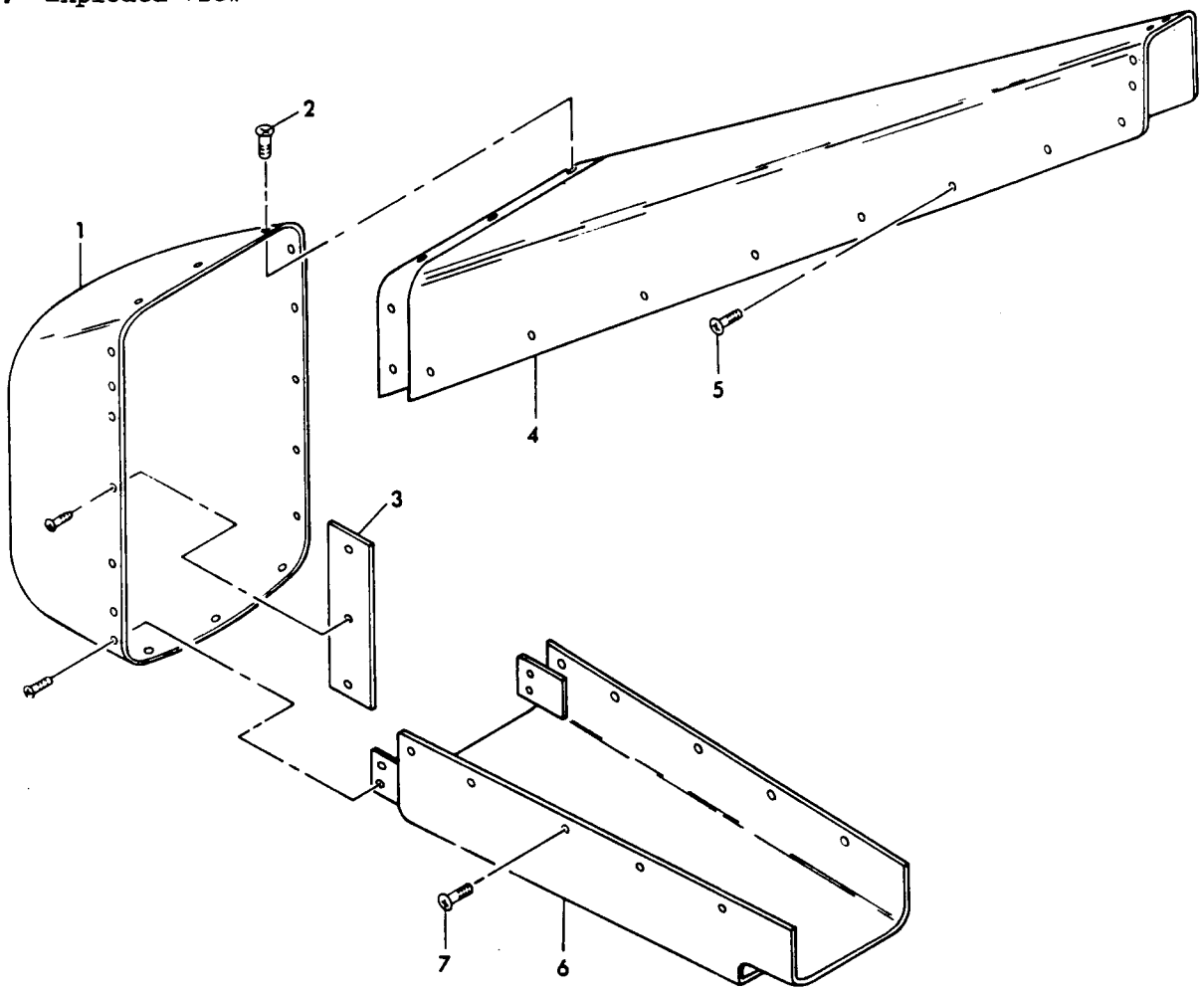
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
19	NAS514P632-5		. SCREW		1
20	MS20426A4		. RIVET		1
21	NAS1399MW5-3		. RIVET, Blind		3
			INSTALLATION ITEMS		
22	610-1011		DISCHARGER, V08935 (OPTIONAL TO 610D1B)		2
22	610D1B		DISCHARGER, V08935 (OPTIONAL TO 610-1011)		2
22	2-13S		DISCHARGER *[2](OPTIONAL TO 610-1011 AND 610D1B)		2

*[1] Limited usage
*[2] Chelton Electrostatics Ltd., Marlow, Buckinghamshire, England

VENDORS

V08935 GRANGER ASSOCIATES, 1360 WILLOW ROAD, MENLO PARK, CALIFORNIA 94025

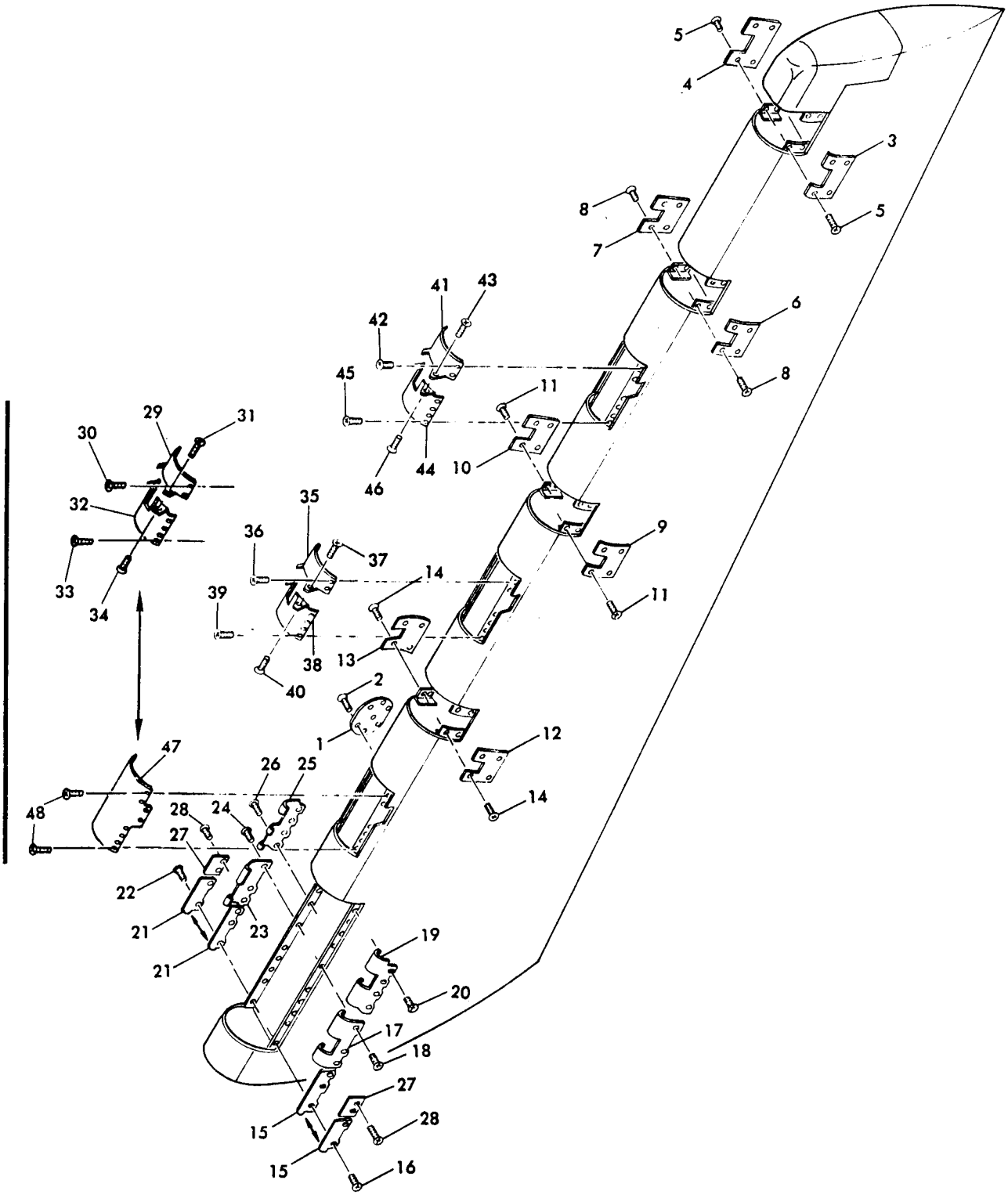
3. Exploded View



Rudder Tip Buildup
Figure 1102

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			RUDDER TIP BUILDUP		
1	65-53722-1		. FAIRING		1
2	BACB30LU3-3		. BOLT.		16
3	65-47609-13		. SHIM.		AR
4	65-53619-1		. FAIRING		1
5	BACB30LU3-3		. BOLT.		19
6	65-53619-2		. FAIRING		1
7	BACB30LU3-2		. BOLT.		12



Access Doors and Covers
Figure 1103

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103-			ACCESS DOORS AND COVERS		
1	69-55994-3		. DOOR ASSY (REPLS 69-40241-2)		18
1	69-40241-2		. DOOR ASSY (REPLD BY 69-55994-3)		18
2	BACB30LU3-2		. BOLT		180
3	69-46267-1		. COVER		1
4	69-46267-2		. COVER		1
5	BACB30LU3-1		. BOLT		6
6	65-53734-4		. COVER		1
7	65-53734-5		. COVER		1
8	BACB30LU3-1		. BOLT		8
9	65-53734-3		. COVER		1
10	65-53734-6		. COVER		1
11	BACB30LU3-1		. BOLT		8
12	65-53734-2		. COVER		1
13	65-53734-7		. COVER		1
14	BACB30LU3-1		. BOLT		8
15	65-53620-23		. FAIRING (POST SB 27-1107)		1
15	65-53620-13		. FAIRING (PRE SB 27-1107; REPLS 65-53620-2)		1
15	65-53620-2		. FAIRING (REPLD BY 65-53620-13)		1
16	BACB30LU3-4		. BOLT		*[1]
17	65-53620-21		. FAIRING (REPLS 65-53620-19) (PRE SB 27-1252)		1
17	65-53620-19		. FAIRING (POST SB 27-1107; REPLD BY 65-53620-21) (PRE SB 27-1252)		
17	65-53620-8		. FAIRING (PRE SB 27-1107) (PRE SB 27-1252)		1
17	65C13849-4		. FAIRING (POST SB 27-1252)		1
18	BACB30LU3-4		. BOLT (PRE SB 27-1252)		3
18	BACB30LH3K4		. BOLT (POST SB 27-1252)		3
19	65-53620-9		. FAIRING		1
20	BACB30LU3-4		. BOLT		4
21	65-53620-24		. FAIRING (POST SB 27-1107)		1
21	65-53620-14		. FAIRING (PRE SB 27-1107; REPLS 65-53620-3)		1
21	65-53620-3		. FAIRING (REPLD BY 65-53620-14)		1
22	BACB30LU3-4		. BOLT		*[1]
23	65-53620-22		. FAIRING (REPLS 65-53620-20) (PRE SB 27-1252)		1
23	65-53620-20		. FAIRING (POST SB 27-1107; REPLD BY 65-53620-22) (PRE SB 27-1252)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103-					
23	65-53620-10		. FAIRING (PRE SB 27-1107) (PRE SB 27-1252)		1
23	65C13849-3		. FAIRING (POST SB 27-1252)		1
24	BACB30LU3-4		. BOLT (PRE SB 27-1252)		3
24	BACB30LH3K4		. BOLT (POST SB 27-1252)		3
25	65-53620-11		. FAIRING		1
26	BACB30LU3-4		. BOLT		4
27	65-53620-12		. FAIRING *[2]		2
28	BACB30LU3-4		. BOLT		4
29	65-53648-18		. SKIN (REPLS 65-53648-3)*[3]		1
29	65-53648-3		. SKIN (REPLD BY 65-53648-18)*[3]		1
30	BACB30LU3-2		. BOLT		6
31	BACB30LU3-5		. BOLT		2
32	65-53648-17		. SKIN (REPLS 65-53648-2)*[3]		1
32	65-53648-2		. SKIN (REPLD BY 65-53648-17)*[3]		1
33	BACB30LU3-2		. BOLT		15
34	BACB30LU3-5		. BOLT		2
35	65-53648-20		. SKIN (REPLS 65-53648-5)		1
35	65-53648-5		. SKIN (REPLD BY 65-53648-20)		1
36	BACB30LU3-2		. BOLT		6
37	BACB30LU3-5		. BOLT		2
38	65-53648-19		. SKIN (REPLS 65-53648-4)		1
38	65-53648-4		. SKIN (REPLD BY 65-53648-19)		1
39	BACB30LU3-2		. BOLT		11
40	BACB30LU3-5		. BOLT		2
41	65-53648-22		. SKIN (REPLS 65-53648-7)		1
41	65-53648-7		. SKIN (REPLD BY 65-53648-22)		1
42	BACB30LU3-2		. BOLT		4
43	BACB30LU3-5		. BOLT		2
44	65-53648-21		. SKIN (REPLS 65-53648-6)		1
44	65-53648-6		. SKIN (REPLD BY 65-53648-21)		1
45	BACB30LU3-2		. BOLT		11
46	BACB30LU3-5		. BOLT		2
47	65-75957-5		. SKIN ASSY, NOSE (SB 55-1010)*[4]		1
48	BACB30LU3-2		. BOLT (SB 55-1010)*[4]		48

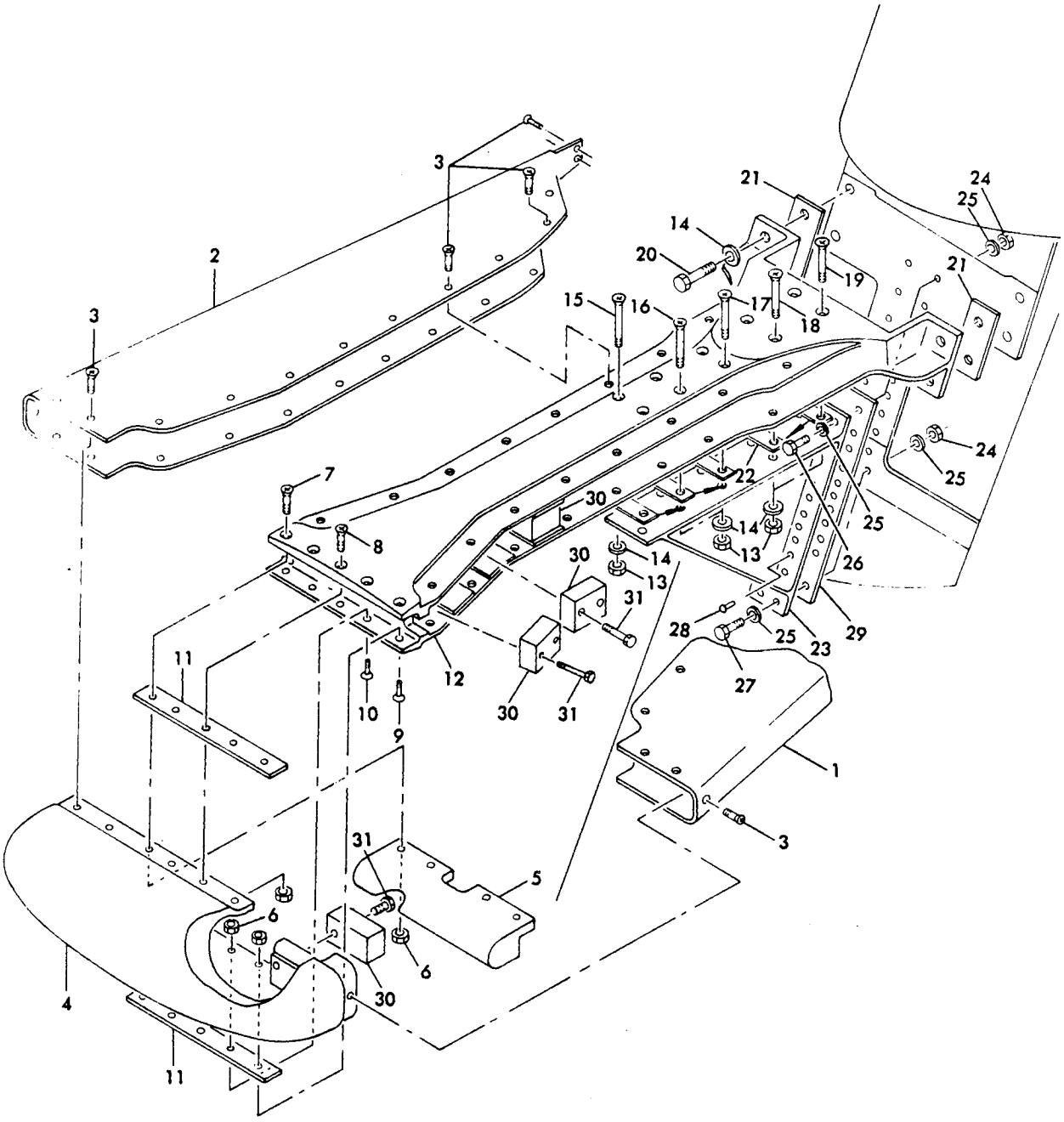
*[1] USE 3 WITH 65-53620-13 OR -14. USE 2 WITH 65-53620-2 OR -3.

*[2] USED WITH 65-53620-2 AND -3

*[3] USED ON RUDDER ASSEMBLIES, P/N 65-73788-1 THRU -6, AND 65-75339-1, -14, -15, -16

*[4] USED ON RUDDER ASSEMBLIES, P/N 65-73788-501 THRU -504, AND 65-75957-1, -2

7. Exploded View



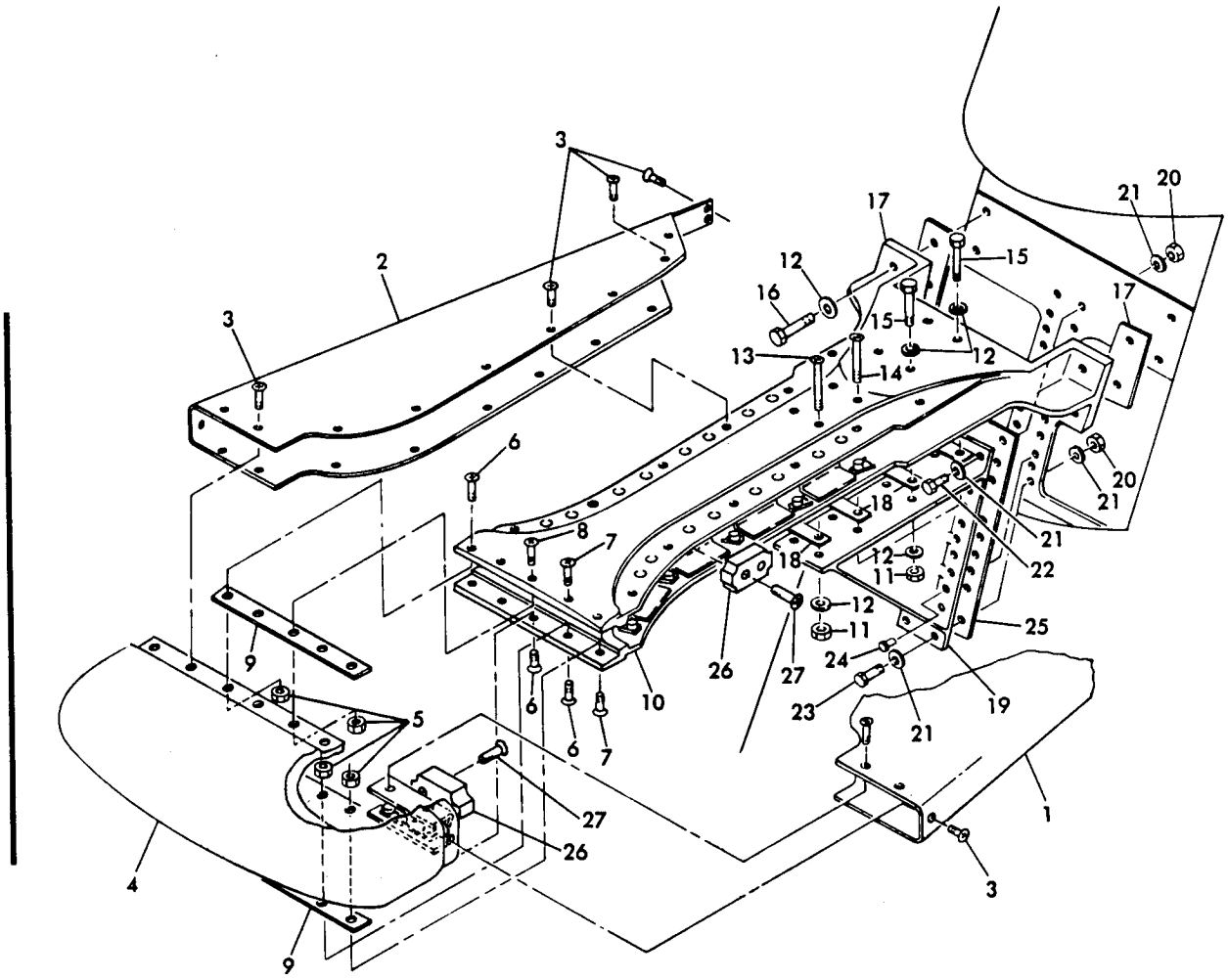
Bottom Balance Weights and Support
Figure 1104

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1104-					
	65-53610-1		BALANCE WT INST, LWR *[2]	A	RF
1	65-53630-1		. SKIN, FAIRING		1
2	65-53630-2		. SKIN, FAIRING		1
3	BACB30LU3-5		. BOLT		40
4	65-53642-1		. WEIGHT, BALANCE		1
5	69-51884-1		. WEIGHT, MASS BALANCE*[3]		1
6	BACN10JC4		. NUT		10
7	BACB30LU4-10		. BOLT		4
8	BACB30LU4-6		. BOLT		1
9	BACB30LU4-5		. BOLT		2
10	BACB30LU4-4		. BOLT		3
11	BACS40RO8B75F		. SHIM		AR
12	65-53603-1		. FITTING ASSY, SUPPORT		1
13	BACN10JC4		. NUT		10
14	AN960PD416L		. WASHER		14
15	BACB30LU4-36		. BOLT		2
16	BACB30LU4-38		. BOLT		2
17	BACB30LU4-44		. BOLT		2
18	BACB30LU4-46		. BOLT		2
19	BACB30LU4-41		. BOLT		2
20	BACB30NF4-11		. BOLT		4
21	BACS40A16-46		. SHIM		AR
22	BACS40RO8B19F		. SHIM		AR
23	65-53634-3		. SUPPORT		1
24	BACN10JC3		. NUT		6
25	AN960PD10L		. WASHER		12
26	BACB30NE3-6		. BOLT		2
27	BACB30NE3-5		. BOLT		4
28	MS20470D5		. RIVET		AR
29	BACS40R20B 113F		. SHIM		AR
30	69-43281-1		. WEIGHT, BALANCE (65-73788 REF)		AR
31	BACB30NE3-14		. BOLT *[1]		AR
31	BACB30NE3-26		. BOLT *[1]		AR
31	BACB30NE3-38		. BOLT *[1]		AR

*[1] USE BACB30NE3-14 TO ATTACH SINGLE WEIGHT, -26 TO ATTACH TWO WEIGHTS, OR -38 TO ATTACH THREE WEIGHTS IN EACH POSITION.

*[2] USED ON RUDDER ASSEMBLIES 65-73788-1 THRU -6, AND 65-75339-1, -14, -15, -16

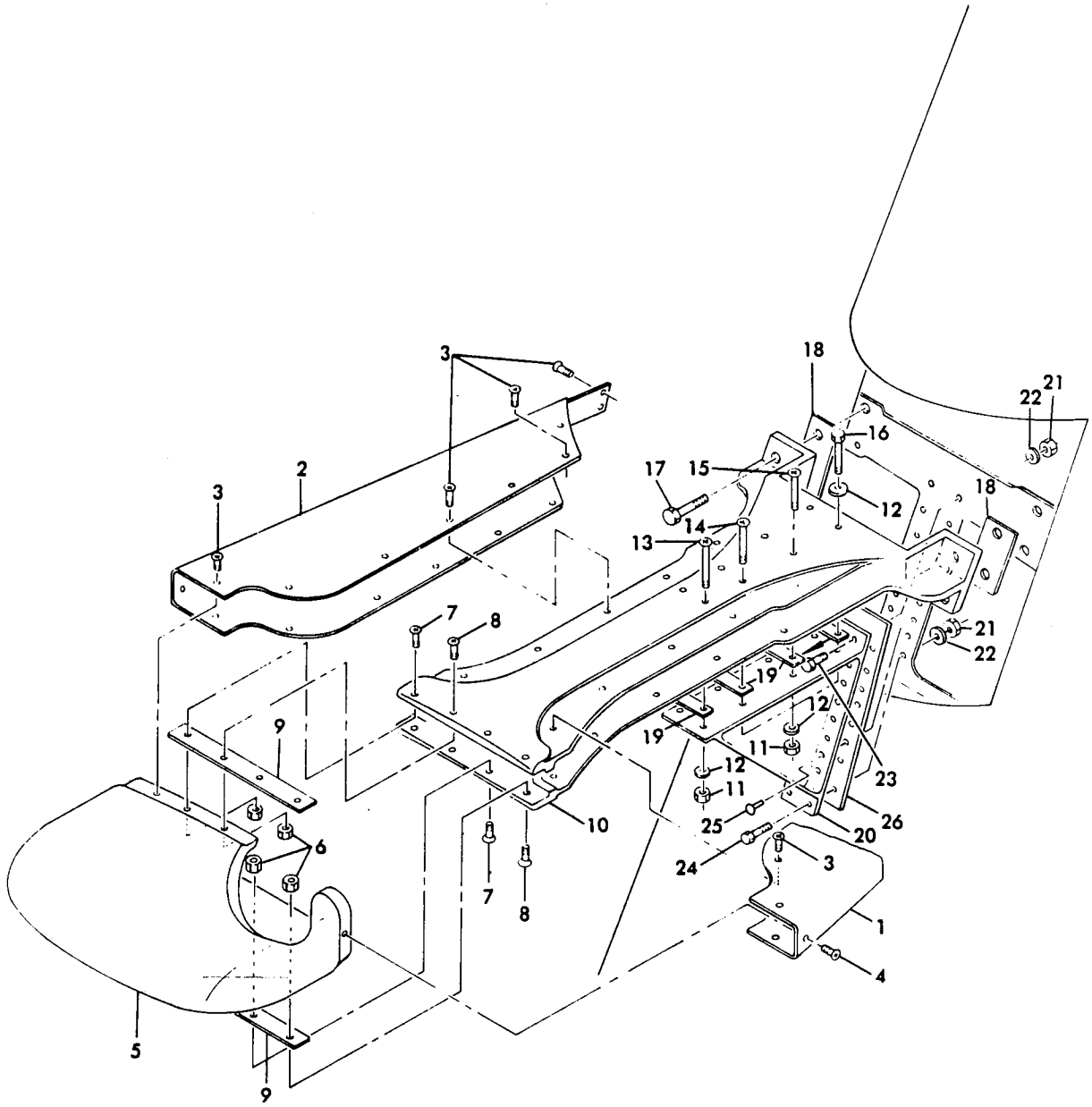
*[3] USED ON RUDDER ASSEMBLY 65-73788-1



Center Balance Weight and Support
Figure 1105

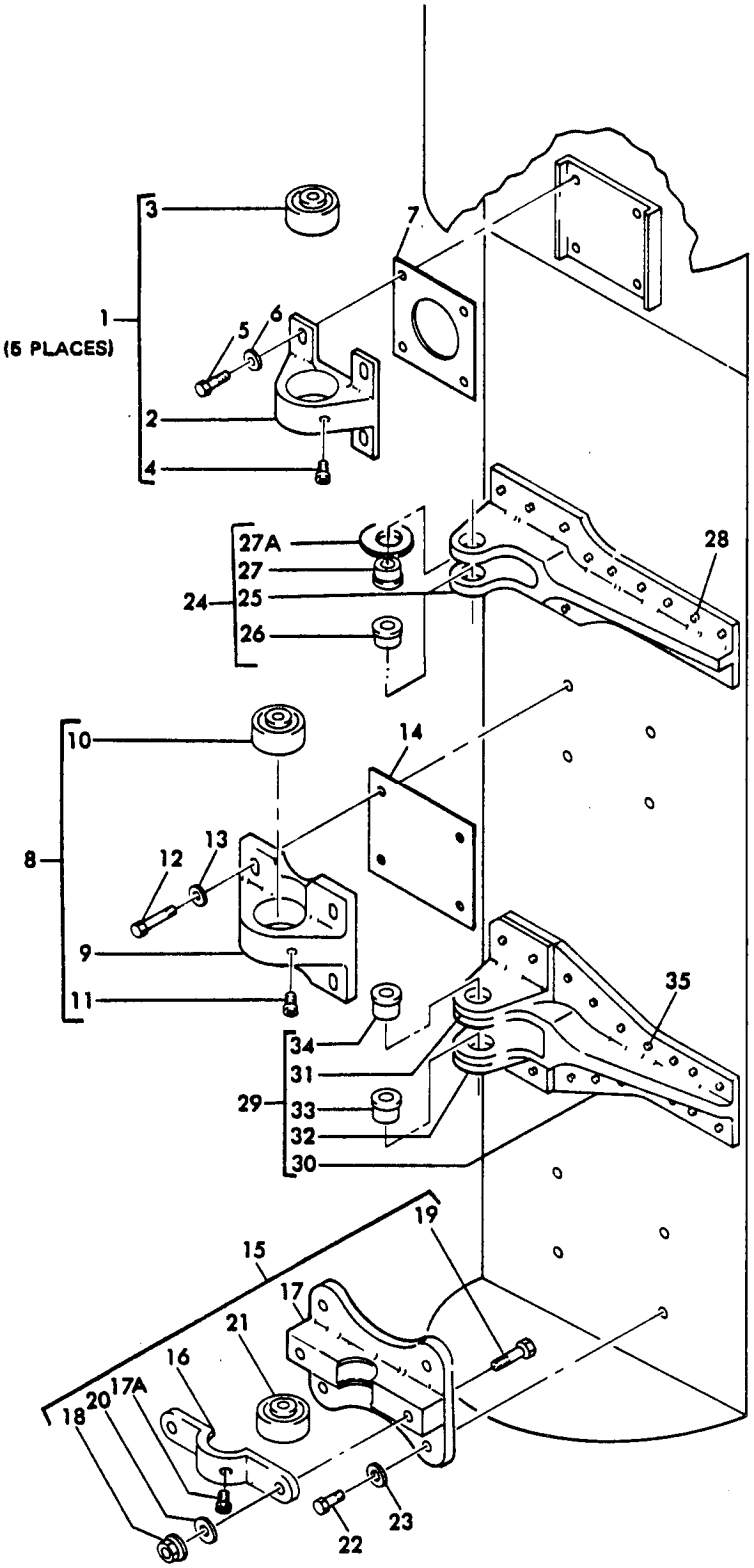
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1105-					
	65-53611-1		BALANCE WT INST, CTR	A	RF
	65-53611-501		BALANCE WT INST, CTR	B	RF
1	65-53631-1		. SKIN, FAIRING		1
2	65-53631-2		. SKIN, FAIRING		1
3	BACB30LU3-5		. BOLT		34
3	BACB30LU3-5		. BOLT (REPLD BY BACB30LU3-5)		34
4	65-77415-1		. WEIGHT (REPLS 65-53643-1 PER SB 55-1010)		1
4	65-53643-1		. WEIGHT (PRE SB 55-1010)	A	1
4	65-53643-501		. DELETED		
5	BACN10JC4		. NUT		10
6	BACB30LU4-4		. BOLT		5
6	BACB30FL4-4		. BOLT (REPLD BY BACB30LU4-4)		5
7	BACB30LU4-5		. BOLT		4
7	BACB30FL4-5		. BOLT (REPLD BY BACB30LU4-5)		4
8	BACB30LU4-6		. BOLT		1
8	BACB30FL4-6		. BOLT (REPLD BY BACB30LU4-6)		1
9	BACS40R08A70F		. SHIM		1
10	65-53606-1		. SUPPORT ASSY		1
11	BACN10JC4		. NUT		8
12	AN960PD416L		. WASHER		16
13	BACB30LU4-37		. BOLT		2
13	BACB30FL4-37		. BOLT (REPLD BY BACB30LU4-37)		2
14	BACB30LU4-39		. BOLT		2
14	BACB30FL4-39		. BOLT (REPLD BY BACB30LU4-39)		2
15	NAS1104-41		. BOLT		4
16	NAS1104-11		. BOLT		4
17	BACS40R10A29F		. SHIM		AR
18	BACS40R08A20F		. SHIM		AR
19	65-53636-3		. SUPPORT		1
20	BACN10JC3		. NUT		6
21	AN960PD10L		. WASHER		12
22	NAS1103-6		. BOLT		2
23	NAS1103-5		. BOLT		4
24	MS20470D5		. RIVET		AR
25	BACS40R19A85F		. SHIM		AR
26	69-60716-1		. WEIGHT (POST SB 55-1010)(65-73788 REF)		AR
26	69-43281-1		. WEIGHT (PRE SB 55-1010)	A	AR
27	BACB30NE3-14		. BOLT *[1]		AR
27	BACB30NE3-26		. BOLT *[1]		AR
27	BACB30NE3-38		. BOLT *[1]		AR
27	BACB30NE3-50		. BOLT *[1]		AR

*[1] BOLT LENGTH DEPENDS ON NUMBER OF BALANCE WEIGHTS (26) USED AT EACH LOCATION. BACNE3-14 IS USED FOR ONE, -26 FOR TWO, -38 FOR THREE, AND -50 FOR FOUR WEIGHTS.



Top Balance Weight and Support
Figure 1106

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1106-					
	65-53612-1		BALANCE WT INST, TOP	A	RF
1	65-53632-1		. SKIN, FAIRING		1
2	65-53632-2		. SKIN, FAIRING		1
3	BACB30LU3-5		. BOLT		24
4	BACB30LU3-6		. BOLT		2
5	65-53644-1		. WEIGHT, BALANCE		1
6	BACN10JC4		. NUT		8
7	BACB30LU4-5		. BOLT		4
8	BACB30LU4-4		. BOLT		4
9	BACS40R08A52F		. SHIM		AR
10	65-53609-1		. SUPPORT ASSY		1
11	BACN10JC4		. NUT		8
12	AN960PD416L		. WASHER		12
13	BACB30LU4-36		. BOLT		2
14	BACB30LU4-37		. BOLT		2
15	BACB30LU4-40		. BOLT		2
16	BACB30NF4-41		. BOLT		2
17	BACB30NF4-11		. BOLT		4
18	BACS40R10A29F		. SHIM		AR
19	BACS40R08A20F		. SHIM		AR
20	65-53639-3		. SUPPORT		1
21	BACN10JC3		. NUT		6
22	AN960PD10L		. WASHER		6
23	BACB30NE3-6		. BOLT		2
24	BACB30NE3-5		. BOLT		4
25	MS20470D5		. RIVET		AR
26	BACS40R19A71F		. SHIM		AR



Attach Fittings
Figure 1107

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1107-					
	65-47600-1		FRONT SPAR INST	A	RF
	65-47600-502		FRONT SPAR INST	B	RF
1	69-40300-1		. FITTING ASSY, HINGE		5
2	69-40300-2		. . FITTING		1
3	BACB10C135H		. . BEARING		1
3	BACB10C161GH		. . BEARING (OPT)		1
4	NAS516-1A		. . FITTING, LUBRICATION		1
4	NAS516-1		. . FITTING, LUBRICATION (OPT)		1
5	MS20004-12		. BOLT		20
6	MS20002C4		. WASHER		20
7	65-47600-55		. SHIM, LAMINATED		AR
8	69-41882-1		. FITTING ASSY, HINGE		1
9	69-41882-2		. . FITTING		1
10	BACB10C92H		. . BEARING		1
11	NAS516-1		. . FITTING, LUBRICATION		1
12	BACB30NF5-12		. BOLT		4
13	MS20002C5		. WASHER		4
14	65-47600-57		. SHIM, LAMINATED		AR
15	65-53739-4		. FITTING ASSY, THRUST HINGE (SB 55-1017)		1
15	65-53739-1		. FITTING ASSY, THRUST HINGE (REPLD BY 65-53739-4)	A	1
16	65-53739-2		. . CAP (USED ON 65-53739-1)	A	1
16	65-53739-5		. . CAP (USED ON 65-53739-4)		1
17	65-53739-3		. . BASE		1
17A	NAS516-1		. . FITTING, LUBRICATION (USED ON 65-53739-4)		1
18	BACN10JC6		. . NUT		2
19	MS20006-14		. . BOLT		2
20	MS20002-6		. . WASHER		2
21	BACB10C85Y		. . BEARING		1
22	MS20004-10		. BOLT		4
23	MS20002C4		. WASHER		4
24	65-53625-5		. FTG ASSY (POST SB 27-1099)	B	1
24	65-53625-501		. FTG ASSY (PRE SB 27-1099) *[1]		1
24	65-53625-4		. FTG ASSY (PRE SB 27-1099) *[1]	A	1
25	65-53625-2		. . FITTING		1
26	NAS537B9P34		. . BUSHING (USED ON 65-53625-5,-501)		1
26	NAS538B9P20		. . BUSHING (USED ON 65-53625-4, PRE SB 27-1099)		1
27	69-53208-501		. . BUSHING (USED ON 65-53625-5, -501)		1
27	69-53208-1		. . BUSHING (USED ON 65-53625-4, PRE SB 27-1099)		1
27A	69-47685-2		. . WEAR PLATE (USED ON 65-53625-5, POST SB 27-1099)		1
28	MS20470D6		. RIVET		AR

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1107-29	65-53626-9		. FITTING ASSY, SUPPORT (REPLS 65-53626-5)		1
29	65-53626-5		. FITTING ASSY, SUPPORT (REPLD BY 65-53626-9)		1
30	65-53626-6		. . FITTING		1
31	65-53626-7		. . ANGLE		1
32	65-53626-8		. . ANGLE		1
33	BACB28W10B53		. . BUSHING (USED ON 65-53626-9; OPT TO NAS538R10P53 ON 65-53626-5)		1
33	NAS538B10P53		. . BUSHING (OPT TO BACB28W10B53 ON 65-53626-5)		1
34	BACB28W14B60		. . BUSHING (USED ON 65-53626-9; OPT TO NAS538B14P60 ON 65-53626-5)		1
34	NAS538R14P60		. . BUSHING (OPT TO BACB28W124B60 ON 65-53626-5)		1
35	MS20470D6		. RIVET		AR
			*[1] LIMITED USAGE		

Part No.	Fig. and Index No.	Qty. per Assy.
AN960PD10L		AR
AN960PD416L		AR
AN960PD8		AR
BACB10-92H	1107-10	1
BACB10C135H	1107-3	1
BACB10C161GH	1107-3	1
BACB10C85Y	1107-21	1
BACB28W10B53	1107-33	1
BACB28W14B60	1107-34	1
BACB30LH3K4	1103-18	3
BACB30LH3K4	1103-24	3
BACB30LU2-4	1101-9	2
BACB30LU3-1	1103-5	6
BACB30LU3-1	1103-8	8
BACB30LU3-1	1103-11	8
BACB30LU3-1	1103-14	8
BACB30LU3-2	1102-7	12
BACB30LU3-2	1103-2	180
BACB30LU3-2	1103-30	6
BACB30LU3-2	1103-33	15
BACB30LU3-2	1103-36	6
BACB30LU3-2	1103-39	1
BACB30LU3-2	1103-42	4
BACB30LU3-2	1103-45	1
BACB30LU3-2	1103-48	48
BACB30LU3-3	1102-2	16
BACB30LU3-3	1102-5	19
BACB30LU3-4	1103-16	AR
BACB30LU3-4	1103-18	3
BACB30LU3-4	1103-20	4
BACB30LU3-4	1103-22	AR
BACB30LU3-4	1103-24	3
BACB30LU3-4	1103-26	4
BACB30LU3-4	1103-28	4
BACB30LU3-5	1103-31	2
BACB30LU3-5	1103-34	2
BACB30LU3-5	1103-37	2
BACB30LU3-5	1103-40	2
BACB30LU3-5	1103-43	2
BACB30LU3-5	1103-46	2
BACB30LU3-5	1104-3	40
BACB30LU3-5	1105-3	34
BACB30LU3-5	1106-3	24
BACB30LU3-6	1106-4	2
BACB30LU4-10	1104-7	4
BACB30LU4-36	1104-15	2

Part No.	Fig. and Index No.	Qty. per Assy.
BACB30LU4-36	1106-13	2
BACB30LU4-37	1105-13	2
BACB30LU4-37	1106-14	2
BACB30LU4-38	1104-16	2
BACB30LU4-39	1105-14	2
BACB30LU4-4	1104-10	3
BACB30LU4-4	1105-6	5
BACB30LU4-4	1106-8	4
BACB30LU4-40	1106-15	2
BACB30LU4-41	1104-19	2
BACB30LU4-44	1104-17	2
BACB30LU4-46	1104-18	2
BACB30LU4-5	1104-9	2
BACB30LU4-5	1105-7	4
BACB30LU4-5	1106-7	4
BACB30LU4-6	1104-8	1
BACB30LU4-6	1105-6	1
BACB30NE3-14	1104-31	AR
BACB30NE3-14	1105-27	AR
BACB30NE3-26	1104-31	AR
BACB30NE3-26	1105-27	AR
BACB30NE3-38	1104-31	AR
BACB30NE3-38	1105-27	AR
BACB30NE3-50	1105-27	AR
BACB30NE3-5	1104-27	4
BACB30NE3-5	1105-23	4
BACB30NE3-5	1106-24	4
BACB30NE3-6	1104-26	2
BACB30NE3-6	1105-22	2
BACB30NE3-6	1106-23	2
BACB30NF4-11	1104-20	4
BACB30NF4-11	1106-17	4
BACB30NF4-41	1106-16	2
BACB30NF5-12	1107-12	4
BACJ40AB20-2	1101-10	1
BACN10JC08	1101-7	2
BACN10JC3	1104-24	6
BACN10JC3	1105-20	6
BACN10JC3	1106-21	6
BACN10JC4	1104-6	10
BACN10JC4	1104-13	10
BACN10JC4	1105-5	10
BACN10JC4	1105-11	8
BACN10JC4	1106-6	8
BACN10JC4	1106-11	8
BACN10JC6	1107-18	2

Part No.	Fig. and Index No.	Qty. per Assy.
BACR15DJ5-2	1101-12	1
BACS40A16-46	1104-21	AR
BACS40R08A20F	1105-18	AR
BACS40R08A20F	1106-19	AR
BACS40R08A52F	1106-9	AR
BACS40R08A70F	1105-9	AR
BACS40R08B19F	1104-22	AR
BACS40R08B75F	1104-11	AR
BACS40R10A29F	1105-17	AR
BACS40R10A29F	1106-18	AR
BACS40R19A71F	1106-26	AR
BACS40R19A85F	1105-25	AR
BACS40R20B113F	1104-29	AR
MS20002-6		AR
MS20002C4		AR
MS20002C5		AR
MS20004-10		AR
MS20004-12		AR
MS20006-14		AR
MS20426A4		AR
MS20426A4-2		AR
MS20426D5		AR
MS20470D5		AR
MS20470D6		AR
NAS1103-5		AR
NAS1103-6		AR
NAS1104-11		AR
NAS1104-41		AR
NAS1399MW5-3		AR
NAS514P632-5		AR
NAS516-1		AR
NAS516-1A		AR
NAS537B9P34		AR
NAS538B10P53		AR
NAS538B14P60		AR
NAS538B9P20		AR
2-13S	1101-22	2
610-1009	1101-11	1
610-1011	1101-22	2
610D1B	1101-22	2

Part No.	Fig. and Index No.	Qty. per Assy.
65-47600-55	1107-7	AR
65-47600-57	1107-14	AR
65-47609-13	1102-3	AR
65-47648-31	1101-18	1
65-47648-508	1101-14	1
65-47648-509	1101-16	1
65-47648-510	1101-11	1
65-47648-510	1101-15	1
65-53603-1	1104-12	1
65-53606-1	1105-10	1
65-53609-1	1106-10	1
65-53619-1	1102-4	1
65-53619-2	1102-6	1
65-53620-10	1103-23	1
65-53620-11	1103-25	1
65-53620-12	1103-27	2
65-53620-13	1103-15	1
65-53620-14	1103-21	1
65-53620-19	1103-17	1
65-53620-20	1103-23	1
65-53620-21	1103-17	1
65-53620-22	1103-23	1
65-53620-23	1103-15	1
65-53620-24	1103-21	1
65-53620-2	1103-15	1
65-53620-3	1103-21	1
65-53620-8	1103-17	1
65-53620-9	1103-19	1
65-53625-2	1107-25	1
65-53625-4	1107-24	1
65-53625-5	1107-24	1
65-53625-501	1107-24	1
65-53626-5	1107-29	1
65-53626-6	1107-30	1
65-53626-7	1107-31	1
65-53626-8	1107-32	1
65-53626-9	1107-29	1
65-53630-1	1104-1	1
65-53630-2	1104-2	1
65-53631-1	1105-1	1
65-53631-2	1105-2	1
65-53632-1	1106-1	1
65-53632-2	1106-2	1
65-53634-3	1104-23	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-53636-3	1105-19	1
65-53639-3	1106-20	1
65-53642-1	1104-4	1
65-53643-1	1105-4	1
65-53643-501	1105-4	1
65-53644-1	1106-5	1
65-53648-17	1103-32	1
65-53648-18	1103-29	1
65-53648-19	1103-38	1
65-53648-2	1103-32	1
65-53648-20	1103-35	1
65-53648-21	1103-44	1
65-53648-22	1103-41	1
65-53648-3	1103-29	1
65-53648-4	1103-38	1
65-53648-5	1103-35	1
65-53648-6	1103-44	1
65-53648-7	1103-41	1
65-53722-1	1102-1	1
65-53734-2	1103-12	1
65-53734-3	1103-9	1
65-53734-4	1103-6	1
65-53734-5	1103-7	1
65-53734-6	1103-10	1
65-53734-7	1103-13	1
65-53739-1	1107-15	1
65-53739-2	1107-16	1
65-53739-3	1107-17	1
65-53739-4	1107-15	1
65-53739-5	1107-16	1
65-73788-1	1101	
65-73788-2	1101	
65-73788-3	1101	
65-73788-4	1101	
65-73788-5	1101	
65-73788-501	1101	
65-73788-502	1101	
65-73788-503	1101	
65-73788-504	1101	
65-73788-6	1101	
65-75339-1	1101	
65-75339-14	1101	
65-75339-15	1101	
65-75339-16	1101	
65-75957-1	1101	
65-75957-2	1101	
65-75957-5	1103-47	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-77415-1	1105-4	1
65C13849-3	1103-23	1
65C13849-4	1103-17	1
69-40241-2	1103-1	18
69-40300-1	1107-1	5
69-40300-2	1107-1	1
69-41882-1	1107-8	1
69-41882-2	1107-9	1
69-43281-1	1104-30	AR
69-43281-1	1105-26	AR
69-46267-1	1103-3	1
69-46267-2	1103-4	1
69-47685-2	1107-27A	1
69-51884-1	1104-5	1
69-53208-1	1107-27	1
69-53208-501	1107-27	1
69-55994-3	1103-1	18