

BOEING
Commercial Jet
OVERHAUL MANUAL

TO: ALL HOLDERS OF PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSEMBLY
OVERHAUL MANUAL, 25-56-13

REVISION NO. 1, DATED APR 5/77

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED										
	D & O	D/Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage
<u>NOTE</u> Beginning with this revision separate consecutively numbered highlight sheets will be provided whenever this subject is revised. Updated refinish section					X						

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HIGHLIGHTS
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PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSEMBLY

25-56-13

BOEING P/N 65-54137-1 thru -12
65-67832-3, -4, -5

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
2281 (707)		PRR 16291 PRR 16857	May 15/69 May 15/69
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LIST OF EFFECTIVE PAGES					
* Indicates pages revised, added or deleted in latest revision					
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T-2	BLANK				
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IEP-2	BLANK				
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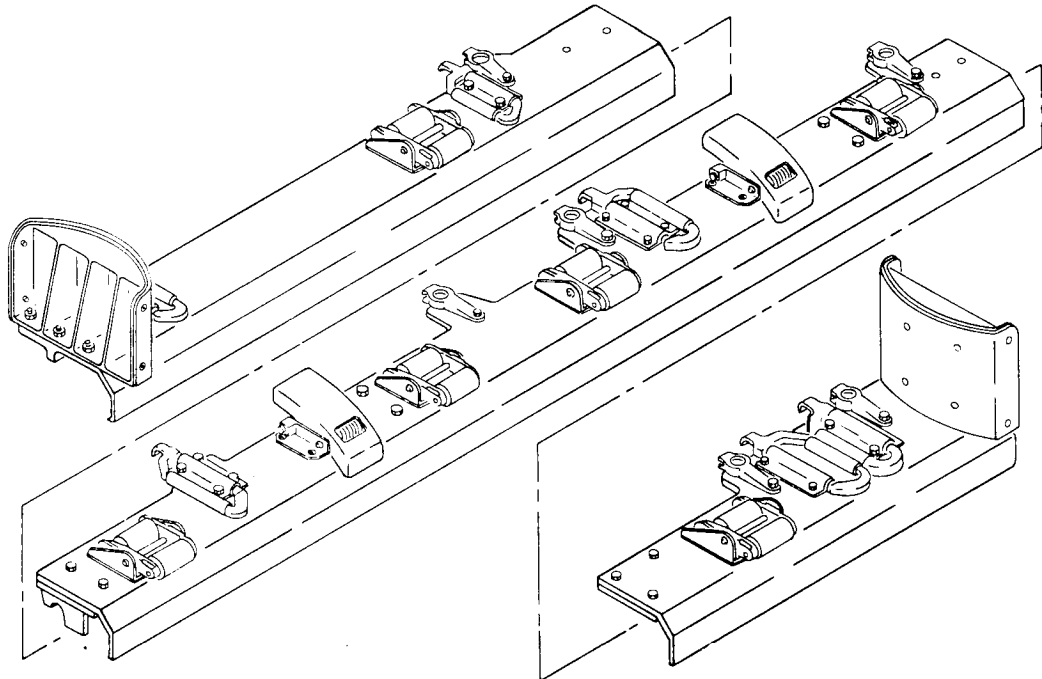
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PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSEMBLY

Boeing Part Numbers: 65-54137-1 through -12;
65-67832-3, -4, and -5



Palletized Cargo System Main Cargo Door Threshold Assembly
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

- (1) The palletized cargo system main cargo door threshold assembly consists of a central channel beam holding rocking roller assemblies, pallet stop arm assemblies, lifting handles, hinge fittings and scuff plate - guide assemblies. Various support blocks, plates and angles are bolted to the underside of the beam for positioning and support. Each cargo door set consists of three assemblies - forward, center and aft.

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B. Operation

- (1) The threshold assemblies are attached to airplane seat tracks just inside the main cargo door openings. Sliding pallets are supported by the turning rollers of the threshold assembly in the gap between the external loading platform and the airplane palletized cargo floor system. Stops prevent pallets from slipping out of the airplane while they are being loaded.

C. Leading Particulars

Length -- 65-54137-2, -5, -8, -11, and 65-67832-4 -- 80.75 inches
(approximately)
65-54137-1, -4, -7, -10 and 65-67832-3 -- 31.75 inches
(approximately)
65-54137-3, -6, -9, -12, and 65-67832-5 -- 22.00 inches
(approximately)

Width -- 65-54137-1, -3, -4, -6, -7, -9, -10, -12, and 65-67832-3 and
-5 -- 10.70 inches (approximately)
65-54137-2, -5, -8, -11, and 65-67832-4 -- 8.40 inches
(approximately)

Height -- 65-54137-1, -3, -4, -6, -7, -9, -10, -12; and 65-67832-3 and
-5 -- 9.25 inches (approximately)
65-54137-2, -5, -8, -11; and 65-67832-4 -- 5.90 inches
(approximately)

Weight -- 65-54137-1, -4, -7, -10; and 65-67832-3 -- 25.2 pounds
(approximately)
65-54137-2, -5, -8, -11; and 65-67832-4 -- 45.1 pounds
(approximately)
65-54137-3, -6, -9, -12; and 65-67832-5 -- 23.0 pounds
(approximately)

2. DISASSEMBLY

A. General

- (1) Do not remove bearings or bushings unless repair or replacement makes it necessary.
- (2) Do not remove helical coil inserts unless replacement is required.

B. Procedures (See figure 3.)

- (1) Remove nuts (1) and screws (2) with scuff plate (3).
- (2) Remove nuts (4), bolts (5), and other fasteners (6 to 10) with guide assembly (11), support bracket (12) and bearing plate (13) (if applicable).
- (3) Remove nuts (14), washers (15), screws (16) and other fasteners (17 to 20) with hinge fitting (21).
- (4) Remove nuts (22), washers (23), and bolts (24, 25 and 26) with attach plate (27), spring (28) and handle (29 or 30).
- (5) Remove baseplate (31), support bracket (32) (if applicable), and bearing plate (33) (if applicable).
- (6) Remove snap rings (34), washers (35), and shaft (36) and disassemble cotter pins (37), shafts (38), and roller assemblies (39) from rocker arms (42 and 43).

NOTE: Do not separate roller (40) and roller bearing (41) unless repair or replacement makes it necessary.

- (7) Remove nuts (44), washers (45) and bolts (46 and 47), support angles (48 and 49), shims (50 and 51) (if applicable), and support assembly (52) (if applicable).

NOTE: Do not remove helical coil inserts (53) from support (54) unless replacement is required.

- (8) Remove nuts (55 and 58), washers (56 and 59) and bolts (57 and 60) with support brackets (61 to 64) and bearing plates (65 to 68) from beam (109, 110 and 111) on applicable assemblies.
- (9) Remove nuts (69), washers (70), and screws (71) with angle (72) and support plate (73) (if applicable).
- (10) Remove screws (74) and support assemblies (75 through 77) from beam assemblies (103 and 104) and beams (109, 110 and 111) on applicable assemblies.

NOTE: Do not remove helical coil inserts (78) from supports (79 through 81) unless replacement is required.

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- (11) Remove snap rings (82), washers (83), shaft (84), springs (85 and 86), spacer (87) and arm assembly (88).

NOTE: Do not remove bushings (89) from arm (90) unless repair or replacement makes it necessary.

- (12) Remove ball plungers (91) from supports (97 and 100).

NOTE: If optional spring plunger (91) is used, first remove jamnut (92) and flat washer (93) before removing spring plungers from support assemblies (97 and 100).

- (13) Remove nuts (94), washers (95) and screws (96) with supports or support assemblies (97 and 100) from beam assembly (104) and beam (111) on applicable assemblies.

NOTE: Do not remove helical coil inserts (98 or 101) from supports (99 or 102) unless replacement is required. Do not remove rivets (105) or nutplates (106) from beams (107 and 108) unless replacement is required.

3. CLEANING

A. Metal Parts

- (1) Clean all parts except bearings in solvent, P-D-680, or equivalent.
- (2) Use stiff-bristle brush to remove stubborn accumulation of dirt. Do not use metal brush.
- (3) Dry parts with clean, lint-free cloth or clean, moisture-free air.
- (4) Refer to 20-30-03, General Cleaning Procedures, for further information.

B. Bearings

- (1) Clean all bearings per 20-30-01, Cleaning and Relubricating Antifriction Bearings.

4. INSPECTION/CHECK

A. Visual Check (See figure 3.)

- (1) Examine all metal parts for pits, scratches, cracks, corrosion and damage, using strong light and minimum of 10-power magnification.
- (2) Examine all threads for cross-threading or stripping.
- (3) Examine all painted or plated surfaces for blisters and flaking.
- (4) Examine roller bearings (41) for excessive radial or axial play.
- (5) Examine beams (107 through 111) for bent, dented or torn structural components.
- (6) Examine all bearing, bolt, and shaft holes for corrosion and excessive or eccentric wear.

B. Special Check (See figure 3.)

- (1) If visual examination discloses evidence of defects in any of the parts listed, perform the following checks:
 - (a) Penetrant check -- angles (48 and 49) and shaft (84) per 20-20-02, Penetrant Methods of Inspection.
 - (b) Magnetic particle check -- guide assembly (11), hinge fitting (21), handles (29 and 30), and stop arms (90) per 20-20-01, Magnetic Particle Inspection.

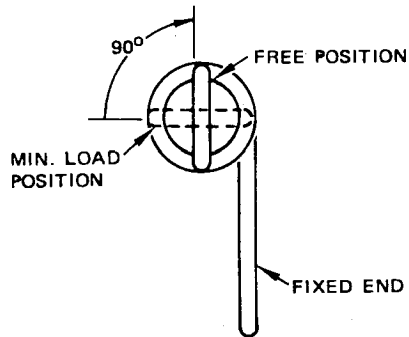
C. Spring checks (See figure 3.)

- (1) Check springs (28, 85 and 86) for zero-load condition and allowable load limits as shown in figure 2. Check both ends of spring (28).

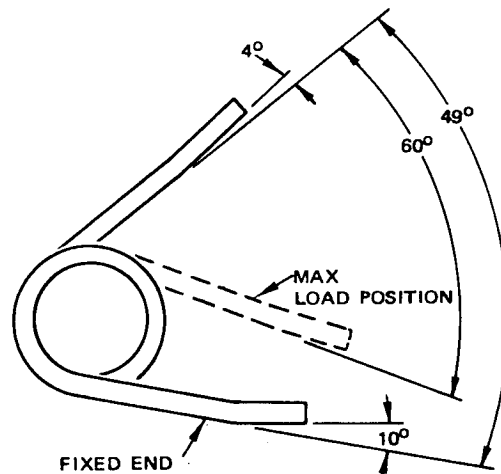
NOTE: Free position of arms, as shown in figure 2, determines zero-deflection position. Deflections must be measured from this position to establish load limits. Springs (85 and 86) are to work over 0.64-inch diameter shaft.

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SPRING (28)



SPRING (85), (86) OPPOSITE

Item No. Figure 3	Test Deflection (degrees)	Allowable Load Limits (pound-inches)
28	90	1.44 to 1.76
	180	2.88 to 3.52
85, 86	44	11.1 to 13.5
	60	15.0 to 18.4

Spring Check Data
Figure 2

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5. REPAIR

A. Repair (Fig. 3)

- (1) Use standard industry practices for repair of this component.
- (2) Deleted
- (3) Straighten all minor beam (107 thru 111) damage with standard sheet metal forming equipment.

B. Refinish (Fig. 3)

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

- (1) Plate (3) -- Chromic acid anodize or alodize and apply one coat primer EMS 10-11, type 1 (F-2.115) on inside surface and edges. Material: Alum alloy.
- (2) Guide assy (11) -- Cadmium plate (F-1.191) all over. Material: 4130 steel, 125-145 ksi.
- (3) Bracket (12, 32, 61, 62, 63, 64), plate (13, 33, 65, 66, 67, 68), roller (40), arm (42, 43), shim (51), angle (72), support (54, 79, 80, 81) -- Chromic acid anodize (F-2.20) all over. Material: Alum alloy.
- (4) Fitting (21) -- Passivate (F-8.07) all over. Apply two coats primer EMS 10-11, type 1 (SRF-8.51) to lower surface only. Material: 17-4PH CRES, 180-220 ksi.
- (5) Plate (27), angle (48, 49), arm (90) -- Passivate (F-8.07) all over. Material: 17-7PH CRES, 180-200 ksi.
- (6) Spring (28, 85, 86) -- Passivate (F-8.07) all over. Material: 302 CRES, spring temper.
- (7) Handle (29, 30) -- Passivate (F-8.07) all over and apply one coat epoxy gloss enamel EMS 10-11, type 2 (SRF-14.905-101) all over. Material: 17-4PH, 180-200 ksi.
- (8) Basplate (31) -- Passivate (F-8.07) all over. Apply two coats primer EMS 10-11, type 1 (SRF-8.51) on top and bottom surfaces. Material: 17-7PH or 301 or 302 CRES.
- (9) Shaft (36, 38) -- Cadmium plate (F-1.191) all over. Material: 4340 steel, 150-170 ksi.

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- (10) Shim (50) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over. Material: Alum alloy.
- (11) Plate (73) -- Passivate (F-8.07) all over. Apply two coats primer BMS 10-11, type 1 (SRF-12.206) to side opposite countersink. Material: 17-7PH CRES, 170-200 ksi.
- (12) Shaft (84) -- Apply dry film lubricant BMS 3-8, class A, per 20-50-08, method 3. Material: 17-4PH CRES, 180-200 ksi.
- (13) Support (97, 99, 100, 102) -- Chromic acid anodize (F-2.26) all over. Material: Alum alloy.
- (14) Beams (107 thru 111) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over. Fill depressed numbers with black unthinned enamel BMS 10-11, type 2, color BAC701. Material: Alum alloy.

C. Replacement (Fig. 3)

- (1) Replace all cotter pins at each overhaul.
- (2) Replace all parts damaged or worn beyond simple repair.
- (3) Replace snap rings (34 and 82) and shims (50 and 51) if deformed in any way.
- (4) If roller (40) or bearings (41) are damaged or worn, disassemble parts. Replace damaged part and reassemble. Coat faying surfaces of both parts with wet primer, BMS 10-11, type 1, and press-fit while wet per 20-50-03, Bearing Installation and Retention.
- (5) Remove inserts (53, 78, 98 and 101) if required, from supports (54 and 79 thru 81) or (99 and 102). Clean and check condition of bore. Sparingly, apply primer BMS 10-11, type 1 to bore and replacement insert. Install replacement insert 1/4 to 1-1/2 turn below support surface while primer is wet. Remove tang.

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- (6) Remove bushings (89) from arm (90), if required. Insert replacement bushings (89) into arm (90) per 20-50-03, Bearing Installation and Retention.

6. ASSEMBLY (See figure 3.)

- A. Attach supports or support assemblies (97 and 100) to beam assembly (104) or beam (111) with screws (96), washers (95) and nuts (94).
- B. Install ball plungers (91) in supports (99 and 102), or optional spring plunger (91) in support assemblies (97 and 100). Install washer (93) and jamnut (92) on spring plunger (91).
- C. Install arm assembly (88), spacer (87), springs (85 and 86), shaft (84) and washers (83) between supports (97 and 100). Attach snap rings (82) to shaft (84). Use as many washers (83) between supports (97 and 100) and arm assembly (88) as necessary to provide clearance of not more than 0.015 inch. Adjust ball or spring plungers (91) equally until 4 to 10 pounds force (applied to inboard end of arm assembly (88) is required to pull arm assembly (88) from secured position.
- D. Attach support assemblies (75 through 77) to beam assemblies (103 and 104) and beams (109 through 111) with screws (74) on applicable assemblies.
- E. Attach support plate (73) and angle (72) to beam assemblies (103 and 104) and beams (109 and 111) with screws (71), washers (70) and nuts (69) on applicable assemblies.
- F. Attach bearing plates (65 through 68), and support brackets (61 through 64) to beams (109, 110 and 111) with bolts (57 and 60), washers (56 and 59) and nuts (55 and 58) on applicable assemblies.
- G. Attach shims (50 and 51) and support angles (48 and 49) with bolts (46 and 47), washers (45) and nuts (44).
- H. Position roller assemblies (39) between rocker arms (42 and 43) and insert shafts (38) and cotter pins (37).
- I. Position roller assembly group between support angles (48 and 49) and insert shaft (36) with washers (35). Attach snap rings (34).
- J. Install bearing plate (33), if applicable, support bracket (32), (if applicable), baseplate (31), handles (29 and 30), spring (28) and attach plate (27) with bolts (24, 25 and 26), washers (23) and nuts (22).
- K. Install hinge fitting (21) and fasten with bolts (19 and 20), washers (18), nuts (17) and fasteners (14 through 16).

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- L. Install bearing plate (13), if applicable, support bracket (12), if applicable, and guide assembly (11) with bolts (10, 7 and 5), screws (8), washers (9 and 6), and nuts (4).
- N. Attach scuff plate (3) with screws (2) and nuts (1) on applicable assemblies.

7. TESTING (See figure 3.)

- A. Check roller assemblies (39) for smooth rotation on shafts (38) and free movement of rocker arms (42 and 43) on shaft (36).
- B. Check free operation of handles (29 and 30) with spring (28) in attach plate (27).
- C. Check pallet stop arm assembly (88) for smooth movement on spacer when lifted from secured position.
- D. Check operation of ball plungers (91) or optional spring plunger assembly (91) in holding pallet stop arm assembly (90) in secured position.

8. TROUBLE SHOOTING (See figure 3.)

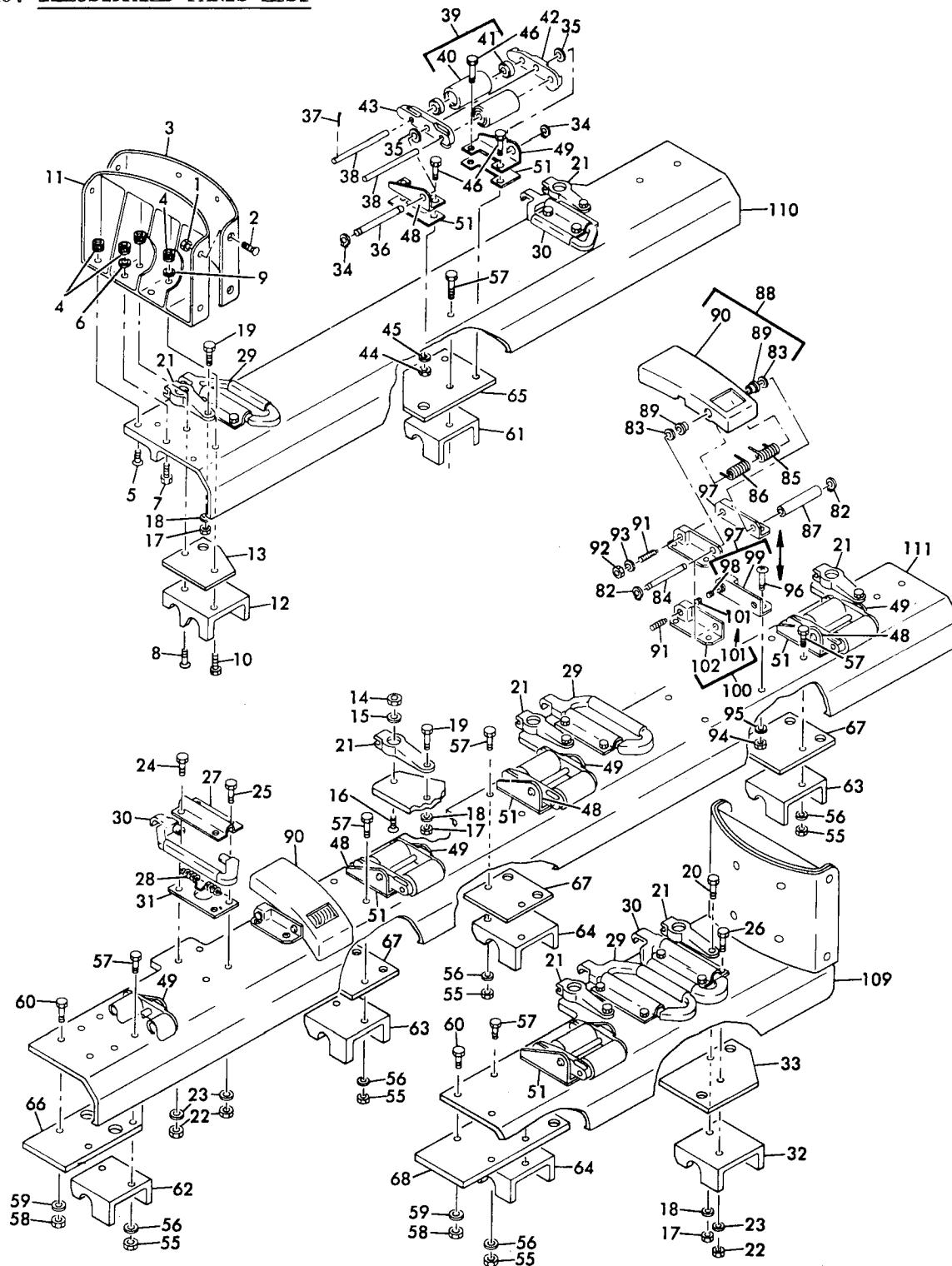
NOTE: Trouble shooting is keyed to individual steps of the test procedure. Referenced paragraphs show test procedure step in which the noted trouble would appear.

<u>Trouble</u>	<u>Possible Cause</u>	<u>Correction</u>
A. Roller assemblies (39) binding or stuck on shaft	Foreign matter deposited in bearings (41)	Disassemble, reclean and reassemble
	Bearings (41) defective	Replace bearings (41)
	Shaft (36 or 38) grooved or broken	Replace shaft (36 or 38)
	Shaft holes elongated in rocker arms (42 and 43) or support angles (48 and 49)	Replace rocker arms (42 and 43) or angles (48 and 49)
B. Ball plunger (91) or spring plunger (91) stuck	Ball plunger (91) or spring plunger (91) defective	Replace defective part

9. STORAGE INSTRUCTIONS

- A. Wrap entire unit in vapor barrier paper.
- B. Tag with part number identity and date of overhaul.
- C. Refer to 20-44-02, Temporary Protective Coatings, for further storage information.

10. ILLUSTRATED PARTS LIST



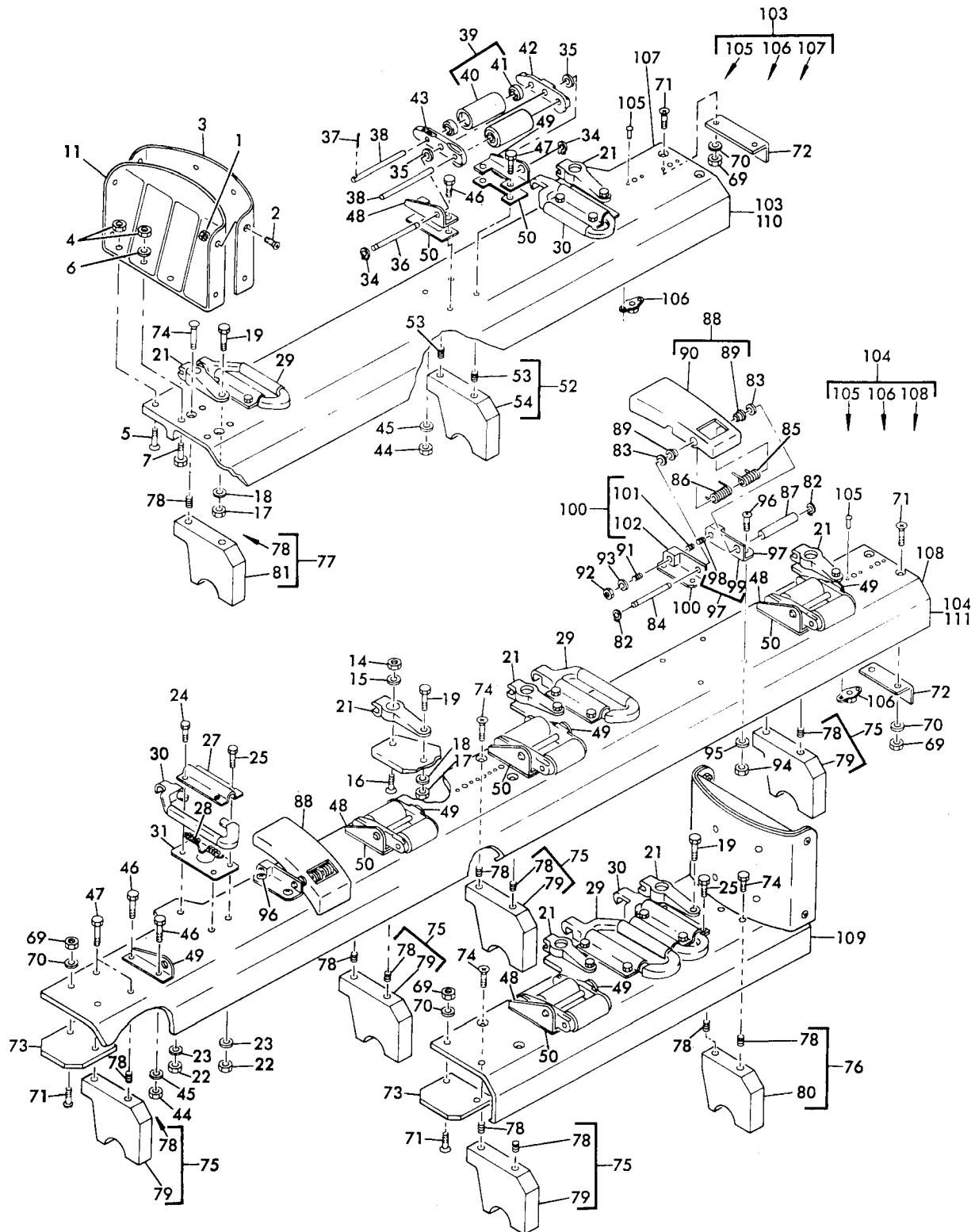
Palletized Cargo System Main Cargo Door Threshold Assembly
Figure 3 (Sheet 1)

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Palletized Cargo System Main Cargo Door Threshold Assembly
Figure 3 (Sheet 2)

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-	65-54137-1		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (procurable or reworked from 65-37218-6 per SB 25-100 or SB 2281)	A	Ref
	65-54137-2		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (procurable or reworked from 65-37218-7 per SB 25-100 or SB 2281)	B	Ref
	65-54137-3		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (procurable or reworked from 65-37218-8 per SB 25-100 or SB 2281)	C	Ref
	65-54137-4		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	D	Ref
	65-54137-5		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	E	Ref
	65-54137-6		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	F	Ref
	65-54137-7		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	G	Ref
	65-54137-8		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	H	Ref
	65-54137-9		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	I	Ref
	65-54137-10		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	J	Ref
	65-54137-11		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	K	Ref
	65-54137-12		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY	L	Ref
	65-67832-3		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (SB 2694)	M	Ref
	65-67832-4		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (SB 2694)	N	Ref
	65-67832-5		PALLETIZED CARGO SYSTEM MAIN CARGO DOOR THRESHOLD ASSY (SB 2694)	O	Ref
1	BACN10JC3		. NUT (replaces NAS679A3W)	ACDFG IJLMO	8
2	NAS514P1032- 10		. SCREW	ACDFG IJLMO	8
3	69-29625-1		. PLATE, Scuff	ACDFG IJLMO	1

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101											
4	BACN10GW ⁴		.	NUT	(replaces	BACN10BL ⁴ L)				ACDFG IJLMO	6
5	BACB30LU ⁴ -11A		.	BOLT	(replaces	BACB30ABP ⁴ -11A)				ACDFG IJLMO	2
6	AN960PD ⁴ 16		.	WASHER						ACFGI JLMO	4
6	AN960PD ⁴ 16		.	WASHER						D	2
7	BACB30NE ⁴ -7		.	BOLT	(replaces	NAS130 ⁴ -7)				ACFGI JLMO	4
7	BACB30NE ⁴ -7		.	BOLT	(replaces	NAS130 ⁴ -7)				D	2
8	BACB30LU ⁴ -16		.	SCREW	(preferred)					D	1
8	NAS517- ⁴ -16		.	SCREW	(optional to	BACB30LU ⁴ -16)				D	1
9	AN960PD ⁴ 16		.	WASHER						D	1
10	BACB30NE ⁴ -16		.	BOLT	(replaces	NAS130 ⁴ -16)				D	1
11	65-37216-1		.	GUIDE ASSY,	Door threshold					ACDFG IJLMO	1
12	69-50905-1		.	BRACKET,	Support					D	1
13	69-50907-1		.	PLATE,	Bearing					D	1
14	BACN10JC ⁴		.	NUT	(replaces	NAS679A ⁴ W)				ACDFG IJLMO	2
14	BACN10JC ⁴		.	NUT	(replaces	NAS679A ⁴ W)				BEHKN	4
15	AN960- ⁴ 16		.	WASHER						ACDFG IJLMO	2
15	AN960- ⁴ 16		.	WASHER						BEHKN	4
16	BACB30LU ⁴ -8		.	SCREW	(preferred)					ACDFG IJLMO	2
16	NAS517- ⁴ -8		.	SCREW	(optional to	BACB30LU ⁴ -8)				ACDFG IJLMO	2
16	BACB30LU ⁴ -8		.	SCREW	(preferred)					BEHKN	4
16	NAS517- ⁴ -8		.	SCREW	(optional to	BACB30LU ⁴ -8)				BEHKN	4
17	BACN10JC3		.	NUT	(replaces	NAS679A3W)				ACDFG IJLMO	2
17	BACN10JC3		.	NUT	(replaces	NAS679A3W)				BEHKN	4
18	AN960PD10L		.	WASHER						ACDFG IJLMO	2
18	AN960PD10L		.	WASHER						BEHKN	4
19	NAS1103-8		.	BOLT						ACDGI JLMO	2
19	NAS1103-8		.	BOLT						F	1
19	NAS1103-8		.	BOLT						BEHKN	4
20	NAS1103-17		.	BOLT						F	1
21	69-43629-1		.	FITTING,	Hinge (preferred)					ACDF	2
21	69-43629-1		.	FITTING,	Hinge (preferred)					BE	4

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101											
21	65-67818-1		.	FITTING,	Hinge	(optional	to	69-		ACDF	2
						43629-1)					
21	65-67818-1		.	FITTING,	Hinge	(optional	to	69-		BE	4
						43629-1)				GIJL	2
21	65-67818-1		.	FITTING,	Hinge					HK	4
21	65-67818-1		.	FITTING,	Hinge					MO	2
21	65-67832-12		.	FITTING,	Hinge	(SB 2694)				N	4
21	65-67832-12		.	FITTING,	Hinge	(SB 2694)					
22	BACN10JC3		.	NUT	(replaces	NAS679A3W)					8
23	AN960PDL0L		.	WASHER							8
24	NAS1103-10		.	BOLT							4
25	NAS1103-6		.	BOLT						A-E	4
										G-O	
25	NAS1103-6		.	BOLT						F	3
26	NAS1103-15		.	BOLT						F	1
27	69-43630-1		.	PLATE,	Attach						2
28	69-43634-1		.	SPRING,	Handle						2
29	65-56946-1		.	HANDLE							1
30	65-56946-2		.	HANDLE	(opposite	65-56946-1)					1
31	69-43633-1		.	BASEPLATE							2
32	69-50905-6		.	BRACKET,	Support					F	1
33	69-50907-6		.	PLATE,	Bearing					F	1
34	MS16624-10-50		.	RING,	Snap	(replaces	NAS670-50)			ACDFG	2
										IJLMO	
34	MS16624-10-50		.	RING,	Snap	(replaces	NAS670-50)			BEHKN	8
35	AN960-816		.	WASHER						ACDFG	2
										IJLMO	
35	AN960-816		.	WASHER						BEHKN	8
36	66-20782-1		.	SHAFT						ACDFG	1
										IJLMO	
36	66-20782-1		.	SHAFT						BEHKN	4
37	MS24665-285		.	PIN,	Cotter					ACDFG	4
										IJLMO	
37	MS24665-285		.	PIN,	Cotter					BEHKN	16
38	66-20781-1		.	SHAFT						ACDFG	2
										IJLMO	
38	66-20781-1		.	SHAFT						BEHKN	8
39	69-29613-2		.	ROLLER	ASSY					ACDFG	2
										IJLMO	
39	69-29613-2		.	ROLLER	ASSY					BEHKN	8
40	69-29608-1		.	ROLLER							1

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1101					
41	BACB10A691		. . BEARING, Roller (replaces AN200KP6)		2
42	66-20780-1		. ARM, Rocker	ACDFG IJLMO	1
42	66-20780-1		. ARM, Rocker	BEHKN	4
43	66-20780-2		. ARM, Rocker (opposite 66-20780-1)	ACDFG IJLMO	1
43	66-20780-2		. ARM, Rocker (opposite 66-20780-1)	BEHKN	4
44	BACN10JC3		. NUT (replaces NAS679A3W)	AGJM	2
44	BACN10JC3		. NUT (replaces NAS679A3W)	BHKN	8
44	BACN10JC3		. NUT (replaces NAS679A3W)	CDFIL	4
44	BACN10JC3		. NUT (replaces NAS679A3W)	O E	16
45	AN960PD10L		. WASHER	AGJM	2
45	AN960PD10L		. WASHER	BHKN	10
45	AN960PD10L		. WASHER	CDFIL O	4
45	AN960PD10L		. WASHER	E	16
46	NAS1103-6		. BOLT	A	2
46	NAS1103-8		. BOLT	GJ	2
46	NAS1103-6		. BOLT	B	10
46	NAS1103-8		. BOLT	HK	10
46	NAS1103-6		. BOLT	C	4
46	NAS1103-8		. BOLT	IL	4
46	NAS1103-7		. BOLT	DF	4
46	NAS1103-7		. BOLT	E	16
46	NAS1303-9		. BOLT (SB 2694)	M	2
46	NAS1303-9		. BOLT (SB 2694)	N	10
46	NAS1303-9		. BOLT (SB 2694)	O	4
47	BACB3ONE3-6		. BOLT (replaces NAS1303-6)	A	2
47	BACB3ONE3-8		. BOLT (replaces NAS1303-8)	GJ	2
47	BACB3ONE3-6		. BOLT (replaces NAS1303-6)	B	6
47	BACB3ONE3-8		. BOLT (replaces NAS1303-8)	HK	6
47	NAS1303-9		. BOLT (SB 2694)	M	2
47	NAS1303-9		. BOLT (SB 2694)	N	6
48	69-39958-1		. ANGLE, Support	ACDFG IJLMO	1
48	69-39958-1		. ANGLE, Support	BEHKN	4
49	69-39958-2		. ANGLE, Support (opposite 69-39958-1)	ACDFG IJLMO	1
49	69-39958-2		. ANGLE, Support (opposite 69-39958-1)	BEHKN	4
50	69-56220-1		. SHIM	GIJL	2

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1101					
50	69-56220-1		. SHIM	HK	8
50	69-56220-1		. SHIM (SB 2694)	MO	2
50	69-56220-1		. SHIM (SB 2694)	N	8
51	69-50907-7		. SHIM	DF	2
51	69-50907-7		. SHIM	E	8
52	69-39986-1		. SUPPORT ASSY	ACGLJ LMO	1
53	MS21209F1-20		. . INSERT, Helical coil		2
54	69-39986-4		. . SUPPORT		1
55	BACN1QJC4		. NUT (replaces NAS679A4W)	DF	2
55	BACN1QJC4		. NUT (replaces NAS679A4W)	E	8
56	AN96OPD416		. WASHER	DF	2
56	AN96OPD416		. WASHER	E	8
57	NAS1104-13		. BOLT	DF	2
57	NAS1104-13		. BOLT	E	8
58	BACN1QJC4		. NUT (replaces NAS679A4W)	EF	2
59	AN96OPD416		. WASHER	EF	2
60	NAS1104-10		. BOLT	EF	2
61	69-50905-2		. BRACKET, Support	D	1
62	69-50905-3		. BRACKET, Support	E	1
63	69-50905-5		. BRACKET, Support	E	2
64	69-50905-7		. BRACKET, Support	EF	1
65	69-50907-2		. PLATE, Bearing	D	1
66	69-50907-3		. PLATE, Bearing	E	1
67	69-50907-4		. PLATE, Bearing	E	3
68	69-50907-5		. PLATE, Bearing	F	1
69	BACN1QJC3		. NUT (replaces NAS679A3W)	ABGHK LMO	2
70	AN96OPD10L		. WASHER	ABGHK LMO	2
71	BACB30LU3-6		. SCREW (preferred)	ABGHK LMO	4
71	NAS517-3-6		. SCREW (optional to BACB30LU3-6)	ABGHK LMO	4
72	69-29600-2		. ANGLE	ABGH MO	1
73	69-56528-1		. PLATE, Support	KL	1
74	BACB30LU3-3		. SCREW (preferred)	ABGHJ KMO	2
74	NAS517-3-3		. SCREW (optional to BACB30LU3-3)	ABGHJ KMO	2
74	BACB30LU3-3		. SCREW (preferred)	CILO	4

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101					
74	NAS517-3-3		. SCREW (optional to BACB30LU3-3)	CILO	4
75	69-39986-1		. SUPPORT ASSY	CILO	1
75	69-39986-1		. SUPPORT ASSY	BHKN	4
76	69-39986-2		. SUPPORT ASSY	CILO	1
77	69-39986-3		. SUPPORT ASSY	AGJM	1
78	MS21209F1-20		. . INSERT, Helical coil		2
79	69-39986-4		. . SUPPORT (used on 69-39986-1)		1
80	69-39986-5		. . SUPPORT (used on 69-39986-2)		1
81	69-39986-6		. . SUPPORT (used on 69-39986-3)		1
82	MS16624-4037		. RING, Snap	BEHKN	4
83	AN960PD616L		. WASHER	BEHKN	AR
84	69-39984-1		. SHAFT, Pallet stop	BEHKN	2
85	69-40479-1		. SPRING, Pallet stop	BEHKN	2
86	69-40479-2		. SPRING, Pallet stop (opposite 69-40479-1)	BEHKN	2
87	NAS1056C12-195		. SPACER	BEHKN	2
88	65-54511-1		. ARM ASSY, Pallet stop	BEHKN	2
89	NAS77A6-50P		. . BUSHING		2
90	65-54511-2		. . ARM, Stop		1
91	SSB60N		. PLUNGER, Ball, V01266	HK	4
91	SSB60N		. PLUNGER, Ball, V01266 (preferred) * [1] * [2]	BEN	4
91	S-56		. PLUNGER, Spring, V01266 (optional) * [1] * [2]	BEN	4
92	MS35691-502		. JAMNUT (optional) * [1] * [2]	BEN	4
93	AN960PD516L		. WASHER, Flat (optional) * [1] * [2]	BEN	4
94	BACN10JC4		. NUT (replaces NAS679A4W)	BEHKN	8
95	AN960PD416		. WASHER	BEHKN	8
96	BACB30LU4-6		. SCREW (preferred)	BEHKN	8
96	NAS517-4-6		. SCREW (optional to BACB30LU4-6)	BEHKN	8
97	69-39983-5		. SUPPORT	HK	2
97	69-39983-5		. SUPPORT (preferred) * [1]	BEN	2
97	69-39983-1		. SUPPORT ASSY (optional to 69-39983-5) * [1]	BEN	2
98	MS21209C5-15		. . INSERT, Helical coil (used on 69-39983-1)		2
99	69-39983-3		. . SUPPORT (used on 69-39983-1)		1
100	69-39983-6		. SUPPORT (opposite 69-39983-5)	HK	2
100	69-39983-6		. SUPPORT (opposite 69-39983-5) (preferred) * [2]	BEN	2
100	69-39983-2		. SUPPORT ASSY (opposite 69-39983-1) (optional to 69-39983-6) * [2]	BEN	2

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1101 101	MS21209C5-15		. . INSERT, Helical coil (used on 69-39983-2)		2
102	69-39983-4		. . SUPPORT (used on 69-39983-2)		1
103	65-54138-1		. BEAM ASSY	A	1
103	65-67832-9		. BEAM ASSY (SB 2694)	M	1
104	65-54138-2		. BEAM ASSY	B	1
104	65-67832-10		. BEAM ASSY (SB 2694)	N	1
105	MS20426D3		. . RIVET	AM	4
105	MS20426D3		. . RIVET	BN	10
106	BACN10JR4F		. . NUTPLATE (replaces NAS686A4)	AM	2
106	BACN10JR4F		. . NUTPLATE (replaces NAS686A4)	BN	5
107	65-54138-4		. . BEAM	AM	1
108	65-54138-5		. . BEAM	BN	1
109	65-54138-3		. BEAM	C	1
109	65-54138-8		. BEAM	F	1
109	65-54138-11		. BEAM	IL	1
109	65-67832-11		. BEAM (SB 2694)	O	1
110	65-54138-6		. BEAM	D	1
110	65-54138-12		. BEAM	GJ	1
111	65-54138-7		. BEAM	E	1
111	65-54138-13		. BEAM	HK	1

*[1] 69-39983-1, MS35691-502, AN960PD516L and S-56 are optional to 69-39983-5
and SSB60N

*[2] 69-39983-2, MS35691-502, AN960PD516L and S-56 are optional to 69-39983-6
and SSB60N

VENDORS

V01226 Vlier Engineering Corporation, 8900 Santa Monica Boulevard, Los
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Part No.	Fig. and Index No.	Qty. per Assy.
AN960-416	3-	AR
AN960-816		AR
AN960PD10L		AR
AN960PD416		AR
AN960PD516L		AR
AN960PD616L		AR
BACB10A691	41	2
BACB30LU3-3	74	2
BACB30LU3-3	74	4
BACB30LU3-6	71	4
BACB30LU4-11A	5	2
BACB30LU4-16	8	1
BACB30LU4-6	96	8
BACB30LU4-8	16	2
BACB30LU4-8	16	4
BACB30NE3-6	47	2
BACB30NE3-6	47	6
BACB30NE3-8	47	2
BACB30NE3-8	47	6
BACB30NE4-16	10	1
BACB30NE4-7	7	2
BACB30NE4-7	7	4
BACN10GW4	4	6
BACN10JC3	1	8
BACN10JC3	17	2
BACN10JC3	17	4
BACN10JC3	22	8
BACN10JC3	44	2
BACN10JC3	44	4
BACN10JC3	44	8
BACN10JC3	44	16
BACN10JC3	69	2
BACN10JC4	14	2
BACN10JC4	14	4
BACN10JC4	55	2
BACN10JC4	55	8
BACN10JC4	58	2
BACN10JC4	94	8
BACN10JR4F	106	2
BACN10JR4F	106	5

Part No.	Fig. and Index No.	Qty. per Assy.
MS16624-10-50		AR
MS16624-4037		AR
MS20426D3		AR
MS21209C5-15		AR
MS21209F1-20		AR
MS24665-285		AR
MS35691-502		AR
NAS1056C12-195		AR
NAS1103-10		AR
NAS1103-15		AR
NAS1103-17		AR
NAS1103-6		AR
NAS1103-7		AR
NAS1103-8		AR
NAS1104-10		AR
NAS1104-13		AR
NAS1303-6		AR
NAS1303-8		AR
NAS1303-9		AR
NAS514-1032-10		AR
NAS517-3-3		AR
NAS517-3-6		AR
NAS517-4-16		AR
NAS517-4-6		AR
NAS517-4-8		AR
NAS670-50		AR
NAS679A3W		AR
NAS679A4W		AR
NAS686A4		AR
NAS77A6-50P		AR
S-56	91	4
SSB60N	91	4
65-37216-1	11	1
65-54137-1		
65-54137-10		
65-54137-11		
65-54137-12		
65-54137-2	3	

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Part No.	Fig. and Index No.	Qty. per Assy.
65-54137-3	3-	
65-54137-4	3	
65-54137-5	3	
65-54137-6	3	
65-54137-7	3	
65-54137-8	3	
65-54137-9	3	
65-54138-1	103	1
65-54138-11	109	1
65-54138-12	110	1
65-54138-13	111	1
65-54138-2	104	1
65-54138-3	109	1
65-54138-4	107	1
65-54138-5	108	1
65-54138-6	110	1
65-54138-7	111	1
65-54138-8	109	1
65-54511-1	88	2
65-54511-2	90	1
65-56946-1	29	1
65-56946-2	30	1
65-67818-1	21	2
65-67818-1	21	4
65-67832-10	104	1
65-67832-11	109	1
65-67832-12	21	2
65-67832-12	21	4
65-67832-3	3	
65-67832-4	3	
65-67832-5	3	
65-67832-9	103	1
66-20780-1	42	1
66-20780-1	42	4
66-20780-2	43	1
66-20780-2	43	4
66-20781-1	38	2
66-20781-1	38	8
66-20782-1	36	1
66-20782-1	36	4
69-29600-2	72	1
69-29608-1	40	1
69-29613-2	39	2

Part No.	Fig. and Index No.	Qty. per Assy.
69-29613-2	39	8
69-29625-1	3	1
69-39958-1	48	1
69-39958-1	48	4
69-39958-2	49	1
69-39958-2	49	4
69-39983-1	97	2
69-39983-2	100	2
69-39983-3	99	1
69-39983-4	102	1
69-39983-5	97	2
69-39983-6	100	2
69-39984-1	84	2
69-39986-1	52	1
69-39986-1	75	1
69-39986-1	75	4
69-39986-2	76	1
69-39986-3	77	1
69-39986-4	54	1
69-39986-4	79	1
69-39986-5	80	1
69-39986-6	81	1
69-40479-1	85	2
69-40479-2	86	2
69-43629-1	21	2
69-43629-1	21	4
69-43630-1	27	2
69-43633-1	31	2
69-43634-1	28	2
69-50905-1	12	1
69-50905-2	61	1
69-50905-3	62	1
69-50905-5	63	2
69-50905-6	32	1
69-50905-7	64	1
69-50907-1	13	1
69-50907-2	65	1
69-50907-3	66	1
69-50907-4	67	3
69-50907-5	68	1
69-50907-6	33	1
69-50907-7	51	2
69-50907-7	51	8
69-56220-1	50	2
69-56220-1	50	8
69-56528-1	73	1