

OVERHAUL MANUAL

TO: ALL HOLDERS OF AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP
OVERHAUL MANUAL, 27-67-03

REVISION NO. 3, DATED DEC 5/89

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / A s s y	C l e a n i n g	I n s p / C h k	R e p a i r	A s s y	F / C	T e s t	T / S h o o t i n g	S / T o o l s	S t o r a g e	I P L	L / O v e r h a u l
Added quadrant assembly 65-52881-38 with larger diameter to ensure full deployment of the flight spoilers per PRR 34552		X			X	X						X	
Added quadrant assemblies 65C34605-5, -6, -7 per SB 26-1156		X		X	X	X						X	

AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP

27-67-03

BOEING P/N NO ASSIGNED PART NUMBER

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
27-1027		PRR 33528 PRR 34267 PRR 34297 PRR 34552	Mar 10/71 Jun 5/84 Jun 5/88 Jun 5/88 Dec 5/89 Dec 5/89
27-1156			

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LIST OF EFFECTIVE PAGES

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

PAGE	DATE	PAGE	DATE	PAGE	DATE
27-67-03					
* T-1	Dec 5/89				
T-2	BLANK				
* LEP-1	Dec 5/89				
LEP-2	BLANK				
* T/C-1	Dec 5/89				
T/C-2	BLANK				
1	May 15/69				
2	Mar 10/71				
* 3	Dec 5/89				
* 4	Dec 5/89				
* 5	Dec 5/89				
* 6	Dec 5/89				
* 7	Dec 5/89				
* 8	Dec 5/89				
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* 12	Dec 5/89				
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* 21	Dec 5/89				
* 22	BLANK				



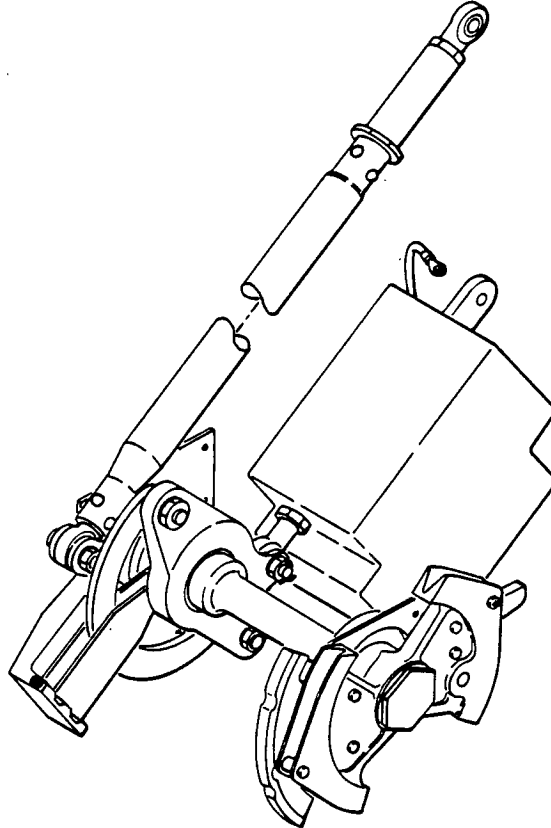
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AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP
No Assigned Part Number



Automatic Speed Brake Drum Mechanism and Actuator Buildup
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

- (1) The automatic speed brake drum mechanism and actuator is located at station 192.90. The unit consists of a push rod assembly, linear actuator assembly, quadrant assembly, and a brake assembly.

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B. Operation

- (1) The drum mechanism and linear actuator are connected through control cables and linkage to a speed brake control system. The speed brake control system actuates flight and ground spoilers on the wings. Movement of a speed brake control lever rotates the drum mechanism and attached quadrant. Cables attached to the quadrant transfer control lever motion to the speed brake control system and to the spoilers. Speed brake system control may also be applied through the electrically-driven linear actuator by a preselected setting of the speed brake control lever. The actuator then drives the control lever to cause the spoilers to raise or lower. Control lever braking is provided by the mechanism brake assembly.

C. Leading Particulars

Width -- 6.00 inches (approximately)
Length -- 9.00 inches (approximately)
Height -- 5.00 inches (approximately)
Weight -- 7.00 pounds (approximately)

2. DISASSEMBLY

A. General

NOTE: It is necessary to remove some of the buildup parts during removal of mechanism from the airplane. Therefore, applicable items removed in the following procedure may be disassembled prior to receiving the mechanism for overhaul.

B. Disassembly (See figure 3.)

- (1) Remove nut (1), washer (2), bolt (3), and push rod assembly (4).

NOTE: Do not disassemble push rod assembly (4) unless repair or replacement is necessary.

- (2) Remove cotter pin (12), nut (13), washer (14), bolt (15), and linear actuator assembly (16).

NOTE: Refer to manufacturer's instructions for overhaul of linear actuator assembly (16).

- (3) Remove nut, washers, screw, and jumper assembly (17 through 20) from linear actuator assembly (16).

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- (4) Quadrant Assembly (65-52881-5, -7, -24), remove quadrant bolt (21), washer (22), and quadrant assembly (23).

NOTE: Do not remove rivets and cam (24 and 25) from quadrant assembly (23) or rivets, cam, spacers, nuts, washers, and screws (24A thru 24C, as applicable, 27 thru 34) from quadrant (35) unless repair or replacement is necessary.

- (5) Quadrant Assembly (65-52881-9, -11, -30), remove quadrant bolt (21), washer (22), and quadrant assembly (23).

- (a) Remove nuts (25C), washers (25D), cams (25, 25A), spacers (25B) and screws (25E) from quadrant (35).

NOTE: Do not remove rivets (27, 29), cam (28), spacers (30, 34), nut (31), washer (32) and screw (33) from quadrant (35) unless repair or replacement is necessary.

- (6) Quadrant Assembly (65-52881-15, -36, -40), remove quadrant bolt (21), washer (22), and quadrant assembly (23).

- (a) Remove nuts (25C), washers (25D), cam (25, 25A), spacers (25B) and screws (25E) from quadrant (35).

- (b) Remove nuts (28B), washers (28C), adapter plate (28A), spacers (28D), cam (28), and bolts (28E) from quadrant (35).

NOTE: Do not remove rivet (29), nut (29B, 31), washer (29C, 32), spacer (30, 34) and screw (29A, 33) from quadrant (35) unless repair or replacement is necessary.

- (7) Quadrant assembly (65-52881-28, -32, -34, -38), remove quadrant bolt (21), washer (22) and quadrant assembly (23).

- (a) Remove nuts (24C), washers (24B), screws (24A) and cam (25) from quadrant (35).

- (b) Remove nuts (28B), washers (28C), adapter plate (28A), spacers (28D), cam (28), and bolts (28E) from quadrant (35).

NOTE: Do not remove rivet (29), nut (29B, 31), washer (29C, 32), spacer (30, 34) and screw (29A, 33) from quadrant (35) unless repair or replacement is necessary.

- (8) Quadrant assembly (65C34605-5), remove quadrant bolt (21), washer (22), and quadrant assembly (23).

NOTE: Do not remove bolts (35A, 35G, 35N), screws (24A), nuts (24C, 35C, 35H, 35L), washers (24B, 35B, 35J, 35M), spacers (35U, 35P), cams (25, 35F) from quadrant (35Q) unless repair or replacement is necessary.

(9) Quadrant assembly (65C34605-7), remove quadrant bolt (21), washer (22), and quadrant assembly (23).

(a) Remove nuts (25C), washers (25D), cams (25, 25A), spacers (25B) and screws (25E) from quadrant (35Q).

NOTE: Do not remove bolts (35A, 35G, 35N), nuts (35C, 35H, 35L), washers (35B, 35J, 35M), spacers (35K, 35P) and cam (35F) from quadrant (35Q) unless repair or replacement is necessary.

(10) Quadrant assembly (65C34605-6), remove quadrant bolt (21), washer (22) and quadrant assembly (23).

(a) Remove nuts (24C), washers (24B), screws (24A) and cam (25) from quadrant (35Q).

(b) Remove nuts (35C), washers (35B), adapter plate (35E), spacers (35D), cam (35F) and bolts (35A) from quadrant (35Q).

NOTE: Do not remove bolt (35G), nuts (35H, 35L), washers (35J, 35M), spacers (35K, 35P) and screw (35N) from quadrant (35Q) unless repair or replacement is necessary.

(11) Remove nut (36), washer (37), and bearing retainers (38 and 41) from shaft of brake assembly (42).

NOTE: Do not remove bearings (39 and 40) unless repair or replacement is necessary.

Refer to manufacturer's instructions for overhaul of brake assembly (42).

3. CLEANING

A. General

(1) Wash and rinse all metal parts except bearings in solvent, Specification P-D-680 or equivalent. Use stiff bristle brush to remove accumulations of foreign matter.

(2) Dry parts with a clean, lint-free cloth or moisture-free compressed air.

(3) For additional information, refer to 20-30-03, General Cleaning Procedures.

B. Bearings

(1) For cleaning of bearings, refer to 20-30-01, Cleaning and Relubricating Antifriction Bearings.

4. INSPECTION/CHECK

A. Visual Check

- (1) Check all metal parts for cracks, burrs, nicks, and corrosion under strong light and a minimum of 10-power magnification.
- (2) Examine all threads for cross-threading, stripping, and accumulation of foreign material.
- (3) Check bearings for corrosion, roughness, binding, excessive radial or axial play, and for freedom of rotation.
- (4) Examine painted and plated surfaces for blisters or flaking.
- (5) Check parts for wear beyond allowable limits shown in Fits and Clearances.

B. Special Check (Fig. 3)

- (1) If questionable areas are evident under visual examination, perform penetrant check on rod (11), quadrant (35, 35Q), and bearing retainers (38, 41).

NOTE: Refer to 20-20-02 for penetrant check methods.

5. REPAIR

A. Repair

- (1) Remove minor scratches, nicks, pitting, and corrosion by polishing with abrasive cloth, 220 grit or finer.
- (2) Remove minor defects from threads with thread chaser or small triangular file.

B. Refinish (Fig. 3)

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

- (1) If plated or painted surfaces are worn or chipped, refinish the following parts as indicated:
 - (a) Threaded plug (8) -- Apply SRF-2.90 all over except no primer on threads or on entire length of 0.623- to 0.625-inch diameter.
 - (b) Rod (11) -- Apply SRF-2.901 all over followed by SRF-12.205.
 - (c) Quadrant bolt (21) -- Apply F-1.1923 all over.

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- (d) Cam (28, 69-53445-1, -2) -- Apply SRF-2.30 all over except F-2.204 on periphery only. 69-53445-2 (only) -- Finish index mark per SRF-14.9052-701 (Black).
- (e) Cam (28, 35F) -- Apply F18.13 all over except F17.06 on periphery only.
- (f) Quadrant (35, 65-52497-6) -- Apply F-2.201 all over followed by SRF-12.205 except no primer on splines.
- (g) Quadrant (35, 65-52497-13), (35, 35Q, 65-52497-18) -- Apply F18.13 all over except no primer on splines.
- (h) Bearing retainer (38) -- Apply SRF-3.30 all over except no primer on 1.9377- to 1.9382-inch diameter.
- (i) Bearing retainer (41) -- Apply SRF-3.305 all over except no primer on 0.8752- to 0.8757-inch diameter.
- (j) Adapter plate (28A, 35E, 69-70545-1) -- Apply F-18.05 all over.
- (k) Adapter plate (28A, 69-77162-1) -- Apply F-18.13 all over.

C. Replacement (Fig. 3)

- (1) Replace any parts damaged beyond simple repair or refinish.
- (2) Replace cotter pin (12) at each overhaul.
- (3) If necessary to replace bearings (39 and 40), remove old bearings and install new bearings per 20-50-03.

6. ASSEMBLY

- A. Loose-assemble bearing retainers (38 and 41, Fig. 3) and nut (36) on shaft of brake assembly (42).

NOTE: Final installation of bearing retainers (38 and 41) and nut (36) will be accomplished when unit is installed in airplane.

- B. Quadrant Assembly (65-52881-5, -7, -24, 65C34605-5)

- (1) Install washer (37) and quadrant assembly (23) and secure with washer (22) and quadrant bolt (21).

NOTE: Do not tighten quadrant bolt (21). Bolt will be tightened when unit is installed in airplane.

- C. Quadrant Assembly (65-52881-9, -11, -30, 65C34605-7)

- (1) Install cams (25, 25A), spacers (25B), screws (25E), washers (25D) and nuts (25C) on quadrant (35, 35Q).

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- (2) Install washer (37) and quadrant assembly (23) and secure with washer (22) and quadrant bolt (21).

NOTE: Do not tighten quadrant bolt (21). Bolt will be tightened when unit is installed in airplane.

D. Quadrant Assembly (65-52881-15, -36, -40)

- (1) Install adapter plate (28A), spacers (28D) cam (28), bolts (28E), washers (28C), and nuts (28B) on quadrant (35).
- (2) Install cams (25, 25A), spacers (25B), screws (25E), washers (25D) and nuts (25C) on quadrant (35).
- (3) Install washer (37) and quadrant assembly (23) and secure with washer (22) and quadrant bolt (21).

NOTE: Do not tighten quadrant bolt (21). Bolt will be tightened when unit is installed in airplane.

E. Quadrant Assembly (65-52881-28, -32, -34, -38)

- (1) Install adapter plate (28A, 35E), spacers (28D, 35D), cam (28, 35F), bolts (28E, 35A), washers (28C, 35B), and nuts (28B, 35C) on quadrant (35, 35Q).
- (2) Install cam (25), screws (24A), washers (24B) and nuts (24C) on quadrant (35, 35Q).
- (3) Install washer (37) and quadrant assembly (23) and secure with washer (22) and quadrant bolt (21).

NOTE: Do not tighten quadrant bolt (21). Bolt will be tightened when unit is installed in airplane.

- F. Install jumper assembly (20) on linear actuator assembly (16) using nut, washers, and screws (17 thru 19).

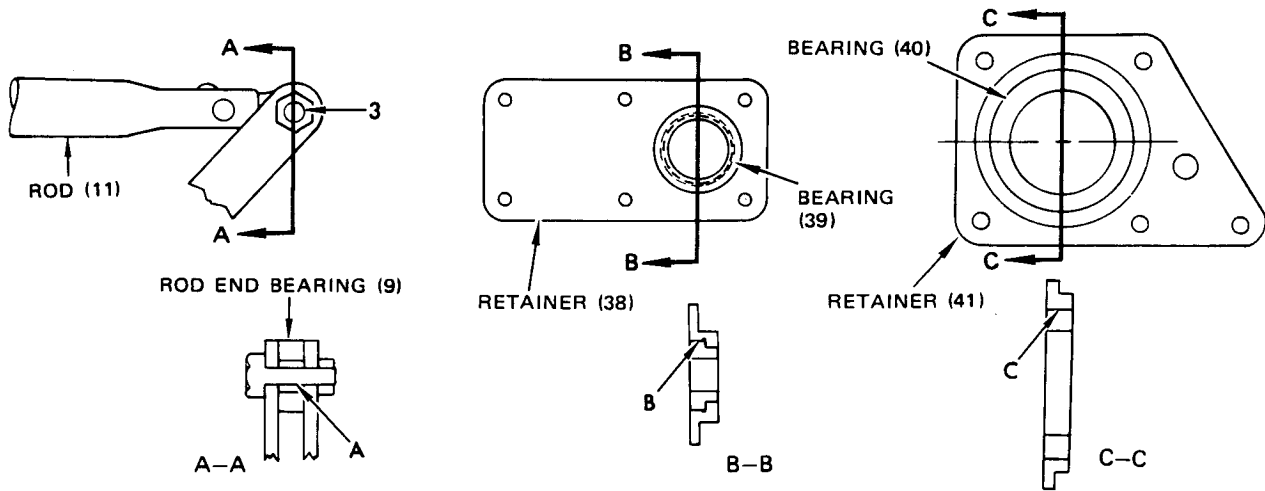
- G. Attach linear actuator assembly (16) to arm of brake assembly (42) with bolt (15), washer (14), nut (13) and cotter pin (12).

- H. Install pushrod assembly (4) with bolt (3), washer (2), and nut (1).

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7. FITS AND CLEARANCES

A. and B. deleted.



Ref Letter Fig.	Mating Item No. Fig. 3	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID 9	0.1897	0.1900	0.0002	0.0015	0.1881	0.1900	0.0019
	OD 3	0.1885	0.1895					
B	ID 38	0.8752	0.8757	0.0002	0.0012	0.8745	0.8765	0.0002
	OD 39	0.8745	0.8750					
C	ID 41	1.9377	1.9382	0.0002	0.0017	1.9365	1.9385	0.0002
	OD 40	1.9365	1.9375					

Fits and Clearances
Figure 2

AUTOMATIC SPEED BRAKE
DRUM MECHANISM AND
ACTUATOR BUILDUP
(NO ASSIGNED P/N)

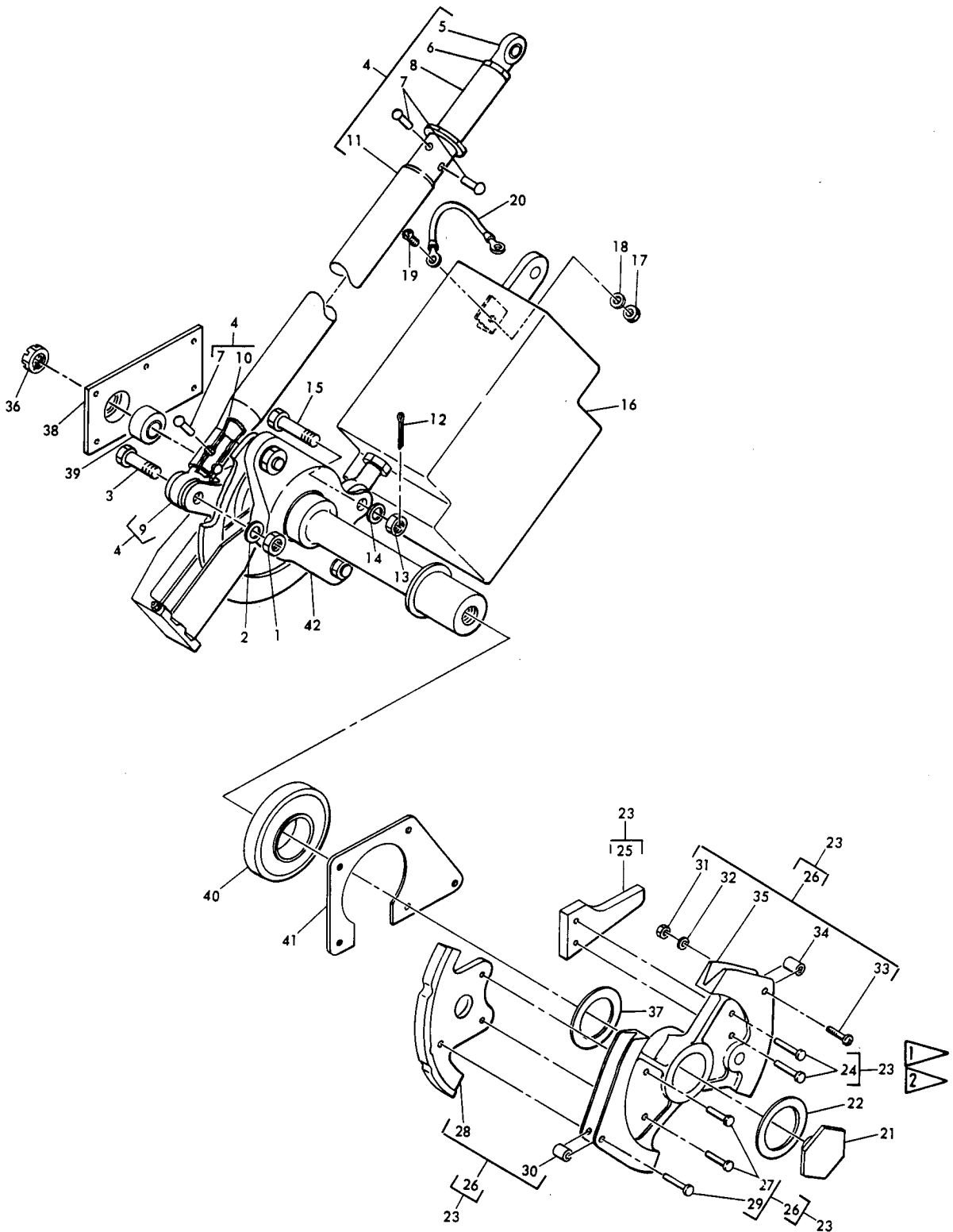


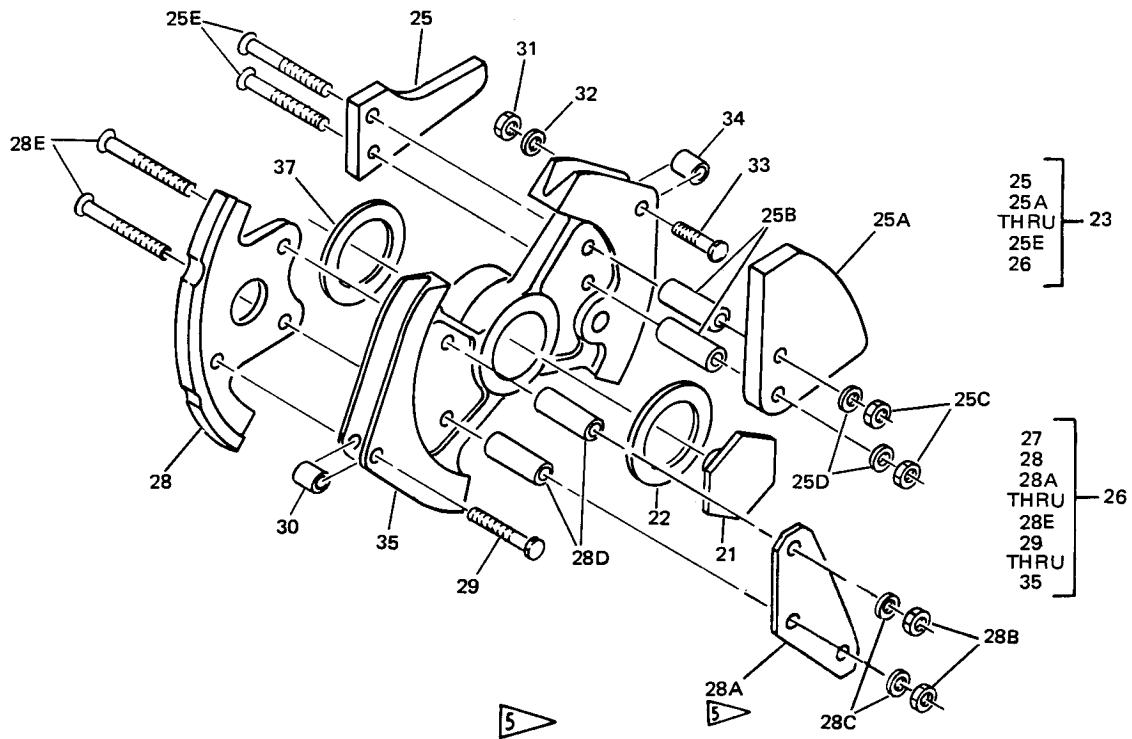
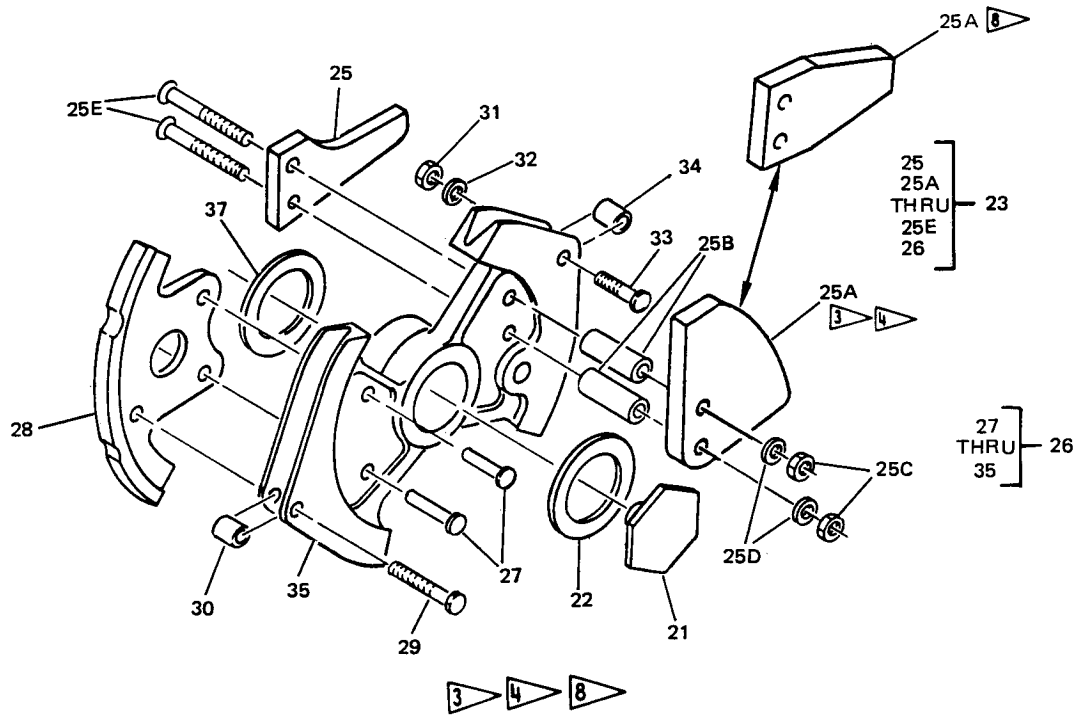
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8. STORAGE INSTRUCTIONS

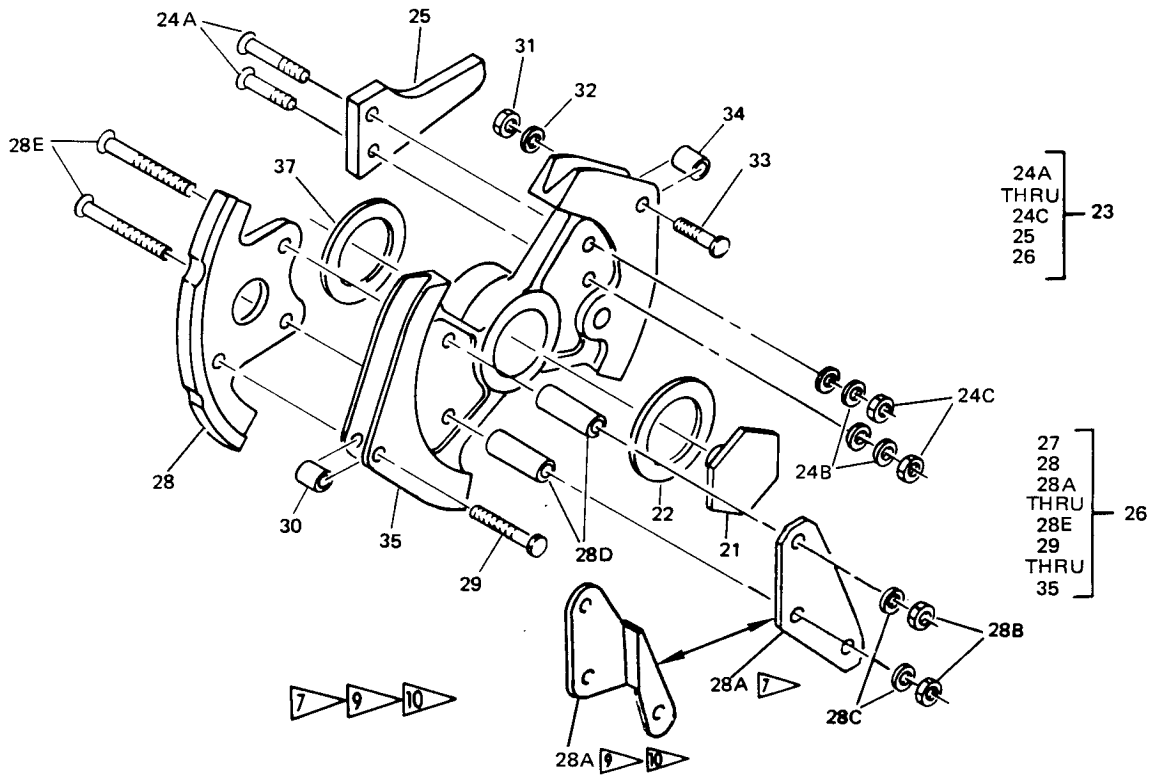
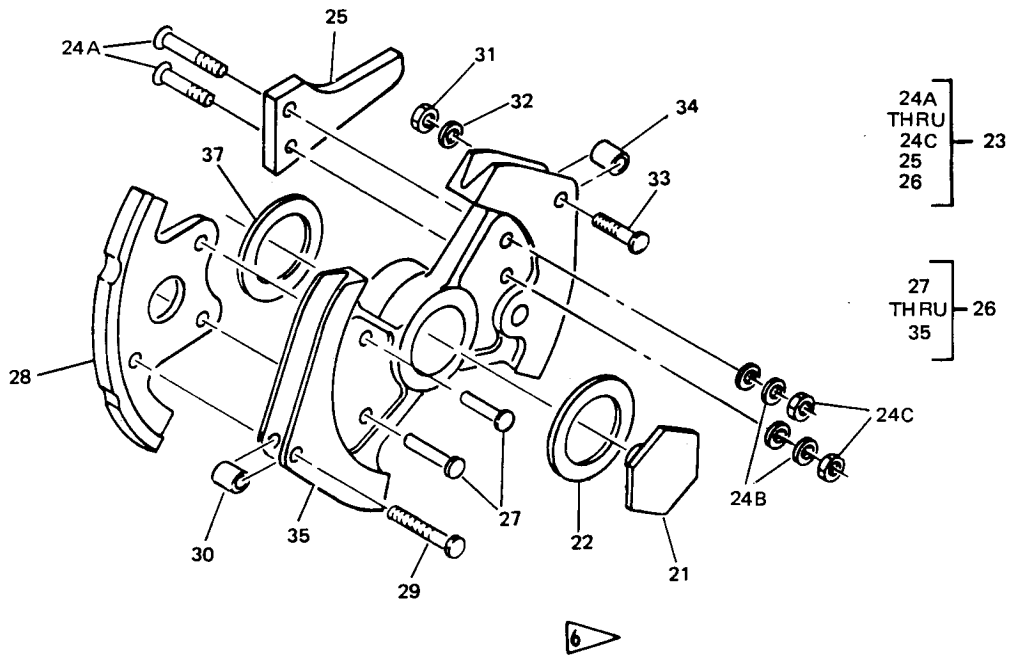
- A. Wrap entire unit in vapor-barrier paper. Tag with overhaul date and store.
- B. For further information, refer to Temporary Protective Coatings, Subject 20-44-02.

9. ILLUSTRATED PARTS LIST



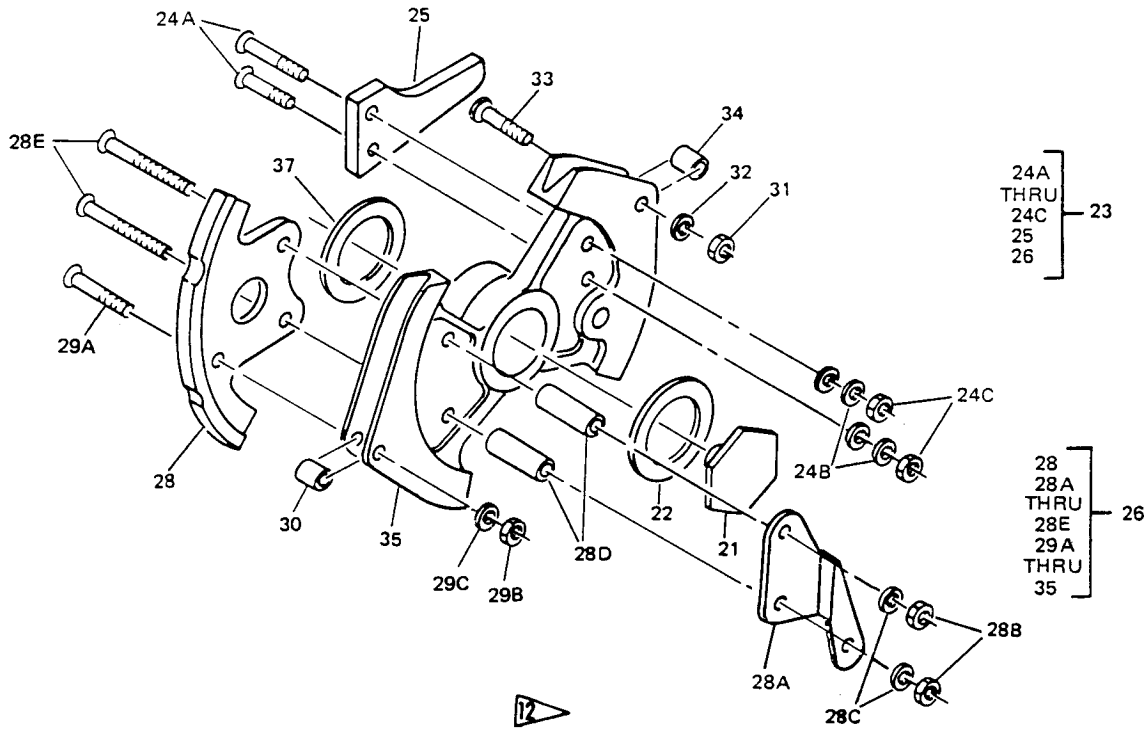
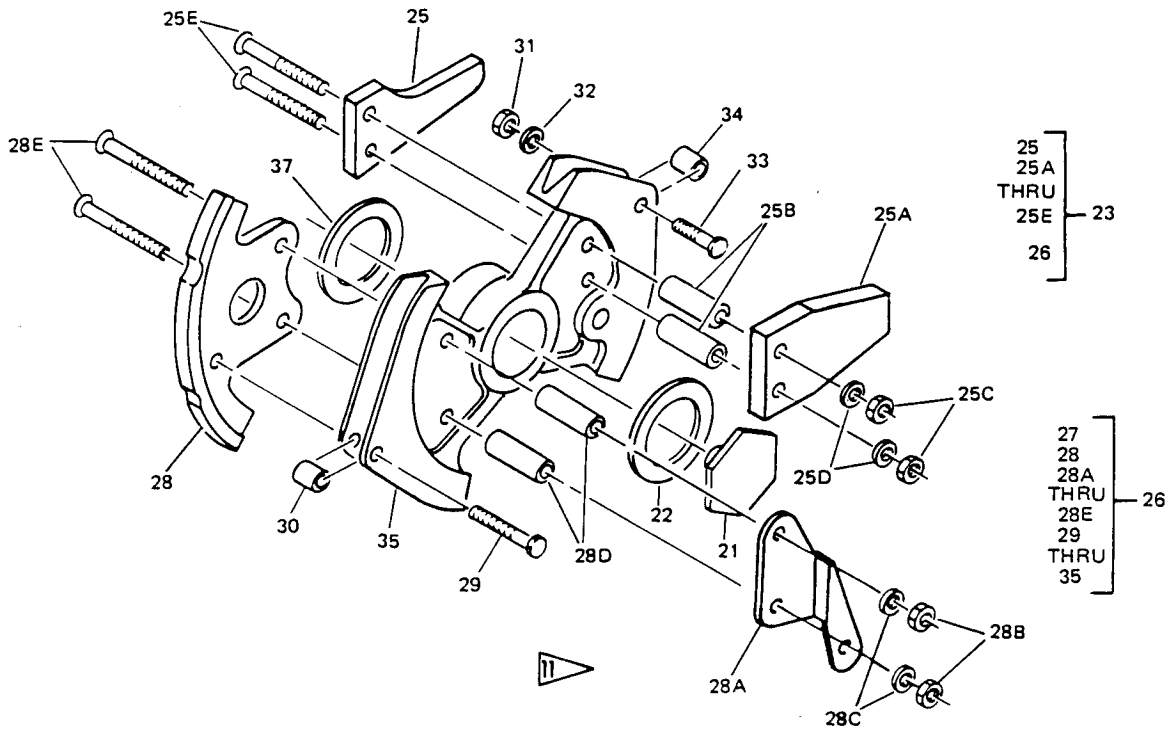


Automatic Speed Brake Drum Mechanism and Actuator Buildup
Figure 3 (Sheet 2)



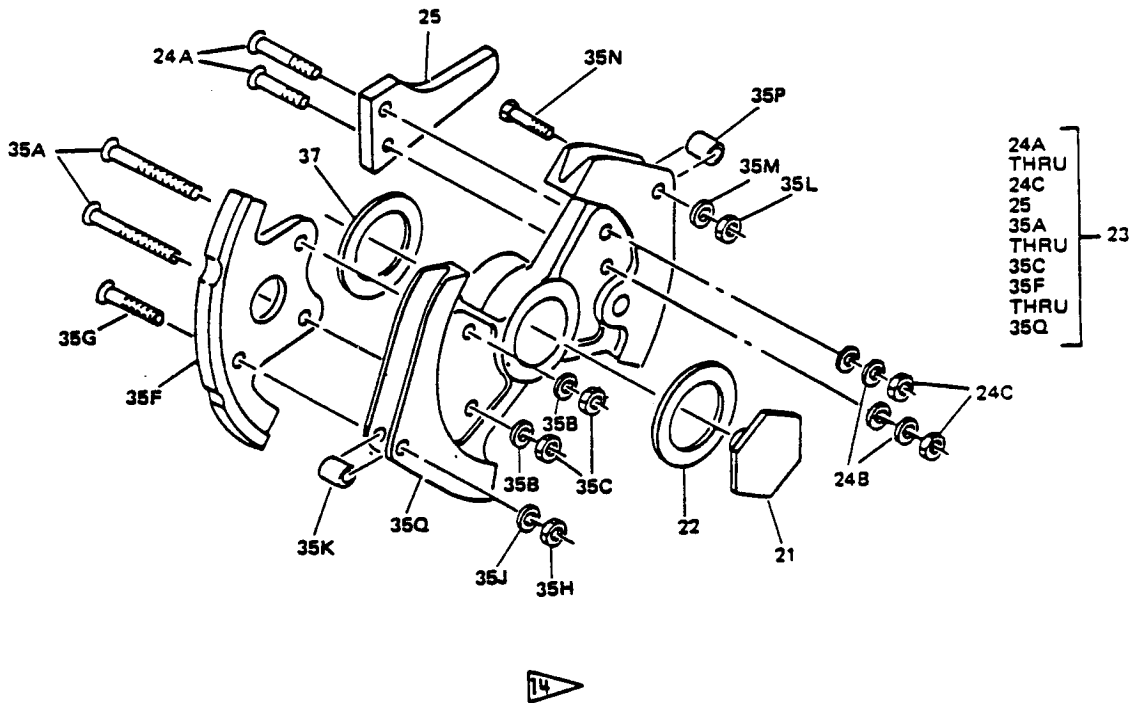
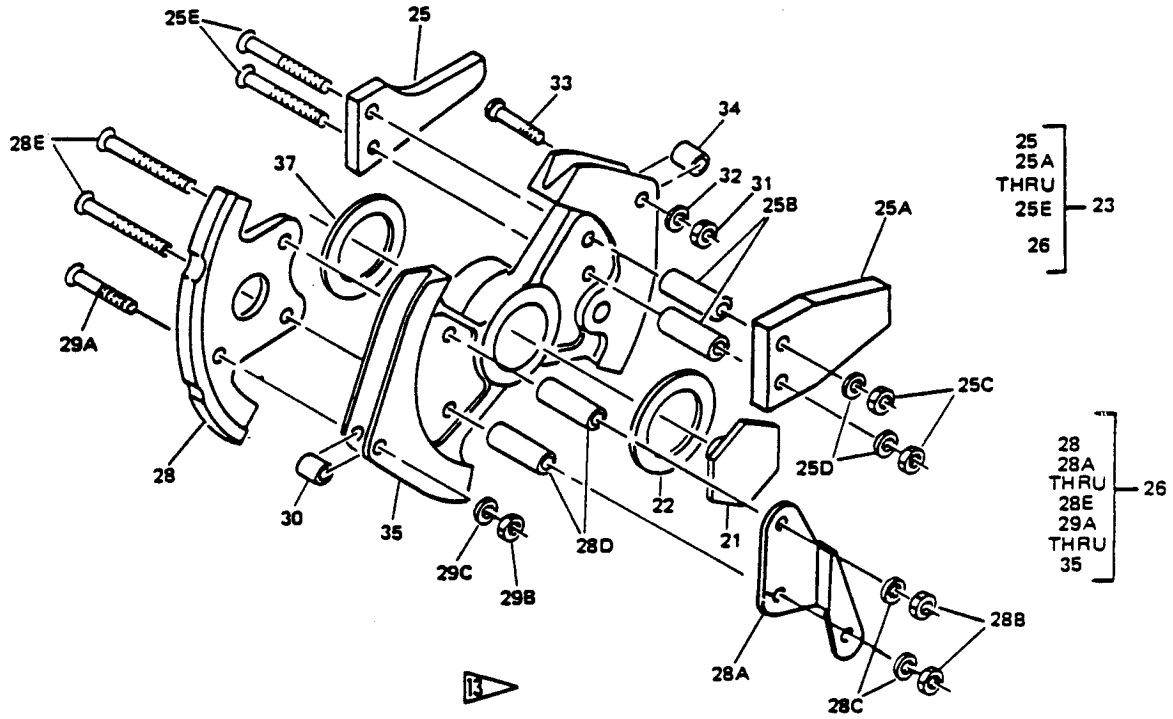
Automatic Speed Brake Drum Mechanism and Actuator Buildup
 Figure 3 (Sheet 3)

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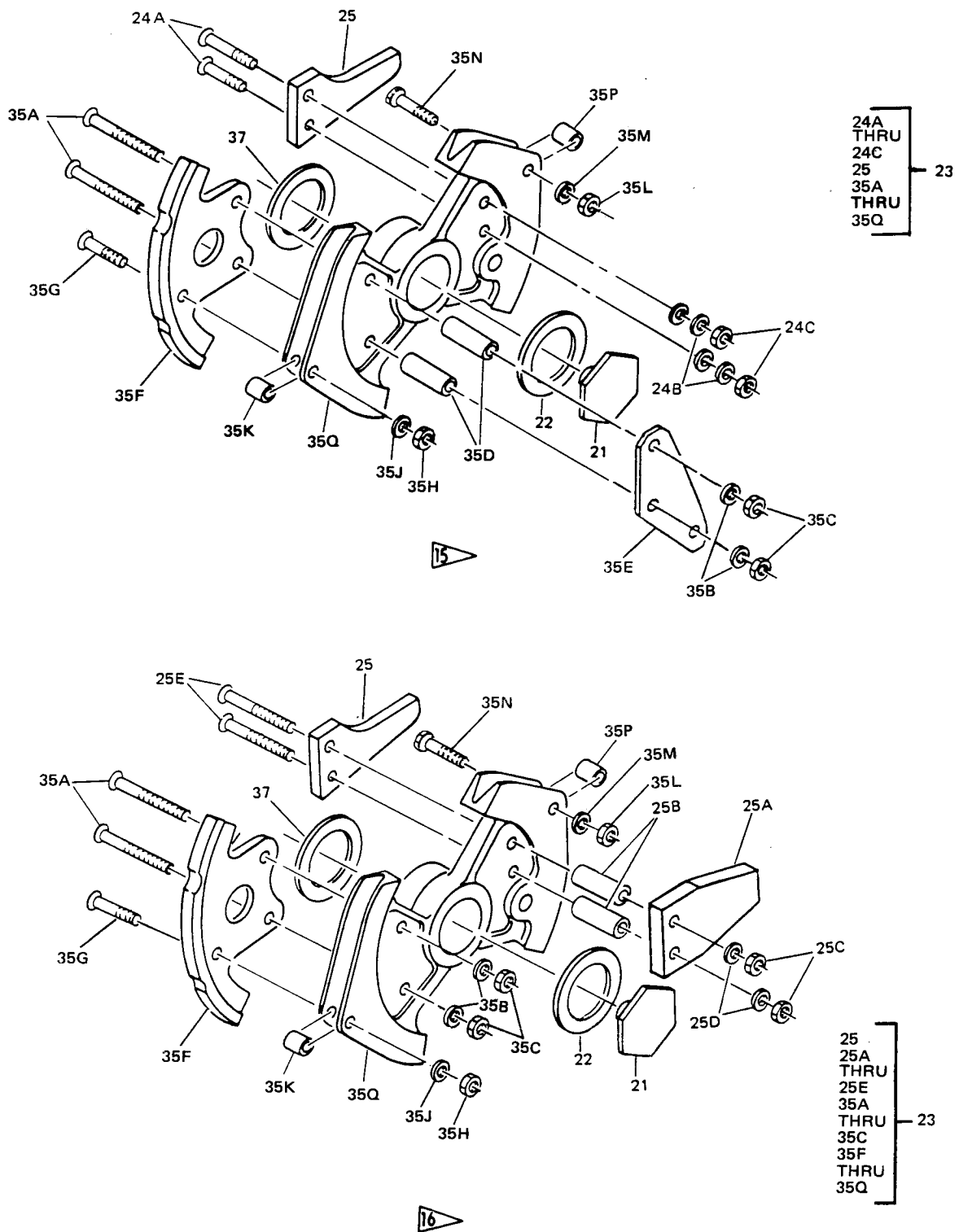


Automatic Speed Brake Drum Mechanism and Actuator Buildup
 Figure 3 (Sheet 4)

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 AUTOMATIC SPEED BRAKE
 DRUM MECHANISM AND
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Automatic Speed Brake Drum Mechanism and Actuator Buildup
 Figure 3 (Sheet 5)



Automatic Speed Brake Drum Mechanism and Actuator Buildup
Figure 3 (Sheet 6)

AUTOMATIC SPEED BRAKE
 DRUM MECHANISM AND
 ACTUATOR BUILDUP
 (NO ASSIGNED P/N)



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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		
3-	1		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[1]							A	
	2		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[2]							B	
	3		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[3]							C	
	4		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[4]							D	
	5		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[5]							E	
	6		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[6]							F	
	7		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[7]							G	
	8		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[8]							H	
	9		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[9]							J	
	10		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[10]							K	
	11		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[11]							L	
	12		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[12]							M	
	13		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[13]							N	
	14		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[14]							P	
	15		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[15]							Q	
	16		AUTOMATIC SPEED BRAKE DRUM MECHANISM AND ACTUATOR BUILDUP *[16]							R	
1	MS21042L3		. NUT (REPLS BACN10JC3)								1
1	BACN10JC3		. NUT (REPLS NAS679A3W, REPLD BY MS21042L3)								1
2	NAS1197-10L		. WASHER								1
3	BACB30LU3-12		. BOLT								1
4	69-16556-1		. PUSHROD ASSY (OPT)							ABCE-R	1
4A	69-16556-3		. PUSHROD ASSY (OPT)							ABCE-R	1
4A	69-16556-3		. PUSHROD ASSY							D	1
5	BACB10AD3		. . BEARING, ROD END								1
6	MS25082-6		. . NUT, CHECK								1
7	MS20470D5		. . RIVET								4
8	60-2271-3003		. . PLUG, THREADED								1
9	BACB10AE8A		. . BEARING, ROD END (PRFD)								1

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(NO ASSIGNED P/N)

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		
9	BACB10A455		. . BEARING, ROD END (OPT TO BACB10AE8A)								1
10	69-16507-3		. . PLUG (USED WITH BACB10A455) (USED ON 69-16556-1)								1
10A	69-16507-4		. . PLUG (USED WITH BACB10A455) (USED ON 69-16556-3)								1
11	69-16556-2		. . ROD								1
12	MS24665-134		. PIN, COTTER								1
13	BACN10JD104		. NUT (REPLS AN320-4)								1
14	AN960D416		. WASHER								1
15	NAS1104-11D		. BOLT							AB	1
15	BACB3ONF4D11		. BOLT							C-R	1
16	6012A1		. ACTUATOR ASSY, LINEAR, V17472 (BOEING 10-61359-2)							ABC	1
16	R35303-51		. ACTUATOR ASSY, LINEAR V81039 (BOEING 10-61359-3)							D-R	1
17	MS21042L3		. NUT (REPLS BACN10JC3)								1
17	BACN10JC3		. NUT (REPLS NAS679A3W, REPLD BY MS21042L3)							1	
18	AN960D10L		. WASHER								2
19	NAS603-7P		. SCREW (REPLS NAS603-7)								1
20	MS25083-1BB4		. JUMPER ASSY								1
21	66-14897-1		. BOLT, QUADRANT								1
22	NAS1197-1616L		. WASHER								1
23	65-52881-5		. QUADRANT ASSY							A	1
23	65-52881-7		. QUADRANT ASSY							B	1
23	65-52881-9		. QUADRANT ASSY							C	1
23	65-52881-11		. QUADRANT ASSY							D	1
23	65-52881-15		. QUADRANT ASSY							E	1
23	65-52881-24		. QUADRANT ASSY							F	1
23	65-52881-28		. QUADRANT ASSY							G	1
23	65-52881-30		. QUADRANT ASSY							H	1
23	65-52881-32		. QUADRANT ASSY							J	1
23	65-52881-34		. QUADRANT ASSY							K	1
23	65-52881-36		. QUADRANT ASSY							L	1
23	65-52881-38		. QUADRANT ASSY							M	1
23	65-52881-40		. QUADRANT ASSY							N	1
23	65C34605-5		. QUADRANT ASSY							P	1
23	65C34605-6		. QUADRANT ASSY							Q	1
23	65C34605-7		. QUADRANT ASSY							R	1
24	MS20470B5		. . RIVET							AB	2
24A	NAS514P1032-14		. . SCREW							FGJKM PQ	2
24B	NAS620-10		. . WASHER							FGJKM PQ	4
24C	MS21042L3		. . NUT							FGJKM PQ	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							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
25	66-24487-3		.	.	CAM					ABCEF	1
25	66-24487-4		.	.	CAM					GJK	
25	69-76960-1		.	.	CAM					D	1
25	69-76960-3		.	.	CAM					HL	1
25A	69-62768-1		.	.	CAM					M-R	1
25A	69-76960-2		.	.	CAM					CDE	1
25B	NAS42DD6-71		.	.	SPACER					HLNR	1
25B	NAS42DD6-68		.	.	SPACER					CDE	2
25C	BACN10JC3		.	.	NUT					HLNR	2
25C	MS21042L3		.	.	NUT					CDE	2
25D	AN960PD10		.	.	WASHER					HLNR	2
25D	AN960JD10		.	.	WASHER					CDEH	2
25D	AN960JD10L		.	.	WASHER					LN	2
25E	NAS514P1032-36		.	.	SCREW					R	2
25E	NAS514P1032-30		.	.	SCREW					CDE	2
25E	BACB30LU3-30		.	.	SCREW					HLN	2
26	65-52497-10		.	.	QUADRANT ASSY (REPLS 65-52497-9) (SB 27-1027)					R	2
26	65-52497-9		.	.	QUADRANT ASSY (REPLD BY 65- 52497-10)(SB 27-1027)					ABCDF	1
26	65-52497-11		.	.	QUADRANT ASSY					A	1
26	65-52497-12		.	.	QUADRANT ASSY					EG	1
26	65-52497-14		.	.	QUADRANT ASSY					H	1
26	65-52497-15		.	.	QUADRANT ASSY					J	1
26	65-52497-16		.	.	QUADRANT ASSY					K	1
26	65-52497-17		.	.	QUADRANT ASSY					L	1
27	MS20426B5		.	.	RIVET					MN	1
28	65-90266-5		.	.	CAM (REPLS 65-53445-1)(SB 27-1027)					A-DFH	2
28	69-53445-1		.	.	CAM (REPLD BY 65-90226-5) (SB 27-1027)					A	1
28	69-53445-2		.	.	CAM					B-L	1
28	69-53445-3		.	.	CAM					MN	1
28A	69-70545-1		.	.	ADAPTER PLATE					EG	1
28A	69-77162-1		.	.	ADAPTER PLATE					JKLMN	1
28B	MS21042L3		.	.	NUT (REPLS BACN10JC3)					EGJ-N	2
28C	AN960PD10L		.	.	WASHER					EGJ-N	2
28D	NAS43DD3-32		.	.	SPACER					EGJ-N	2
28E	BACB30LU3-13		.	.	BOLT					EGJ-N	2
29	MS20426B4		.	.	RIVET					A-L	1
29A	BACB30LU2-9		.	.	BOLT					MN	1
29B	MS21042L08		.	.	NUT					MN	1
29C	AN960C8L		.	.	WASHER					MN	1
30	NAS42DD4-17		.	.	SPACER					A-L	1
30	NAS43DD3-27		.	.	SPACER					MN	1

OVERHAUL MANUAL

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		
31	BACN10JC04		.	.	.	.	NUT (REPLS NAS679A04W)		A-L	1
31	MS21042L08		.	.	.	.	NUT		MN	1
32	AN960PD4L		.	.	.	.	WASHER		A-L	1
32	AN960C8L		.	.	.	.	WASHER		MN	1
33	NAS600-10P		.	.	.	.	SCREW		A-L	1
33	NAS623-2-8		.	.	.	.	SCREW		MN	1
34	NAS42DD4-17		.	.	.	.	SPACER		A-L	1
34	NAS43DD3-27		.	.	.	.	SPACER		MN	1
35	65-52497-6		.	.	.	.	QUADRANT		A-GJK	1
35	65-52497-13		.	.	.	.	QUADRANT		HL	1
35	65-52497-18		.	.	.	.	QUADRANT		MN	1
35A	BACB30LU3-4		.	.			BOLT		PR	2	
35A	BACB30LU3-13		.	.			BOLT		Q	2	
35B	AN960JD10L		.	.			WASHER		P-R	2	
35C	MS21042L3		.	.			NUT		P-R	2	
35D	NAS43DD3-32		.	.			SPACER		Q	2	
35E	69-70545-1		.	.			ADAPTER PLATE		Q	2	
35F	69-53445-3		.	.			CAM		P-R	1	
35G	BACB30LU2-9		.	.			BOLT		P-R	1	
35H	MS21042L08		.	.			NUT		P-R	1	
35J	AN960C8L		.	.			WASHER		P-R	1	
35K	NAS43DD3-27		.	.			SPACER		P-R	1	
35L	MS21042L08		.	.			NUT		P-R	1	
35M	AN960C8L		.	.			WASHER		P-R	1	
35N	NAS623-2-8		.	.			SCREW		P-R	1	
35P	NAS43DD3-27		.	.			SPACER		P-R	1	
35Q	65-52497-18		.	.			QUADRANT		P-R	1	
36	BACN10JC6		.				NUT (REPLS NAS679A6)			1	
37	NAS1197-1616L		.				WASHER			1	
38	69-18606-1		.				RETAINER, BEARING			1	
39	BACB10A314		.				BEARING			1	
40	BACB10A371		.				BEARING			1	
41	69-18605-3		.				RETAINER, BEARING			1	
42	50179-3A		.				BRAKE ASSY, V80477 (PREF) (BOEING 10-60721-3)			1	
42	50179-3		.				BRAKE ASSY, V80477 (OPT) (BOEING 10-60721-3)			1	

AUTOMATIC SPEED BRAKE
DRUM MECHANISM AND
ACTUATOR BUILDUP
(NO ASSIGNED P/N)



OVERHAUL MANUAL

- 1 ▽ USED ON INSTALLATION 65-52881-3
- 2 ▽ USED ON INSTALLATION 65-52881-6
- 3 ▽ USED ON INSTALLATION 65-52881-8
- 4 ▽ USED ON INSTALLATION 65-52881-10
- 5 ▽ USED ON INSTALLATION 65-52881-14
- 6 ▽ USED ON INSTALLATION 65-52881-23 (PRE SB 27-1156)
- 7 ▽ USED ON INSTALLATION 65-52881-27 (PRE SB 27-1156)
- 8 ▽ USED ON INSTALLATION 65-52881-29 (PRE SB 27-1156)
- 9 ▽ USED ON INSTALLATION 65-52881-31 (PRE SB 27-1156)
- 10 ▽ USED ON INSTALLATION 65-52881-33 (PRE SB 27-1156)
- 11 ▽ USED ON INSTALLATION 65-52881-35
- 12 ▽ USED ON INSTALLATION 65-52881-37; 65-52881-31 (POST SB 27-1156),
65-52881-33 (POST SB 27-1156)
- 13 ▽ USED ON INSTALLATION 65-52881-39
- 14 ▽ USED ON INSTALLATION 65-52881-23 (POST SB 27-1156)
- 15 ▽ USED ON INSTALLATION 65-52881-27 (POST SB 27-1156)
- 16 ▽ USED ON INSTALLATION 65-52881-29 (POST SB 27-1156)

VENDORS

- V17472 CONDUCTION CORPORATION, ELECTRO-MECHANICAL DIVISION, 3675
PATTERSON AVENUE, P.O. BOX 1704, GRAND RAPIDS, MICHIGAN 49501
- V80477 ADAMS RITE MANUFACTURING CO., 540 WEST CHEVY CHASE DRIVE,
GLENDALE, CALIFORNIA 91204
- V81039 PLESSEY DYNAMICS CORPORATION, 1414 CHESTNUT AVE., HILLSIDE,
NEW JERSEY 07205