TO: ALL HOLDERS OF CONTROL WHEEL STEERING AILERON DRUM ASSEMBLY OVERHAUL MANUAL, 27-16-09

REVISION NO. 8, DATED NOV 1/05

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
Added top assemblies 65-55731-74, -75, -80, -81		X			X	X						X	
Revised Repair Limits & Finishes on fork (20), Figure 2					X								
SB 27-1209R2 incorporated												X	

CONTROL WHEEL STEERING AILERON DRUM ASSEMBLY

27-16-09

BOEING P/N 65-55731-21, -23, -24, -26, -27, -35, -55, -57, -62 thru -66, -70, -73, -74, -75, -80, -81

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 32900-1	Jan 5/80
		PRR 32912-1	Jan 5/80
		PRR 32950-7	Jan 5/80
		PRR 34475-2	Dec 5/89
		PRR 34515-4	Jun 5/90
		PRR 38060-20	Nov 1/05
27-1209R2			Nov 1/05

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
27-16-09						
*	T-1	Nov 1/05				
	T-2	BLANK				
*	LEP-1	Nov 1/05				
	LEP-2	BLANK				
	T/C-1	Jan 5/80				
	T/C-2	BLANK				
	1	Dec 5/87				
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*	4	Nov 1/05				
	4A	Dec 5/89				
	4B	BLANK				
*	5	Nov 1/05				
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*	8	Nov 1/05				
	9	Jan 5/80				
*	10	Nov 1/05				
*	11	Nov 1/05				
	12	Jun 1/95				
	13	Dec 5/87				
*	14	Nov 1/05				
*	15	Nov 1/05				
	16	Jun 5/90				
	17	Jun 5/90				
	18	Jun 5/90				
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*	22	Nov 1/05				
*	23	Nov 1/05				
*	24	Nov 1/05				
*	25	Nov 1/05				
*	26	Nov 1/05				

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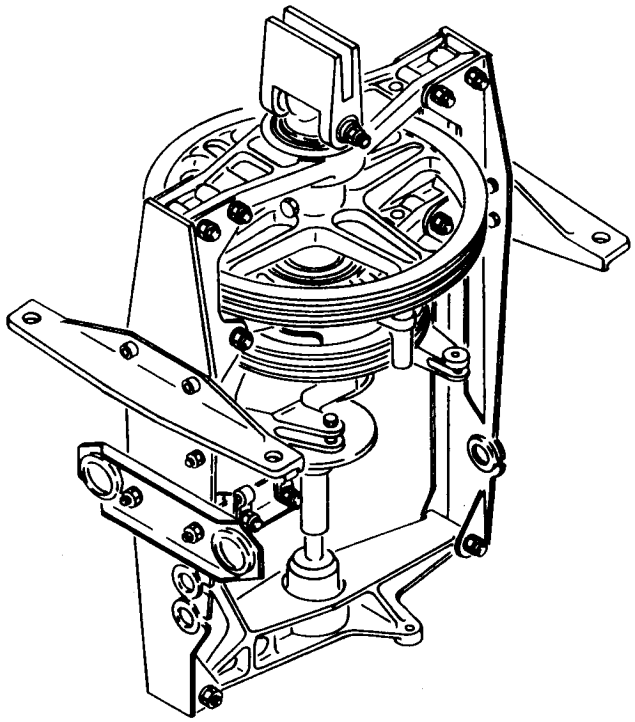
*[1] Special instruction not required. Use standard industry practices and the information contained in 20-30-01 and 20-30-03.

*[2] Special instruction not required. Use standard industry practices and the informations contained in 20-44-02.

CONTROL WHEEL STEERING AILERON DRUM ASSEMBLY



Control Wheel Steering Aileron Drum Assembly
Figure 1

1. DESCRIPTION AND OPERATION

A. The control wheel steering aileron drum assembly includes the bus drum, aileron drum, shaft assemblies, fork assembly, cable assemblies, and supporting members. The drum assembly is located at the base of the captain's control column and transfers control wheel forces through cables to the aileron/spoiler power control units.

B. Leading Particulars (Approximate)

Width -- 9.5 inches
Length -- 13.0 inches
Height -- 17.0 inches
Weight -- 9.5 pounds

2. DISASSEMBLY (Fig. 5)

A. On assys 65-55731-21, -23, -62, -63, -65, -66, -73, -74, -75, -80, -81, remove spring (465), lockwires and cable assys (470 thru 480) from drum or spool (375) and pulley (485), if attached.

B. On assys 65-55731-21, -23, -62, -63, -65, -66, -73, -74, -75, -80, -81, remove fasteners (490 thru 500) and remove pulley (485) from sensor (505). Remove fasteners (510, 515) and remove bracket assy from support (550), if attached.

NOTE: Do not remove steel wire sleeve (530) from bracket (525) unless necessary for repair or replacement.

C. Remove parts (5, 10) and remove fork (15) and spacers (35) from shaft (40). Remove bearing (30) from fork (20).

NOTE: Do not remove bearing (25) from fork (20) unless necessary for repair or replacement.

D. Remove parts (45 thru 165, 550 thru 580, if attached) and separate forward and aft ribs (190, 195) from bearing housing (200, 205) and bracket (210). Remove fasteners (175 thru 187) and guide (170) from forward rib (190).

NOTE: Do not remove beams (430, 435) and grommets (440, 445) from ribs unless necessary for repair or replacement.

E. Remove bearing housing (200) from shaft (40) and remove bearing (215) from housing.

F. Remove fasteners (220 thru 230), slide bus drum (235) from shaft and remove cable assys (420, 425).

G. Remove bearing housing (205) and spacer (240) from shaft (40) and remove bearing (215), parts (250 thru 260) and cable guards (245) from bearing housing.

H. On all assys except 65-55731-70, -80, remove fasteners (265 thru 275) and spacers (280) and separate shaft (40) from shaft assy (340). On assy 65-55731-70, remove pins (265) and separate shaft (40) from spool assy (340).

I. Slide aileron drum (285) from shaft (40) and remove bearings (335) from drum. On all assys except 65-55731-21, -62, remove clip assy (290) by removing parts (310 thru 330). Remove parts (300 thru 320) from clip assy (290).

J. Disassemble shaft assy (340, 69-46277-3) by removing parts (350, 360, 365). On shaft assys (340, 69-46277-4, -5, -6) remove parts (400 thru 415) from bracket (380). On spool assy (340, 69-78240-1) remove parts (400 thru 415) from bracket (380).

NOTE: Do not remove rivets (355, 390), pin (370), or bushings (345) unless necessary for repair or replacement.

3. INSPECTION/CHECK

A. Check all parts for obvious defects in accordance with standard industry practices. Refer to Fig. 4 for design dimensions and wear limits.

B. Penetrant check per SOPM 20-20-02 -- shaft (40), bearing housing (200, 205), bracket (210), bus drum (235), and aileron drum (285) (Fig. 5).

C. Magnetic particle check per SOPM 20-20-01 -- fork (20), shaft (395) (Fig. 5).

4. REPAIR

A. Repair (Fig. 5)

(1) Repair minor defects using standard industry practices.

NOTE: Do not repair cable grooves in drums in any manner that will alter pitch diameter of drums.

(2) Fork (20) (Fig. 2)

(a) Machine inside flats per SOPM 20-10-01 as required to remove defects. Maintain limits and dimensions shown.

(b) Stress relieve at 300-350°F for 2 hours; air cool at 65-75°F.

(c) Restore machined surfaces to design dimensions by nickel plating.

(d) Magnetic particle check per SOPM 20-20-01.

(e) Apply BMS 3-8, class A solid film lubricant to inside flats per SOPM 20-50-08, method 3.

B. Refinish (Fig. 5)

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

(1) Fork (20) -- Fig. 2.

(2) Shaft (40) -- 65-55710-4, Chromic acid anodize (F-2.26) all over; 65-55710-6, -7, Chromic acid anodize (F-17.02) all over. Material: Al alloy.

(3) Bracket (60) (69-45429-1), guide (170), forward rib (190) (65-59347-1, -4), aft rib (195) (65-59347-3), forward beam (430) (69-41771-1), aft beam (435) (69-41772-1) -- Alodize or chromic acid anodize and apply BMS 10-11, Type 1 primer (SRF-2.30). Material: Al alloy.

(4) Forward rib (190) (65-59347-6, -8, -9, -10), aft rib (195) (65-59347-5, -7) -- Chromic acid anodize and apply BMS 10-11, Type 1 primer (F-18.13). Material: Al alloy.

(5) Forward beam (430) (69-41771-2), aft beam (435) (69-41772-2) -- Chromic acid anodize and apply BMS 10-11, Type 1 primer (F-18.13). Apply BMS 10-11, Type 2 enamel, BAC702 gloss white (F-21.03). Material: Al alloy.

(6) Bracket (60) (69-71532-2, -3), bracket (95) -- Chemical treat and apply BMS 10-11, Type 1 primer (F-18.05). Material: Al alloy.

(7) Spacers (35, 240) -- Apply one coat of BMS 10-11, Type 1 primer (SRF-12.205) all over. Material: Al alloy.

(8) Bracket (210) -- Sulfuric acid anodize (F-2.201, 65-58143-1; F-17.03, 65C19848-1) follow by one coat of BMS 10-11, Type 1 primer (F-20.02) all over except no primer in boltholes or 0.50-inch diameter hole through vertical web. Material: Al alloy.

(9) Bearing housing (200, 205) -- Chromic acid anodize and apply BMS 10-11, Type 1 primer (SRF-2.19) all over except no primer in recesses for bearing. Material: Al alloy.

(10) Bus drum (235) -- 65-55711-1: Sulfuric acid anodize (F-2.201) and apply BMS 10-11, Type 1 primer (SRF-12.205) except no primer on ID of hub. 65-55711-3: Chromic acid anodize and apply BMS 10-11, Type 1 primer (F-18.13) except no primer on ID of hub. Material: Al alloy.

(11) Aileron drum (285) -- Sulfuric acid anodize (F-17.03) and apply BMS 10-11, Type 1 primer (F-20.02) except no primer on ID of hub. Material: Al alloy.

C. Replacement (Fig. 5)

(1) Replace all unserviceable or irreparable parts.

(2) Beams (430, 435) -- Replace lock bolts (450) with same part number or next larger size fastener.

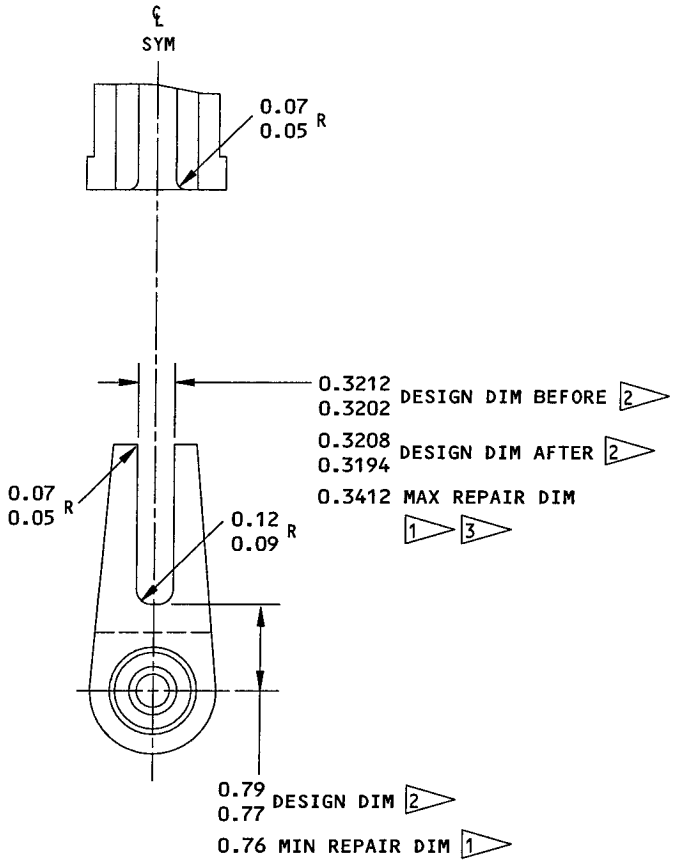
(3) Grommet (440, 445) -- Replace per SOPM 20-50-09.

(4) Bearing (25) -- Install per SOPM 20-50-03 except install with wet sealant BMS 5-95. Roller swage fork (20) to retain bearing.

(5) Sleeves (530) -- Tap 10-32UNF3B Heli-coil thread in bracket (525). Install sleeves 1/4 to 1 1/2 turns below start of the first thread, remove tang. Install sleeves with BMS 10-11, Type 1 primer and seat with thread gage while primer is still wet.

(6) Bushings (345) -- Install bushings with wet primer, BMS 10-11 Type 1.

NOTE: Machining is not required after installation.



REFINISH

6-60428-1: CADMIUM PLATE (F-1.1924) ALL SURFACES EXCEPT INSIDE FLATS OF FORK. COAT INSIDE FLATS PER 2 (NO FINISH ON BEARING SURFACES)

6-60428-3,-7: CADMIUM PLATE (F-15.23) ALL SURFACES EXCEPT INSIDE FLATS OF FORK. COAT INSIDE FLATS PER 2 (NO FINISH ON BEARING SURFACES)

1 BUILD UP WITH NICKEL PLATE (REFER TO SOPM 20-42-09) TO DESIGN DIMENSIONS SHOWN. OBSERVE 0.06 PLATING RUNOUT.

2 BMS 3-8, CLASS A, SOLID FILM LUBRICANT (0.0004 THICK) (REFER TO SOPM 20-50-08).

3 0.010 MAXIMUM MATERIAL REMOVAL FROM EITHER FLAT.

REPAIR

DIMENSIONS NOTED BY 1 3

63 ALL REWORKED SURFACES

MATERIAL: 4620 OR 9310 CASE HARDENED STEEL (CORE STRENGTH 150-210 OR 150-190 KSI)

ALL DIMENSIONS ARE IN INCHES

FORK (20)

Fork Repair and Refinish
Figure 2

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5. ASSEMBLY (Fig. 5)

A. Shaft assy (340) (69-46277-3) -- Install bushings (345) on shaft. Install drum (375) on shaft (390) using bolt (350), washers (360) (under bolthead and nut), nut (360).

B. Shaft assy (340) (69-46277-4, -5, -6) -- Install parts (400 thru 415) on bracket (380). Install bracket on spool (375) with rivets (390) and washers (385). Install bushings (345) on shaft. Install spool on shaft (395) with pin (370) and rivet (355).

C. Spool assy (340) (69-78240-1) -- Install parts (400 thru 415) on bracket (380). Install bracket on spool (375) with rivets (390) and washers (385).

D. Install parts (290 thru 330) on aileron drum (285). Install bearings (335) on aileron drum and slide drum on shaft (40). Transducer attachment arms will be aligned with shaft lug engages recess in drum properly.

E. On all assys except 65-55731-70, -80, join shaft assys (40, 340) with bolt (265), washers (270) (under bolthead and nut), nut (275) and spacers (280). On assys 65-55731-70, -80, join shaft assy (40) and spool assy (340) (69-78240-1) with pins (265).

F. Install bearing (215) in bearing housing (205). Attach cable guards (245) to bearing housing with fasteners (250 thru 260). Install spacer (240) and housing (205) on shaft (40).

G. Lubricate cable (420, 425) with MIL-G-25760 grease. Install cable on bus drum (235) and secure with cotter pin (460). Install drum on shaft (40) with terminal ends of cable extending inboard, cable (420) in top groove and cable (425) in bottom groove. Secure with fasteners (220 thru 230).

H. Install bearing (215) in bearing housing (200) and slide housing on shaft (40).

I. Assembly 65-55731-21, -62 -- Install guide (170) on forward rib (190) and secure with fasteners (175 thru 185). Install support (550), rubstrip (555), shim (560) and spacer (570) on aft rib (195) and secure with fasteners (100 thru 125, 565, 575, 580). Install forward and aft ribs (190, 195) and bracket (60) (69-45429-1) to bearing housings (200, 205) and bracket (210), secure with fasteners (45 thru 55). Install clamps (135) with fasteners (130, 140, 145). (Transducer attachment arms on shaft and drum (40, 285) extend outboard, cable assys (420, 425) extend inboard.)

J. Assys 65-55731-23, -63, -65 -- Install guide (170) on forward rib (190) and secure with fasteners (175 thru 185). Install support (550), bracket (95), rubstrip (555), shim (560) and spacer (570) on aft rib (195) and secure with fasteners (100 thru 125, 565, 575, 580). Install bracket (60) (65-71523-2) on forward rib and secure with fasteners (80 thru 90). Install forward and aft ribs (190, 195) to bearing housing (200, 205) and bracket (210). Secure with fasteners (45 thru 55, 65 thru 75). Install clamps (135, 155) and secure with fasteners (130, 140, 145, 150, 160, 165). (Transducer attachment arms on shaft and drum (40, 285) extend outboard, cable assys (420, 425) extend inboard.)

NOTE: Install bracket (60) (69-71532-2) on forward rib (190) and secure with fasteners (80 thru 90) before installing bracket (210).

K. Assys 65-55731-24, -26, -27, -35, -55, -57, -64, -66, -73, -74, -75, -81 -- Install guide (170) on forward rib (190) with fasteners (175 thru 185). Install bracket (60) (69-71532-2) on forward rib and secure with fasteners (80 thru 90). Install bracket (95) on aft rib (195) and secure with fasteners (100 thru 125). Install forward and aft ribs (190, 195) to bearing housing (200, 205) and bracket (210). Secure with fasteners (45 thru 55, 65 thru 75). Install clamps (135, 155) and secure with fasteners (130, 140, 145, 150, 160, 165). (Transducer attachment arms on shaft and drum (40, 285) extend outboard, cable assys (420, 425) extend inboard).

NOTE: Install bracket (60) (69-71532-2) on forward rib (190) and secure with fasteners (80 thru 90) before installing bracket (210).

L. Assys 65-55731-70, -80 -- Install guide (170) on forward rib (190) with fasteners (177 thru 187). Install bracket (60) (69-71532-3) on forward rib and secure with fasteners (80 thru 90). Install bracket (95) on aft rib (195) and secure with fasteners (100 thru 125). Install forward and aft ribs (190, 195) to bearing housing (200, 205). Secure with fasteners (45 thru 55, 65 thru 75). Install clamps (135, 155) and secure with fasteners (130, 132, 140, 145, 150, 160, 165). (Transducer attachment arms on shaft and drum (40, 285) extend outboard, cable assys (420, 425) extend inboard).

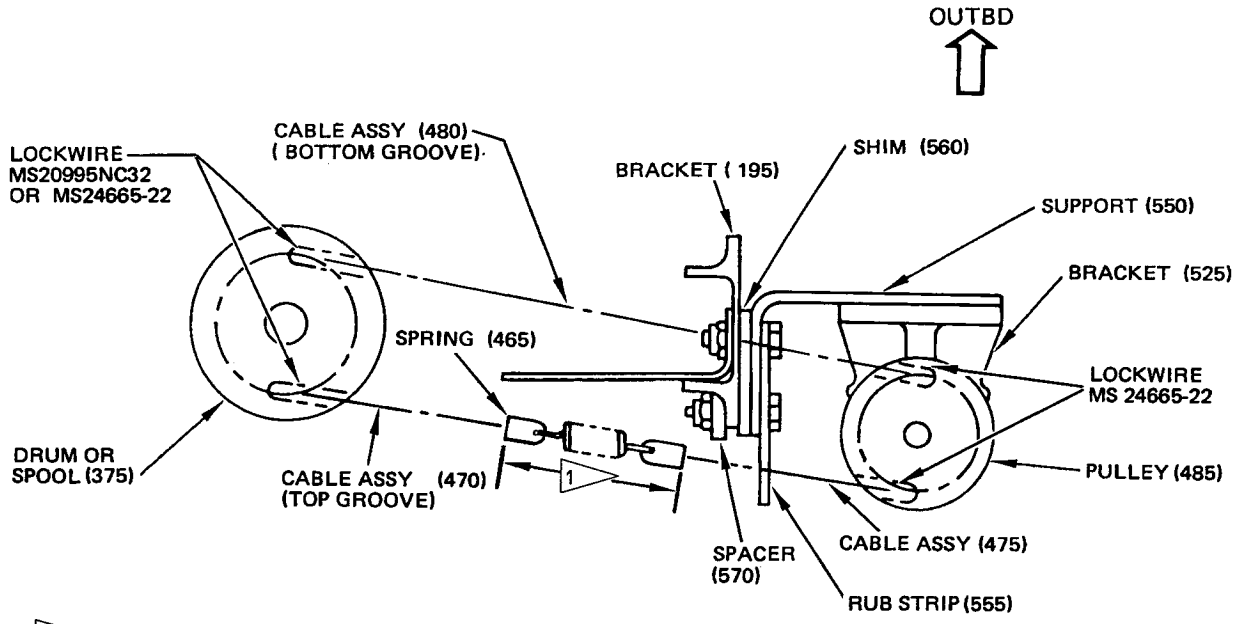
M. Install bearing (30) in fork (20).

WARNING: INSTALL BOLT (5) WITH HEAD INBOARD TO AVOID POSSIBLE BINDING OF CONTROLS WHEN UNIT IS INSTALLED IN AIRPLANE.

N. Install spacers (35) and fork assy (15) on shaft (40) and secure with bolt (5) and nut (10). Tighten nut to 30-40 lb-in.

O. Assys 65-55731-21, -23, -62, -63, -65, -66, -70, -73, -74, -75, -80, -81 -- Install bracket (520) on support (550) and secure with fasteners (535 thru 545). Apply a thin coat of MIL-C-16173, grade 2, corrosion preventive compound to capscrew (510) and washer (515). Assemble sensor (505) on bracket using capscrew (510) and washers (515). Tighten screws to 30-35 lb-in. Sensor shall not turn in bracket. Install pulley (485) on sensor with bolt (490), washers (495) (under bolthead and nut) and nut (500).

P. Assys 65-55731-21, -23, -62, -63, -65, -66, -70, -73, -74, -75, -80, -81 -- Install cable assys (470 thru 480) on pulley (485) and spool or drum (375) and lockwire at the attaching points. Cable assys (470, 475) shall be located in top groove, inboard position. Cable assy (480) shall be located in bottom groove, outboard position. Attach spring (465) to cable assys (470, 475). Determine final length of cable assys using nominal shim thickness under support (550). Dimension between terminals of cable assys (470, 475) shall be 2.07-2.11 inches. Remove shim (560) laminations, as required, to meet specified dimension (Fig. 3).



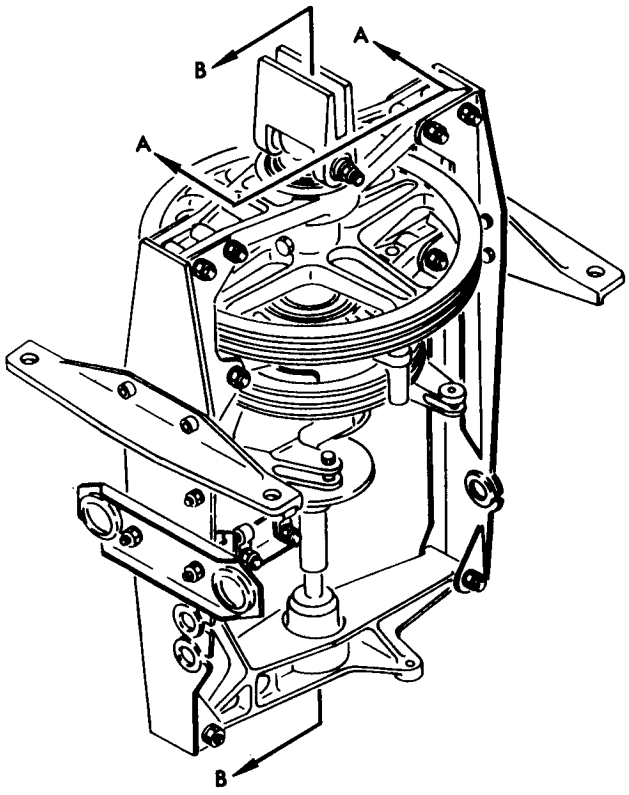
1 ADJUST SHIM (560) THICKNESS TO OBTAIN DIM BETWEEN CABLE TERMINALS

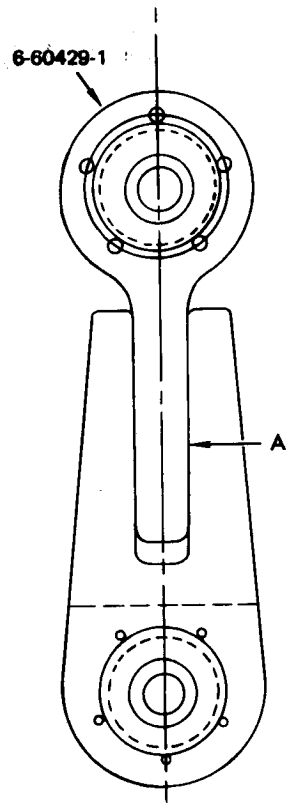
65-55731-21,-23,-62, -63,-65,-66,-74,-75:	2.11 2.07
65-55731-70,-73,-80,-81:	2.05 2.01

65-55731-21,-23,-62,-63,-65,-66,-70,-73,-74,-75,-80,-81

Cable Installation
Figure 3

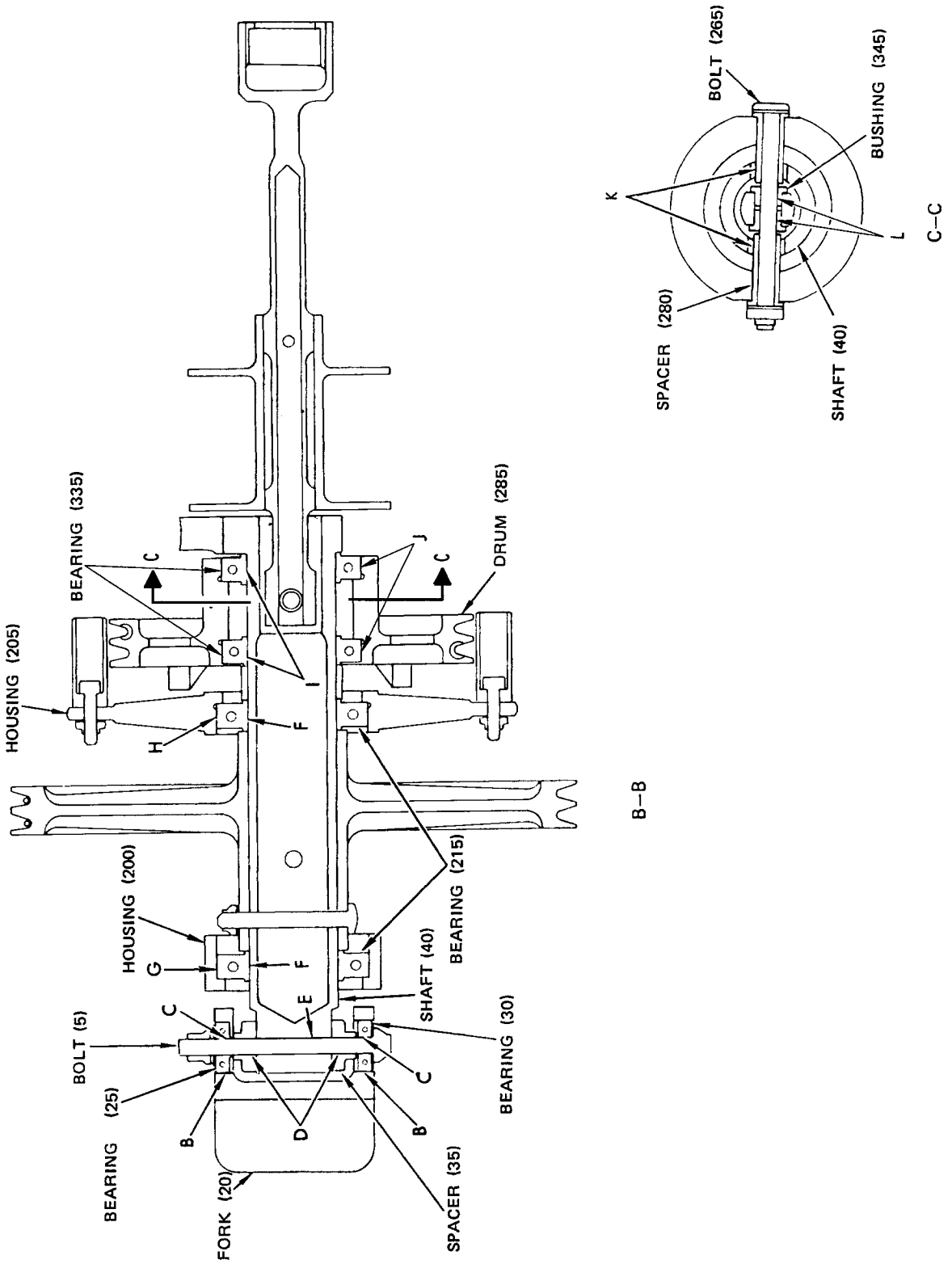
6. FITS AND CLEARANCES





A–A

Fits and Clearances
Figure 4 (Sheet 1)



Fits and Clearances
Figure 4 (Sheet 2)

Ref Letter Fig. 4	Mating Item No. Fig. 5	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	20	0.3194 *[1]	0.3208 *[1]	0.0001 *[1]	0.0020 *[1]	0.3160	0.3249	0.0060
	*[2]	0.3188 *[1]	0.3193 *[1]					
B	ID 20	0.7498	0.7503	-0.0002	0.0008	0.7495 *[3]	0.7503	0.0008
	OD 25,30	0.7495	0.7500					
C	ID 25,30	0.2495	0.2500	0.0000	0.0015	0.2481	0.2500 *[3]	0.0019
	OD 5	0.2485	0.2495					
D	ID 35	0.2500	0.2540	0.0005	0.0055	0.2485	0.2540	0.0055
	OD 5	0.2485	0.2495					
E	ID 40	0.2495	0.2505	0.0000	0.0020	0.2485	0.2505	0.0020
	OD 5	0.2485	0.2495					
F	ID 215	1.3120	1.3130	0.0000	0.0020	1.3110	1.3130 *[3]	0.0020
	OD 40	1.3110	1.3120					
G	ID 200	2.2500	2.2510	0.0000	0.0020	2.2490	2.2510	0.0020
	OD 215	2.2490	2.2500					
H	ID 205	2.2500	2.2510	0.0000	0.0020	2.2490 *[3]	2.2510	0.0020
	OD 215	2.2490	2.2500					
I	ID 335	1.3120	1.3130	0.0000	0.0020	1.3110	1.3130 *[3]	0.0020
	OD 40	1.3110	1.3120					

Fits and Clearances
Figure 4 (Sheet 3)

		Design Dimensions				Service Wear Limits		
Ref Letter Fig. 3	Mating Item No. Fig. 4	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
J	ID 285	2.0625	2.0635	0.0000	0.0000		2.0635	0.0020
	OD 335	2.0615	2.0625			2.0615 *[3]		
K	ID 40	0.5000	0.5040	0.1239	0.1284		0.5040	0.1284
	OD 280	0.3756	0.3761			0.3756		
L	ID 345	0.2497	0.2507	0.0002	0.0022		0.2507	0.0022
	OD 265	0.2485	0.2495			0.2485		

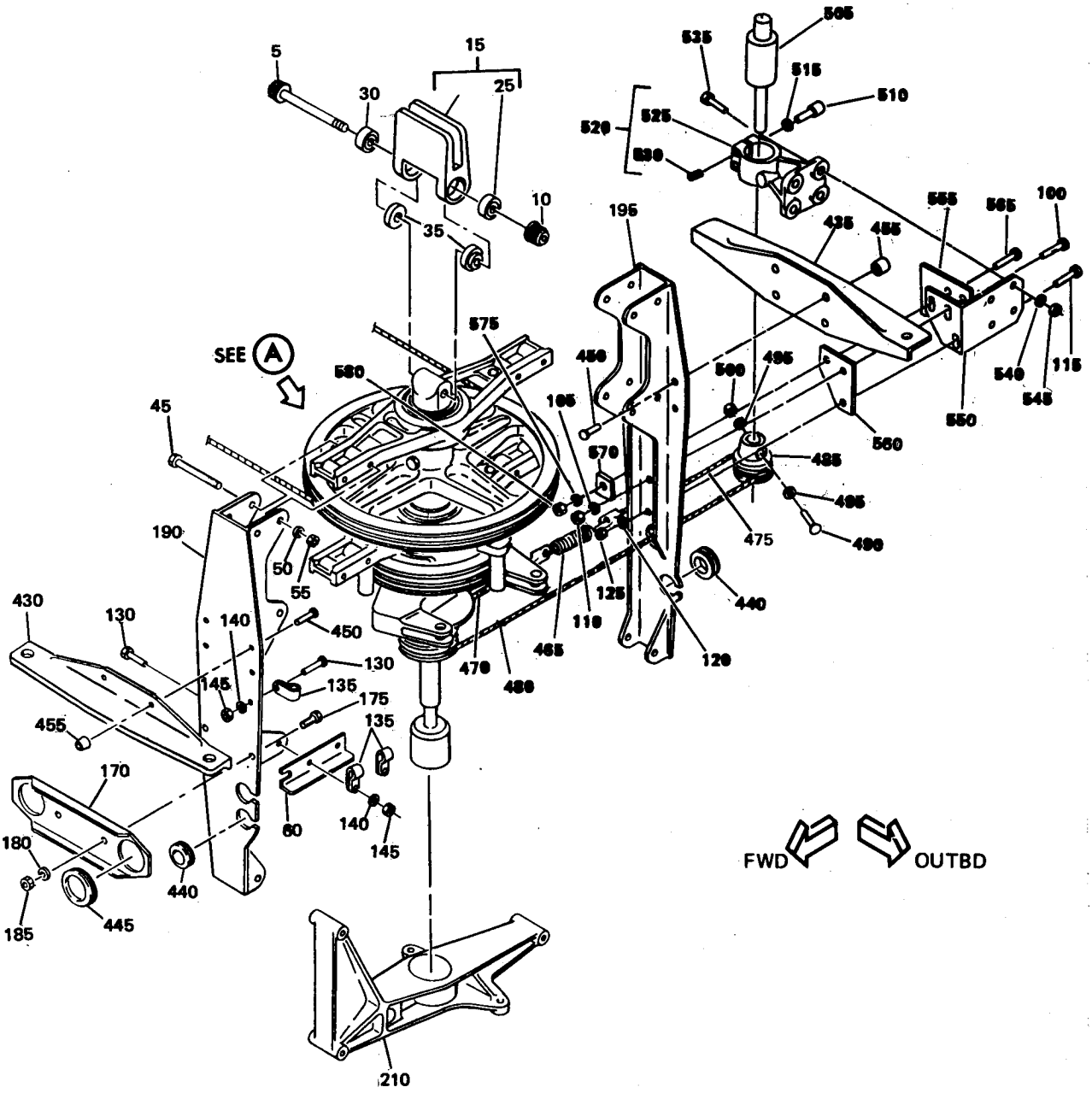
*[1] Dimensions include BMS 3-8 Dry Film Lubricant (0.0004 inch maximum)

*[2] 6-60429-1 (Reference)

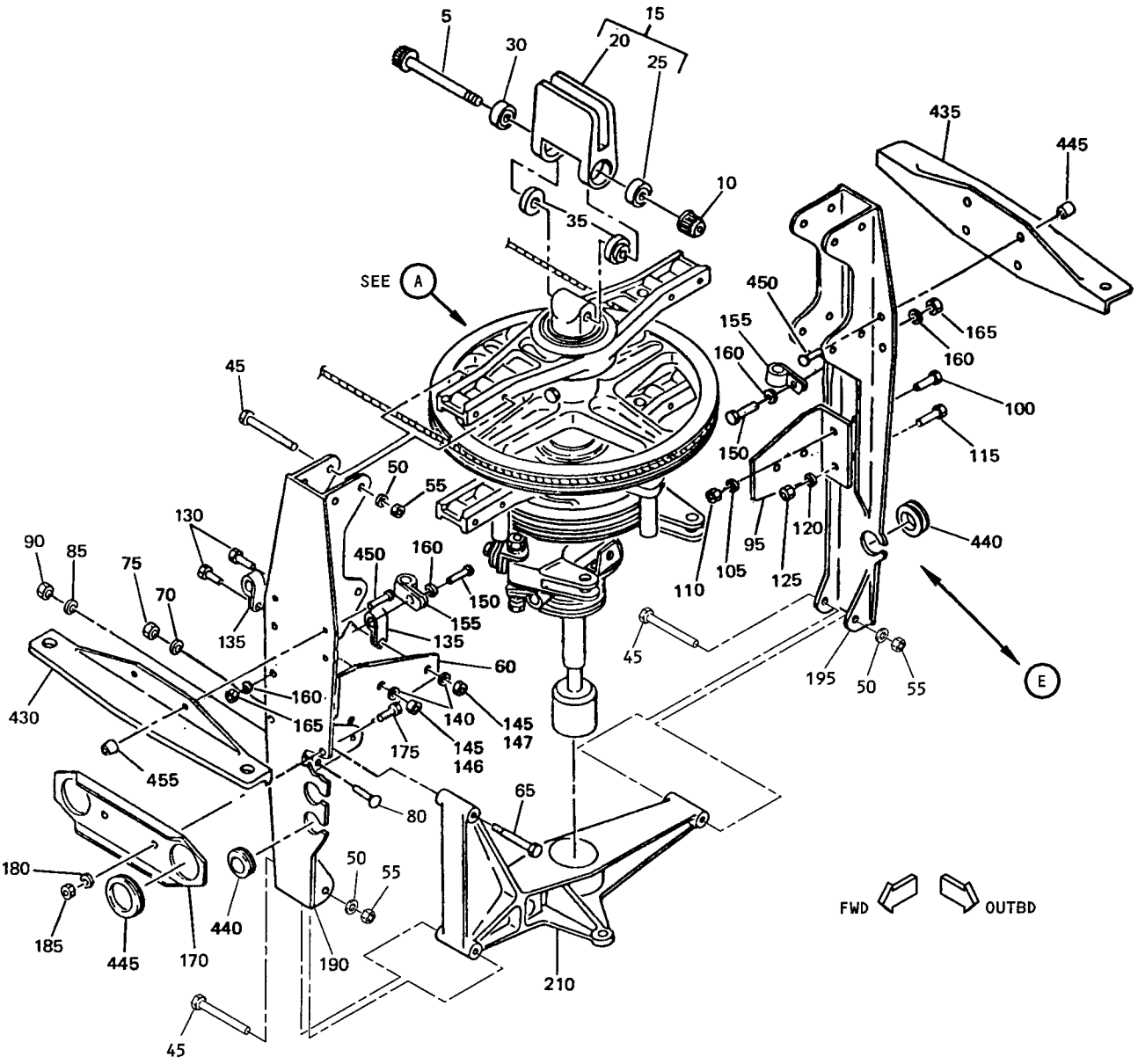
*[3] Maximum allowable radial play of bearing 0.0020 inch

Fits and Clearances
Figure 4 (Sheet 4)

7. ILLUSTRATED PARTS LIST



65-55731-21, -62



65-55731-23,-24,-26,-27,-35,-55,-57,
-63 THRU -66,-73 THRU -75,-81

Control Wheel Steering Aileron Drum Assembly
Figure 5 (Sheet 2)

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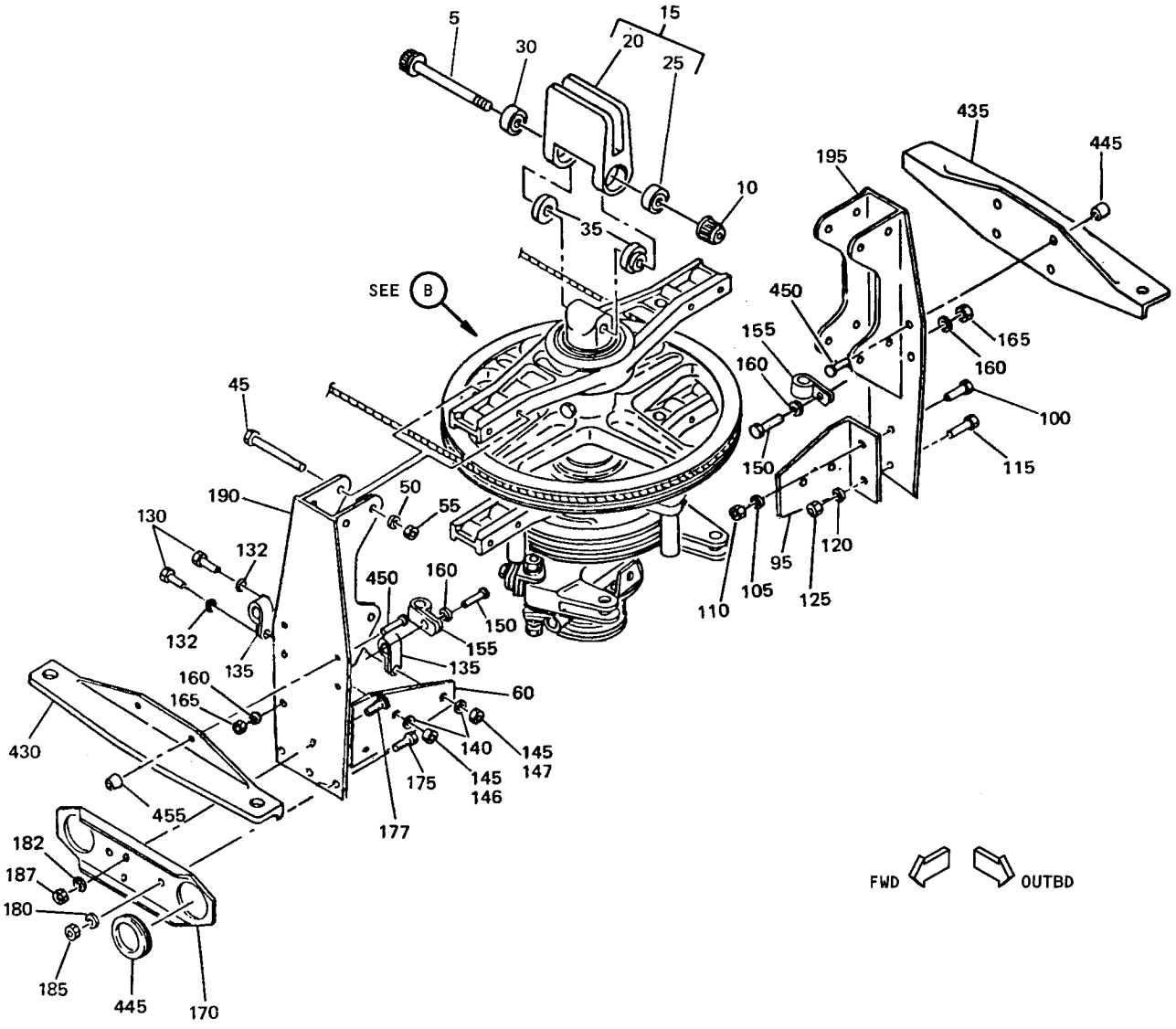
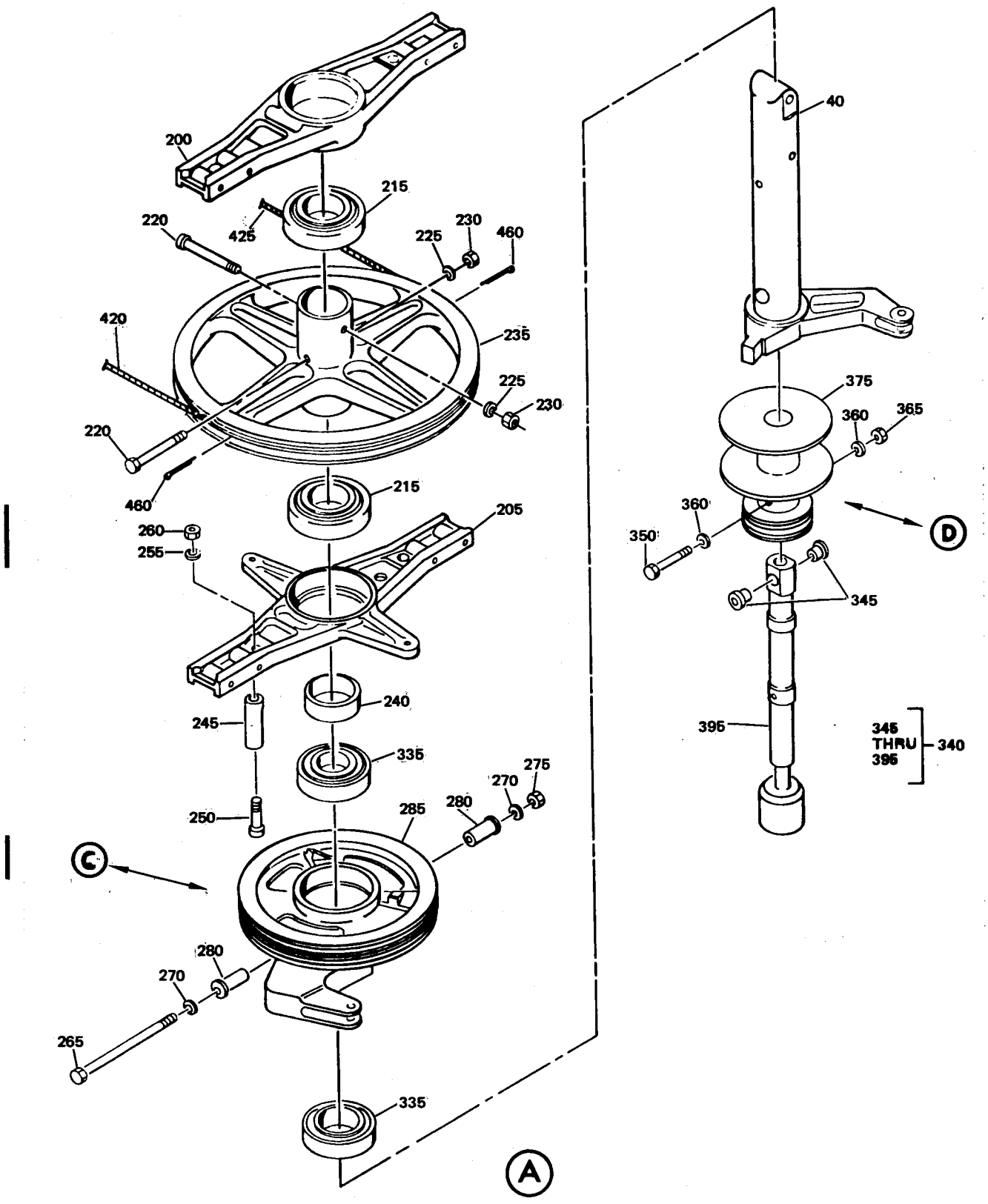
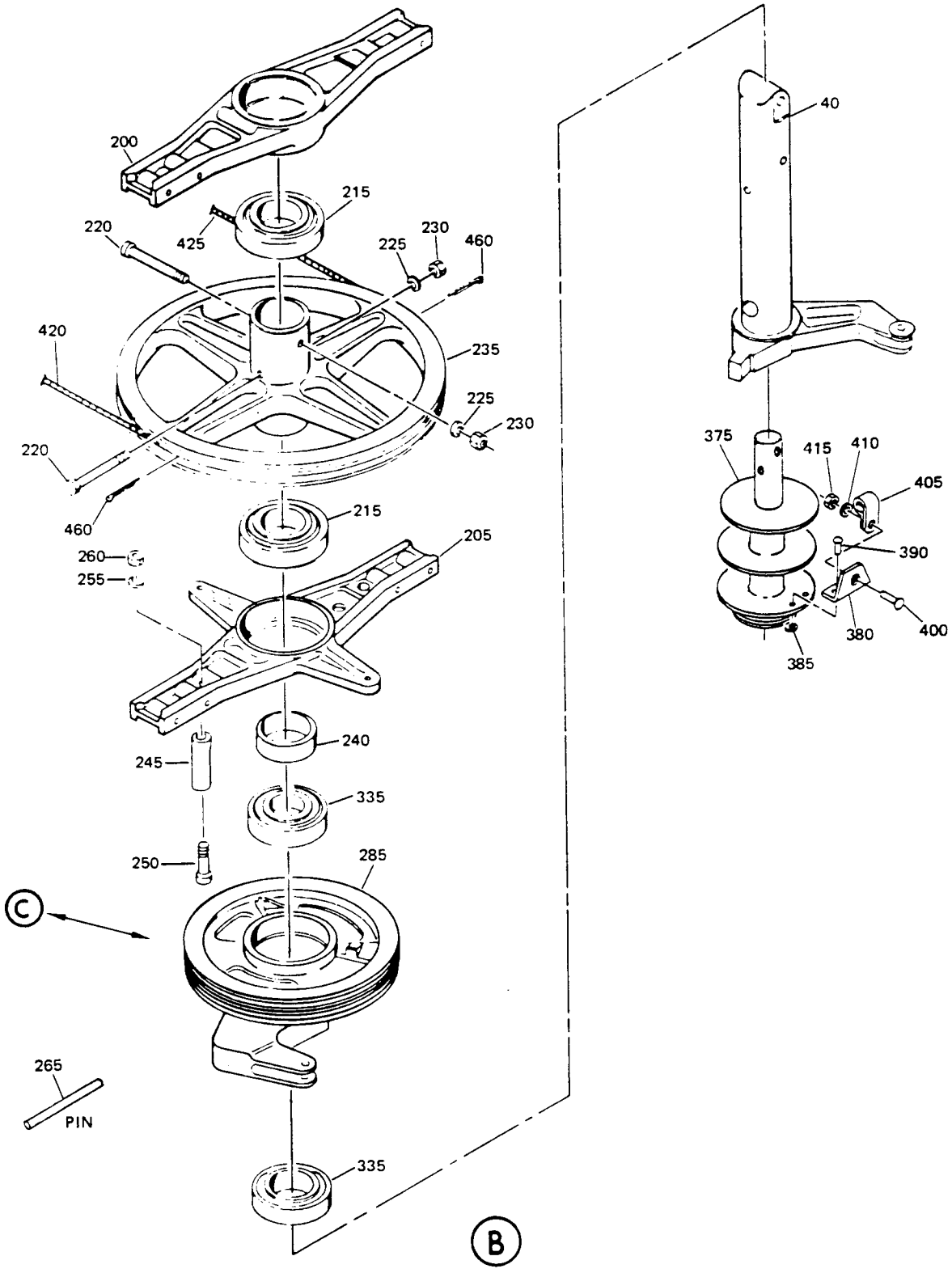


65-55731-70,-80

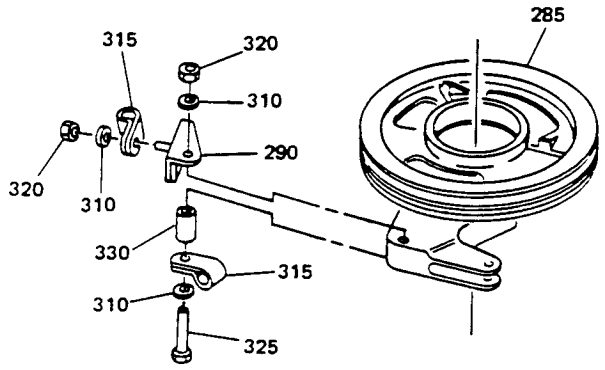
Control Wheel Steering Aileron Drum Assembly
Figure 5 (Sheet 3)



Control Wheel Steering Aileron Drum Assembly
Figure 5 (Sheet 4)



Control Wheel Steering Aileron Drum Assembly
Figure 5 (Sheet 5)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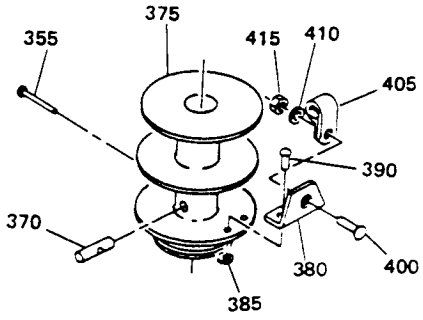
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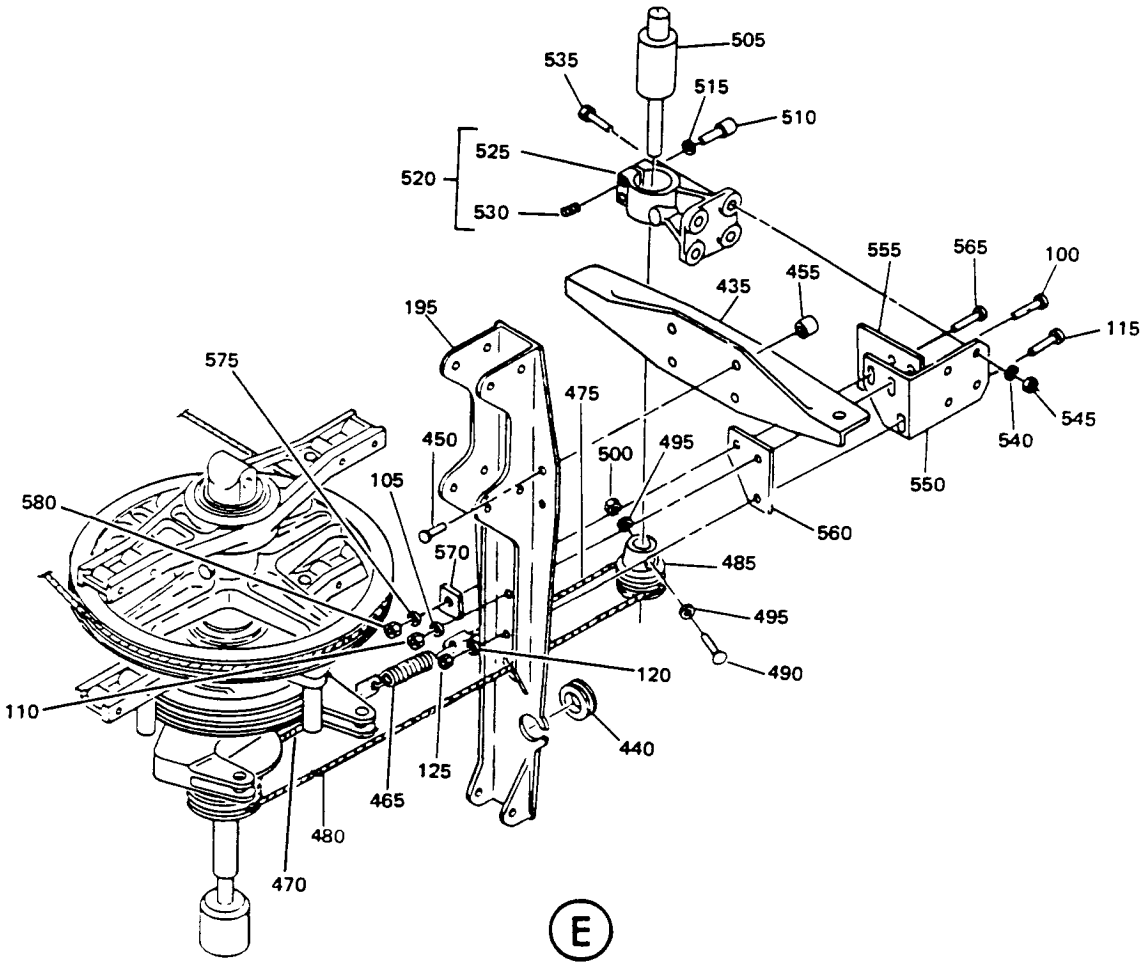
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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
1	65-55731-21		DRUM ASSY, CONTROL WHEEL STEERING AIL	A	RF
1	65-55731-23		DRUM ASSY, CONTROL WHEEL STEERING AIL	B	RF
1	65-55731-24		DRUM ASSY, CONTROL WHEEL STEERING AIL	C	RF
1	65-55731-26		DRUM ASSY, CONTROL WHEEL STEERING AIL	D	RF
1	65-55731-27		DRUM ASSY, CONTROL WHEEL STEERING AIL	E	RF
1	65-55731-35		DRUM ASSY, CONTROL WHEEL STEERING AIL	F	RF
1	65-55731-55		DRUM ASSY, CONTROL WHEEL STEERING AIL	G	RF
1	65-55731-57		DRUM ASSY, CONTROL WHEEL STEERING AIL	H	RF
1	65-55731-62		DRUM ASSY, CONTROL WHEEL STEERING AIL	L	RF
1	65-55731-63		DRUM ASSY, CONTROL WHEEL STEERING AIL	I	RF
1	65-55731-64		DRUM ASSY, CONTROL WHEEL STEERING AIL	J	RF
1	65-55731-65		DRUM ASSY, CONTROL WHEEL STEERING AIL	K	RF
1	65-55731-66		DRUM ASSY, CONTROL WHEEL STEERING AIL	M	RF
1	65-55731-70		DRUM ASSY, CONTROL WHEEL STEERING AIL	N	RF
1	65-55731-73		DRUM ASSY, CONTROL WHEEL STEERING AIL	O	RF
1	65-55731-74		DRUM ASSY, CONTROL WHEEL STEERING AILERON	P	RF
1	65-55731-75		DRUM ASSY, CONTROL WHEEL STEERING AILERON	Q	RF
1	65-55731-80		DRUM ASSY, CONTROL WHEEL STEERING AILERON	R	RF
1	65-55731-81		DRUM ASSY, CONTROL WHEEL STEERING AILERON	S	RF
5	69-40961-1		. BOLT	A-G	1
5	69-40961-2		. BOLT	H-S	1
10	BACN10JC4		. NUT (SUPSD BY MS21042L)		1
10	MS21042L4		. NUT (SUPSS BACN10JC4)		1
15	6-60428		. FORK ASSY	A-E	1
15	6-60428		. FORK ASSY (PRE SB 27-1209R2)	F	1
15	6-60428-2		. FORK ASSY (PRE SB 27-1209)	GHMQ	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
15	6-60428-2		. FORK ASSY	I-L	1
15	6-60428-2		. FORK ASSY (OPT TO 6-60428-6)	NO	1
15	6-60428-6		. FORK ASSY (OPT TO 6-60428-2)	NO	1
15	6-60428-6		. FORK ASSY (POST SB 27-1209R2)	FGHMPQ	1
15	6-60428-6		. FORK ASSY	RS	1
20	6-60428-1		. . FORK (USED ON 6-60428)		1
20	6-60428-3		. . FORK (USED ON 6-60428-2)		1
20	6-60428-7		. . FORK (USED ON 6-60428-6)		1
25	MS27641-4		DELETED		
25	BACB10BX4		. . BEARING (REPLS AN201KP4A) (USED ON 6-60428)		1
25	BACB10BX4		. . BEARING (USED ON 6-60428-2,-6)		1
25	BACB10BX4		. . BEARING (REPLS AN201KP4A) (USED ON 6-60428-2,-6)		1
25	BACB10BX4		. . BEARING (USED ON 6-60428-2,-6)		1
30	BACB10BX4		. BEARING (REPLS BACB10A661)		1
35	66-24952-1		. SPACER		2
40	65-55710-4		. SHAFT	A-MPQ	1
40	65-55710-6		. SHAFT	NR	1
40	65-55710-7		. SHAFT	OS	1
45	BACB30NE4-23		. BOLT (SUPSD BY NAS6604-23)	A-M	10
45	NAS6604-23		. BOLT (SUPSDS BACB30NE4-23)	A-MO	10
45	NAS6604-23		. BOLT	NR	8
45	BACB30NF4-23		. BOLT	PQ	11
45	NAS6604-23		. BOLT	S	11
50	AN960PD416L		. WASHER (SUPSD BY AN960JD416L)	A-MPQS	10
50	AN960JD416L		. WASHER (SUPSDS AN960PD416L)	A-MOPQ S	10
50	AN960JD416L		. WASHER	NR	8
55	BACN10JC4		. NUT (SUPSD BY MS21042L4)	ALPQS	11
55	BACN10JC4		. NUT (SUPSD BY MS21042L4)	B-KM	10
55	MS21042L4		. NUT (SUPSDS BACN10JC4)	A-LPQS	11
55	MS21042L4		. NUT (SUPSDS BACN10JC4)	B-KMO	10
55	MS21042L4		. NUT	NR	8
60	69-45429-1		. BRACKET	AL	1
60	69-71532-2		. BRACKET	B-KMOP QS	1
60	69-71532-3		. BRACKET	NR	1
62	69-71432-2		DELETED		
65	BACB30NE4-23		. BOLT (SUPSD BY NAS6604-23)	AL	1
65	NAS6604-23		. BOLT (SUPSDS BACB30NE4-23)	ALS	1
65	BACB20NE4-24		. BOLT (SUPSD BY NAS6604-24)	B-KMOP Q	1
65	NAS6604-24		. BOLT (SUPSDS BACB30NE4-24)	B-KMOP Q	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
70	AN960PD10L		DELETED		
70	AN960PD416L		. WASHER (SUPSD BY AN960JD416L)	A-MOPQ	1
70	AN960JD416L		. WASHER (SUPSDS AN960PD416L)	A-MOPQ S	1
75	BACN10JC4		. NUT (SUPSD BY MS21042L4)	A-MOPQ S	1
75	MS21042L4		. NUT (SUPSDS BACN10JC4)	A-MOPQ S	1
80	BACB30LU3-3		. BOLT	B-KMO	1
85	AN960PD10		. WASHER (SUPSD BY AN960JD10)	B-KM	1
85	AN960JD10		. WASHER (SUPSDS AN960PD10)	B-KMO	1
90	BACN10JC3		. NUT	B-KMO	1
95	69-71532-1		. BRACKET	B-M-S	1
100	BACB30NE3-5		. BOLT (SUPSD BY NAS6603-5)	A-MPQ	1
100	NAS6603-5		. BOLT (SUPSDS BACB30NE3-5)	A-MPQ	1
100	NAS623-3-3		. BOLT	R	1
100	NAS623-3-5		. BOLT	S	1
100	NAS623-3-7		. SCREW	NO	1
105	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	A-MPQ	1
105	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	A-MP-S	1
110	BACN10JC3		. NUT	A-MPQ	1
110	MS21042L3		. NUT	NORS	1
115	BACN30NE3-7		. BOLT (SUPSD BY NAS6603-7)	A-M	1
115	NAS6603-7		. BOLT	AMPQ	1
115	NAS623-3-3		. BOLT	R	1
115	NAS623-3-7		. BOLT	NOS	1
120	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	A-MPQ	1
120	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	A-MP-S	1
125	BACN10JC3		. NUT	A-MPQ	1
125	MS21042L3		. NUT	NORS	1
130	BACB30NE3-3		. BOLT (SUPSD BY NAS6603-3)	AL	3
130	NAS6603-3		. BOLT	AL	3
130	NAS623-3-3		. BOLT	B-KMPQ	4
130	NAS623-3-5		. BOLT	NORS	4
132	AN960JD10L		. WASHER	NORS	4
135	BACC10DK4		. CLAMP	AL	3
135	BACC10DK4		. CLAMP	C	4
135	BACC10DK4		. CLAMP (LIMITED)	BDE	4
135	BACC10DK3		. CLAMP (LIMITED)	BDE	4
135	BACC10DK3		. CLAMP	F-KM-S	4
137	BACP20BA		. PLUG, FILLER (USED WITH BACC10DK3)	BD-KM-S	4
140	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	AL	3
140	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	AL	3

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-140	AN960PD10		. WASHER (USED WITH BACN10JC3) (SUPSD BY AN960JD10L)	B-E	4
140	AN960JD10L		. WASHER (USED WITH BACN10JC3) (SUPSDS AN960PD10L)	B-E	4
140	AN960PD10		. WASHER (USED WITH MS21042L3) (SUPSD BY AN960JD10L)	BD-KM P-S	4
140	AN960JD10L		. WASHER (USED WITH MS21042L3) (SUPSDS AN960PD10L)	BD-KM P-S	4
140	AN960JD10L		. WASHER	NO	4
145	BACN10JC3		. NUT	AL	3
145	BACN10JC3		. NUT (USED WITH BACC10DK4)	B-E	4
145	MS21042L3		. NUT	NORS	4
146	BACN10YD3		. NUT, CLIP-ON (USED WITH BACC10DK3)	BD-KM PQ	2
146	MS21042L3		. NUT (OPT)	BD-KM PQ	2
147	BACN10YD4		. NUT, CLIP-ON (USED WITH BACC10DK3)	BD-KM PQ	2
147	MS21042L3		. NUT (OPT)	BD-KM PQ	2
150	NAS623-3-5		DELETED		
150	BACB30NE3-5		. BOLT (SUPSD BY NAS6603-5)	B-KMPQ	2
150	NAS6603-5		. BOLT (SUPSDS BACB30NE3-5)	B-KMPQ	2
150	NAS623-3-5		. BOLT	NORF	2
155	BACC10DK4		. CLAMP	C	2
155	BACC10DK4		. CLAMP (LIMITED)	BDE	2
155	BACC10DK3		. CLAMP (LIMITED)	BDE	2
155	BACC10DK3		. CLAMP	F-KM-S	2
157	BACP20BA		. PLUG, FILLER (USED WITH BACC10DK3)	BD-KM-S	2
160	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	B-KM-S	4
160	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	B-KM-S	4
165	BACN10JC3		. NUT	B-KMPQ	2
165	MS21042L3		. NUT	NORS	2
170	69-41789-1		. GUIDE		1
175	BACB30NE3-3		. BOLT (SUPSD BY NAS6603-3)	A-MPQ	2
175	NAS6603-3		. BOLT (SUPSDS BACB30NE3-3)	A-MPQ	2
175	NAS623-3-3		. BOLT	NORS	2
175	NAS623-3-4		. BOLT	NR	2
180	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	A-MPQ	2
180	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	A-MP-S	2
180	AN960JD10L		. WASHER	NR	2
185	BACN10JC3		. NUT	A-MPQ	2
185	MS21042L3		. NUT	NORS	2
187	MS21042L3		. NUT	NR	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
190	65-59347-1		. RIB, FWD	AL	1
190	65-59347-4		. RIB, FWD	B-KMO PQ	1
190	65-59347-6		. RIB, FWD (OPT TO 65-59347-4)	MO-Q	1
190	65-59347-8		. RIB, FWD	N	1
190	65-59347-9		. RIB, FWD	S	1
190	65-59347-10		. RIB, FWD	R	1
195	65-59347-3		. RIB, AFT	A-MOP QS	1
195	65-59347-5		. RIB, AFT (OPT TO 65-59347-3)	MO-QS	1
195	65-59347-7		. RIB, AFT	NR	1
200	65-55476-7		. HOUSING, BEARING		1
205	65-55476-6		. HOUSING, BEARING		1
210	65-58143-1		. HOUSING, BEARING	ACEL	1
210	65C19848-1		. HOUSING, BEARING	BDF-KM O-QS	1
215	BACB10A235		. BEARING (REPLD BY BACB10EX21)	A-MPQ	2
215	BACB10EX21		. BEARING	NORS	2
215	BACB10EX21		. BEARING (REPLS BACB10A235)	A-MPQ	2
215	MS27648-21G		. BEARING (OPT)		2
220	BACB30NE4-26		. BOLT (SUPSD BY NAS6604-26)	A-O	2
220	NAS6604-26		. BOLT (SUPSDS BACB30NE4-26)	A-O	2
220	NAS6604-26X		. BOLT	P	2
220	BACB30NF4-26		. BOLT	Q	2
220	NAS6604-26		. BOLT	RS	2
225	AN960PD416L		. WASHER (SUPSD BY AN960JD416L)	A-MPQ	2
225	AN960JD416L		. WASHER (SUPSDS AN960PD416L)	A-MPQ	2
225	AN960JD416L		. WASHER	NORS	2
230	BACN10JC4		. NUT (SUPSD BY MS21042L4)	A-MPQ	2
230	MS21042L4		. NUT (SUPSDS BACN10JC4)	A-MPQ	2
230	MS21042L4		. NUT	NORS	2
235	65-55711-1		. DRUM, BUS	A-MPQ	1
235	65-55711-3		. DRUM, BUS	NORS	1
240	69-42919-1		. SPACER		1
245	69-41762-2		. GUARD, CABLE		3
250	MS16998-29		. CAPSCREW		3
255	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	A-MPQ	3
255	AN960JD10L		. WASHER (SUPSDS AN960PD10L)	A-MPQ	3
255	AN960JD416L		. WASHER	NORS	3
260	BACN10JC3		. NUT	A-MPQ	3
260	MS21042L3		. NUT	NORS	3
265	BACB30GE4-42		. BOLT	A-MO-QS	1
265	NAS607-3-10P		. PIN	NR	2
270	AN960PD416L		. WASHER (SUPSD BY AN960JD416L)	A-MPQ	2
270	AN960JD416L		. WASHER (SUPSDS AN960PD416L)	A-MO-QS	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
275	BACN10JC4		. NUT (SUPSD BY MS21042L4)	A-MPQS	1
275	MS21042L4		. NUT (SUPSDS BACN10JC4)	A-MO-QS	2
280	69-46712-1		. SPACER	A-MO-QS	2
285	65-55729-4		. DRUM, AIL	AL	1
285	65-55729-5		. DRUM, AIL	B-KM-S	1
290	69-71533-1		. CLIP ASSY	B-KM-S	1
295	69-71533-2		. . CLIP		1
300	69-71533-4		. . FILLER		1
305	BACS53B1EA1		. . STUD		1
310	AN960PD10L		. WASHER (SUPSD BY AN960JD10L)	B-KMP-S	3
310	AN960JD10L		. WASHER	B-KMP-S	3
315	BACC10DK4		. CLAMP	C	2
315	BACC10DK4		. CLAMP (LIMITED)	BDE	2
315	BACC10DK3		. CLAMP (LIMITED)	BDE	2
315	BACC10DK3		. CLAMP	F-KM-S	2
317	BACP20BA		. PLUG, FILLER (USED WITH BACC10DK3)	BD-KM-S	2
320	BACN10JC3		. NUT	B-KMPQ	2
320	MS21042L3		. NUT	NORS	2
325	NAS623-3-18		. BOLT	B-KMPQ	1
325	NAS6603-18		. BOLT	NORS	1
330	NAS43DD3-52		. SPACER	B-KM-S	
335	BACB10BW21		. BEARING (REPLS BACB10A822)	A-MPQ	2
335	MS27642-21		. BEARING	NORS	2
340	69-46277-3		. SHAFT ASSY	AL	1
340	69-46277-4		. SHAFT ASSY	C	1
340	69-46277-5		. SHAFT ASSY	BDEI-K	1
340	69-46277-6		. SHAFT ASSY	FGHM O-QS	1
340	69-78240-1		. SPOOL ASSY	NR	1
345	BACB28W4B21		. . BUSHING	A-MO-QS	2
350	BACB30NE4-16		. . BOLT (USED ON 69-46277-3)		1
355	BACR15BB3D12		. . RIVET (USED ON 69-46277-4,-5,-6)		1
360	AN960PD416		. . WASHER (USED ON 69-46277-3)		2
365	BACN10JC4		. . NUT (USED ON 69-46277-3)		1
370	66-26130-1		. . PIN (USED ON 69-46277-4,-5,-6)		1
375	69-40948-3		. . DRUM (USED ON 69-46277-3)		1
375	69-71534-1		. . SPOOL (USED ON 69-46277-4)		1
375	69-71534-2		. . SPOOL (USED ON 69-46277-5,-6)		1
375	69-78240-2		. . SPOOL (USED ON 69-78240-1)		1
380	69-71533-3		. . BRACKET (USED ON 69-46277-4,-5,-6)		1
380	69-71533-3		. . BRACKET (USED ON 69-78240-1)		1
385	AN960PD4		. . WASHER (USED ON 69-46277-4,-5,-6) (SUPSD BY AN960JD4)		2
385	AN960JD4		. . WASHER (USED ON 69-46277-4,-5,-6; 69-78240-1)(SUPSDS AN960PD4)		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-390	BACR15BA4A3		. . RIVET (USED ON 69-46277-4,-5,-6; 69-78240-1)		2
395	69-45403-1		. . SHAFT	A-MO-QS	1
400	BACB30LU3-2		. BOLT	B-KM-S	1
405	BACC10DK4		. CLAMP	C	1
405	BACC10DK4		. CLAMP (LIMITED)	BDE	1
405	BACC10DK3		. CLAMP (LIMITED)	BDE	1
405	BACC10DK3		. CLAMP	F-KM-S	1
407	BACP20BA		. PLUG, FILLER (USED WITH BACC10DK3)	BD-KM-S	1
410	AN960PD10		. WASHER (USED WITH MS21042L3) (SUPSD BY AN960JD10)	BD-KM-S	1
410	AN960JD10		. WASHER (USED WITH MS21042L3) (SUPSDS AN960PD10)	BD-KM-S	1
415	BACN10JC3		. NUT (USED WITH BACC10DK4)	B-E	1
415	BACN10YD1		. NUT, CLIP-ON (USED WITH BACC10DK3)	BD-KM-S	1
415	MS21042L3		. NUT (OPT TO BACN10YD1)	BD-KM-S	1
420	BACC2A4B00321CG		. CABLE ASSY		1
425	BACC2A4B00321DG		. CABLE ASSY		1
430	69-41771-1		. BEAM, FWD	A-L	1
430	69-41771-2		. BEAM, FWD	MN-S	1
435	69-41772-1		. BEAM, AFT	A-L	1
435	69-41772-2		. BEAM, AFT	MN-S	1
440	NAS1368N10C		. GROMMET	A-MOS	3
445	NAS1368N16A		. GROMMET	NP-R	2
450	BACB30DX6-4		. LOCKBOLT		8
455	NAS1080-06		. COLLAR		8
460	MS24665-132		. PIN, COTTER		2
			---------*---------		
			INSTALLATION PARTS		
465	MS24586-609		SPRING	ABIK-S	1
470	69-40951-43		CABLE ASSY	ABIK-S	1
475	69-40951-41		CABLE ASSY	ABIK-S	1
480	69-40951-45		CABLE ASSY	ABIK-S	1
485	69-40949-3		PULLEY	ABIK-S	1
490	NAS623-3-10		BOLT	ABIK-S	1
495	NAS549L10		WASHER	ABIK-S	2
500	BACN10JC3		NUT	ABIKL MPQ	1
500	MS21042L3		NUT	NORS	1
505	H505A		SENSOR, V33463 (BOEING S250N104-1)	ABIK-S	1
505	13TX0115A		SENSOR, V51761 (BOEING 60B40042-3) (OPT)	ABIK-S	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
5-					
505	7977-18-01		SENSOR, V99932 (BOEING 60B40042-3) (OPT)	ABIK-S	1
505	7977-01		SENSOR, V99932 (BOEING 60B40042-1) (OPT)	ABIK-S	1
505	H505B		SENSOR, V33463 (BOEING S250N104-4) (OPT)	ABIK-S	1
505	ZR1A		SENSOR, V51761 (BOEING S250N104-4) (OPT)	ABIK-S	1
505	7977-05-01		SENSOR, V99932 (BOEING 60B40042-1) (OPT)	ABIK-S	1
510	MS16998-32		CAPSCREW	ABIK-S	2
515	NAS620A10L		WASHER	ABIK-S	2
520	65-41617-2		BRACKET ASSY	ABIK-S	1
525	65-41617-4		. BRACKET		1
530	BACS13W3CN3		. SLEEVE, STEEL WIRE		2
535	BACB10NE3-5		BOLT	ABIK-S	4
540	AN960PD10L		WASHER	ABIK-S	4
545	BACN10JC3		NUT	ABIK-S	4
550	69-40946-3		SUPPORT	ABIK-S	1
555	69-58371-8		RUBSTRIP	ABIK-S	1
560	69-58371-7		SHIM	ABIK-S	1
565	BACB30NE3-10		BOLT	ABIKL MPQ	1
565	NAS623-3-8		BOLT	RS	1
565	NAS623-3-10		BOLT	NO	1
570	69-40946-2		SPACER	ABIKL MPQ	1
575	AN960PD10L		WASHER	ABIKL MPQ	1
575	AN960JD10L		WASHER	NORS	1
580	BACN10JC3		NUT	ABIKL MPQ	1
580	MS212042L3		NUT	NORS	1

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