



**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

TO: ALL HOLDERS OF AILERON AND ELEVATOR CONTROL WHEEL AND COLUMN ASSEMBLY  
 COMPONENT MAINTENANCE MANUAL 27-09-11

REVISION NO. 13 DATED NOV 01/05

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION

AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE	Added top assemblies 253T2111-85, -86, similar to -79, -80 except without approach plate assembly, per PRR B13252
1	
TR & SB RECORD	
1	
301	
703	
1006,1008,1012,1022, 1024-1031,1033-1035, 1038,1043-1045,1047, 1049-1052	
TITLE PAGE	Added top assemblies 253T2111-87 thru -90, similar to -81, -82, -73, -74, except without approach plate assembly, per PRR B13124-22
1	
TR & SB RECORD	
1	
301	
703	
1006,1008,1012,1022, 1024-1034,1043-1052	
REPAIR-GEN	Edited without technical change
601	
1014,1019	
709	Changed item numbers to show configuration differences more clearly
1020,1027-1028	

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HIGHLIGHTS

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**AILERON AND ELEVATOR CONTROL  
WHEEL AND COLUMN ASSEMBLY**

**| PART NUMBERS 253T2111-19 THRU -42,-51 THRU -90**

COMPONENT MAINTENANCE MANUAL  
WITH  
ILLUSTRATED PARTS LIST

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TITLE PAGE

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REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY

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REVISION RECORD

01

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B10675 PRR C12010 PRR C12012 PRR C12013 PRR C12015 PRR B11555 PRR B11715 PRR B13124-22 PRR B13252	JUL 10/83 JUL 10/83 JUL 10/83 JUL 10/83 JUL 10/83 APR 10/87 JUL 01/88 NOV 01/05 NOV 01/05

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TR &amp; SB RECORD

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2	BLANK		502	BLANK	
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2	BLANK		602	MAR 01/00	01.1
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*703	NOV 01/05	01.1	*1023	NOV 01/05	01.101
704	MAR 01/00	01.1	*1024	NOV 01/05	01.1
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706	MAR 01/00	01.1	*1026	NOV 01/05	01.1
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708	MAR 01/00	01.1	*1028	NOV 01/05	01.1
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802	JAN 10/87	01.1	*1033	NOV 01/05	01.1
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*1019	NOV 01/05	01.1			
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## INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

- |  |                              |
|--|------------------------------|
| 1. Title Page                                      | 4. List of Effective Pages   |
| 2. Record of Revisions                             | 5. Table of Contents         |
| 3. Temporary Revision &<br>Service Bulletin Record | 6. Introduction              |
|  | 7. Procedures & IPL Sections |

Refer to the Table of Contents for the page location of applicable sections. An asterisked flagnote \*[ ] in place of the page number indicates that no special instructions are provided since the function can be performed using standard industry practices.

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices, and an explanation of the True Position Dimensioning symbols used.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

Verification:

Disassembly	Jan 21/83
Assembly	Jan 21/83

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INTRODUCTION

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AILERON AND ELEVATOR CONTROL WHEEL AND COLUMN ASSEMBLY

DESCRIPTION AND OPERATION

1. The wheel and column assembly is an aileron control wheel assembly and an elevator control column assembly. The wheel assembly contains stabilizer trim, autopilot, interphone, and microphone switches. Rotation of the wheel assembly is transmitted to the ailerons via cable drum and cable assemblies. Pushing and pulling the column transmits force to deflect the elevators via the elevator torque tube assembly.

2. Leading Particulars (Approximate)

Width -- 15 inches

Depth -- 6 inches

Length -- 41 inches

Weight -- 15 pounds

Control Wheel Travel -- 65 degrees either side of neutral position.

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TESTING AND TROUBLE SHOOTING

 1. Equipment

NOTE: Equivalent substitutes may be used.

A. Megohmeter (500 volts) -- Biddle Model 656

 2. Continuity Check

A. Check electrical circuits for continuity (Ref Wiring Diagram, Fig. 101).

 3. Insulation Check

A. Perform the following high potential electrical insulation tests on stab trim switch wire ends at lower end of column using a 500-volt megohmmeter.

(1) Check between each wire end and ground and also between wires:

| (a) WHT-VIO to WHT-RED

| (b) WHT-VIO to WHT-ORN

| (c) WHT-VIO to WHT/BLK-ORN

| (d) WHT-RED to WHT/BLK-ORN

| (e) WHT-RED to WHT-ORN

| (f) WHT/BLK-ORN to WHT-ORN

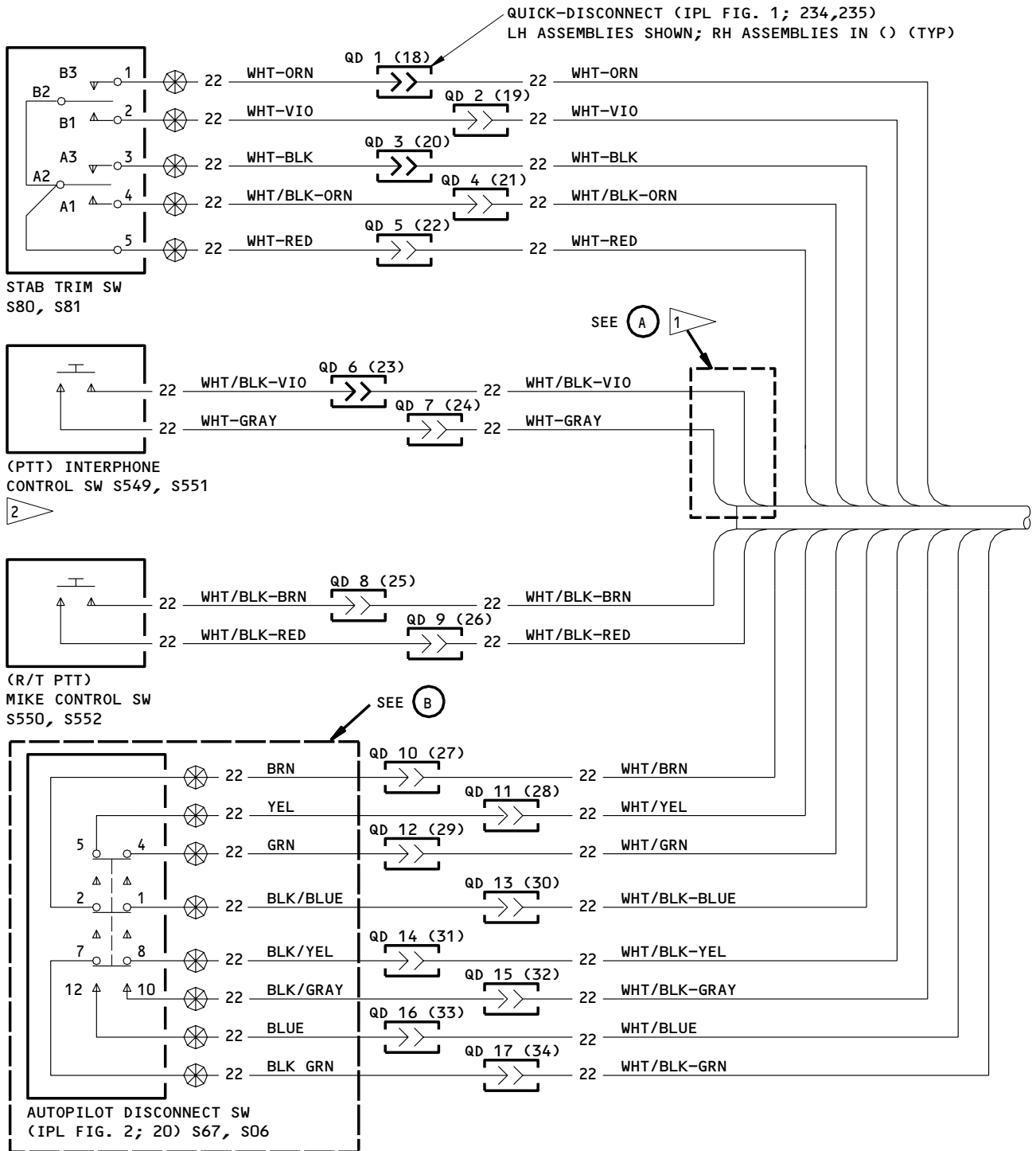
| CAUTION: DO NOT ROTATE WHEEL MORE THAN 65 DEGREES TO EITHER SIDE OF THE NEUTRAL POSITION, OR DAMAGE TO THE WIRE OR CABLE ASSEMBLY CAN OCCUR.

(2) Rotate control wheel (stop to stop) during each high potential test.

(3) The insulation test shall not produce an insulation breakdown.

(4) The insulation resistance must be 100 megohms minimum.

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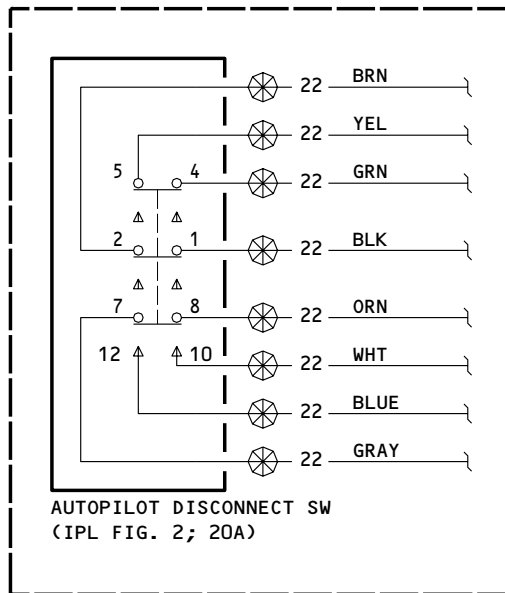
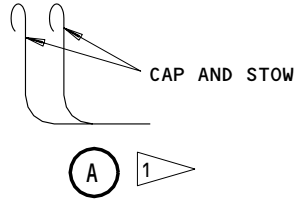
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Wiring Diagram  
Figure 101 (Sheet 1)

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OPTIONAL CONFIGURATION

(B)

1 253T2111-19,-20,-23,-24,-27,-28,-31,-32,-35,-36,-39,-40,-67,-68,-73,-74

2 253T2111-21,-22,-25,-26,-29,-30,-33,-34,-37,-38,-41,-42,-51 THRU -66,-69 THRU -72,-75 THRU -84

Wiring Diagram  
 Figure 101 (Sheet 2)

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DISASSEMBLY

NOTE: Disassemble this component only as necessary to complete fault isolation, determine the serviceability of parts, perform required repairs, and restore the unit to serviceable condition.

1. Parts Replacement

NOTE: The following parts are recommended for replacement. Unless otherwise specified, actual replacement of parts may be based on in-service experience.

A. Cotter pin (160)

2. Disassemble Wheel and Column Assembly (IPL Fig. 1)

A. Remove screw (15) and medallion (10A) with attached approach plate assembly (270A) from wheel assembly (30 or 35), if installed. Remove wire guard assembly (16).

NOTE: Do not disassemble approach plate assembly (270A) unless necessary for repair or replacement.

B. Remove screws (25) and cover (20) from column assembly (245).

C. Remove one cap nut (75A) which holds clamp (132). Pull clamp (132) from shank of bolt (70A). Remove straps (230) from connectors (234, 235).

D. Using extraction/insertion tool M15570-20 remove color coded wires with contacts (237 or 238) from connectors (234 or 235).

NOTE: Do not remove contacts (237 or 238) from ends of wires unless necessary for repair or replacement.

E. Remove screws (80, 85), washers (120), nuts (125), spacer (90), and stop (140) from column assembly (245).

NOTE: Do not remove screw (115), washer (120), nut (125) or clamp (130, 135) unless necessary for replacement of electrical cable assembly (170C).

F. Remove screws (95, 97, 98, 105), washers (120, 122A), nuts (125) and spacers (100, 101, 110) from column assembly (245).

NOTE: Do not remove clamps (130, 135) from electrical cable (170C) or conduit (165) unless necessary for repair or replacement.

G. Remove bolts (185), washers (195), nuts (200), bushings (190), and pulley assemblies (180) from column assembly (245).

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**NOTE:** Do not disassemble pulley assembly (180) unless necessary for repair or replacement.

H. Remove cap nuts (75A), washers (72), and bolts (70A) and separate wheel assembly (30 or 35) from column assembly (245).

**NOTE:** Do not remove clamp (132) from electrical cable assembly (170AC) unless necessary for repair or replacement.

I. Pull out coil section of electrical cable (170C) thru opening on column assembly (245) where cover (20) was removed.

**NOTE:** Do not remove or pull straight section of electrical cable assembly (170C) from conduit (165) or column assembly (245) unless necessary for repair or replacement.

J. Remove screws (60) and bolt retainer (65) from cable drum assembly (145).

K. Remove retaining bolts (70A) and cable drum assembly (145) from column assembly (245).

**NOTE:** Do not remove inserts (150) from cable drum (155) unless necessary for repair or replacement.

L. Remove cotter pins (160) and slide terminals of cable assemblies (157, 158) out from grooves of cable drum (155).

**NOTE:** Do not remove terminal from cable assembly (155) unless necessary for replacement.

M. Pull cable assemblies (157, 158) thru bottom opening of column assembly (245) and store in safe place so that no kink or knot can occur.

N. Remove screws (45), bearing retainer (40), bearings (50), and spacer (55).

**NOTE:** Do not remove nutplates (260), rivets (255) or inserts (250) from column assembly (245) unless necessary for replacement.

### 3. Disassemble Wheel Assembly (IPL Fig. 2)

A. Remove screw (15) and plate (10) from wheel assembly (1 or 5).

B. Remove autopilot disengage switch (20A) with wire tail from wheel assembly (1 or 5).

C. Remove screws (35).

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D. On wheel assembly 253T2121-1, -2, -5, -6, and 251N1140-21, -22, remove the trigger (30 or 32), clamp (50 or 55), button (60 or 62), and switch (47 or 48) as a unit.

**NOTE:** Do not separate parts (25, 30, 32, 40, 47 or 48, 50 or 55, 60 or 62) or the soldered wires unless necessary for repair or replacement.

E. On wheel assembly 253T2121-3, -4, -7 thru -12, and 251N1140-17 thru -20, remove the trigger (30 or 32), clamp (50 or 55), and switches (45) with wires as a unit.

**NOTE:** Do not separate parts (25, 30, 32, 40, 45, 50 or 55) or the soldered wires unless necessary for repair or replacement.

F. Remove screws (70) and stab trim switch (65A) with wire tail from wheel assembly (1 or 5).

**NOTE:** Do not remove inserts (85, 90) from wheel (95 or 100) unless necessary for repair or replacement.

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CLEANING

1. Clean all parts except bearings using standard industry practices and information contained in 20-30-03.
2. Clean teflon-sealed bearings (50, IPL Fig. 1) per manufacturer's instruction.

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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices. Refer to FITS AND CLEARANCES for design dimensions and wear limits.
2. Magnetic particle check per 20-20-01 -- Bearing retainer (40, IPL Fig. 1) and retaining bolt (70A).
3. Penetrant check per 20-20-02 -- Spacer (55, IPL Fig. 1), bolt retainer (65), cable drum assembly (145), conduit (165), and column (265).

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CHECK

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REPAIR – GENERAL1. Content

- A. Repair, refinish and replacement procedures are included in separate repair sections as follows:

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
253T2116	COLUMN	1-1
253T2117	CABLE DRUM	2-1
253T2121	WHEEL	3-1
65B80975	PULLEY	4-1
- - -	MISC PARTS REFINISH	5-1
BAC27TFDE0172 BAC27TFDE0207	DECAL	6-1

2. Standard Practices

- A. Refer to the following standard practices as applicable, for details of procedure in individual repairs.

20-11-02	Repair of Electrical Connectors
20-30-02	Stripping of Protective Finishes
20-41-01	Decoding Table for Boeing Finish Codes
20-42-05	Bright Cadmium Plating
20-43-01	Chromic Acid Anodizing
20-50-03	Bearing and Bushing Replacement
20-50-05	Application of Aluminum Foil and Other Markers
20-50-12	Application of Adhesives

3. Materials

NOTE: Equivalent substitutes may be used.

- A. Primer -- BMS 10-11, Type 1 (Ref 20-60-02)
- B. Adhesive -- Type 38 (Ref 20-50-12)

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4. Dimensioning Symbols

- A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in Fig. 601.

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- STRAIGHTNESS
- ▭ FLATNESS
- ⊥ PERPENDICULARITY (OR SQUARENESS)
- // PARALLELISM
- ROUNDNESS
- ⊘ CYLINDRICITY
- ⌒ PROFILE OF A LINE
- △ PROFILE OF A SURFACE
- ◎ CONCENTRICITY
- ≡ SYMMETRY
- ∠ ANGULARITY
- ↗ RUNOUT
- ↗ TOTAL RUNOUT
- ⊏ COUNTERBORE OR SPOTFACE
- ∇ COUNTERSINK

- ⊕ THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
- ∅ DIAMETER
- S ∅ SPHERICAL DIAMETER
- R RADIUS
- SR SPHERICAL RADIUS
- ( ) REFERENCE
- BASIC (BSC) OR DIM A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
- A- DATUM
- (M) MAXIMUM MATERIAL CONDITION (MMC)
- (L) LEAST MATERIAL CONDITION (LMC)
- (S) REGARDLESS OF FEATURE SIZE (RFS)
- (P) PROJECTED TOLERANCE ZONE
- FIM FULL INDICATOR MOVEMENT

### EXAMPLES

<p><span style="border: 1px solid black; padding: 2px;">— 0.002</span> STRAIGHT WITHIN 0.002</p> <p><span style="border: 1px solid black; padding: 2px;">⊥ 0.002 B</span> PERPENDICULAR TO B WITHIN 0.002</p> <p><span style="border: 1px solid black; padding: 2px;">// 0.002 A</span> PARALLEL TO A WITHIN 0.002</p> <p><span style="border: 1px solid black; padding: 2px;">○ 0.002</span> ROUND WITHIN 0.002</p> <p><span style="border: 1px solid black; padding: 2px;">⊘ 0.010</span> CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER</p> <p><span style="border: 1px solid black; padding: 2px;">⌒ 0.006 A</span> EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A</p> <p><span style="border: 1px solid black; padding: 2px;">△ 0.020 A</span> SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE</p>	<p><span style="border: 1px solid black; padding: 2px;">◎ ∅ 0.0005 C</span> CONCENTRIC TO C WITHIN 0.0005 DIAMETER</p> <p><span style="border: 1px solid black; padding: 2px;">≡ 0.010 A</span> SYMMETRICAL WITH A WITHIN 0.010</p> <p><span style="border: 1px solid black; padding: 2px;">∠ 0.005 A</span> ANGULAR TOLERANCE 0.005 WITH A</p> <p><span style="border: 1px solid black; padding: 2px;">⊕ ∅ 0.002 (S) B</span> LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE</p> <p><span style="border: 1px solid black; padding: 2px;">⊥ ∅ 0.010 (M) A</span> <span style="border: 1px solid black; padding: 2px;">0.510 (P)</span> AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION</p> <p><span style="border: 1px solid black; padding: 2px;">2.000</span> THEORETICALLY EXACT DIMENSION IS 2.000 OR 2.000 BSC</p> <p><span style="border: 1px solid black; padding: 2px;">0.020 A</span> <span style="border: 1px solid black; padding: 2px;">A 0.020</span></p>
<p><b>NOTE:</b> DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME</p>	

True Position Dimensioning Symbols  
Figure 601

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REPAIR-GENERAL

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COLUMN ASSEMBLY – REPAIR 1-1

253T2116-1, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions, Fig. 601.

1. Bolt Hole and Bearing Seat Repair (IPL Fig. 1, Fig. 601)

- A. Machine bolt holes or bearing seat as required, within repair limits shown, to remove defects.
- B. Build up repaired surface with chrome plate and grind to dimension and finish shown.

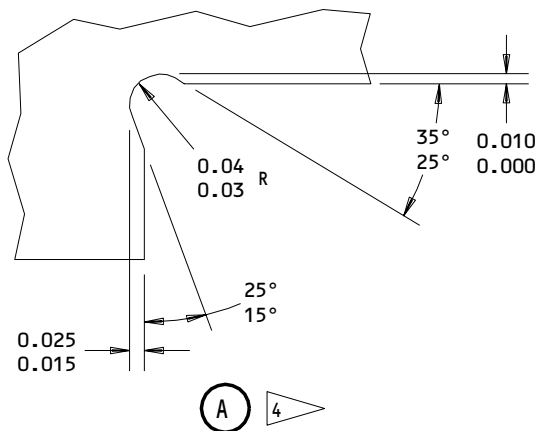
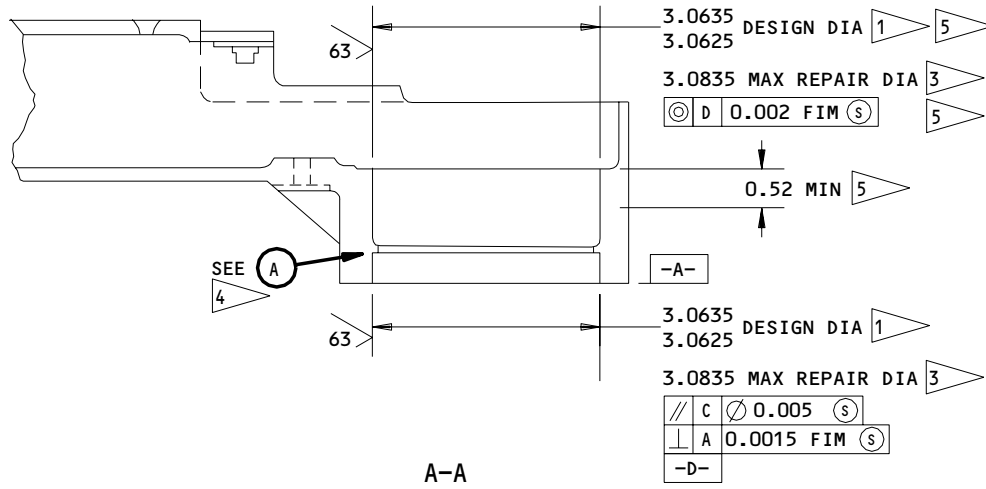
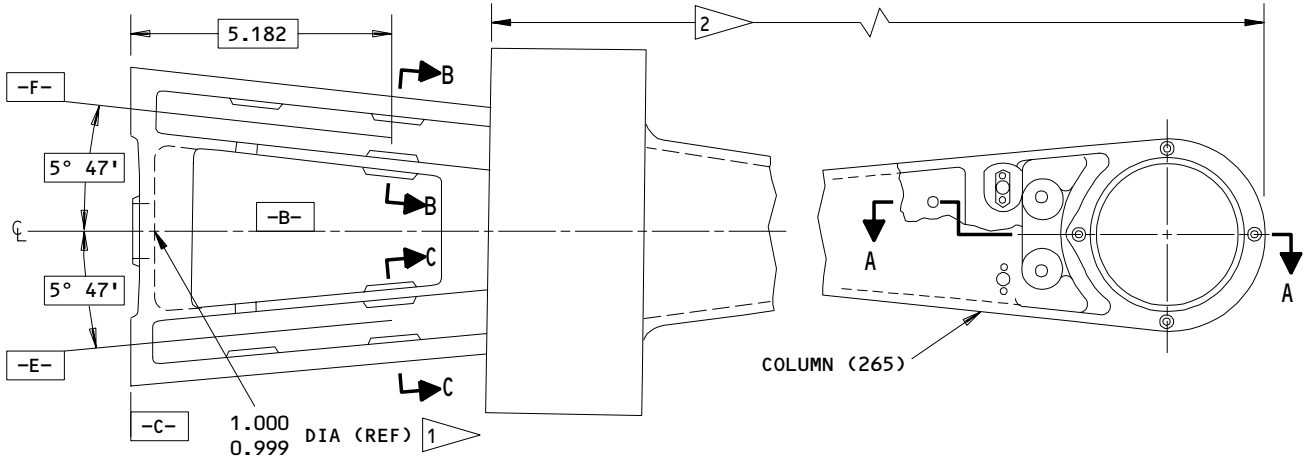
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253T2116-1,-4  
 Column Assembly Repair  
 Figure 601 (Sheet 1)

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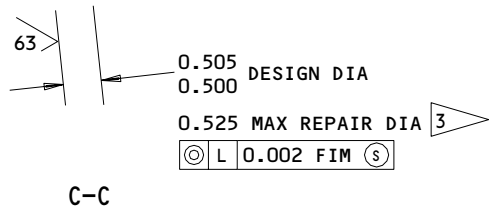
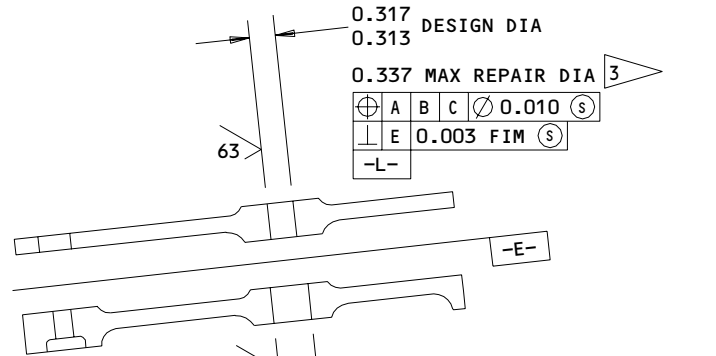
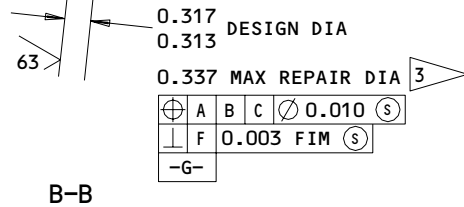
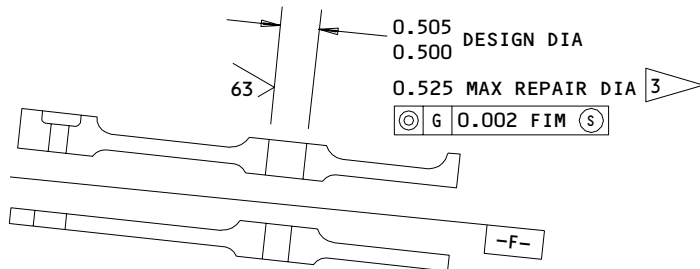
REPAIR 1-1

01.1

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**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL



**REFINISH**

COLUMN (265)--ANODIZE (F-17.05) AND APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) EXCEPT AS NOTED

COLUMN (265A)--CHEMICAL TREAT (F-17.26) AND APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) EXCEPT AS NOTED

- 1 OMIT PRIMER
- 2 APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.26-8924, WHICH REPLACES SRF-14.903-8924) ON EXTERIOR SURFACES ONLY IN THIS AREA.
- 3 BUILD UP WITH CHROME PLATE PER SOPM 20-42-03 AND GRIND TO DIMENSION AND FINISH SHOWN. CHROME PLATE RUNOUT 0.00-0.08. STOP CHROME PLATE 0.00-0.02 FROM FILLET RADIUS OR EDGE.

**REPAIR**

REF 3

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

- 4 MAINTAIN CORNER DETAIL AS SHOWN
- 5 MAINTAIN DIAMETER FOR 0.52 MIN DEPTH

253T2116-1,-4  
 Column Assembly Repair  
 Figure 601 (Sheet 2)

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REPAIR 1-1

01.1

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CABLE DRUM ASSEMBLY - REPAIR 2-1

253T2117-1

**NOTE:** Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Seat Repair (IPL Fig. 1, Fig. 601)

- A. Machine bearing seat as required, within repair limit shown, to remove defects.
- B. Build up repaired surface with chrome plate and grind to dimension and finish shown.

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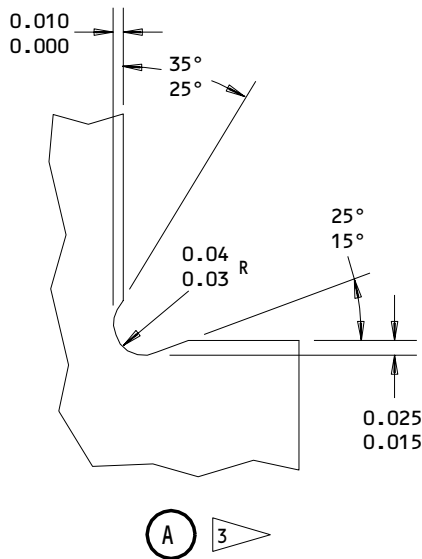
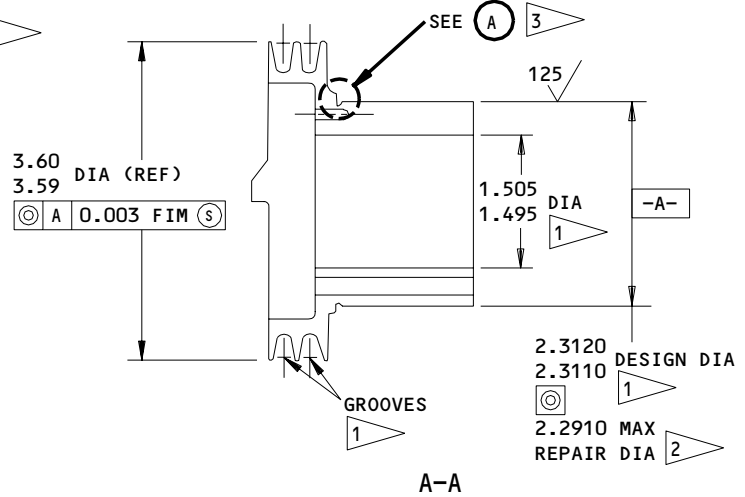
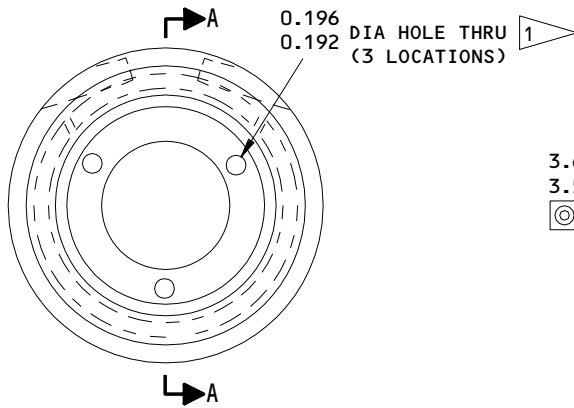
REPAIR 2-1

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**REFINISH**

CHROMIC ACID ANODIZE (F-17.04) AND APPLY ONE COAT BMS 10-11, TYPE 1 PRIMER (F-20.02) EXCEPT AS NOTED

- 1 OMIT PRIMER
- 2 BUILD UP WITH CHROME PLATE AND GRIND TO DIMENSION AND FINISH SHOWN. CHROME PLATE RUNOUT 0.00-0.08. STOP CHROME PLATE 0.00-0.02 FROM FILLET RADIUS OR EDGE.
- 3 MAINTAIN CORNER DETAIL AS SHOWN

**REPAIR**

REF 2 3

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

253T2117-1  
 Cable Drum Assembly Repair  
 Figure 601

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REPAIR 2-1

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WHEEL ASSEMBLY – REPAIR 3-1

253T2121-1 thru -12  
251N1140-17 thru -22

NOTE: Refer to REPAIR-GEN for list of applicable standard practices.

1. Switch Replacement (IPL Fig. 2, Fig. 601)

- A. Loosen the locking screw (40) in the clamp (50 or 55).
- B. Remove the switches (45, 47 or 48) or the button (60 or 62) from the clamp (50 or 55).
- C. For assemblies 253T2121-1 thru -6, -9, -10, and 251N1140-21, -22:
  - (1) With the INT switch (45) or the button (60 or 62) set at 0.37–0.39 inch as shown, install and adjust the MIC switch (45, 47, or 48) in the clamp (50 or 55) until the MIC switch button contacts the trigger (30).
  - (2) Adjust the MIC switch 1/8 to 3/8 turn to preload the MIC switch button.
  - (3) Tighten the locking screw (40) on the clamp (50 or 55).
- D. For assemblies 253T2121-7, -8, -11, -12:
  - (1) With the MIC switch (45) bottomed in the clamp (50 or 55), install and adjust the INT switch (45) until the INT switch contacts the trigger (30).
  - (2) Adjust the INT switch 1/8 to 3/8 turn to preload the INT switch button.

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REPAIR 3-1

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(3) Tighten the locking screw (40) on the clamp (50 or 55).

(4) Adjust the ball catch so that the trigger latches when the lower part of the trigger is pressed.

E. For assemblies 251N1140-17, -18:

(1) With the MIC switch (45) bottomed in the clamp (50 or 55), install and adjust the INT switch (45) until the INT switch contacts the trigger (30).

(2) Adjust the INT switch 1/8 to 3/8 turn to preload the INT switch button.

(3) Tighten the locking screw (40) on the clamp (50 or 55).

F. For assemblies 251N1140-19, -20:

(1) Install the MIC switch (45) in the upper position on the wheel (95 or 100).

(2) Turn the MIC switch until the MIC switch button contacts the trigger (30) and the ball contacts the switch mount detent.

(3) Install the INT switch (45) in the lower position on the wheel.

(4) Turn the INT switch until it contacts the trigger, then back off 1/4 turn.

(5) Tighten the locking screw (40) on the clamp (50 or 55).

(6) Operate the trigger to make sure that it stays in the detent position. If it does not stay in the detent position, back off the INT switch until the trigger operates satisfactorily.

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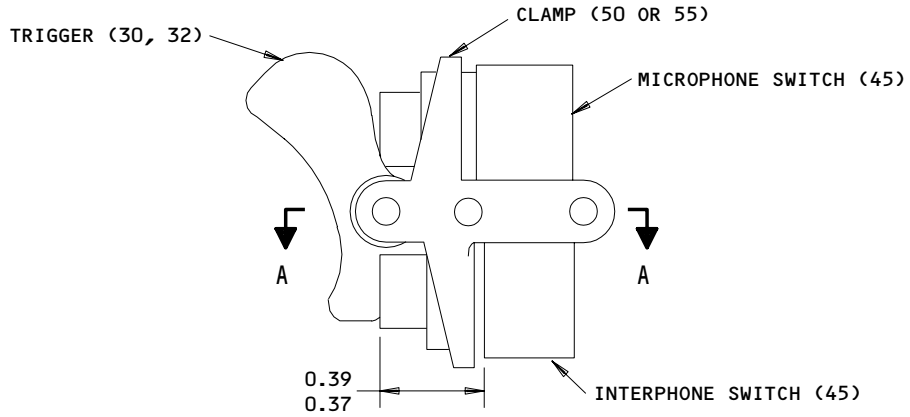
REPAIR 3-1

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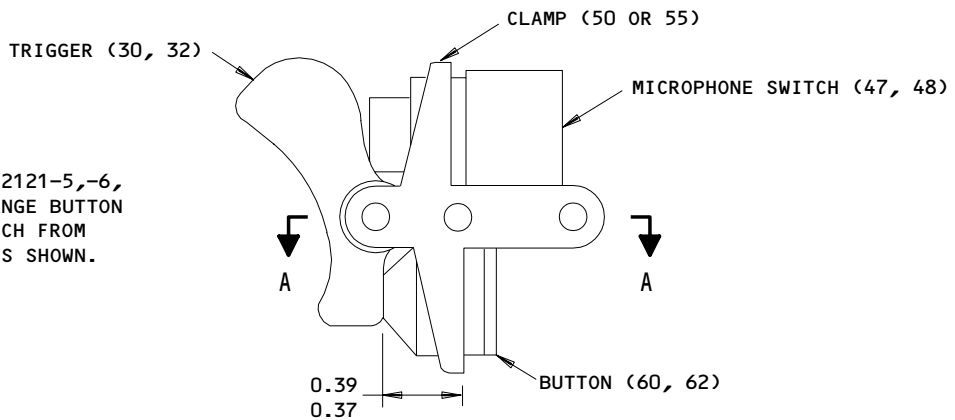
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**BOEING**  
**COMPONENT**  
**MAINTENANCE MANUAL**

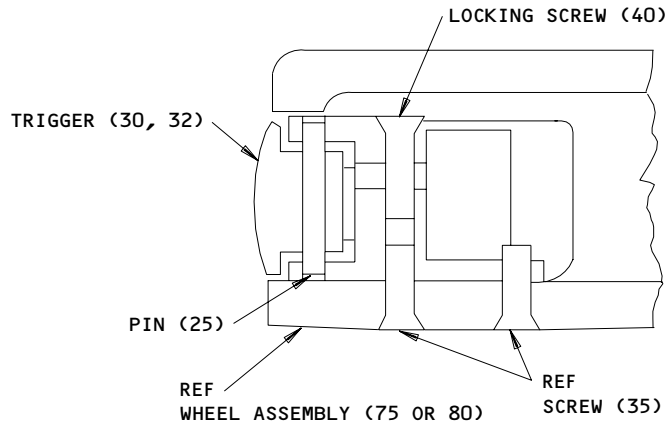


(USED ON 253T2121-3,-4,-7 THRU -12, 251N1140-17 THRU -20)

**NOTE:** FOR 253T2121-5,-6,  
 INTERCHANGE BUTTON  
 AND SWITCH FROM  
 POSITIONS SHOWN.



(USED ON 253T2121-1,-2,-5,-6, 251N1140-21,-22)



A-A

ALL DIMENSIONS ARE IN INCHES  
 ITEM NUMBERS REFER TO IPL FIG. 2

253T2121-1 THRU -12  
 251N1140-17 THRU -22  
 Wheel Assembly - Switch Replacement  
 Figure 601

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REPAIR 3-1

01.1

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PULLEY ASSEMBLY – REPAIR 4-1

65B80975-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices.

1. Bearing Replacement (Fig. 601)

A. Remove bearing (215, IPL Fig. 1).

NOTE: Pulley assembly without bearing becomes sheave assembly (205).

B. Install new bearing (215) on sheave assembly (205).

C. Roller swage the insert (208) on both sides per 20-50-03.

D. Apply a 3-4 pound side load at 5.19-5.25 inch diameter. Make sure that the pulley does not wobble more than 0.03 inch FIM.

2. Pulley Shield Replacement

A. Remove rivets (220).

B. Remove shields (210) and clean all contact surfaces of pulley assembly.

C. Bond all contact surfaces of shields (210) with type 38 adhesive per 20-50-12.

D. Drill rivet holes as shown and install rivets (220).

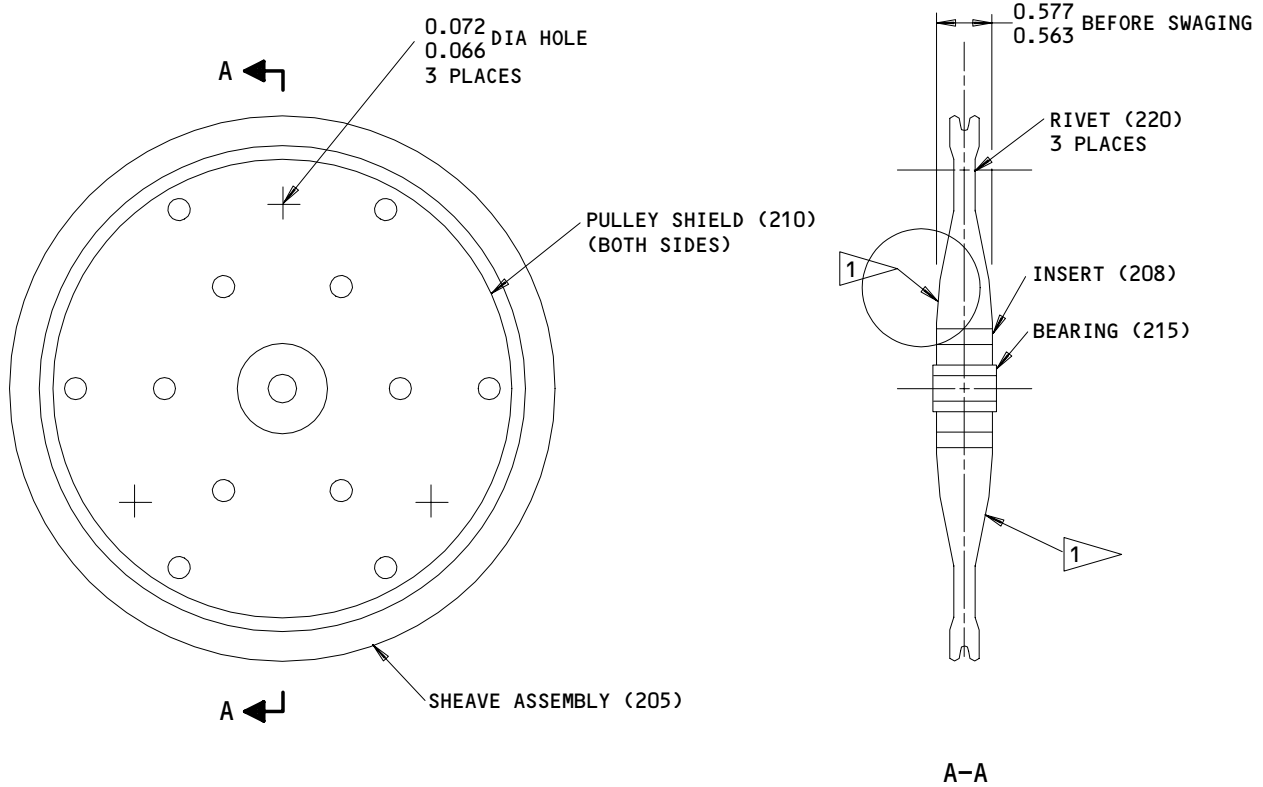
**27-09-11**

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1 BOND ALL CONTACT SURFACES (RIM, HUBS, AND SPOKES) OF SHEAVE ASSEMBLY (205) AND SHIELDS (210) WITH TYPE 38 ADHESIVE

ALL DIMENSIONS ARE IN INCHES  
 ITEM NUMBERS REFER TO IPL FIG. 1

65B80975-1  
 Pulley Assembly - Replacement Details  
 Figure 601

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REPAIR 4-1  
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MISC PARTS REFINISH - REPAIR 5-1

1. Repair of parts listed in Fig. 601 consists of restoration of the original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Spacer (55)	Al alloy	Chromic acid anodize and apply one coat of primer, BMS 10-11, type 1 (F-18.13) except omit primer on ID.
Retainer (65), Stop (140)	Al alloy	Chromic acid anodize and apply one coat of primer, BMS 10-11, type 1 (F-18.13) all over.
Conduit (165)	Al alloy	1. Inside: Chemical treat (F-17.08). 2. Outside: Chemical treat and apply BMS 10-11, type 1 primer (F-18.14) plus one more layer of primer (F-20.02).
<u>Fig. 2</u>		
Clamp (50,50C,50D, 50F,55,55C,55D,55F)	309 or 17-4PH CRES	Cadmium plate (F-15.02).
Clamp (50A,55A)	Al alloy	Chemical treat or chromic acid anodize and apply BMS 10-11, type 1 primer (SRF-2.30).
Clamp (50B,55B)	15-5PH CRES	Cadmium plate and apply BMS 10-11, type 1 primer (F-16.01). Do not apply primer on the holes or threaded areas.
Clamp (50E,50G,55E, 55G)	301,304,17-4PH, or 15-5PH CRES	Passivate (F-17.25, which replaces F-17.09).
Clamp (50F,55F)	17-4PH CRES	Cadmium plate (F-15.02).
Button (60,62)	Al alloy	Anodize (F-2.20).

Refinish Details  
Figure 601

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REPAIR 5-1

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DECAL - REPAIR 6-1

BAC27TFDE0172

BAC27TFDE0207

NOTE: Refer to REPAIR-GEN for list of applicable standard practices.

1. Decal Replacement (IPL Fig. 1)

A. Remove worn or damaged decal (410).

B. Install new decal per 20-50-05.

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REPAIR 6-1

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ASSEMBLY1. Materials

NOTE: Equivalent substitutes may be used.

- A. Enamel -- BMS 10-11, type 2, dark brown (Ref 20-60-02)
- B. Oil -- MIL-L-6085 (Ref 20-60-03)
- C. Primer -- BMS 10-11, type 1 (Ref 20-60-02)
- D. Sealant -- BMS 5-95 (Ref 20-60-04)

2. Equipment

NOTE: Equivalent substitutes may be used.

- A. M15570-20 -- Insert and extract tool
- B. 15500-20-7 -- Crimp tool
- C. 55-000 or 22-000 -- Crimp tool

3. Preassembly Procedures for Electrical Wires

## A. Electrical Cable Assembly (170C) Replacement (IPL Fig. 1, Fig. 701)

- (1) Pull electrical cable assembly (170C) from conduit (165) and clamps (130, 132).
- (2) Insert new cable assembly (170C) through clamps (130, 132) and conduit (165).
- (3) Make wire breakouts.
- (4) Crimp contact (237 or 238) using crimp tool Deutsch 15500-20-7, or Balmar 55-000 or 22-000, on each wire end except two wire ends as shown in Fig. 101.

## B. Electrical Wire Connections and Replacement (Fig. 701)

NOTE: Wires are not furnished with switches (45, 47 or 48, IPL Fig. 2) Use remaining wire cut from electrical cable assembly (170C, IPL Fig. 1) or use BMS 13-48, type 1, class 1 wire color coded as shown.

- (1) Solder wires to switches (45, 47 or 48, IPL Fig. 1).

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(2) Crimp contacts (237 or 238, IPL Fig. 1) on other end of wires with crimp tool Deutsch 15500-20-7 or Balmar 55-000, 22-000.

4. Assemble Wheel Assembly (IPL Fig. 2, Fig. 702)

- A. Install stab trim switch (65A) with screws (70) on wheel assembly (75 or 80). Tighten screws to 3.5-4.5 pound-inches. Stow wire tail as shown.
- B. Install the unit consisting of parts (25, 30, 32, 40, 45, 47 or 48, 50 or 55, 60 or 62) in the wheel assembly (75 or 80) with screws (35). Stow wires as shown.

NOTE: Refer to REPAIR 3-1 for details of adjustment of switches (45, 47 or 48).

- C. Install autopilot disengage switch (20) in plate (10) with primer on threads only.
- D. Secure parts assembled in paragraph 2.C. on wheel assembly (75, 80) with screws (15). Stow wires as shown.

5. Assemble Wheel and Column Assembly (IPL Fig. 1, Fig. 703)

CAUTION: TAKE CARE TO KEEP THE BEARINGS (50) AND THE CAVITY BETWEEN THE BEARINGS CLEAN OR CORROSION CAN OCCUR.

- A. Lubricate the bearings (50, P/N 253T2111-5 only) with MIL-L-6085 oil and install the bearings, with the seals as shown, the spacer (55), and the retainer (40) on the column assembly (245). Secure with screws (45).

NOTE: The seal on one side of the 253T2111-5 bearing is removed intentionally. Bearing (50A, P/N BACB10FL37) is the preferred alternative.

- B. Insert terminals of cable assemblies (157, 158) into appropriate holes in grooves of cable drum assembly (145). Install cotter pins (160) on drum assembly (145). Pull other end of cable assembly (157, 158) through bottom opening of column assembly (245).
- C. Install cable drum assembly (145) in bearings (50) in column assembly (245).
- D. Carefully pull back the electrical cable assembly (170C) through the front opening of the column assembly (245) without straining the wires.
- E. Install the wheel assembly (30 or 35) on the column assembly (245), using the bolts (70A) with wet sealant on the holes of the wheel assembly.

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- F. Install bolt retainer (65) on cable drum assembly (145) with screws (60).
- G. Using insertion/extraction tool M15570-20, connect color-coded wires to appropriate connectors (234, 235). Secure 12 and 5 connectors with straps (230). Use wire routing as shown.
- H. Secure stop (140), spacer (90) and clamp (130) with screws (80, 85), washer (120) and nuts (125).
- I. Install cover (20) on column assembly (245) with screws (25).
- J. Install clamp (132) on one of the bolts (70) as shown. Install washers (72) and cap nuts (75A) and tighten to 20-30 pound-inches above run-up torque.

**NOTE:** Clamp (132) is attached to the electrical wire assembly.

- K. For assemblies 251T2111-19, -20, -23, -24, -27, -28, -31, -32, -35, -36, -39, -40, -67, -68, -73, -74, -89, -90, cap and stow the wires without contacts (color coded as WHT/BLK-VI0, WHT-GRAY). Refer to TESTING AND TROUBLE SHOOTING, Fig. 101.

**NOTE:** Contacts (237 and 238) are crimped on wires for quick connect and disconnect from connectors (234 or 235).

**CAUTION:** ENSURE THAT WIRE GUARD ASSEMBLY (16) SLIDES SMOOTHLY IN GROOVE OF WHEEL ASSEMBLY (30 OR 35) DURING INSTALLATION. KEEP ALL WIRES AND CONNECTORS CLEAR OF PLANE OF GROOVE TO PREVENT POSSIBLE WIRE INSULATION DAMAGE DURING ASSEMBLY.

- L. If applicable, install wire guard assembly (16). Insert lower end of wire guard assembly (16) inside base of wheel. Firmly press upper edge of seal until guard is below medallion groove.
- M. If applicable, install medallion (10A) with attached approach plate assembly (270A) on wheel assembly (30 or 35) with screw (15).
- N. Install pulley assemblies (180) on column assembly (245) with parts (185, 190, 195, 200).

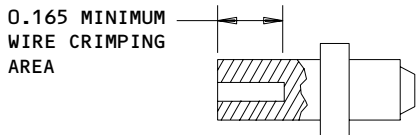
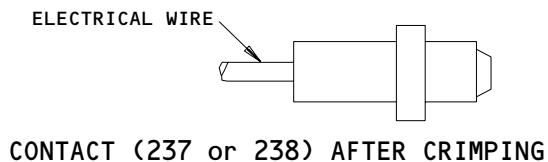
**CAUTION:** USE EXTREME CARE WHEN POSITIONING CABLE ASSEMBLIES (157, 158). CABLE ASSEMBLIES CROSS INSIDE COLUMN ASSEMBLY (245).

- O. Position cable assemblies (157, 158) on pulley assemblies (180).
- P. Install screws (105), spacers (110), washers (120), and nuts (125) on the right side of the column assembly (245) (Fig. 703).
- Q. Install conduit (165) and electrical cable assembly (170A) with screws (95), spacers (100), washers (120) and nut (125) on the left side of the column assembly (245) (Fig. 703).

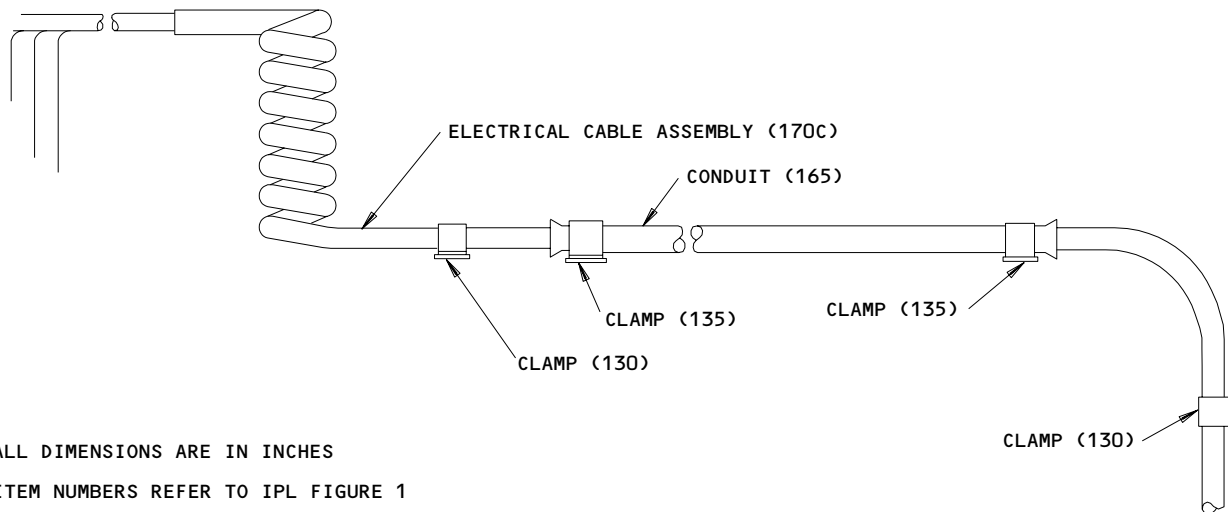
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6. Prepare and store component in accordance with standard industry practices.



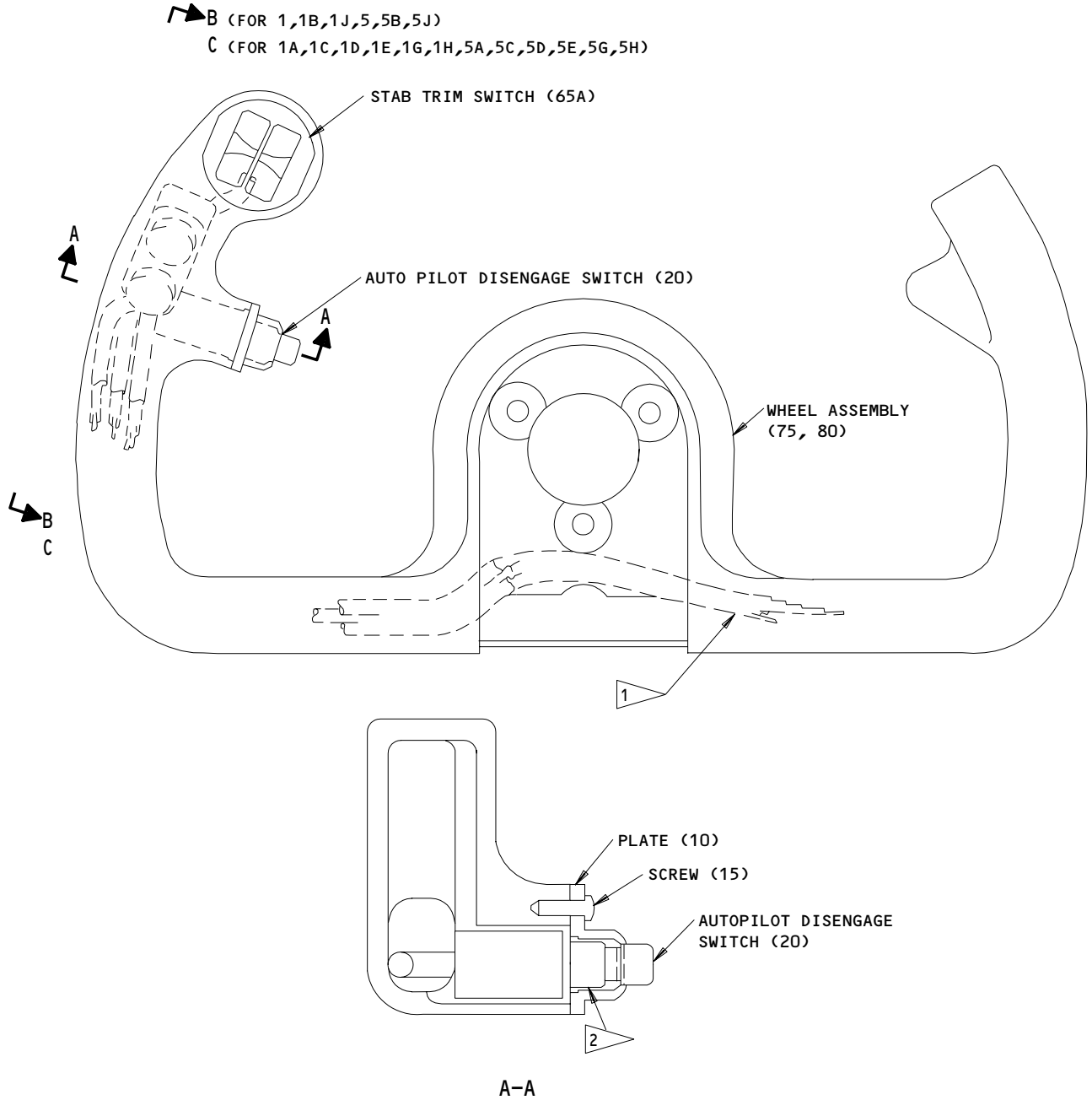
CONTACT (237 or 238) BEFORE CRIMPING



ALL DIMENSIONS ARE IN INCHES  
 ITEM NUMBERS REFER TO IPL FIGURE 1

Electrical Wire Replacement Details  
 Figure 701

14502



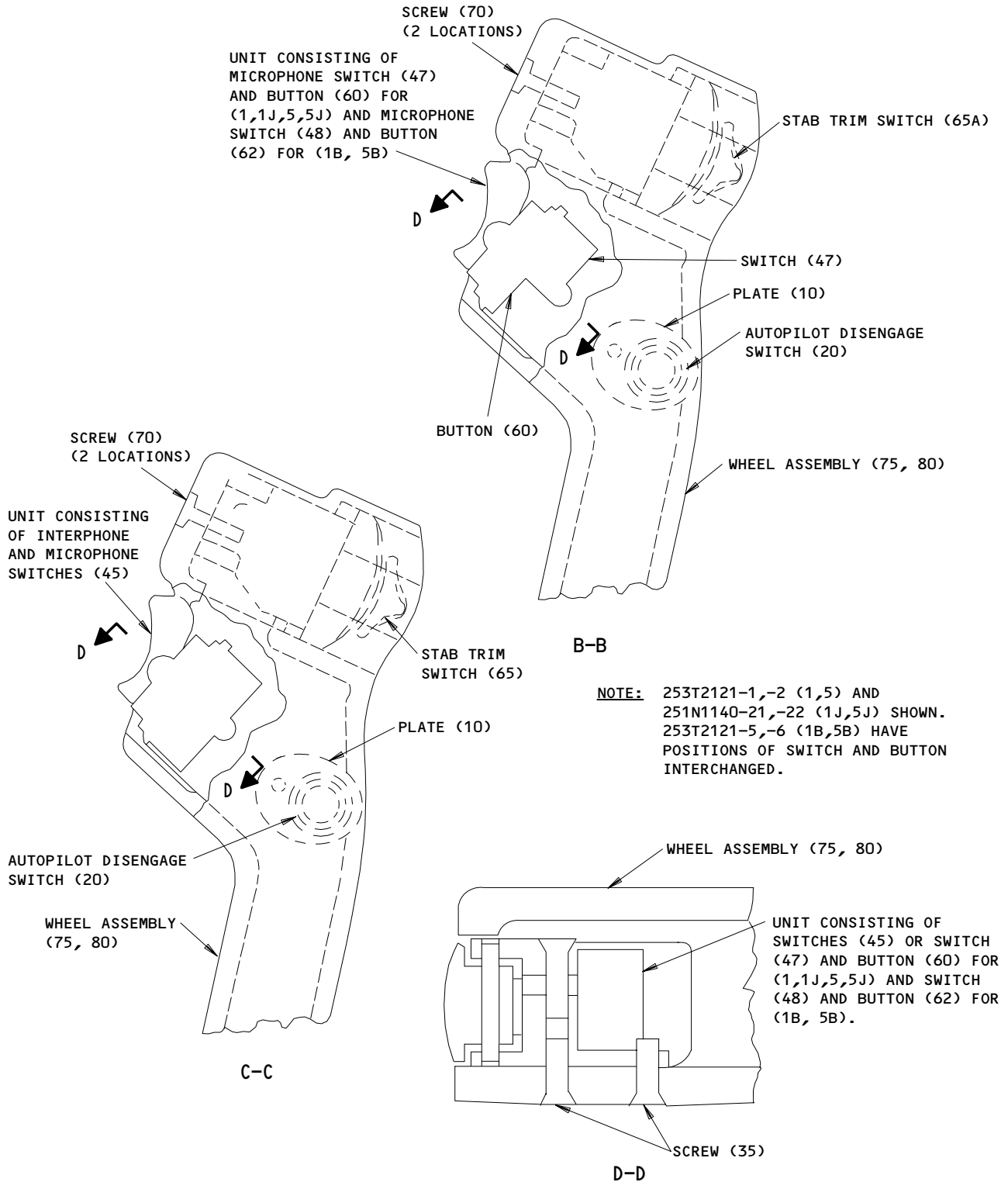
- 1 STOW ELECTRICAL CABLES FROM SWITCHES APPROXIMATELY AS SHOWN.
- 2 INSTALL AUTOPILOT DISENGAGE SWITCH (20) IN PLATE (10) WITH BMS 10-11, TYPE 1 PRIMER ON THREADS ONLY.

Wheel Assembly  
 Figure 702 (Sheet 1)

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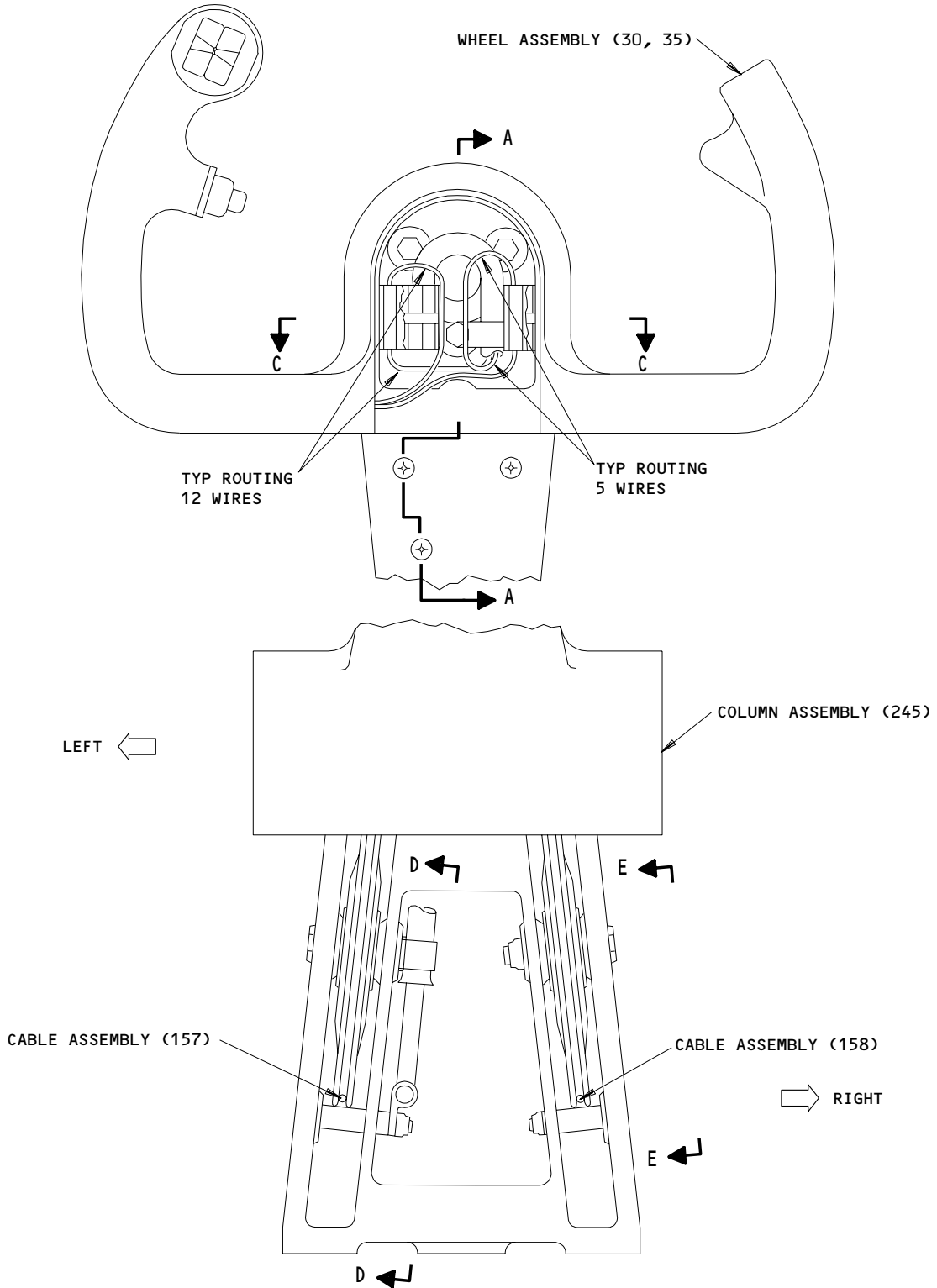
ITEM NUMBERS REFER TO IPL FIG. 2

Wheel Assembly  
 Figure 702 (Sheet 2)

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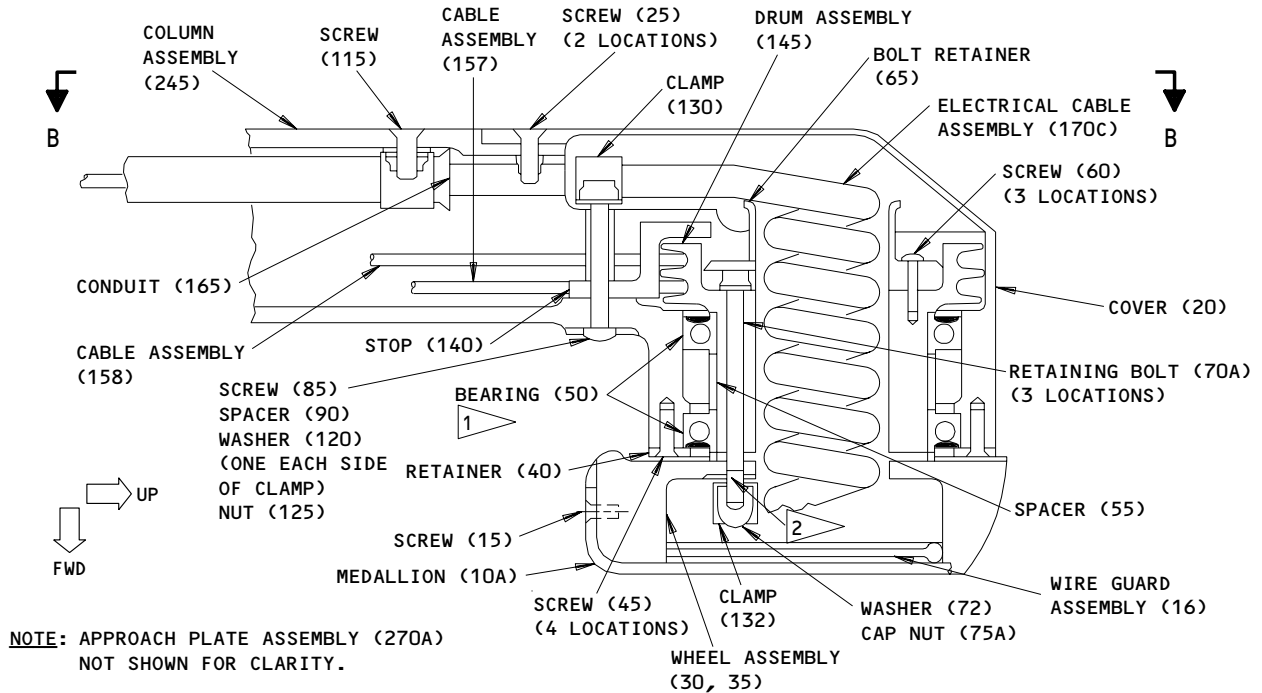


Wheel and Column Assembly  
Figure 703 (Sheet 1)

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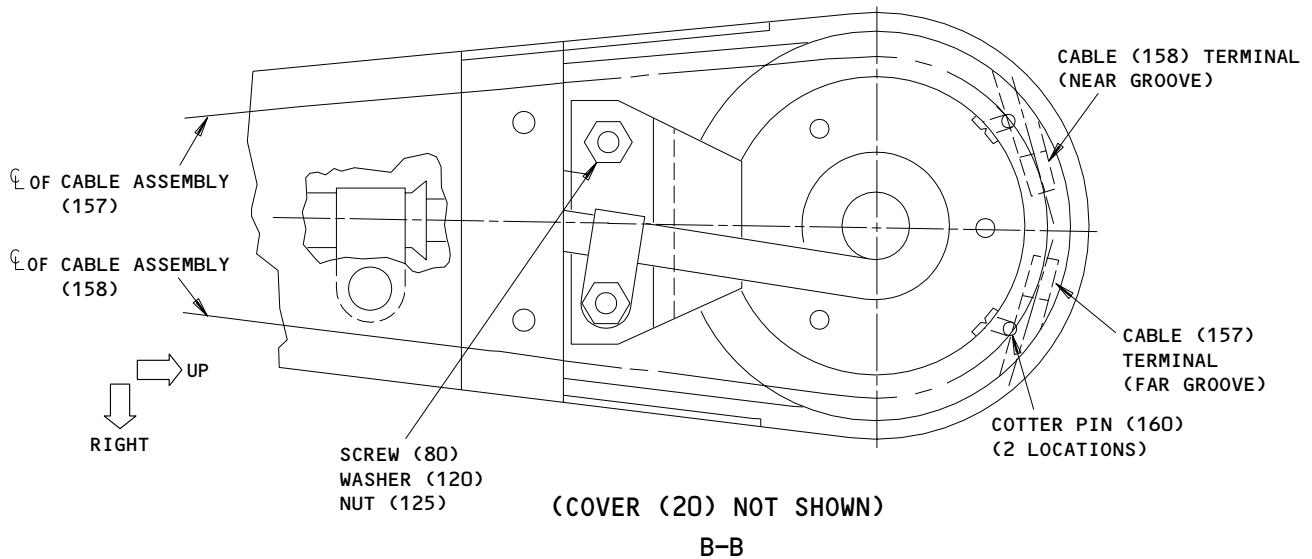
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**COMPONENT  
MAINTENANCE MANUAL**


(ROTATED 90 DEGREES CLOCKWISE)

A-A



B-B

- 1 LUBRICATE LIGHTLY WITH MIL-L-6085 OIL AND INSTALL PER SOPM 20-50-03.
- 2 INSTALL WITH WET SEALANT, BMS 5-95 IN HOLES OF WHEEL ASSEMBLY AND BETWEEN WASHERS AND WHEEL.

 Wheel and Column Assembly  
Figure 703 (Sheet 2)

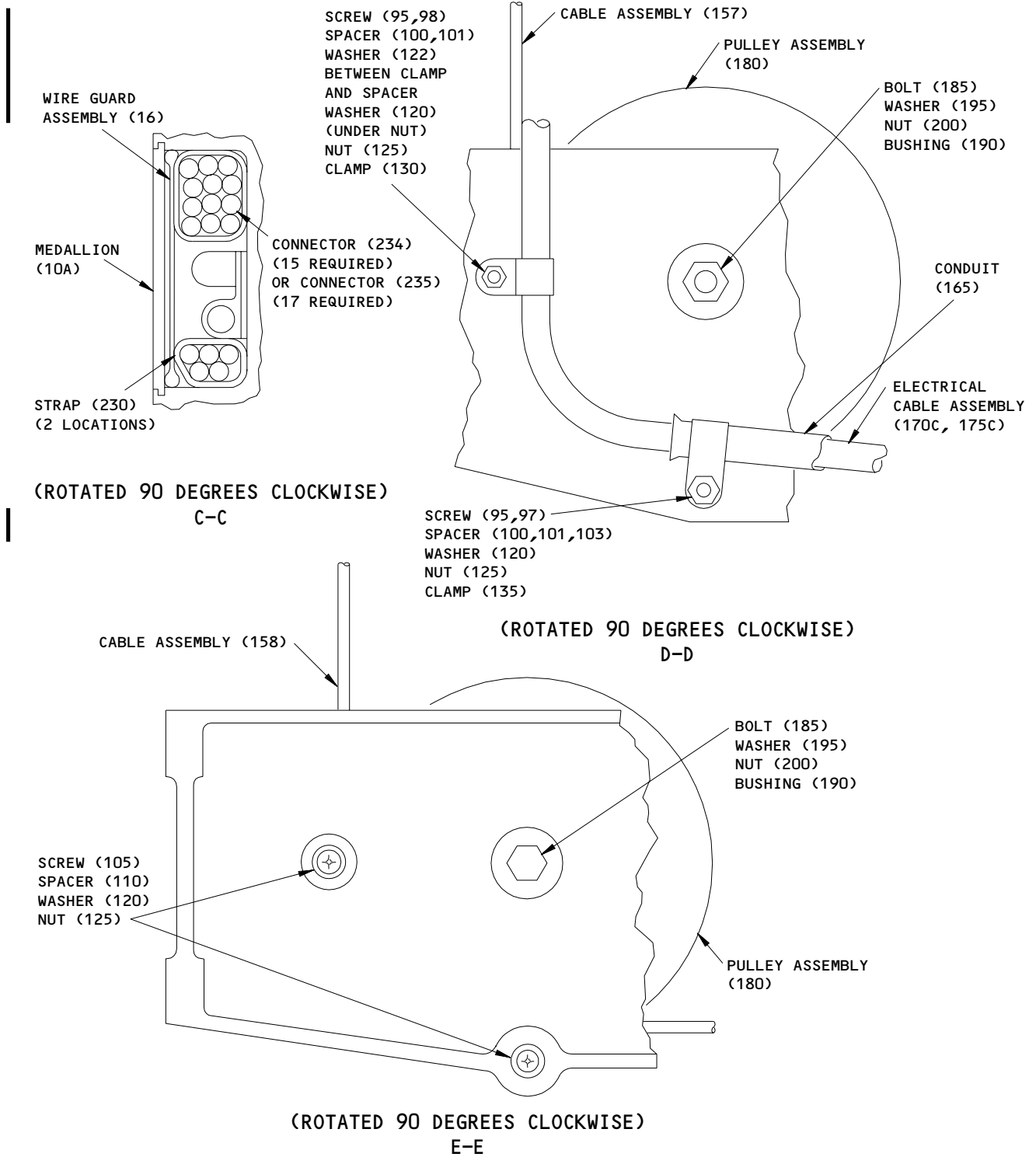
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**COMPONENT**  
**MAINTENANCE MANUAL**



ITEM NUMBERS REFER TO IPL FIG. 1

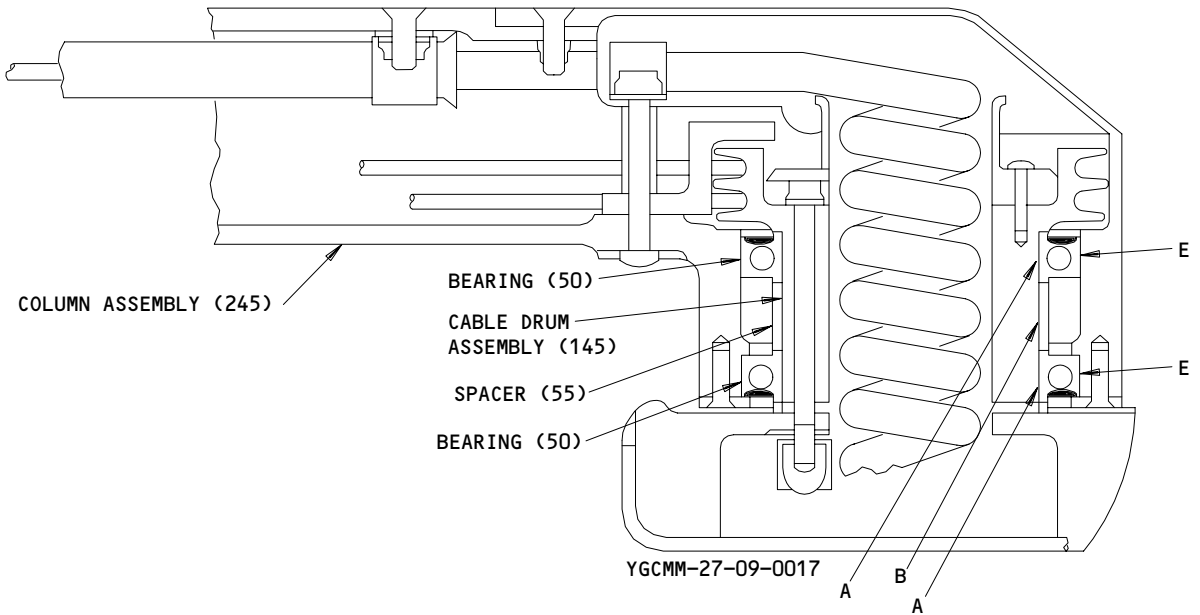
Wheel and Column Assembly  
 Figure 703 (Sheet 3)

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FITS AND CLEARANCES

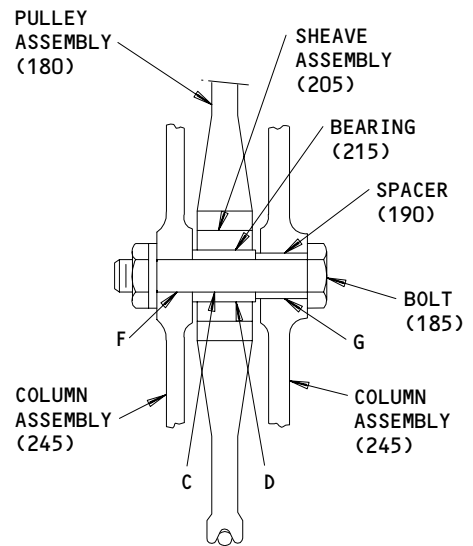
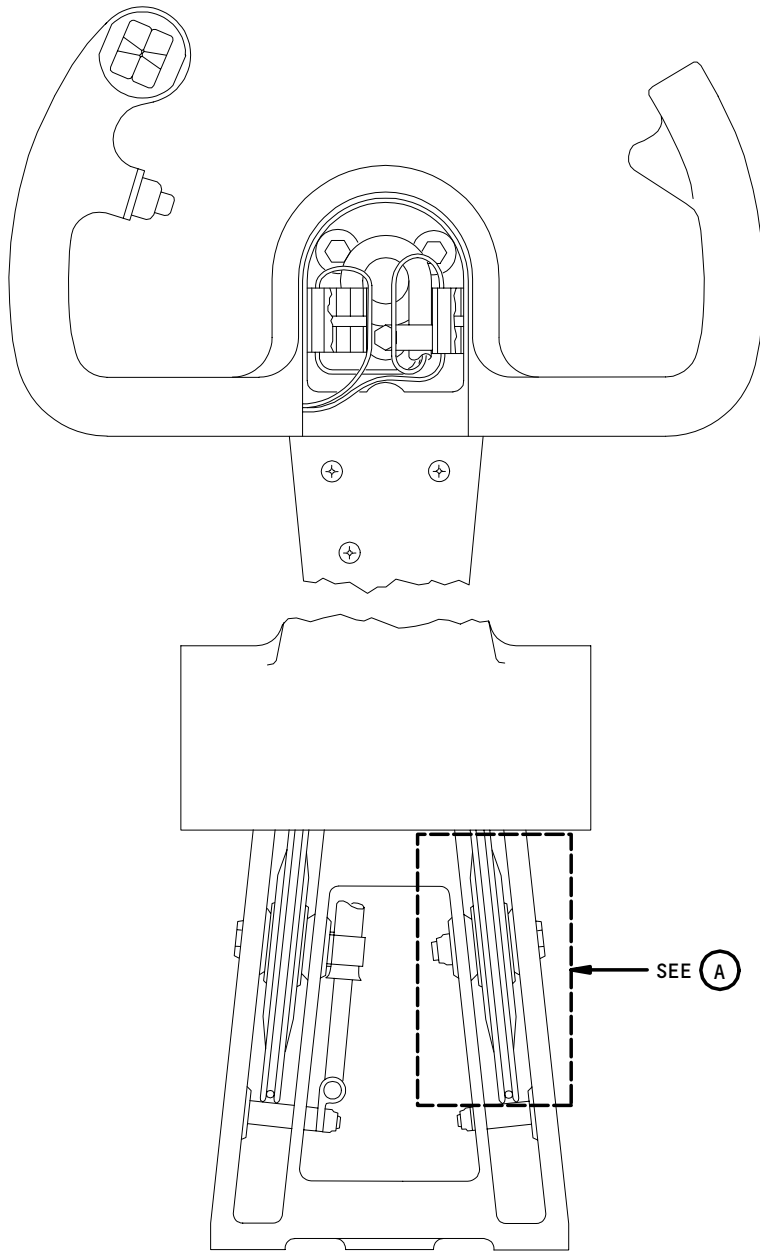


ITEM NUMBERS REFER TO IPL FIG. 1

Fits and Clearances  
Figure 801 (Sheet 1)

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FITS AND CLEARANCES  
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(A)


ITEM NUMBERS REFER TO IPL FIG. 1

Fits and Clearance  
 Figure 801 (Sheet 2)

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FITS AND CLEARANCES  
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 COMPONENT  
 MAINTENANCE MANUAL

Ref Letter Fig.801	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance 		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 50	2.3120	2.3130	0.0000	0.0020	2.310	2.314	0.004
	OD 145	2.3110	2.3120					
B	ID 55	2.320	2.340	0.008	0.029			
	OD 145	2.311	2.312					
C	ID 215	0.3120	0.3125	0.0000	0.0015	0.3080	0.3145	0.0065
	OD 185	0.3110	0.3120					
D	ID 205	0.9369	0.9374	-0.0006	0.0004	0.9370	0.9380	0.0010
	OD 215	0.9370	0.9375					
E	ID 245	3.0625	3.0635	0.0000	0.0020	3.0614	3.0645	0.0031
	OD 50	3.0615	3.0625					
F	ID 245	0.313	0.317	0.001	0.006	0.309	0.319	0.010
	OD 185	0.311	0.312					
G	ID 245	0.500	0.505	0.002	0.008	0.495	0.507	0.012
	OD 190	0.497	0.498					

 NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances  
 Figure 801 (Sheet 3)

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FITS AND CLEARANCES  
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FOR TORQUE VALUE OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO.	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
<u>FIG 1</u> 75A	NUT	20 TO 30 OVER RUN UP TORQUE	
<u>FIG 2</u> 70	SCREW	3.5 - 4.5	

Torque Table  
 Figure 802

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SPECIAL TOOLS

NOTE: Equivalent substitutes may be used for listed items.

1. M15570-20 -- Insert and extract tool (Deutsch Company, Electronic Components Division, 700 S. Hathaway, Municipal Airport, Banning, CA 92220)
2. 15500-20-7 -- Crimp tool (Deutsch Company, Electronic Components Division, 700 S. Hathaway, Municipal Airport, Banning, CA 92220)
3. 55-000 or 22-000 -- Crimp tool (Balmar Crimp Tool Corp., 6160 Cyril Ave. Orlando, FL. 32809)

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SPECIAL TOOLS

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ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional  
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By  
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By  
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

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VENDORS

K8455 RHP BEARINGS PLC RHP AEROSPACE  
OLDENDS LANE  
STONEHOUSE GL10 3RM UK

07150 ELECTRO-MECH COMPONENTS INC  
1826 NORTH FLORADALE AVENUE  
SOUTH EL MONTE, CALIFORNIA 91733-3689

11139 DEUTSCH CO THE ENGINEERED CONNECTING DEVICES  
700 SOUTH HATHAWAY MUNICIPAL AIRPORT  
BANNING, CALIFORNIA 92220

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON  
1224 EAST WARNER AVENUE PO BOX 2157  
SANTA ANA, CALIFORNIA 92707-0157

14608 EMHART INDUSTRIES INC CORBIN CABINET LOCK HARDWARE DIV  
225 EPISCOPAL ROAD  
BERLIN, CONNECTICUT 06037-1524

15653 KAYNAR TECHNOLOGY KAYNAR DIV  
800 SOUTH STATE COLLEGE BLVD PO BOX 3001  
FULLERTON, CALIFORNIA 92634-3001

18076 UMPCO, INCORPORATED  
7100 LAMPSON AVENUE PO BOX 5158  
GARDEN GROVE, CALIFORNIA 92645

21335 TORRINGTON CO FAFNIR BEARING DIV  
59 FIELD STREET  
TORRINGTON, CONNECTICUT 06790-4942

21649 OTTO CONTROLS DIV OF OTTO ENGRG INC  
2 EAST MAIN STREET  
CARPENTERSVILLE, ILLINOIS 60110

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VENDORS

21760      SCHATZ MANUFACTURING CO  
FAIRVIEW AVENUE PO BOX 1191  
POUGHKEEPSIE, NEW YORK 12601

22175      J AND M PRODUCTS INC.  
2435 NORTH NAOMI  
BURBANK, CALIFORNIA 91504-3425

25714      VERMILLION ENTERPRISES INC  
4225 31ST PO BOX 12147  
WICHITA, KANSAS 67277

28277      DEXTER-WILSON CORP  
4133 STONE WAY NORTH  
SEATTLE, WASHINGTON 98103-8013

34941      HARPER ENGINEERING COMPANY  
200 SOUTH TOBIN STREET  
RENTON, WASHINGTON 98055-1307

38443      MRC BEARINGS  
402 CHANDLER STREET  
JAMESTOWN, NEW YORK 14701-3802

43991      FAG BEARING INCORPORATED  
118 HAMILTON AVENUE  
STAMFORD, CONNECTICUT 06904

52828      REPUBLIC FASTENER MFG CORP  
1300 RANCHO CONEJO BLVD  
NEWBURY PARK, CALIFORNIA 91320-1405

54753      GENERAL INSTR SICKLES FW DIV SEE POLLAK TRANSPORTN V97564

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VENDORS

57771 STIMPSON EDWIN B. COMPANY INC  
900 SYLVAN AVENUE  
BAYPORT, NEW YORK 11705-1012

60381 NATIONAL ELECTRIC CABLE DIV OF ELEC CONTROL CO  
16566 SOUTHWEST 72ND AVE  
PORTLAND, OREGON 97213-5063

71087 BOOTS ACFT NUT DIV TOWNSEND CO SEE TEXTRON INC CHERRY  
FASTENER TOWNSEND DIV V11815

72285 EXACTO IND INC SEE V83930

72962 HARVARD INDUSTRIES INC  
3 WERNER WAY SUITE 210  
LEBANON, NEW JERSEY 08833

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV  
2701 SOUTH HARBOR BOULEVARD PO BOX 1259  
SANTA ANA, CALIFORNIA 92702-1259

81579 MASON ELECTRIC CO INC SUBSIDIARY OF CLAROSTAT  
440 WEST LOS FELIZ ROAD PO BOX 6159  
GLENDALE, CALIFORNIA 91205-0159

81640 EATON CORP AEROSPACE AND COMMERCIAL CONTROLS DIV  
2250 WHITFIELD AVENUE EAST  
SARASOTA, FLORIDA 34243-9703

83058 TRW ASSEMBLIES AND FASTENERS GROUP FASTENERS DIV  
265 3RD STREET  
CAMBRIDGE, MASSACHUSETTS 02142-1301

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**BOEING**  
COMPONENT  
MAINTENANCE MANUALVENDORS

83086 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED  
ROUTE 202  
PETERBOROUGH, NEW HAMPSHIRE 03458

83930 IMO DELAVAL INC ADEL FASTENERS DIV  
1444 WASHINGTON AVENUE PO BOX 7727  
HUNTINGTON, WEST VIRGINIA 25778

84971 TA MANUFACTURING CORP SUB OF CRITON CORP  
375 WEST ARDEN AVENUE PO BOX 2500  
GLENDALE, CALIFORNIA 91209-2500

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV  
3010 W LOMITA BLVD  
TORRANCE, CALIFORNIA 90505-5102

92563 MCGILL MFG CO INC BEARINGS DIV  
909 LAFAYETTE STREET  
VALPARAISO, INDIANA 46383-4210

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AN960JD4		1	315A	8
AN960PD10		1	72	3
AN960PD10L		1	120	9
AN960PD4		1	315	8
AN960PD516L		1	195	2
BACB10A331H		1	215	2
BACB10BG3D		1	215A	2
BACB10FL37		1	50A	2
		1	50B	2
BACB10TM2-12A		1	395A	1
BACB30NR5K24		1	185	2
BACC10DK5		1	130	2
BACC10DW8D		1	135	2
BACC10GU102		1	132	1
BACC12C3		2	31	1
BACC2C4A00714DG		1	157	1
BACC2C4A00735DG		1	158	1
BACC2C4C00714DG		1	157A	1
BACC2C4C00735DG		1	158A	1
BACN10JC04		1	320	4
		1	385	1
BACN10JC3		1	125	7
		1	285	2
BACN10JC5		1	200	2
BACN10JN3		1	260	2
BACN10YR3CD		1	125A	7
		1	285A	2
BACN10YR5CD		1	200A	2
BACP18BC02C06P		1	160A	2
BACP20B43		1	240	2
BACR15BA3A		1	297	5
BACR15BA3AD		1	296	2
		1	300	10
		1	330	6
BACR15BB5AD14		1	350	2
BACR15CE3B		1	255	4
BAC27NFDE0131		1	410C	1
BAC27TFDE0172		1	410A	1
BAC27TFDE0207		1	410B	1
BB2523		1	50A	2
		1	50B	2

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**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BRFM20A3		1	260	2
BRH10A04		1	320	4
		1	385	1
BRH10A3		1	125	7
		1	285	2
C2006		2	45B	2
		2	47B	1
		2	48B	1
C2006CB		2	45	2
		2	47	1
C2006CB		2	48	1
C2006RCB		2	45A	2
		2	47A	1
		2	48A	1
DCE105E		1	215A	2
D3161PLC		1	240	2
F22K1-02		1	75A	3
H10-04BAC		1	320	4
		1	385	1
H10-3BAC		1	125	7
		1	285	2
H3-1242-1		2	31	1
JM44LC39S102RG		1	132	1
LLPD5K		1	215A	2
LS3066		2	31	1
MF1000-3BAC		1	260	2
MF53049-3		1	260	2
MS19059-512		1	395B	1
MS20253-2-67		2	25	1
MS20426A2-6		1	220	12
MS21042L04		1	320A	4

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MS21209C0415		1	150	3
		2	85	1
MS21209C0820		1	250	4
MS21209F1-10		1	253	2
MS21209F1-15		2	90	1
MS24585-1001		1	400	1
MS24665-134		1	160	2
MS3367-5-9		1	230	2
NAS1149D0363J		1	72B	3
NAS1149D0332J		1	120A	8
NAS1149D0516J		1	195A	2
NAS42DD3-18		1	302A	4
NAS42DD6-20FC		1	103	1
NAS42DD6-64		1	110	2
NAS42DD6-72		1	100	2
NAS42DD6-78FC		1	100A	2
		1	110A	2
NAS42HT5-24		1	355	2
NAS43DD0-6		1	380A	1
NAS43DD3-52		1	90	1
NAS43DD3-52FC		1	90A	1
NAS514P1032-6		1	15	1
		1	25A	2
NAS514P1032-7		1	275	1
NAS514P1032-8		1	115	1
		1	280	1
NAS514P1032-9		1	25	2
NAS514P440-5		1	310	4
NAS514P440-6B		2	35	2
NAS514P440-7B		2	40	1
NAS514P632-4		1	290A	2
NAS514P832-6		1	45	4
NAS600-5P		1	375	1
NAS600-7B		2	15	1
NAS600-8		1	60	3
NAS600-8B		2	70	2
NAS623-3-21		1	105	2
NAS623-3-22		1	105A	2
NAS623-3-24		1	85	1
NAS623-3-25		1	95A	2
NAS623-3-26		1	95	2
NAS623-3-29		1	95B	2
NAS623-3-8		1	80	1

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**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS73-5-008		1	190	2
NE8817-1		1	170C	1
NE8817-2		1	175C	1
NE8817-3		1	170D	1
		1	170F	1
NE8817-4		1	175D	1
		1	175F	1
NE8817C3		1	170B	1
NE8817C4		1	175B	1
NS103218-02		1	260	2
NS202101-02		1	125	7
		1	285	2
NS202101-40		1	320	4
		1	385	1
PD5K		1	215A	2
P8-4000003		2	45C	2
		2	47C	1
RMF9201M3		1	260	2
RMLH9075-3W		1	125	7
		1	285	2
RMLH9075-40W		1	320	4
		1	385	1
SS48152		1	240	2
SW43896		2	20B	1
S253T407-1		2	65A	1
S253T408-1		1	170A	1
S253T408-2		1	175A	1
S253T408-3		1	170B	1
S253T408-4		1	175B	1
S253T408-5		1	170E	1
S253T408-6		1	175E	1
S258DT8		1	135	2
TA4C44D8T		1	135	2
TSE20-01		1	234	15
		1	235	17
T6S1032J		1	125	7
		1	285	2
T6S440J		1	320	4
		1	385	1
VN252A02		1	260	2
VN303A02		1	125	7
		1	285	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
VN303A40		1	320	4
		1	385	1
V10006-5		1	170E	1
		1	170G	1
V10006-6		1	175E	1
		1	175G	1
1841-1-5620		1	237	30
1841-1-5620		1	238	34
22K1-02		1	75B	3
232T4243-1		1	270A	1
232T4243-11		1	270C	1
232T4243-14		1	270D	1
232T4243-15		1	270E	1
232T4243-16		1	270H	1
232T4243-18		1	270F	1
232T4243-20		1	270G	1
232T4243-3		1	345	1
232T4243-4		1	395	1
232T4243-6		1	270B	1
232T4244-16		1	325A	2
232T4244-2		1	405	1
232T4244-3		1	340	1
232T4244-4		1	360	1
232T4244-5		1	365	1
232T4244-6		1	370	1
232T4244-7		1	335	1
232T4244-8		1	305A	1
232T4244-9		1	305B	1
251N1105-1		2	75E	1
251N1105-2		2	80E	1
251N1105-3		2	75D	1
251N1105-4		2	80D	1
251N1105-5		2	95E	1
251N1105-6		2	100E	1
251N1105-7		2	95D	1
251N1105-8		2	100D	1
251N1140-17		1	30J	1
		2	1G	RF
251N1140-18		1	35J	1
		2	5G	RF
251N1140-19		1	30G	1
		2	1H	RF
251N1140-20		1	35G	1
		2	5H	RF

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**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251N1140-21		1	30H	1
		2	1J	RF
251N1140-22		1	35H	1
		2	5J	RF
251N1241-2		2	30A	1
251N1241-3		2	32A	1
251N1241-4		2	30C	1
251N1241-5		2	30F	1
		2	30G	1
		2	32B	1
251N1281-1		2	25A	1
253T2111-19		1	1H	RF
253T2111-20		1	5H	RF
253T2111-21		1	1J	RF
253T2111-22		1	5J	RF
253T2111-23		1	1K	RF
253T2111-24		1	5K	RF
253T2111-25		1	1L	RF
253T2111-26		1	5L	RF
253T2111-27		1	1M	RF
253T2111-28		1	5M	RF
253T2111-29		1	1N	RF
253T2111-30		1	5N	RF
253T2111-31		1	1P	RF
253T2111-32		1	5P	RF
253T2111-33		1	1Q	RF
253T2111-34		1	5Q	RF
253T2111-35		1	1R	RF
253T2111-36		1	5R	RF
253T2111-37		1	1S	RF
253T2111-38		1	5S	RF
253T2111-39		1	1T	RF
253T2111-40		1	5T	RF
253T2111-41		1	1U	RF
253T2111-42		1	5U	RF
253T2111-5		1	50	2
253T2111-51		1	1V	RF

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253T2111-52		1	5V	RF
253T2111-53		1	1W	RF
253T2111-54		1	5W	RF
253T2111-55		1	1X	RF
253T2111-56		1	5X	RF
253T2111-57		1	1Y	RF
253T2111-58		1	5Y	RF
253T2111-59		1	1Z	RF
253T2111-60		1	5Z	RF
253T2111-61		1	2A	RF
253T2111-62		1	6A	RF
253T2111-63		1	2B	RF
253T2111-64		1	6B	RF
253T2111-65		1	2C	RF
253T2111-66		1	6C	RF
253T2111-67		1	2D	RF
253T2111-68		1	6D	RF
253T2111-69		1	2E	RF
253T2111-70		1	6E	RF
253T2111-71		1	2F	RF
253T2111-72		1	6F	RF
253T2111-73		1	2G	RF
253T2111-74		1	6G	RF
253T2111-75		1	2H	RF
253T2111-76		1	6H	RF
253T2111-77		1	2J	RF
253T2111-78		1	6J	RF
253T2111-79		1	2K	RF
253T2111-80		1	6K	RF
253T2111-81		1	2L	RF
253T2111-82		1	6L	RF
253T2111-83		1	2M	RF
253T2111-84		1	6M	RF
253T2111-85		1	2N	RF
253T2111-86		1	6N	RF
253T2111-87		1	2P	RF
253T2111-88		1	6P	RF
253T2111-89		1	2Q	RF
253T2111-90		1	6Q	RF
253T2113-1		1	55	1
253T2114-1		1	165	1

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**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253T2115-1		1	65	1
253T2116-1		1	245	1
253T2116-2		1	265	1
253T2116-4		1	245A	1
253T2116-5		1	265A	1
253T2117-1		1	145	1
253T2117-2		1	155	1
253T2118-2		1	10A	1
253T2119-1		1	20	1
253T2120-1		1	140	1
253T2121-1		1	30	1
		2	1	RF
253T2121-10		1	35D	1
		2	5D	RF
253T2121-11		1	30E	1
		2	1E	RF
253T2121-12		1	35E	1
		2	5E	RF
253T2121-2		1	35	1
		2	5	RF
253T2121-3		1	30A	1
		2	1A	RF
253T2121-4		1	35A	1
		2	5A	RF
253T2121-5		1	30B	1
		2	1B	RF
253T2121-6		1	35B	1
253T2121-6		2	5B	RF
253T2121-7		1	30C	1
		2	1C	RF
253T2121-8		1	35C	1
		2	5C	RF
253T2121-9		1	30D	1
		2	1D	RF
253T2122-1		2	75	1
253T2122-12		2	80B	1
253T2122-13		2	95B	1
253T2122-14		2	100B	1
253T2122-15		2	75C	1
253T2122-16		2	80C	1
253T2122-17		2	95C	1
253T2122-18		2	100C	1
253T2122-2		2	80	1
253T2122-3		2	75A	1
253T2122-4		2	80A	1
253T2122-5		2	95	1
253T2122-6		2	100	1

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253T2122-7		2	95A	1
253T2122-8		2	100A	1
253T2136-1		1	40	1
253T2156-1		1	70A	3
253T2156-2		1	70B	3
253T2164-1		1	16	1
253T2164-2		1	18	1
253T2164-3		1	17	1
306-4312		2	65A	1
3066-1		2	31	1
327-2		1	295B	1
475A8		1	135	2
534CS102		1	132	1
65B80975-1		1	180	2
65B80976-1		1	205	2
65B81426-1		1	210	4
65B89976-2		1	207	2
66-3199		2	60	1
		2	62	1
66-4034-1		2	27	1
		2	30H	1
66-9828-1		2	32	1
69-38947		1	299	1
69-38947-8		1	295N	1
69-38947-9		1	298	1
69-43447-13		1	390	1
69-43972-1		1	325	2
69-4535-1		2	50A	1
69-4535-2		2	55A	1
69-63433-11		2	50F	1
69-63433-12		2	55F	1
69-63433-13		2	50G	1
69-63433-14		2	55G	1
69-63433-3		2	50B	1
69-63433-4		2	55B	1
69-63433-7		2	50E	1
69-63433-8		2	55E	1
69-70179-1		2	50	1
69-70179-2		2	55	1
69-70179-7		2	50C	1
69-70179-8		2	55C	1
69B81362-3		1	208	2
69B82799-2		2	10	1
721101A1		2	20A	1
8084D8T		1	135	2
96-02		1	125	7
		1	285	2

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**BOEING**  
 COMPONENT  
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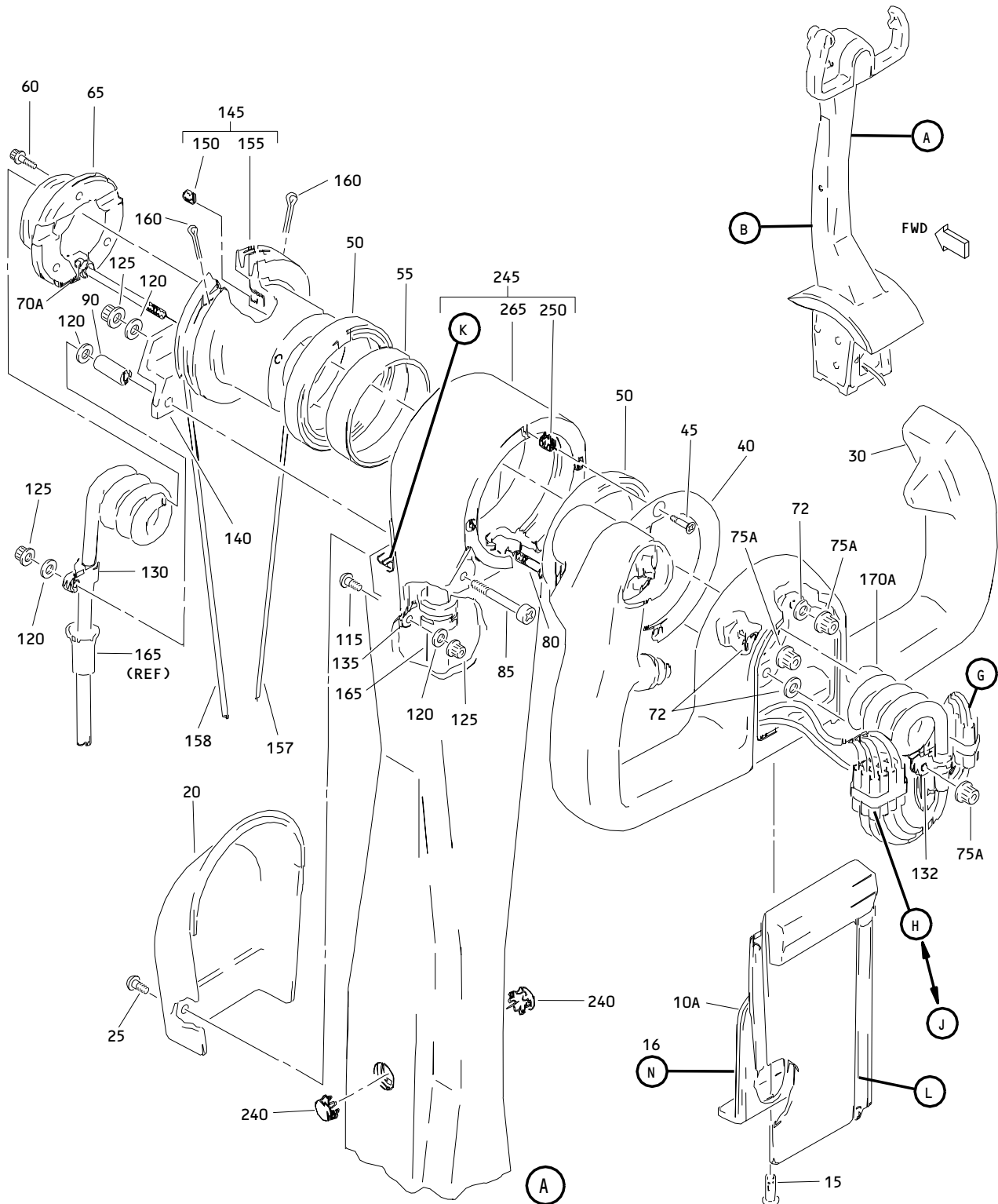
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
96-02		1	125	7
		1	285	2
96-40		1	320	4
		1	385	1

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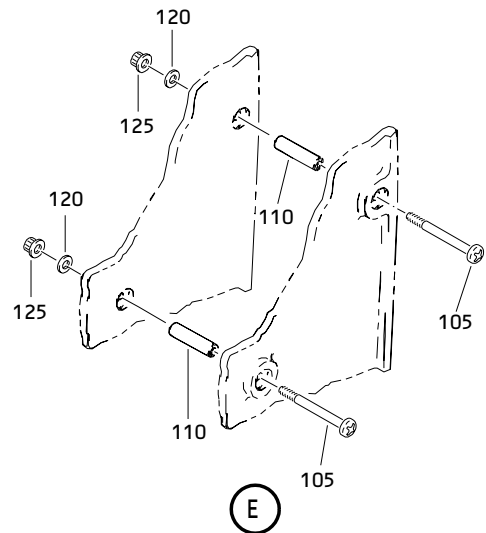
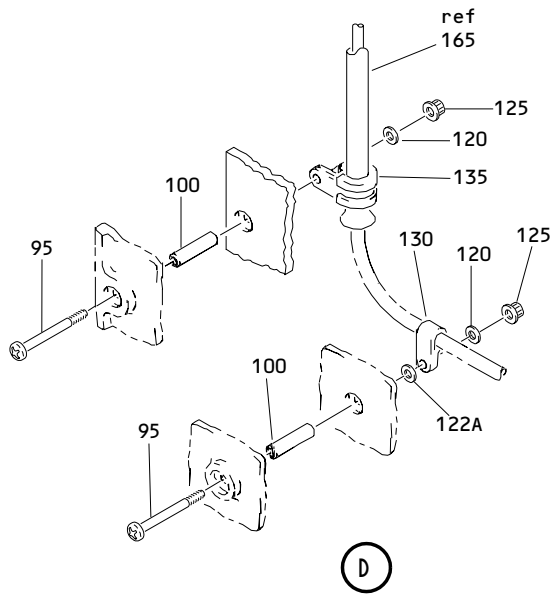
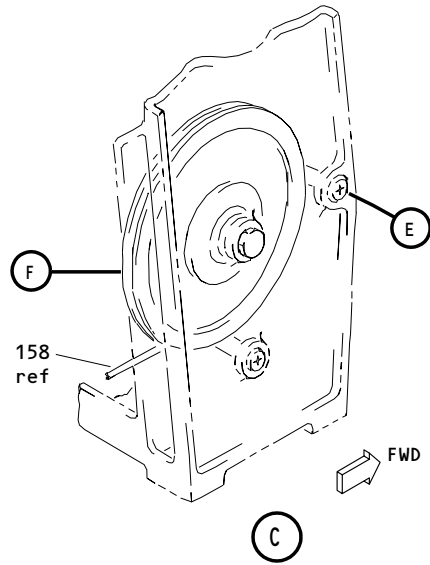
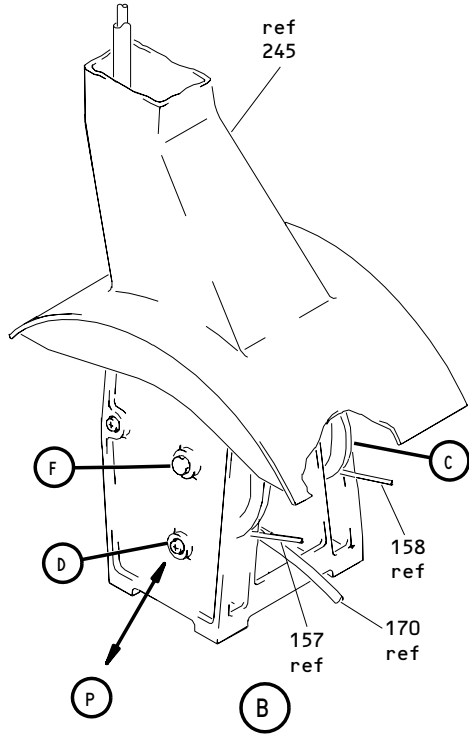
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**Aileron and Elevator Control Wheel and Column Assembly  
 Figure 1 (Sheet 1)**

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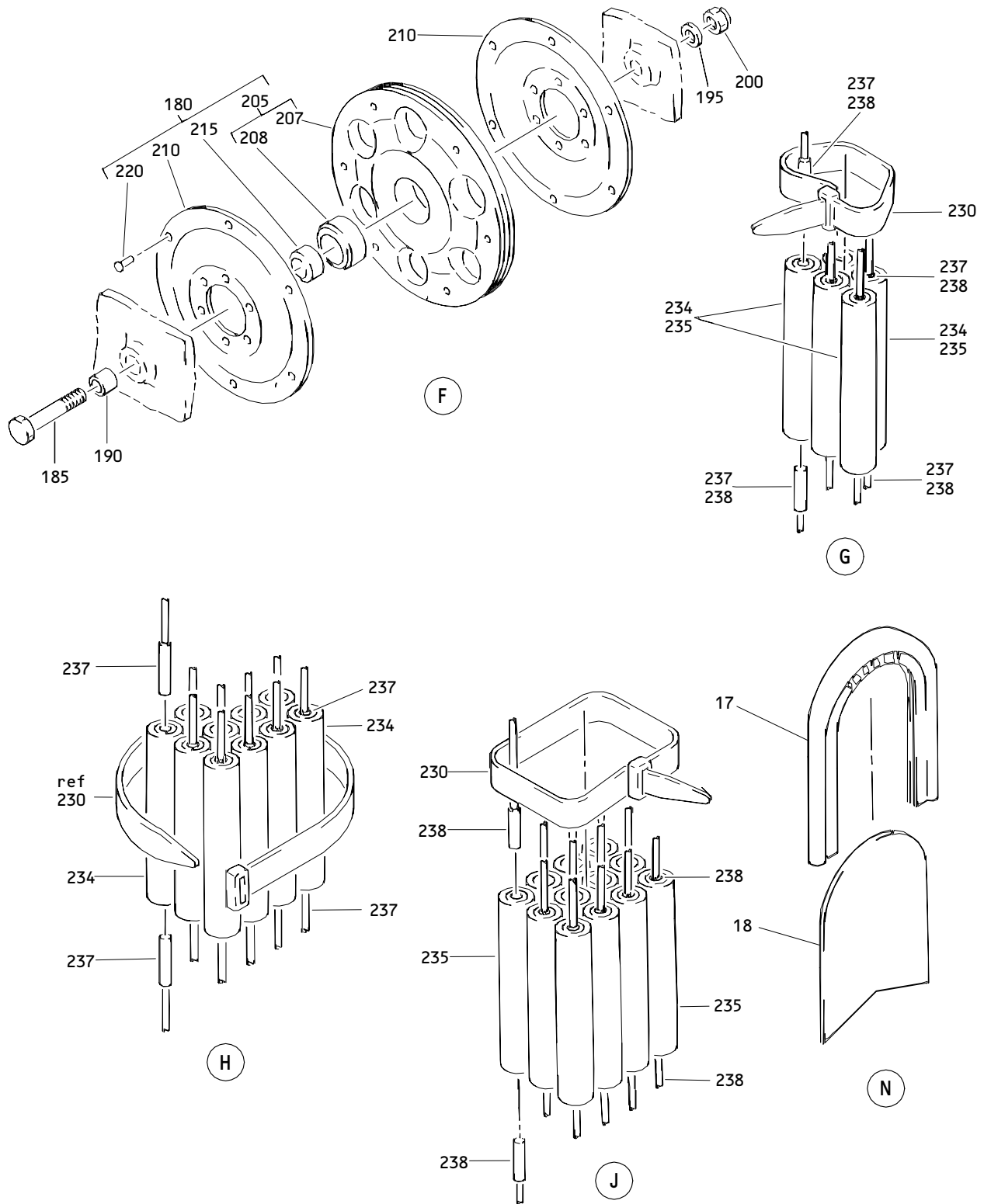
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Aileron and Elevator Control Wheel and Column Assembly  
 Figure 1 (Sheet 2)

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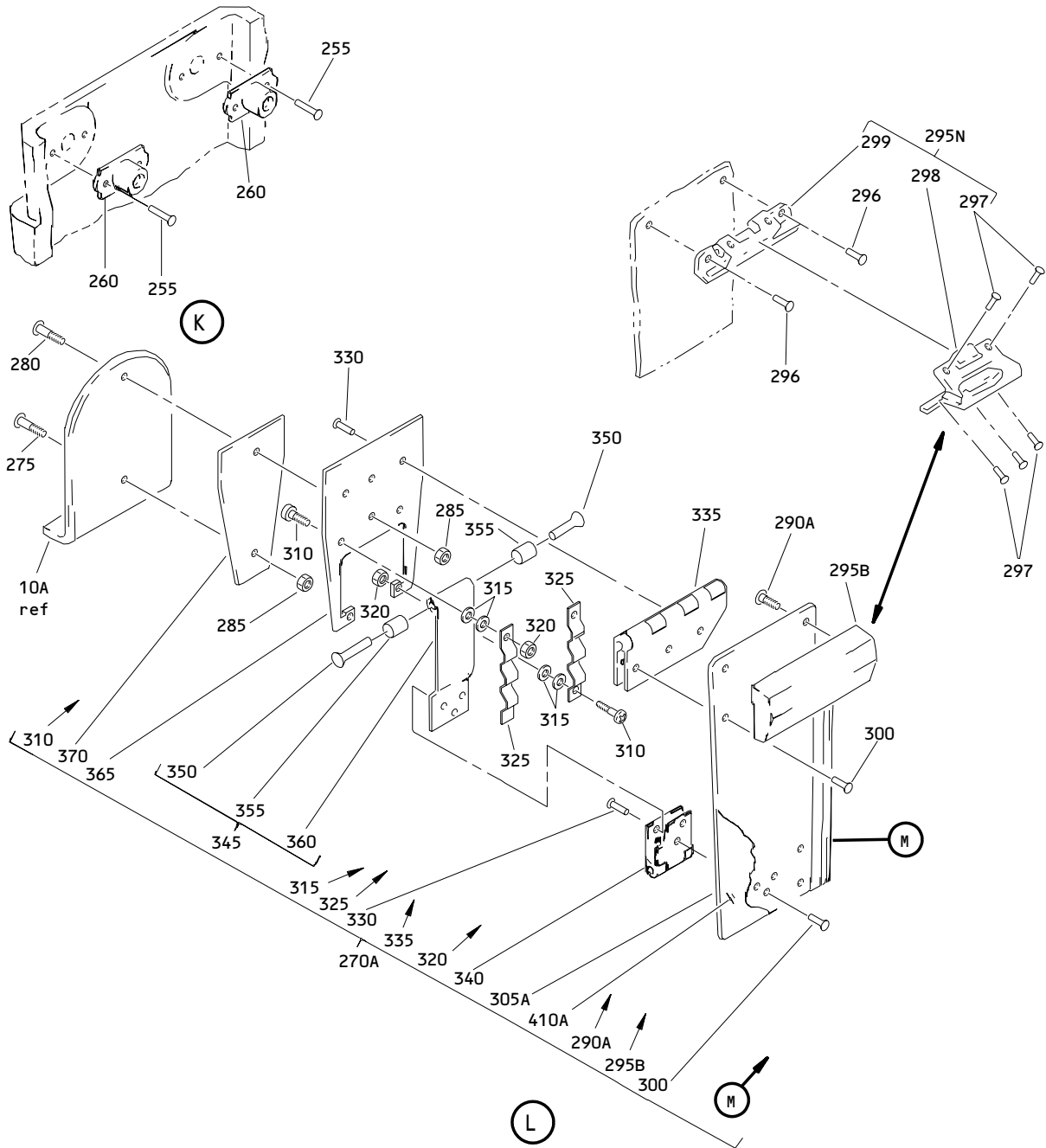


Aileron and Elevator Control Wheel and Column Assembly  
 Figure 1 (Sheet 3)

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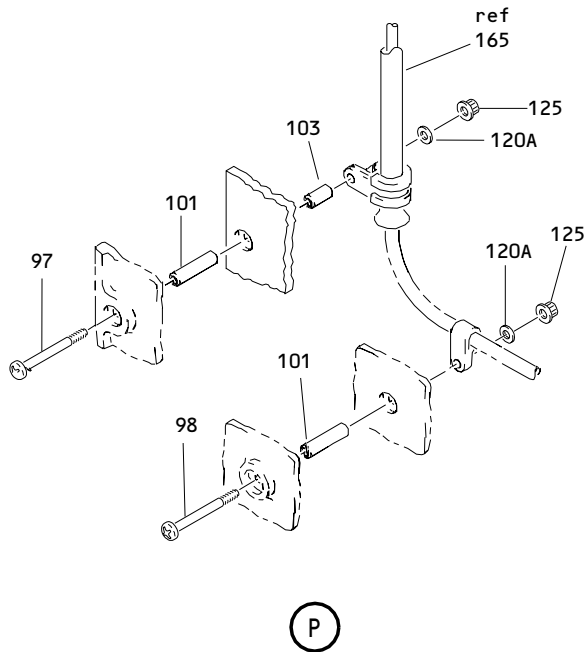
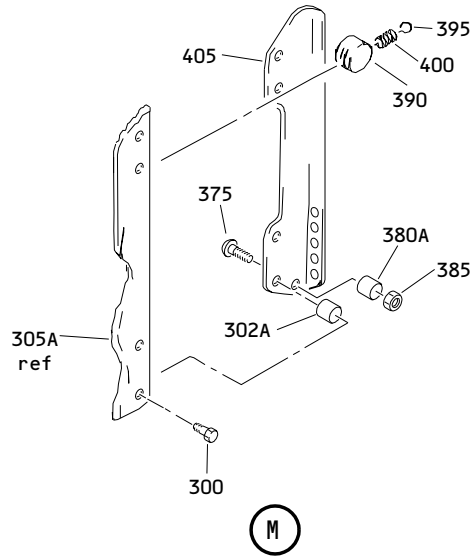




Aileron and Elevator Control Wheel and Column Assembly  
Figure 1 (Sheet 4)

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Aileron and Elevator Control Wheel and Column Assembly  
 Figure 1 (Sheet 5)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	253T2111-1		DELETED		
-1A	253T2111-3		DELETED		
-1B	253T2111-7		DELETED		
-1C	253T2111-9		DELETED		
-1D	253T2111-11		DELETED		
-1E	253T2111-13		DELETED		
-1F	253T2111-15		DELETED		
-1G	253T2111-17		DELETED		
-1H	253T2111-19		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	J	RF
-1J	253T2111-21		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	K	RF
-1K	253T2111-23		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	L	RF
-1L	253T2111-25		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	M	RF
-1M	253T2111-27		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	E	RF
-1N	253T2111-29		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	F	RF
-1P	253T2111-31		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	G	RF
-1Q	253T2111-33		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	H	RF
-1R	253T2111-35		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	A	RF
-1S	253T2111-37		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	B	RF
-1T	253T2111-39		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	C	RF
-1U	253T2111-41		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	D	RF
-1V	253T2111-51		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AA	RF
-1W	253T2111-53		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AB	RF
-1X	253T2111-55		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AE	RF
-1Y	253T2111-57		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AG	RF
-1Z	253T2111-59		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AJ	RF
-2A	253T2111-61		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AL	RF

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -2B	253T2111-63		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AN	RF
-2C	253T2111-65		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AQ	RF
-2D	253T2111-67		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AS	RF
-2E	253T2111-69		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AU	RF
-2F	253T2111-71		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AW	RF
-2G	253T2111-73		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	AY	RF
-2H	253T2111-75		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BA	RF
-2J	253T2111-77		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BC	RF
-2K	253T2111-79		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BD	RF
-2L	253T2111-81		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BE	RF
-2M	253T2111-83		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BF	RF
-2N	253T2111-85		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BL	RF
-2P	253T2111-87		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BN	RF
-2Q	253T2111-89		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (LH)	BQ	RF
-5	253T2111-2		DELETED		
-5A	253T2111-4		DELETED		
-5B	253T2111-8		DELETED		
-5C	253T2111-10		DELETED		
-5D	253T2111-12		DELETED		
-5E	253T2111-14		DELETED		
-5F	253T2111-16		DELETED		
-5G	253T2111-18		DELETED		
-5H	253T2111-20		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	N	RF
-5J	253T2111-22		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	P	RF
-5K	253T2111-24		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	Q	RF
-5L	253T2111-26		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	R	RF

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -5M	253T2111-28		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	S	RF
-5N	253T2111-30		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	T	RF
-5P	253T2111-32		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	U	RF
-5Q	253T2111-34		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	V	RF
-5R	253T2111-36		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	W	RF
-5S	253T2111-38		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	X	RF
-5T	253T2111-40		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	Y	RF
-5U	253T2111-42		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	Z	RF
-5V	253T2111-52		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AC	RF
-5W	253T2111-54		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AD	RF
-5X	253T2111-56		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AF	RF
-5Y	253T2111-58		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AH	RF
-5Z	253T2111-60		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AK	RF
-6A	253T2111-62		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AM	RF
-6B	253T2111-64		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AP	RF
-6C	253T2111-66		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AR	RF
-6D	253T2111-68		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AT	RF
-6E	253T2111-70		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AV	RF
-6F	253T2111-72		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AX	RF
-6G	253T2111-74		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	AZ	RF
-6H	253T2111-76		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BB	RF
-6J	253T2111-78		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BG	RF

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -6K	253T2111-80		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BH	RF
-6L	253T2111-82		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BJ	RF
-6M	253T2111-84		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BK	RF
-6N	253T2111-86		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BM	RF
-6P	253T2111-88		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BP	RF
-6Q	253T2111-90		WHEEL AND COLUMN ASSY-AIL. AND ELEV CONT (RH)	BR	RF
10	253T2118-1		DELETED		
10A	253T2118-2		.MEDALLION	A-BK	1
			ATTACHING PARTS		
15	NAS514P1032-6		.SCREW	A-BK	1
			-----*		
16	253T2164-1		.GUARD ASSY-WIRE	A-BK	1
17	253T2164-3		..SEAL	A-BK	1
18	253T2164-2		..GUARD	A-BK	1
20	253T2119-1		.COVER		1
			ATTACHING PARTS		
25	NAS514P1032-9		.SCREW	A-BB	2
25A	NAS514P1032-6		.SCREW	BC-BR	2
			-----*		
30	253T2121-1		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	A,E,J ,AS	1
-30A	253T2121-3		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	B,F,K ,AA,A J	1
-30B	253T2121-5		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	C,G,L	1
-30C	253T2121-7		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	D,H,M ,AB,A E,AG, AL	1
-30D	253T2121-9		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	AU,BA	1
-30E	253T2121-11		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	AN,AW	1
-30F	253T2121-13		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -30G	251N1140-19		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	AQ,BC ,BE,B N	1
-30H	251N1140-21		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	AY,BQ	1
-30J	251N1140-17		.WHEEL ASSY-LH (FOR DETAILS SEE FIG. 2)	BD,BF ,BL	1
-35	253T2121-2		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	N,S,W ,AT	1
-35A	253T2121-4		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	P,T,X ,AC,A K	1
-35B	253T2121-6		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	Q,U,Y	1
-35C	253T2121-8		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	R,V,Z ,AD,A F,AH, AM	1
-35D	253T2121-10		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	AV,BB	1
-35E	253T2121-12		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	AP,AX	1
-35F	253T2121-14		DELETED		
-35G	251N1140-20		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	AR,BG ,BJ,B P	1
-35H	251N1140-22		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	AZ,BR	1
-35J	251N1140-18		.WHEEL ASSY-RH (FOR DETAILS SEE FIG. 2)	BH,BK ,BM	1
-40	253T2136-1		.RETAINER-BRG ATTACHING PARTS		1
45	NAS514P832-6		.SCREW -----*		4
50	253T2111-5		.BEARING (OPT ITEM 50A) (REF SERVICE LTR 767-SL- 27-33)	B,D-V ,X,Z	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -50A	BB2523		.BEARING (V92563) (SPEC BACB10FL37) (OPT ITEM 50)	B,D-V ,X,Z	2
-50B	BB2523		.BEARING (V92563) (SPEC BACB10FL37)	A,C,W ,Y, AA-BR	2
55	253T2113-1		.SPACER-BRG		1
60	NAS600-8		.SCREW		3
65	253T2115-1		.RETAINER-BOLT		1
-70	253T2156-1		DELETED		
70A	253T2156-1		.BOLT-RETAINING (OPT ITEM 70B)	A-AM, AS,AT	3
-70B	253T2156-2		.BOLT-RETAINING (OPT ITEM 70A)	A-AM, AS,AT	3
-70C	253T2156-2		.BOLT-RETAINING	AN-AR ,AU-B R	3
72	AN960PD10		.WASHER	A-AP, AS-AX ,BA, BB	3
72A	NAS1149D0332J		DELETED		
-72B	NAS1149D0363J		.WASHER	AQ,AR ,AY, AZ, BC-BR	3
75	26C02		DELETED		
75A	F22K1-02		.NUT- (V72962) (OPT ITEM 75B)		3
-75B	22K1-02		.NUT- (V72962) (OPT ITEM 75A)		3

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
80	NAS623-3-8		. SCREW		1
85	NAS623-3-24		. SCREW		1
90	NAS43DD3-52		. SPACER	A-AP, AS-AX ,BA, BB	1
-90A	NAS43DD3-52FC		. SPACER	AQ,AR ,AY, AZ, BC-BR	1
95	NAS623-3-26		. SCREW	A-AP, AS-AX ,BA, BB	2
95A	NAS623-3-25		DELETED		
95B	NAS623-3-29		DELETED		
97	NAS623-3-29		. SCREW	AQ,AR ,AY, AZ, BC-BR	1
98	NAS623-3-25		. SCREW	AQ,AR ,AY, AZ, BC-BR	1
100	NAS42DD6-72		. SPACER	A-AP, AS-AX ,BA, BB	2
100A	NAS42DD6-78FC		DELETED		
101	NAS42DD6-78FC		. SPACER	AQ,AR ,AY, AZ, BC-BR	2
103	NAS42DD6-20FC		. SPACER	AQ,AR ,AY, AZ, BC-BR	1
105	NAS623-3-21		. SCREW	A-AP, AS-AX ,BA, BB	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -105A	NAS623-3-22		. SCREW	AQ, AR , AY, AZ, BC-BR	2
110	NAS42DD6-64		. SPACER	A-AP, AS-AX , BA, BB	2
-110A	NAS42DD6-78FC		. SPACER	AQ, AR , AY, AZ, BC-BR	2
115	NAS514P1032-8		. SCREW		1
120	AN960PD10L		. WASHER	A-AP, AS-AX , BA, BB	8
-120A	NAS1149D0332J		. SPACER	AQ, AR , AY, AZ, BC-BR	8
122	AN960PD10		DELETED		
122A	AN960PD10L		. WASHER	A-AP, AS-AX , BA, BB	1
125	H10-3BAC		. NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828))	A-AP, AS-AX , BA, BB	7

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -125A	BACN10YR3CD		.NUT-	AQ,AR ,AY, AZ, BC-BR	2
130	BACC10DK5		.CLAMP		2
132	JM44LC39S102RG		.CLAMP- (V22175) (SPEC BACC10GU102) (OPT 534CS102 (V83930))		1
135	S258DT8		.CLAMP- (V18076) (SPEC BACC10DW8D) (OPT TA4C44D8T (V84971)) (OPT 475A8 (V83930)) (OPT 8084D8T (V72285))		2
140	253T2120-1		.STOP		1
145	253T2117-1		.DRUM ASSY-CABLE		1
150	MS21209C0415		..INSERT		3
155	253T2117-2		..DRUM-CABLE		1
157	BACC2C4A00714DG		.CABLE ASSY	E-V	1
-157A	BACC2C4C00714DG		.CABLE ASSY	A-D, W-BR	1
158	BACC2C4A00735DG		.CABLE ASSY	E-V	1
-158A	BACC2C4C00735DG		.CABLE ASSY	A-D, W-BR	1
160	MS24665-134		.PIN-COTTER	A-AP, AS-AX ,BA, BB	2
-160A	BACP18BC02C06P		.PIN-COTTER	AQ,AR ,AY, AZ, BC-BR	2
165	253T2114-1		.CONDUIT-ELEC CABLE		1
170	S253T408-1		DELETED		
170A	NE8817-1		DELETED		
-170B	NE8817-3		DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -170C	NE8817-1		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-1) (OPT ITEMS 170D, 170E)	A-M,A A,AB, AE,AG ,AJ,A L,AS	1
-170D	NE8817-3		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-3) (OPT NE8817C3 (V60381)) (OPT ITEMS 170C, 170E)	A-M,A A,AB, AE,AG ,AJ,A L,AS	1
-170E	V10006-5		.CABLE ASSY-ELEC (V25714) (SPEC S253T408-5) (OPT ITEMS 170C, 170D)	A-M,A A,AB, AE,AG ,AJ,A L,AS	1
-170F	NE8817-3		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-3) (OPT NE8817C3 (V60381)) (OPT ITEM 170G)	AN,AQ ,AU,A W,AY, BA, BC-BF ,BL, BN,BQ	1
-170G	V10006-5		.CABLE ASSY-ELEC (V25714) (SPEC S253T408-5) (OPT ITEM 170F)	AN,AQ ,AU,A W,AY, BA, BC-BF	1
-175	S253T408-2		DELETED		
-175A	NE8817-2		DELETED		
-175B	NE8817-4		DELETED		
-175C	NE8817-2		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-2) (OPT ITEMS 175D, 175E)	N-Z,A C,AD, AF,AH ,AK,A M,AT	1
-175D	NE8817-4		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-4) (OPT NE8817C4 (V60381)) (OPT ITEMS 175C, 175E)	N-Z,A C,AD, AF,AH ,AK,A M,AT	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -175E	V10006-6		.CABLE ASSY-ELEC (V25714) (SPEC S253T408-6) (OPT ITEMS 175C, 175D)	N-Z, A C, AD, AF, AH , AK, A M, AT	1
-175F	NE8817-4		.CABLE ASSY-ELEC (V60381) (SPEC S253T408-4) (OPT NE8817C4 (V60381)) (OPT ITEMS 175G)	AP, AR , AV, A X, AZ, BB, BG-BK , BM, BP, BR	1
-175G	V10006-6		.CABLE ASSY-ELEC (V25714) (SPEC S253T408-6) (OPT ITEMS 175F)	AP, AR , AV, A X, AZ, BB, BG-BK , BM, BP, BR	1
180	65B80975-1		.PULLEY ASSY (FOR SPARES PROCURE 81205 BACP30M3) ATTACHING PARTS		2
185	BACB30NR5K24		.BOLT		2
190	NAS73-5-008		.BUSHING		2
195	AN960PD516L		.WASHER	A-AP, AS-AX , BA, BB	2
-195A	NAS1149D0516J		.WASHER	AQ, AR , AY, AZ, BC-BR	2
200	BACN10JC5		.NUT	A-AP, AS-AX , BA, BB	2
-200A	BACN10YR5CD		.NUT-	AQ, AR , AY, AZ, BC-BR	2
205	65B80976-1		-----*----- ..SHEAVE ASSY		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01-					
207	65B89976-2		...NYLON-CHOPPED		1
208	69B81362-3		...INSERT		1
210	65B81426-1		..SHIELD		2
215	BACB10A331H		..BEARING-		1
			(SUPSD BY ITEM 215A)		
-215A	PD5K		..BEARING-		1
			(V38443)		
			(SPEC BACB10BG3D)		
			(OPT PD5KG20		
			(V38443))		
			(OPT PD5KE6531		
			(V21335))		
			(OPT PD5KFS428		
			(V21335))		
			(OPT PD5KTT		
			(V43991))		
			(OPT PD5KT1C1-02		
			(V21760))		
			(OPT LLPD5K		
			(V38443))		
			(OPT DCE105E		
			(VK8455))		
			(OPT PD5KSD610		
			(V83086))		
			(SUPSDS ITEM 215)		
220	MS20426A2-6		..RIVET		6
230	MS3367-5-9		.STRAP		2
234	TSE20-01		.CONNECTOR-	A,C,E	15
			(V11139)	,G,J,	
				L,N,Q	
				,S,U,	
				W,Y,	
				AS,AT	
				,AY,A	
				Z,BQ,	
				BR	

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-235	TSE20-01		.CONNECTOR- (V11139)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AR ,AU,A V,AW, AX,B A-BP	17
237	1841-1-5620		.CONTACT- (V11139)	A,C,E ,G,J, L,N,Q ,S,U, W,Y AS,AT ,AY,A Z,BQ, BR	30
238	1841-1-5620		.CONTACT- (V11139)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AR ,AU,A V,AW, AX,B A-BP	34
240	D3161PLC		.PLUG- (V57771) (SPEC BACP20B43) (OPT SS48152 (V83058))		2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-245	253T2116-1		. COLUMN ASSY	A-AP, AS-AX ,BA, BB	1
-245A	253T2116-4		. COLUMN ASSY	AQ,AR ,AY, AZ, BC-BR	1
250	MS21209C0820		.. INSERT		4
-253	MS21209F1-10		.. INSERT	AQ,AR ,AY, AZ, BC-BR	2
255	BACR15CE3B		.. RIVET- (SIZE DETERMINE ON INST)	A-AP, AS-AX ,BA, BB	4
260	BRFM20A3		.. NUTPLATE- (V52828) (SPEC BACN10JN3) (OPT MF1000-3BAC (V15653)) (OPT NS103218-02 (V80539)) (OPT RMF9201M3 (V72962)) (OPT VN252A02 (V92215)) (OPT MF1000-3BAC (V15653)) (OPT MF53049-3 (V15653))	A-AP, AS-AX ,BA, BB	2
265	253T2116-2		.. COLUMN	A-AP, AS-AX ,BA, BB	1
-265A	253T2116-5		.. COLUMN	AQ,AR ,AY, AZ, BC-BR	1
270	232T4243-2		DELETED		
270A	232T4243-1		. PLATE ASSY-APPROACH	J-R	1
-270B	232T4243-6		. PLATE ASSY-APPROACH	A-H, S-AD	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-270C	232T4243-11		.PLATE ASSY-APPROACH	AE,AF	1
-270D	232T4243-14		.PLATE ASSY-APPROACH	AG,AH	1
-270E	232T4243-15		.PLATE ASSY-APPROACH	AJ-AM ,AS-A Z,BD, BE,BH ,BJ	1
-270F	232T4243-18		.PLATE ASSY-APPROACH	AQ,AR	1
-270G	232T4243-20		.PLATE ASSY-APPROACH	AN,AP ,BC,B G	1
-270H	232T4243-16		.PLATE ASSY-APPROACH	BA,BB ,BF,B K	1
275	NAS514P1032-7		ATTACHING PARTS .SCREW	A-BK	1
280	NAS514P1032-8		.SCREW	A-BK	1
285	H10-3BAC		.NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828)) -----*	A-AP, AS-AX ,BA, BB	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -285A	BACN10YR3CD		.NUT-	AQ,AR ,AY, AZ, BC-BK	2
290 290A	NAS514P440-4 NAS514P632-4		DELETED ..SCREW	A-AD, AG-AM ,AQ-A Z,BD BE,BH ,BJ	2
295 295A 295B	372-1 327-1 327-2		DELETED DELETED ..CLIP ASSY- (V28277)	A-AD, AG-AM ,AQ-A Z,BD BE,BH ,BJ	1
295M -295N	69-3894777-8 69-38947-8		DELETED ..CLIP ASSY	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	1
296	BACR15BA3AD		ATTACHING PARTS ..RIVET- (SIZE DETERMINE ON INST)	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	2
297	BACR15BA3A		-----*----- ...RIVET- (SIZE DETERMINE ON INST)	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	5

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-298	69-38947-9		...COVER	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	1
299	69-38947		...CLIP	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	1
300	BACR15BA3AD		..RIVET- (SIZE DETERMINE ON INST)	A-AZ, BC,BD ,BE,B G,BH, BJ	10
302 302A	NAS42DD3-17 NAS42DD3-18		DELETED ..SPACER	A-AZ, BC,BD ,BE,B G,BH, BJ	4
305 305A	232T4244-1 232T4244-8		DELETED ..PLATE	A-AD, AG-AM ,AQ-A Z,BD, BE,BH BJ	1
-305B	232T4244-9		..PLATE	AE,AF ,AN, AP, BA-BC ,BF, BG,BK	1
310 315	NAS514P440-5 AN960PD4		..SCREW ..WASHER	A-AF, AJ-AP ,AS-B K	4 8
315A	AN960JD4		..WASHER	AG,AH ,AQ, AR	8

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-320	H10-04BAC		..NUT- (V15653) (SPEC BACN10JC04) (OPT NS202101-40 (V80539)) (OPT RMLH9075-40W (V72962)) (OPT T6S440J (V11815)) (OPT VN303A40 (V92215)) (OPT 96-40 (V80539)) (OPT BRH10A04 (V52828))	A-AD, AJ-AM ,AS-A Z,BD, BE,BH BJ	4
320A	MS21042L04		..NUT	AE-AH ,AN-A R, BA-BC ,BF, BG,BK	4
325	69-43972-1		..SPRING	A-AH	2
-325A	232T4244-16		..SPRING	AJ-BK	2
330	BACR15BA3AD		..RIVET- (SIZE DETERMINE ON INST)	A-BK	6
335	232T4244-7		..HINGE	A-BK	1
340	232T4244-3		..HINGE	A-BK	1
345	232T4243-3		..SLIDER ASSY	A-BK	1
350	BACR15BB5AD14		...RIVET	A-BK	2
355	NAS42HT5-24		...SPACER	A-BK	2
360	232T4244-4		...SUPPORT	A-BK	1
365	232T4244-5		..BRACKET	A-BK	1
370	232T4244-6		..BRACKET	A-BK	1
375	NAS600-5P		..SCREW	A-AZ, BC,BD ,BE,B G,BH, BJ	1
380	NAS43DD3-6		DELETED		
380A	NAS43DD0-6		..SPACER	A-AZ, BC,BD ,BE,B G,BH, BJ	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-385	H10-04BAC		..NUT- (V15653) (SPEC BACN10JC04) (OPT NS202101-40 (V80539)) (OPT RMLH9075-40W (V72962)) (OPT T6S440J (V11815)) (OPT VN303A40 (V92215)) (OPT 96-40 (V80539)) (OPT BRH10A04 (V52828))	A-AZ, BC,BD ,BE,B G,BH, BJ	1
390	69-43447-13		..INDICATOR	A-AZ, BC,BD ,BE,B G,BH, BJ	1
395	232T4243-4		..BALL- (OPT ITEMS 395A, 395B)	A-AZ, BC,BD ,BE, BG,BH ,BJ	1
-395A	BACB10TM2-12A		..BALL- (OPT ITEMS 395, 395B)	A-AZ, BC,BD ,BE, BG,BH ,BJ	1
-395B	MS19059-512		..BALL- (OPT ITEMS 395, 395A)	A-AZ, BC,BD ,BE, BG,BH ,BJ	1
400	MS24585-1001		..SPRING	A-AZ, BC,BD ,BE,B G,BH, BJ	1
405	232T4244-2		..BRACKET	A-AZ, BC,BD ,BE,B G,BH, BJ	1

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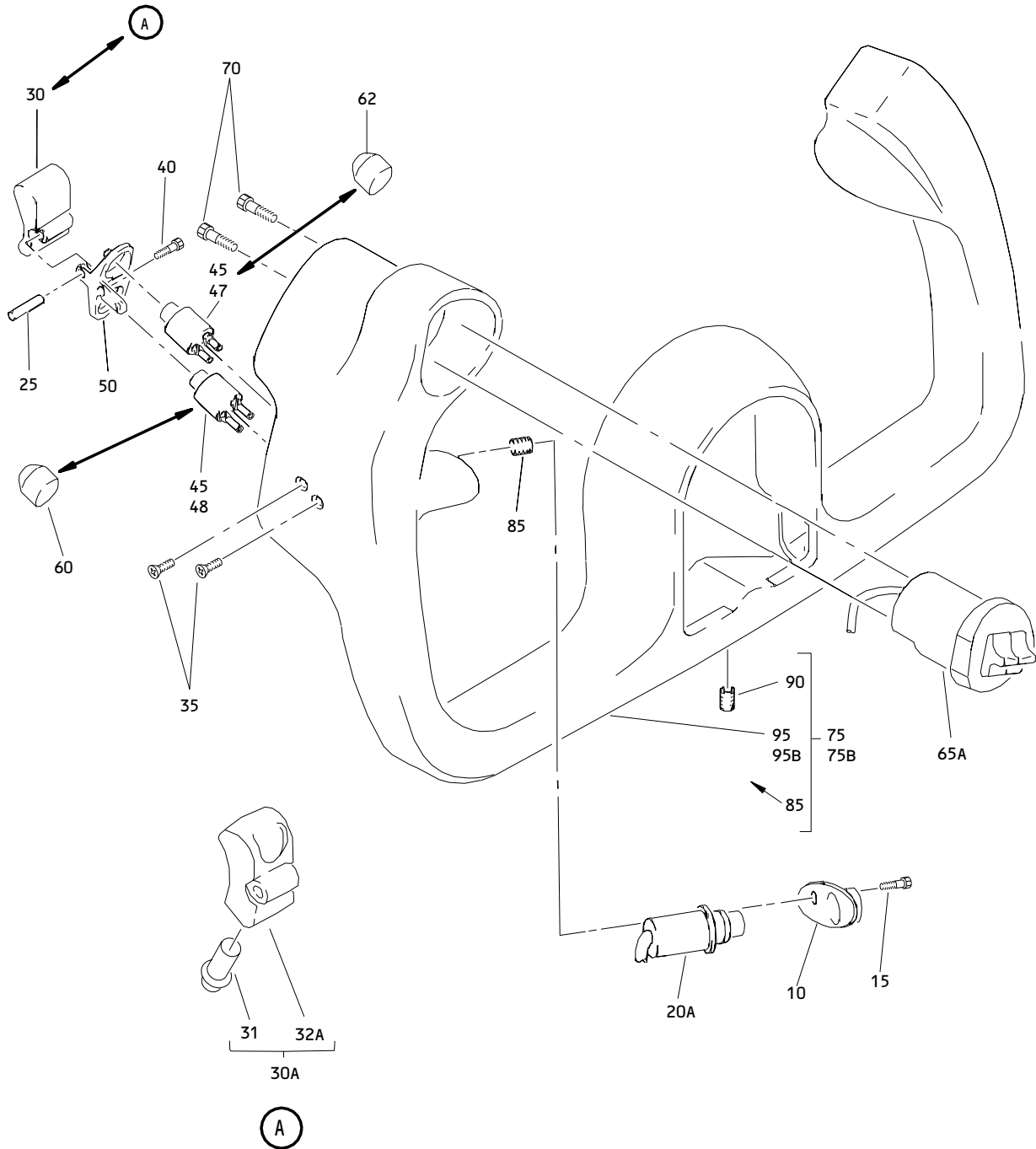
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 410	BAC27TFDE0151		DELETED		
410A	BAC27TFDE0172		..DECAL-INSTRUCTION	J-R	1
-410B	BAC27TFDE0207		..DECAL	A-H, S-AF, AJ-AP ,AS-A Z,B C-BE, BG-BJ	1
-410C	BAC27NFDE0131		..DECAL	AG,AH ,AQ,A R	1

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Control Column Wheel Assembly  
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1	253T2121-1		WHEEL ASSY-CONT COLUMN (LH)	A,E,J ,AS	RF
-1A	253T2121-3		WHEEL ASSY-CONT COLUMN (LH)	B,F,K ,AA,A J	RF
-1B	253T2121-5		WHEEL ASSY-CONT COLUMN (LH)	C,G,L	RF
-1C	253T2121-7		WHEEL ASSY-CONT COLUMN (LH)	D,H,M ,AB,A E,AG, AL	RF
-1D	253T2121-9		WHEEL ASSY-CONT COLUMN (LH)	AU,BA	RF
-1E	253T2121-11		WHEEL ASSY-CONT COLUMN (LH)	AN,AW	RF
-1F	253T2121-13		DELETED		
-1G	251N1140-17		WHEEL ASSY-CONT COLUMN (LH)	BD,BF ,BL	RF
-1H	251N1140-19		WHEEL ASSY-CONT COLUMN (LH)	AQ,BC ,BE, BN	RF
-1J	251N1140-21		WHEEL ASSY-CONT COLUMN (LH)	AY,BQ	RF
-5	253T2121-2		WHEEL ASSY-CONT COLUMN (RH)	N,S,W ,AT	RF
-5A	253T2121-4		WHEEL ASSY-CONT COLUMN (RH)	P,T,X ,AC,A K	RF
-5B	253T2121-6		WHEEL ASSY-CONT COLUMN (RH)	Q,U,Y	RF
-5C	253T2121-8		WHEEL ASSY-CONT COLUMN (RH)	R,V,Z ,AD,A F,AH, AM	RF
-5D	253T2121-10		WHEEL ASSY-CONT COLUMN (RH)	AV,BB	RF
-5E	253T2121-12		WHEEL ASSY-CONT COLUMN (RH)	AP,AX	RF
-5F	253T2121-14		DELETED		
-5G	251N1140-18		WHEEL ASSY-CONT COLUMN (RH)	BH,BK ,BM	RF
-5H	251N1140-20		WHEEL ASSY-CONT COLUMN (RH)	AR,BG ,BJ, BP	RF
-5J	251N1140-22		WHEEL ASSY-CONT COLUMN (RH)	AZ,BR	RF
10	69B82799-2		.PLATE		1
15	NAS600-7B		ATTACHING PARTS .SCREW		1
20	721101A1		-----*----- DELETED		

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-20A	721101A1		.SWITCH-AUTOPILOT DISENGAGE (V54753) (OPT ITEM 20B)		1
-20B	SW43896		.SWITCH-AUTOPILOT DISENGAGE (V07150) (OPT ITEM 20A)		1
25	MS20253-2-67		.PIN-HINGE	A-AP, AS-AX ,BA, BB	1
-25A	251N1283-1		.PIN-HINGE	AQ,AR ,AY, AZ, BC-BR	1
27	66-4034-1		.TRIGGER	A-C, E-G, J-L, N-Q, S-U, W-Y, AA,AC ,AJ, AK,AS ,AT	1
30 30A	66-4034-1 251N1241-2		DELETED .TRIGGER ASSY- (251N1241-5 TOGETHER WITH 3066-1 OR BACC12C3 CAN REPLACE OR BE REPLACED BY 251N1241-2) (OPT ITEMS 30B, 30C)	D,H,M ,R,V, Z,AB, AD-AH AL,AM	1
-30B	66-9828		.TRIGGER ASSY- (OPT ITEMS 30A, 30C)	D,H,M ,R,V, Z,AB, AD-AH AL,AM	1
-30C	251N1241-4		.TRIGGER ASSY- (OPT ITEMS 30A, 30B)	D,H,M ,R,V, Z,AB, AD-AH AL,AM	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -30D -30E	251N1241-2 251N1241-4		DELETED .TRIGGER ASSY	AN-AR ,AW,A X,BC, BE,BG ,BJ, BN,BP	1
-30F	251N1241-5		.TRIGGER (251N1241-5 TOGETHER WITH 3066-1 OR BACC12C3 CAN REPLACE OR BE REPLACED BY 251N1241-2)	AY,AZ ,BD, BF,BH ,BK-B M,BQ, BR	1
-30G	251N1241-5		.TRIGGER (251N1241-5 TOGETHER WITH 3066-1 OR BACC12C3 CAN REPLACE OR BE REPLACED BY 251N1241-2) (OPT ITEM 30H)	AU,AV ,BA, BB	1
-30H	66-4034-1		.TRIGGER (OPT ITEM 30G)	AU,AV ,BA, BB	1
31	LS3066		..CATCH- (V14608) (SPEC BACC12C3) (OPT 3066-1 (V14608)) (OPT H3-1242-1 (V34941)) (OPT ITEM 31A)	D,H,M ,R,V, Z,AB, AD-AH AL-AR ,AW,A X,BC, BE,BG ,BJ, BN,BP	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -31A	3066-1		..CATCH-BULLET (V14608) (OPT ITEM 31)	D,H,M ,R,V, Z,AB, AD-AH AL-AR ,AW,A X,BC, BE,BG ,BJ, BN,BP	1
-32	66-9828-1		..TRIGGER- (USED ON ITEM 30B)	D,H,M ,R,V, Z,AB, AD-AH AL,AM	1
32A	251N1241-3		..TRIGGER- (USED ON ITEM 30A)	D,H,M ,R,V, Z,AB, AD-AH AL,AM	1
-32B	251N1241-5		..TRIGGER- (USED ON ITEMS 30C, 30E)	D,H,M ,R,V, Z,AB, AD-AH AL-AR ,AW,A X,BC, BE,BG ,BJ, BN,BP	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-35	NAS514P440-6B		.SCREW		2
40	NAS514P440-7B		.SCREW		1
45	C2006CB		.SWITCH- (V81640) (OPT ITEMS 45A, 45B, 45C)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AM	2
-45A	C2006RCB		.SWITCH- (V81640) (OPT ITEMS 45, 45B, 45C)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AM	2
-45B	C2006		.SWITCH- (V81640) (OPT ITEMS 45, 45A, 45C)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AM	2
-45C	P8-4000003		.SWITCH- (V21649) (OPT ITEMS 45, 45A, 45B)	B,D,F ,H,K, M,P,R ,T,V, X,Z AA-AM	2
-45D	P8-4000003		.SWITCH- (V21649)	AN-AR ,AU-A X,B A-BP	2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-47	C2006CB		.SWITCH- (V81640) (OPT ITEMS 47A, 47B,	A,E,J ,N,S, W,AS, AT	1
-47A	C2006RCB		.SWITCH- (V81640) (OPT ITEMS 47, 47B, 47C)	A,E,J ,N,S, W,AS, AT	1
-47B	C2006		.SWITCH- (V81640) (OPT ITEMS 47, 47A, 47C)	A,E,J ,N,S, W,AS, AT	1
-47C	P8-4000003		.SWITCH- (V21649) (OPT ITEMS 47, 47A, 47B)	A,E,J ,N,S, W,AS, AT	1
-47D	P8-4000003		.SWITCH- (V21649)	AY,AZ ,BQ, BR	1
48	C2006CB		.SWITCH- (V81640) (OPT ITEMS 48A, 48B)	C,G,L ,Q,U, Y	1
-48A	C2006RCB		.SWITCH- (V81640) (OPT ITEMS 48, 48B)	C,G,L ,Q,U, Y	1
-48B	C2006		.SWITCH- (V81640) (OPT ITEMS 48, 48A)	C,G,L ,Q,U, Y	1
50	69-70179-1		.CLAMP- (69-70179-1 T/W MS20253-67 I/W 69-70179-7 T/W 251N1283-1.) (OPT ITEMS 50A, 50C)	A-C, E-G, J-L,A A,AJ, AS	1
-50A	69-4535-1		.CLAMP- (OPT ITEMS 50, 50C)	A-C, E-G, J-L,A A,AJ, AS	1
-50B	69-63433-3		.MOUNT-SWITCH	D,H,M ,AB,A E,AG, AL,AN ,AW	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -50C	69-70179-7		.CLAMP- (69-70179-1 T/W MS20253-67 I/W 69-70179-7 T/W 251N1283-1.) (OPT ITEMS 50, 50A)	A-C, E-G, J-L,A A,AJ, AS AY,BD ,BF, BL,BQ	1
-50D	69-70179-7		.CLAMP- (69-70179-1 T/W MS20253-67 I/W 69-70179-7 T/W 251N1283-1.)	AU,AY ,BA,B D,BF, BL,BQ	1
-50E	69-63433-7		.MOUNT-SWITCH (OPT ITEMS 50F, 50G)	AQ,BC ,BE, BN	1
-50F	69-63433-11		.MOUNT-SWITCH (OPT ITEMS 50E, 50G)	AQ,BC ,BE, BN	1
-50G	69-63433-13		.MOUNT-SWITCH (OPT ITEMS 50E, 50F)	AQ,BC ,BE, BN	1
-55	69-70179-2		.CLAMP- (69-70179-2 T/W MS20253-67 I/W 69-70179-8 T/W 251N1283-1.) (69-70179-6 OR 69-4535-4 TOGETHER WITH 251N1283-1 MAY REPLACE 69-70179-2 TOGETHER WITH MS20253-2-67 PIN) (OPT ITEMS 55A, 55C)	N-Q, S-U, W-Y,A C,AK, AT	1
-55A	69-4535-2		.CLAMP- (OPT ITEMS 55, 55C)	N-Q, S-U, W-Y,A C,AK, AT	1
-55B	69-63433-4		.MOUNT-SWITCH	R,V,Z ,AD,A F,AH, AM,AP ,AX	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-55C	69-70179-8		.CLAMP- (69-70179-2 T/W MS20253-67 I/W 69-70179-8 T/W 251N1283-1.)	N-Q, S-U, W-Y,A C,AK, AT,AZ ,BH, BK,BM ,BR	1
-55D	69-70179-8		.CLAMP- (69-70179-2 T/W MS20253-67 I/W 69-70179-8 T/W 251N1283-1.)	AV,AZ ,BB,B H,BK, BM,BR	1
-55E	69-63433-8		.MOUNT-SWITCH (OPT ITEMS 55F, 55G)	AR,BG ,BJ, BP	1
-55F	69-63433-12		.MOUNT-SWITCH (OPT ITEMS 55E, 55G)	AR,BG ,BJ, BP	1
-55G	69-63433-14		.MOUNT-SWITCH (OPT ITEMS 55E, 55F)	AR,BG ,BJ, BP	1
60	66-3199		.BUTTON	A,E,J ,N,S, W,AS, AT,AY ,AZ, BQ,BR	1
62	66-3199		.BUTTON	C,G,L ,Q,U, Y	1
65 65A	S253T407-1 306-4312		DELETED .SWITCH-STAB. TRIM (V81579) (SPEC S253T407-1) ATTACHING PARTS		1

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 COMPONENT  
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-70	NAS600-8B		.SCREW -----*-----		2
75	253T2122-1		.WHEEL ASSY	A,E,J ,AS	1
-75A	253T2122-3		.WHEEL ASSY	B,F,K ,AA,A ,J,AU, BA	1
75B	253T2122-11		.WHEEL ASSY	C,G,L	1
-75C	253T2122-15		.WHEEL ASSY	D,H,M ,AB,A E,AG, AL,AN ,AW	1
-75D	251N1105-3		.WHEEL ASSY	AQ,B C-BF, BL,BN	1
-75E	251N1105-1		.WHEEL ASSY	AY,BQ	1
-80	253T2122-2		.WHEEL ASSY	N,S,W ,AT	1
-80A	253T2122-4		.WHEEL ASSY	P,T,X ,AC,A K,AV, BB	1
-80B	253T2122-12		.WHEEL ASSY	Q,U,Y	1
-80C	253T2122-16		.WHEEL ASSY	R,V,Z ,AD,A F,AH, AM,AP ,AX	1
-80D	251N1105-4		.WHEEL ASSY	AR,B G-BK, BM,BP	1
-80E	251N1105-2		.WHEEL ASSY	AZ,BR	1
85	MS21209C0415		..INSERT		1
90	MS21209F1-15		..INSERT		1
95	253T2122-5		..WHEEL	A,E,J ,AS	1
-95A	253T2122-7		..WHEEL	B,F,K ,AA,A ,J,AU, BA	1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-95B	253T2122-13		..WHEEL	C,G,L	1
-95C	253T2122-17		..WHEEL	D,H,M ,AB,A E,AG, AL,AN ,AW	1
-95D	251N1105-7		..WHEEL	AQ,B C-BF, BL,BN	1
-95E	251N1105-5		..WHEEL	AY,BQ	1
-100	253T2122-6		..WHEEL	N,S,W ,AT	1
-100A	253T2122-8		..WHEEL	P,T,X ,AC,A K,AV, BB	1
-100B	253T2122-14		..WHEEL	Q,U,Y	1
-100C	253T2122-18		..WHEEL	R,V,Z ,AD,A F,AH, AM,AP ,AX	1
-100D	251N1105-8		..WHEEL	AR,B G-BK, BM,BP	1
-100E	251N1105-6		..WHEEL	AZ,BR	1

- Item Not Illustrated

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