COMPONENT
MAINTENANCE MANUAL

RUDDER CONTROL FORCE LIMITER ASSEMBLY

PART NUMBERS 251N3220-1,-2

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

L05512

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

L05514

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL

PAGE	DATE	CODE
27-21-23		
TITLE PAGE		
*1	MAR 01/00	01
*2	BLANK	
REVISION RECORD		
*1	MAR 01/00	01
*2	BLANK	
TR & SB RECORD		
*1	MAR 01/00	01
*2	BLANK	
LIST OF EFFECTIVE PAGES		
*1	MAR 01/00	01
THRU LAST PAGE		
CONTENTS		
*1	MAR 01/00	01
*2	BLANK	
INTRODUCTION		
*1	MAR 01/00	01
*2	BLANK	
DESCRIPTION & OPERATION		
*1	MAR 01/00	01
*2	MAR 01/00	01
TESTING & FAULT ISOLATION		
*101	MAR 01/00	01
*102	BLANK	
DISASSEMBLY		
*301	MAR 01/00	01
*302	MAR 01/00	01
CLEANING		
*401	MAR 01/00	01
*402	BLANK	

PAGE	DATE	CODE
CHECK		
*501	MAR 01/00	01
*502	MAR 01/00	01
REPAIR-GENERAL		
*601	MAR 01/00	01
*602	MAR 01/00	01
REPAIR 1-1		
*601	MAR 01/00	01
*602	MAR 01/00	01
ASSEMBLY		
*701	MAR 01/00	01
*702	MAR 01/00	01
*703	MAR 01/00	01
*704	MAR 01/00	01
*705	MAR 01/00	01
*706	MAR 01/00	01
*707	MAR 01/00	01
*708	BLANK	
ILLUSTRATED PARTS LIST		
*1001	MAR 01/00	01
*1002	MAR 01/00	01
*1003	MAR 01/00	01
*1004	MAR 01/00	01
*1005	MAR 01/00	01
*1006	MAR 01/00	01
*1007	MAR 01/00	01
*1008	BLANK	

* = REVISED, ADDED OR DELETED

TABLE OF CONTENTS

*[1] Not Applicable.

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
2. Record of Revisions
3. Temporary Revision & Service Bulletin Record
4. List of Effective Pages
5. Table of Contents
6. Introduction
7. Procedures & IPL Sections

Refer to the Table of Contents for the page location of applicable sections.

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:

DESCRIPTION AND OPERATION

1. Description

   A. The Rudder Control Force Limiter Assembly consist of an inner tube assembly, a rod end, a nut, a locking device, two stops, and an outer tube, held together by rivets.

2. Operation

   A. The Rudder Control Force Limiter Assemblies support the rudder control system of the aircraft. They are connected to the rudder jack shaft assembly at one end and to the rudder pedal support structure.

3. Leading Particulars (Approximate)

   A. Length --

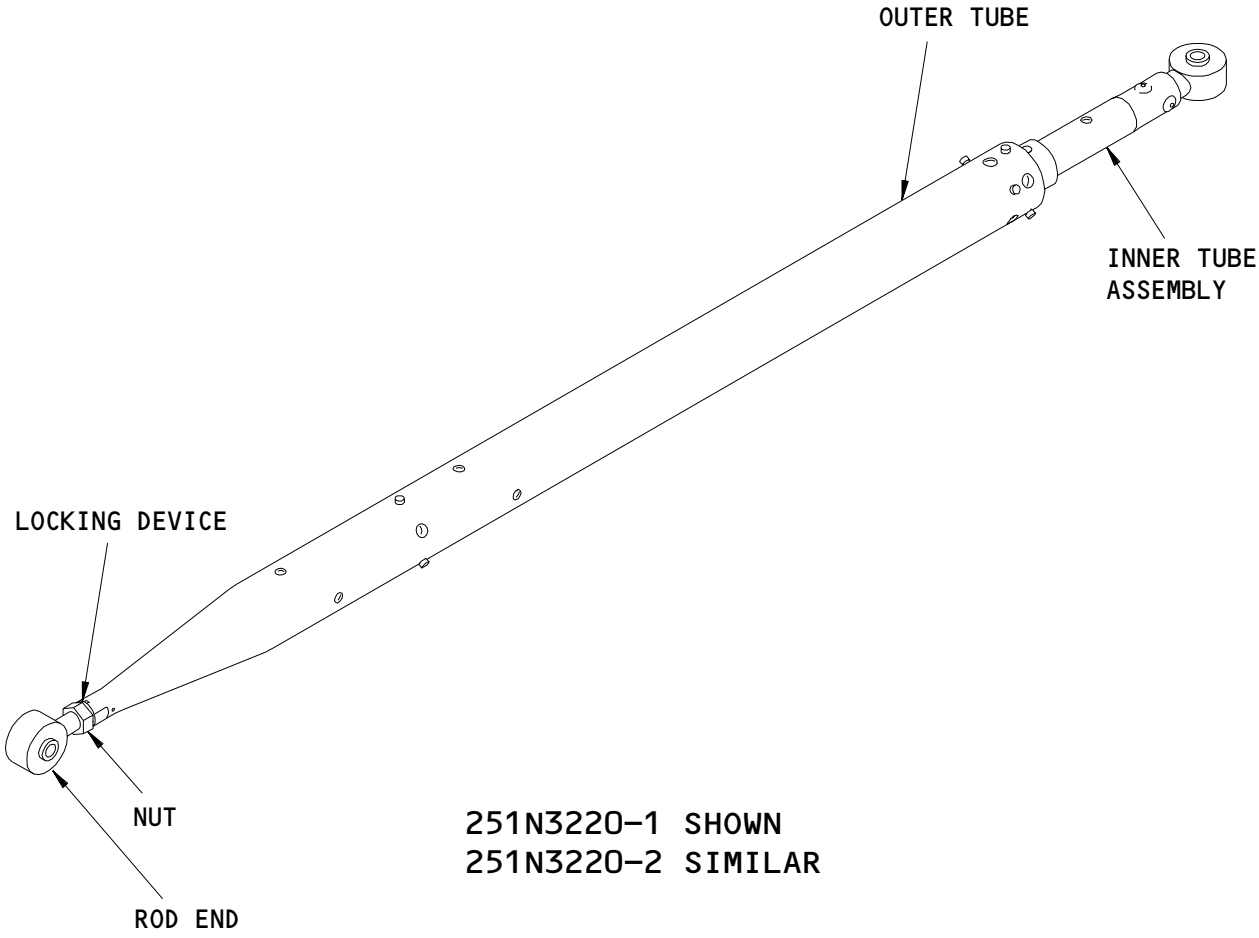
      (1) 251N3220–1 – 35.81 inches

      (2) 251N3220–2 – 36.10 inches

   B. Weight --

      (1) 251N3220–1 – XX pounds

      (2) 251N3220–2 – XX pounds



251N3220-1 SHOWN
251N3220-2 SIMILAR

Rudder Control Force Limiter Assembly
Figure 1

L05606

TESTING AND FAULT ISOLATION

1. General

   A. This procedure has the necessary data to do a test of the rudder control force limiter assembly after an overhaul or for fault isolation.

   B. Refer to the Standard Overhaul Practice Manual (SOPM) for details of the SOPM subjects identified in the procedure.

   C. Refer to IPL Fig. 1 for item numbers.

2. Testing and Fault Isolation

   A. References

      (1) 27-21-23/301, Disassembly

      (2) 27-21-23/701, Assembly

   B. Procedure

      (1) Operate the rudder control force limiter assembly (1A, 1B) and measure the load and the relative travel of the bearing (75) with respect to the outer tube (85).

         (a) Initial compressive breakout load at 35.80-35.82 inches is 55.07-67.67 pounds.

         (b) Final compressive load at 31.40-31.42 inches is 68.00-84.00 pounds.

         (c) After completing step (a) and (b), do a free play check. Maximum travel is to be 0.002 inch after applying a compressive load of 13.0-17.0 pounds.

         (d) All operations shall be smooth and free from binding.

DISASSEMBLY

1. General

A. This procedure has the necessary data to disassemble the rudder control force limiter assembly.

B. Disassemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.

C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

D. Refer to IPL Fig. 1 for item numbers.

2. Disassembly

A. Parts Replacement

NOTE: The parts with follows are recommended for replacement. Unless a replacement tells you to replace a part, replacement is optional.

(1) Slide Ring (45)

B. References

(1) SOPM 20-50-01, Bolt and Nut Installation

C. Procedure

(1) Use standard industry procedures and the steps shown below to disassemble this component.

(2) Remove the rod end (5), the nut (10), and the locking device (15) from the outer tube (85).

CAUTION: THE INNER TUBE ASSEMBLY (30) IS HEAVILY LOADED. REMOVE RIVETS (20) WITH CARE.

(3) Remove the rivets (20), the stop (20), and the inner tube assembly (30) from the outer tube (85).

CAUTION: THE SPRING (50) IS HEAVILY LOADED. REMOVE RIVETS (35) WITH CARE.

(4) Remove the rivets (35), the end stop (40), the slide ring (45), and spring (50) from the inner tube (65).

(5) Remove the rivets (35) and the sleeve (55) from the inner tube (65).

(6) Remove the rivets (70) and the bearing (75) from the inner tube (65).

CLEANING

1. General

   A. This procedure has the necessary data to clean the rudder controls force limiter assembly.

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.

   C. Refer to IPL Fig. 1 for item numbers.

2. Cleaning

   A. References

      (1) SOPM 20-30-01, Cleaning and Relubricating Anti-Friction Bearings

      (2) SOPM 20-30-03, General Cleaning Procedures

   B. Procedure

      (1) Clean the bearings (75) as shown in SOPM 20-30-01.

      (2) Use standard industry procedures and refer to SOPM 20-30-03 to clean all other parts.

CHECK

1. General

   A. This procedure has the necessary data to find defects in the material of the specified parts.

   B. Refer to FITS AND CLEARANCES for the design dimension and wear limits.

   C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.

   D. Refer to IPL Fig. 1 for item numbers.

2. Check

   A. References

      (1) SOPM 20-20-02, Penetrant Methods of Inspection

   B. Procedure

      (1) Use standard industry procedures to do a visual check of all the parts for defects. Do the penetrant check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

      (2) Do a penetrant check (SOPM 20-20-02) of these parts:

         (a) End Stop (40)

         (b) Spring (50)

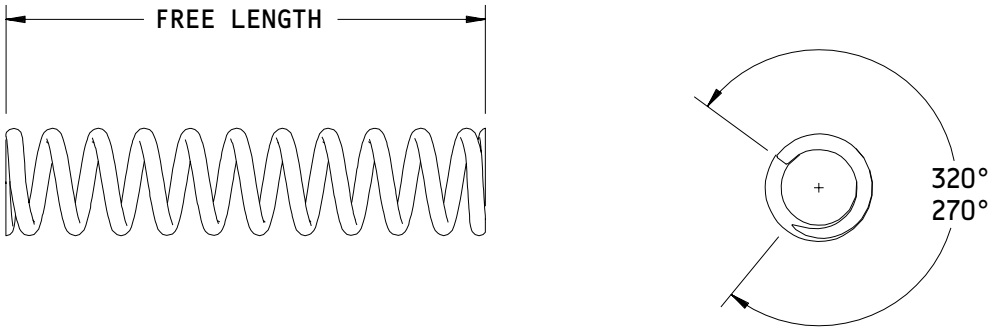
         (c) Sleeve (55)

         (d) Inner tube (65)

         (e) Stop (80)

         (f) Outer Tube (85)

      (3) Check the dimension of the spring (50) as shown in Fig. 501.



SPRING DATA	
TOTAL NUMBER OF COILS	55
FREE LENGTH	33.112-33.312 INCHES
DIRECTION OF COIL	OPTIONAL
CHECK LOAD 1	70.09-85.69 POUNDS
CHECK LOAD 2	49.04-60.04 POUNDS

1 AT 10.42-10.44 INCHES

2 AT 17.25-17.27 INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

253W1265-1
Spring - Compression, Force Limiter
Figure 501

L05526

REPAIR - GENERAL

1. General

   A. Instructions for repair, refinish, and replacement of the specified subassembly parts are included in each REPAIR when applicable:

PART NUMBER	NAME	REPAIR
---	REFINISH OF OTHER PARTS	1-1

2. Dimensioning Symbols

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

—	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 THIS FEATURE PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
[-A-]	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓛ	LEAST MATERIAL CONDITION (LMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE
FIM	FULL INDICATOR MOVEMENT

EXAMPLES

[— | 0.002]	STRAIGHT WITHIN 0.002
[⊥ | 0.002 | B]	PERPENDICULAR TO DATUM B WITHIN 0.002
[// | 0.002 | A]	PARALLEL TO DATUM A WITHIN 0.002
[○ | 0.002]	ROUND WITHIN 0.002
[⌭ | 0.010]	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
[⌒ | 0.006 | A]	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM A
[⌓ | 0.020 | A]	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
[◎ | ∅ 0.0005 | C]	CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
[⌯ | 0.010 | A]	SYMMETRICAL WITH DATUM A WITHIN 0.010
[∠ | 0.005 | A]	ANGULAR TOLERANCE 0.005 WITH DATUM A
[⌖ | ∅ 0.002 Ⓢ | B]	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
[⊥ | ∅ 0.010 Ⓜ | A] 0.510 Ⓟ	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010 INCH DIAMETER, PERPENDICULAR TO DATUM A, AND EXTENDING 0.510 INCH ABOVE DATUM A, MAXIMUM MATERIAL CONDITION
[2.000] OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

True Position Dimensioning Symbols
Figure 601

L05528

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

   A. This procedure has the data necessary to refinish the parts which are not given in the specified repairs.

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.

   C. Refer to IPL Fig. 1 for item numbers.

2. Refinish of Other Parts

   A. General

      (1) Instructions for the repair of the parts listed in Table 601 are for repair of the initial finish.

   B. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) C00064 Compound -- MIL-C-5541, Colored Film (SOPM 20-41-03)

      (2) C00259 Coating -- BMS 10-11, Type 1 Primer (SOPM 20-60-02)

      (3) G00009 Compound -- BMS 3-23, Type 2 Corrosion Inhibiting (SOPM 20-60-03)

   C. References

      (1) SOPM 20-30-02, Stripping of Protective Finishes

      (2) SOPM 20-30-03, General Cleaning Procedures

      (3) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

      (4) SOPM 20-41-03, Application of Corrosion Preventives to Interior of Closed End Tubes

      (5) SOPM 20-43-03, Chemical Conversion Coatings

      (6) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes

      (7) SOPM 20-44-02, Temporary Protective Coatings

(8) SOPM 20-60-02, Finishing Materials

D. References

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Stop (25, 80)	Al alloy	Chemical treat (F-17.27) to the inside and outside surfaces plus apply a layer of BMS 10-11, Type 1 primer (F-20.02).
End Stop (40)	Al alloy	On inside and outside surfaces, chemical treat with MIL-C-5541 color film and apply a layer of BMS 10-11, Type 1 primer (F-18.06).
Slide Ring (45)	Delrin	Apply no finish (F-25.01) but temporary coating may be applied as required for protection during handling, transportation and storage.
Spring (50)	Titanium wire	Apply Duralon EF primer and Duralon JE topcoard (F-21.14) with spring extended.
Sleeve (55)	Al alloy	Chemical treat (F-17.27) to the inside and outside surfaces plus apply a layer of BMS 10-11, Type 1 primer (F-20.02).
Plug (60)	Al alloy	On inside and outside surfaces, chemical treat with MIL-C-5541 color film and apply a layer of BMS 10-11, Type 1 primer (F-18.07).
Tube (65, 85)	Al alloy	Chemical treat with MIL-C-5541 color film the inside and outside surfaces (F-17.08) and apply a layer of BMS 10-11, Type 1 primer (F-20.02) and apply water displacing, corrosion preventive compound BMS 3-23, Type 2 (F-19.26) in the inside surface only.

Refinish Details
Table 601

ASSEMBLY

1. General

   A. This procedure has the necessary data to assemble the rudder control force limiter assemblies.

   B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in this procedure.

   C. Refer to IPL Fig. 1 for item numbers.

2. Assembly

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

      (2) C00174 Compound -- MIL-C-16173 Corrosion Preventive (SOPM 20-60-04)

   B. References

      (1) SOPM 20-50-01, Bolt and Nut Installation

      (2) SOPM 20-50-03, Bearing and Bushing Replacement

      (3) SOPM 20-50-12, Application of Adhesives

      (4) SOPM 20-60-02, Finishing Materials

      (5) SOPM 20-60-04, Miscellaneous Materials

   C. Procedure

      (1) Use standard industry procedures and the steps shown below to assemble this component.

      CAUTION: MAKE SURE THAT NO FOREIGN MATERIALS GET INTO THE WORKING PARTS.

      (2) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) onto the outside surfaces of the stop (80) as identified by flagnote 1 and shown in Fig. 701, bubble A.

(3) Insert and position stop (80) into the outer tube (85) to the dimension shown in Fig. 701.

(4) Install stop (80) into the outer tube (85) with rivets (20) as shown in Fig. 707, view B-B.

(5) If required, assembly the inner tube assembly (30) as follows:

(a) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) on the faying surfaces of the plug (60) and the inner tube (65) as identified by flagnote 1 and shown in Fig. 702, bubble A.

(b) Insert and position plug (60) inside the inner tube (65) to the dimension given in Fig. 702, view A-A.

(c) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) onto the faying surfaces of the end stop (40) and the inner tube (65) as identified by flagnote 1 and shown in Fig. 702, bubble B.

(d) Install the end stop (40) into the inner tube (65) with rivets (35) as identifed by flagnotes 2 and 3, and shown in Fig. 702, bubble B.

(e) Install the slide rings (45) and spring (50) onto the inner tube (65) as shown in Fig. 702, view A-A.

(f) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) onto the faying surfaces of the sleeve (55) and the inner tube (65) as identified by flagnote 1 and shown in Fig. 702, bubble B.

(g) Insert and position the sleeve (55) onto the inner tube (65) to the dimension given in Fig. 702, view A-A.

(h) Install sleeve (55) and plug (60) onto the inner tube (65) with rivets (35) as identified by flagnotes 2 and 3, and shown in Fig. 702, bubble A.

(i) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) onto the faying surfaces of the bearing (75) and the inner tube (65) as identified by flagnote 1 and shown in Fig. 702, bubble C.

(j) Align the center line of bearing (75) at 87-93 degrees against the center line of inner tube (65) draining hole as shown in Fig. 702, view C-C.

(k) Install the bearing (75) into the inner tube (65) with rivets (70) to dimension given in Fig. 702, bubble C. Apply touch up BMS 10-11, Type 1 primer (F-20-06) to rivet heads and exposed metals as identified by flagnote 3 in Fig. 702.

(6) Insert and position inner tube assembly (30) into the outer tube (85) until the inner tube assembly (30) contacts the stop (80) as shown in Fig. 701, view A-A.

(7) Apply a layer of BMS 10-11, Type 1 primer (F-20.06) onto the outside surfaces of the stop (25) as identified by flagnote 1 and shown in Fig. 701, view C-C.

(8) With the drainage holes on the outer tube (85) aligned to 87-93 degrees as shown in Fig. 701, view E-E, insert stop (25) into the outer tube (85) until it contracts the inner tube assemlby (30) sleeve.

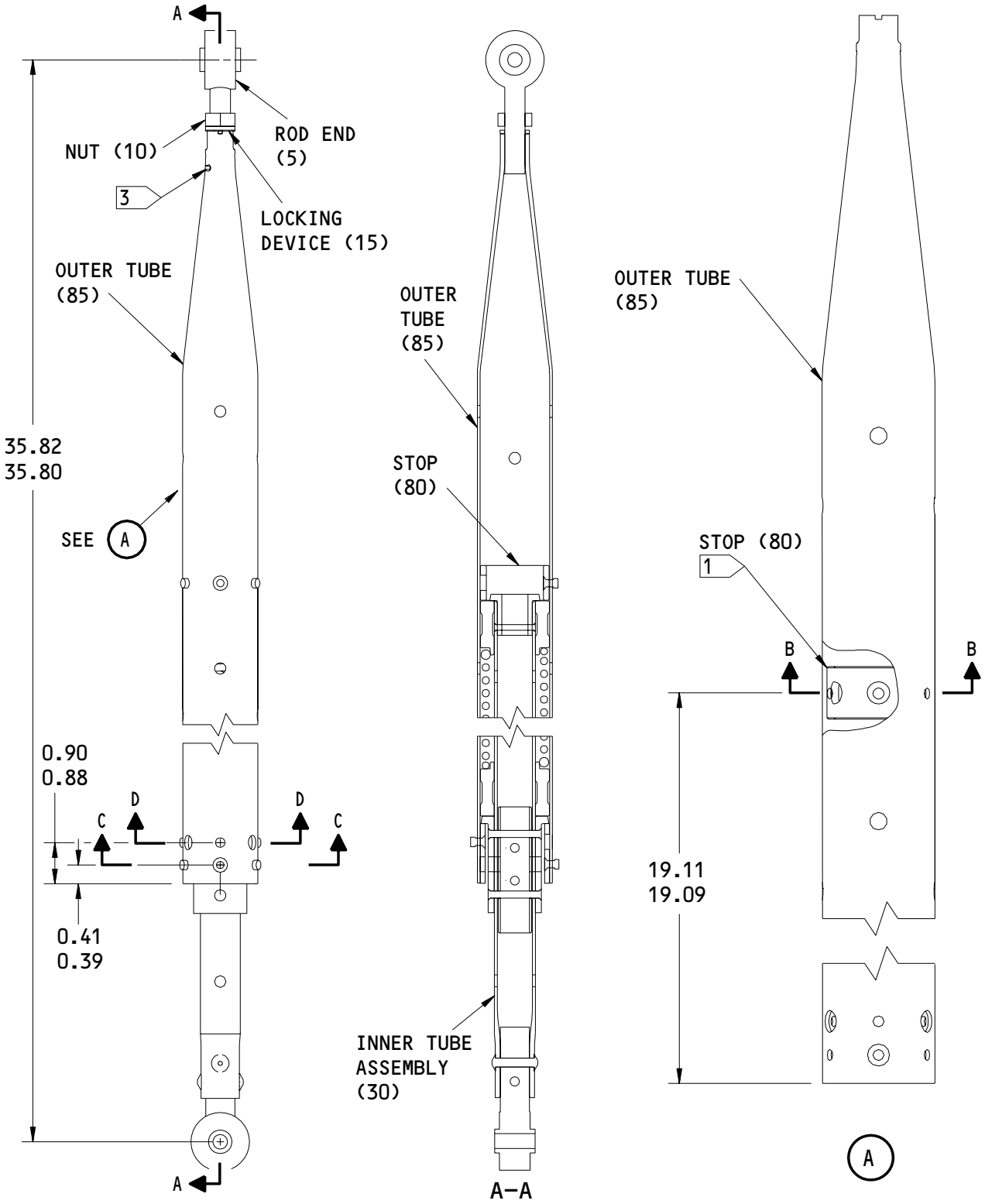
(9) Keep the stop (25) in position inside the outer tube (85) without compressing the inner tube assembly (30) as shown in Fig. 701, view A-A.

(10) Drill six rivet holes and six bucking holes onto the outer tube (85) through the stop (25) and the inner tube assembly (30) as shown in Fig. 701, view C-C and D-D.

(11) Install the stop (25) into the outer tube (85) and the inner tube assembly (30) with rivet (20).

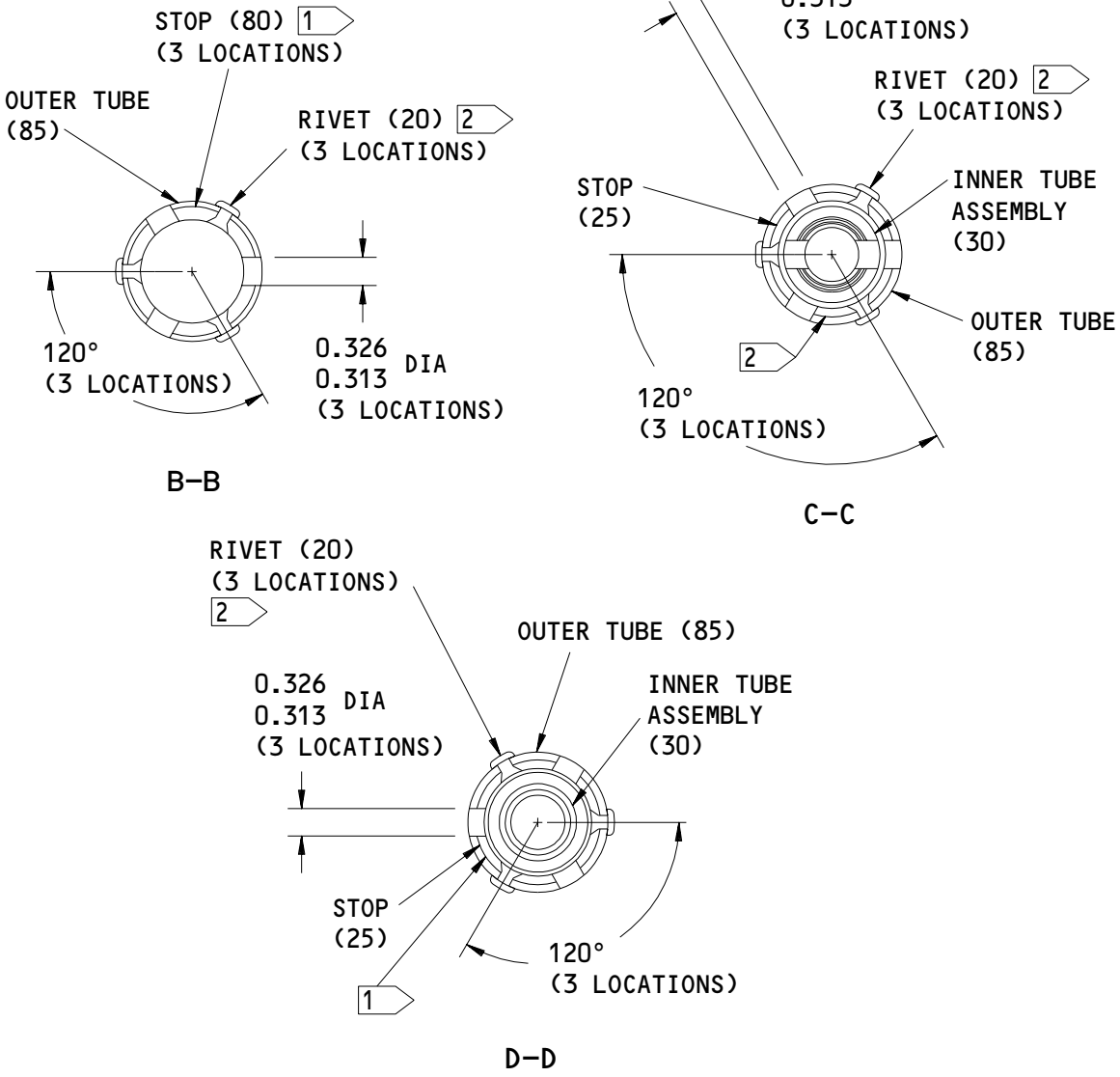
(12) Apply MIL-C-16173 corrosion preventive compound (F-19.05) to the threaded rod end (5).

(13) Install rod end (5), nut (10), and locking device (15) onto the outer tube (85) to dimension given in Fig. 701. Make sure that the rod end (5) covers one half of the inspection hole. Tighten nut (10) finger tight only.



251N3220-1
Rudder Control Inner Tube Assembly
Figure 701 (Sheet 1)

L05683



1 APPLY A LAYER OF BMS 10-11, TYPE 1 PRIMER (F-20.06) ON FAYING SURFACE ONLY

2 MANUALLY APPLY COLORED CHEMICAL COATING (F-17.10) AND LAYER OF BMS 10-11, TYPE 1 PRIMER (F-20.02)

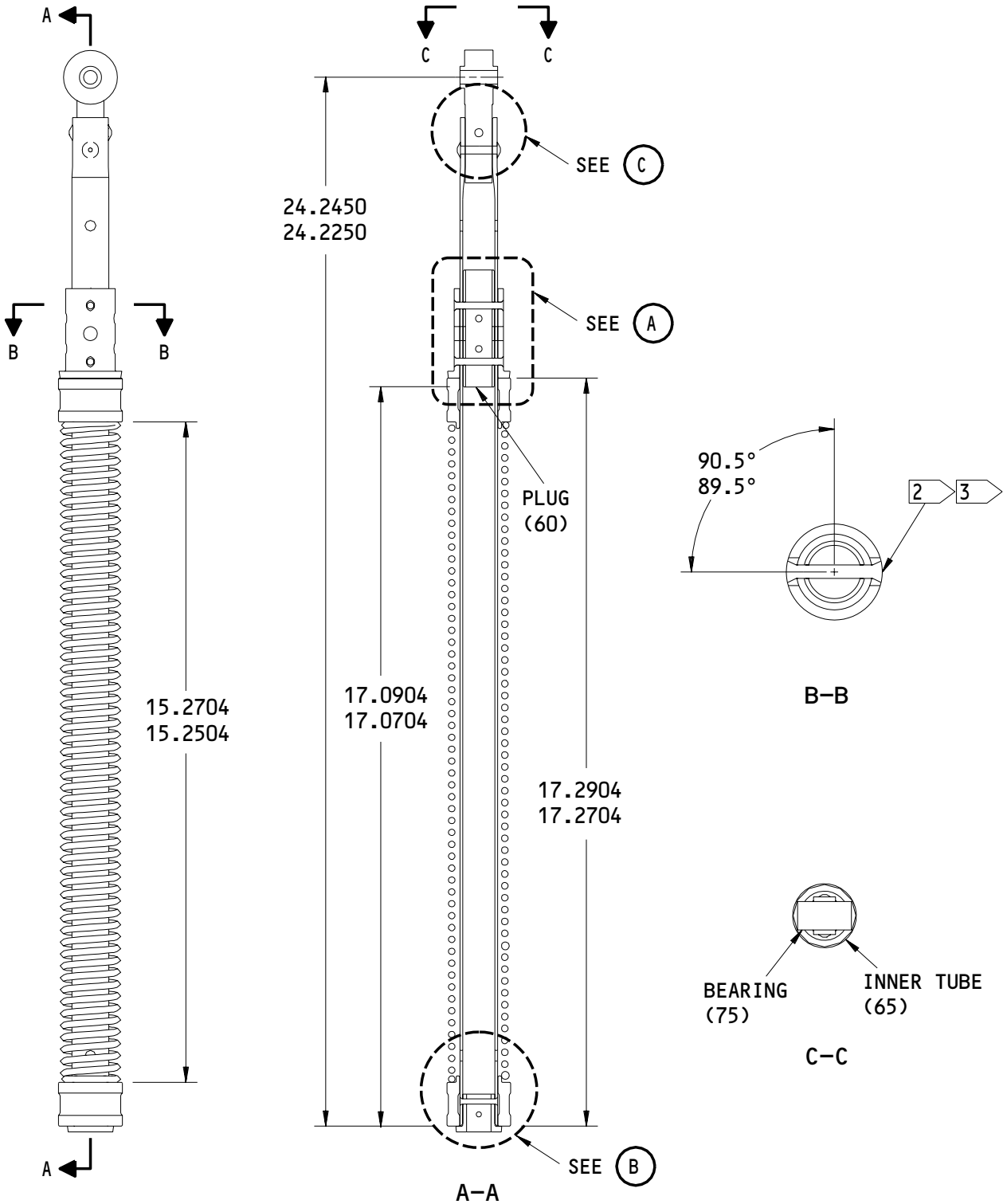
3 INSPECTION HOLE

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

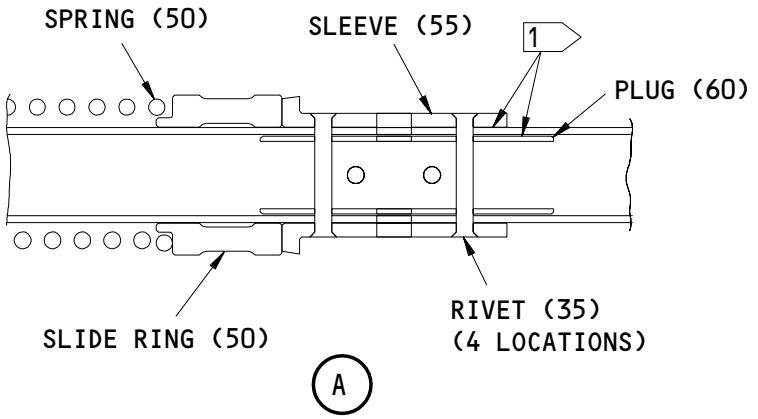
251N3220-1
Rudder Control Inner Tube Assembly
Figure 701 (Sheet 2)

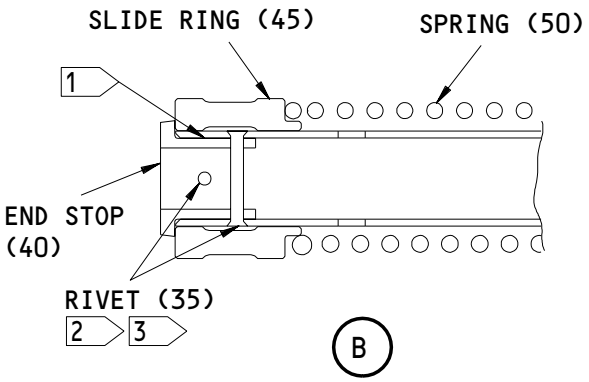
L05693

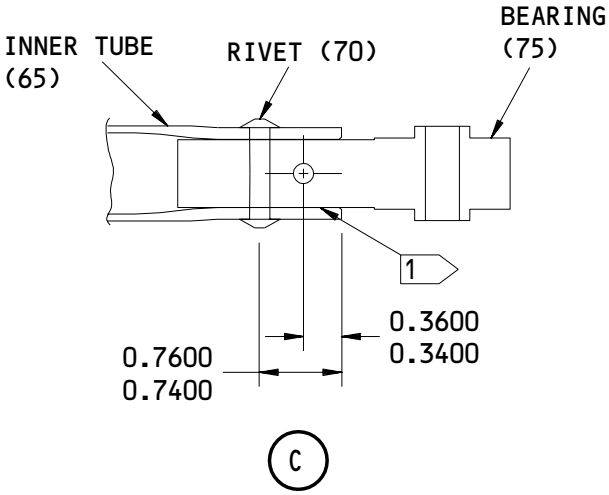


251N3223-1
Rudder Control Inner Tube Assembly
Figure 702 (Sheet 1)

L05636







1 > APPLY A LAYER IF BMS 10-11, TYPE 1 PRIMER (F-20.06) ON FAYING SURFACES

2 > RIVET MUST NOT PROTRUDE ABOVE THE INNER ROD. SHAVE RIVET HEAD AS NECESSARY

3 > APPLY TOUCH-UP BMS 10-11, TYPE 1, PRIMER (F-20.02) ON RIVET HEAD AND EXPOSED METALS

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

251N3223-1
Rudder Control Inner Tube Assembly
Figure 702 (Sheet 2)

L05649

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.

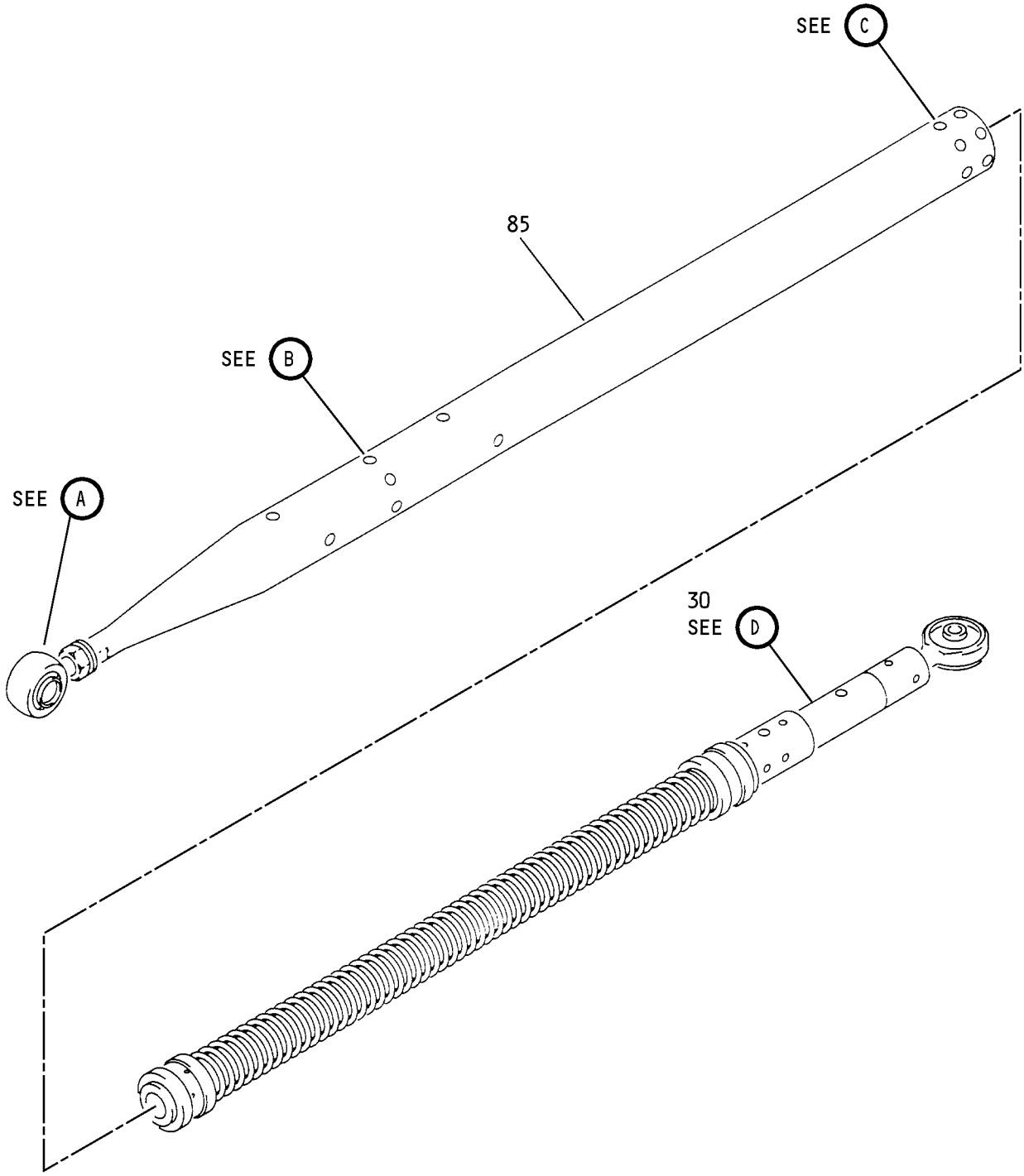
6. Parts Interchangeability

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.

VENDORS

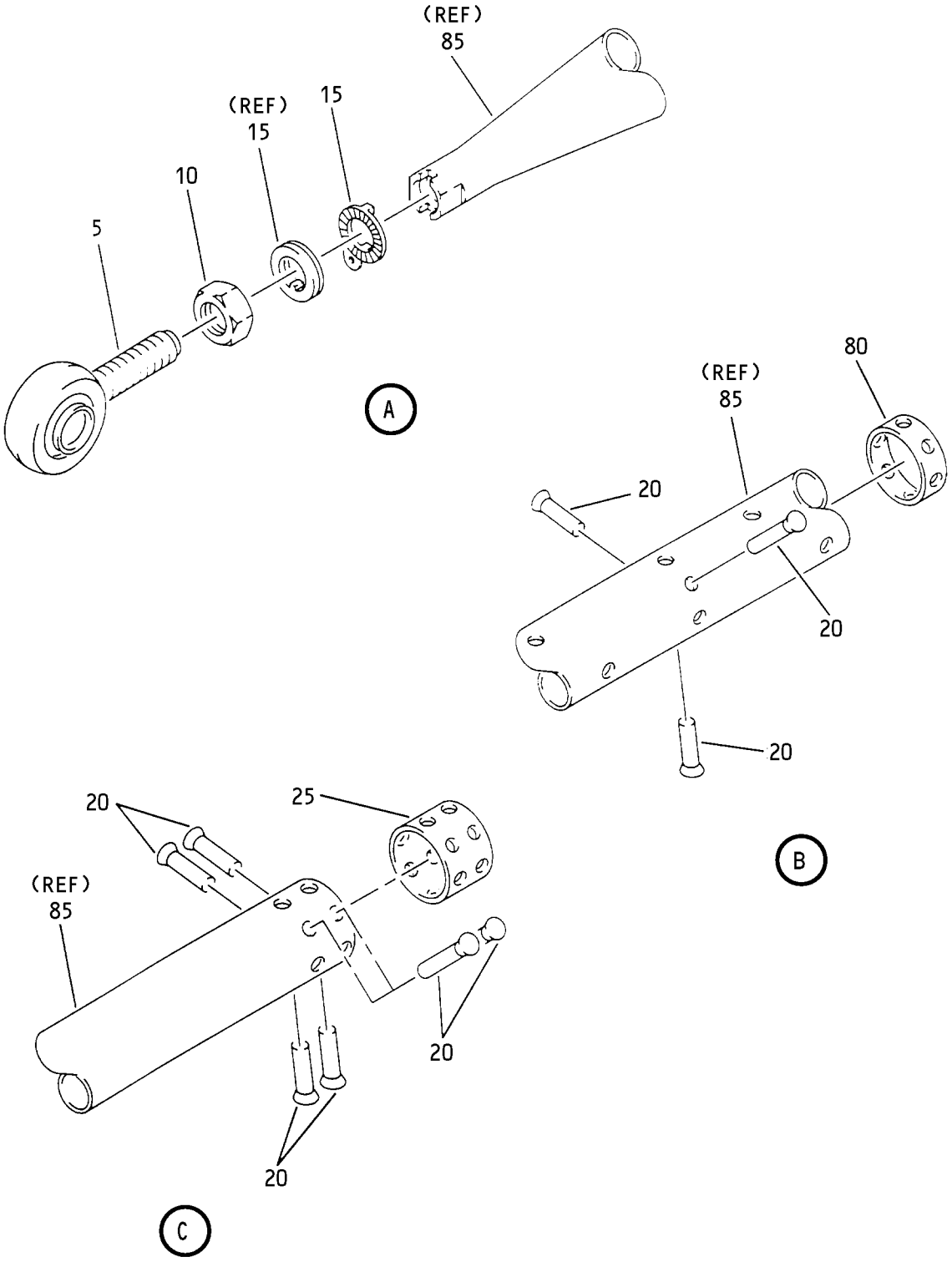
S0352	NIPPON MINIATURE BEARING CO LTD TOKYO, JAPAN
21335	TORRINGTON CO FAFNIR BEARING DIV 59 FIELD STREET TORRINGTON, CONNECTICUT 06790-4942
38443	MRC BEARINGS 402 CHANDLER STREET JAMESTOWN, NEW YORK 14701-3802
50294	NEW HAMPSHIRE BALL BEARINGS INC 9730 INDEPENDENCE AVENUE PO BOX 2515 CHATSWORTH, CALIFORNIA 91311-4323

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ABR5H101		1	75	1
		1	75	1
BACB10AD7K		1	5	1
BACB10AE11		1	75	1
BACB10DE6-07D		1	5A	1
BACR15BA5AD		1	20	9
		1	35	6
HHRE5H8-1		1	75	1
MS20615-6MP		1	70	2
NAS1193K7CP		1	15	1
NAS509-7		1	10	1
REP5H8FS436		1	75	1
251N1067-1		1	60	1
251N1069-1		1	80	1
251N1069-4		1	40	1
251N3220-1		1	1A	RF
251N3220-2		1	1B	RF
251N3221-1		1	85	1
251N3222-1		1	65	1
251N3223-1		1	30	1
253W1265-1		1	50	1
253W1266-1		1	25	1
253W1267-1		1	45	2
253W3105-1		1	55	1



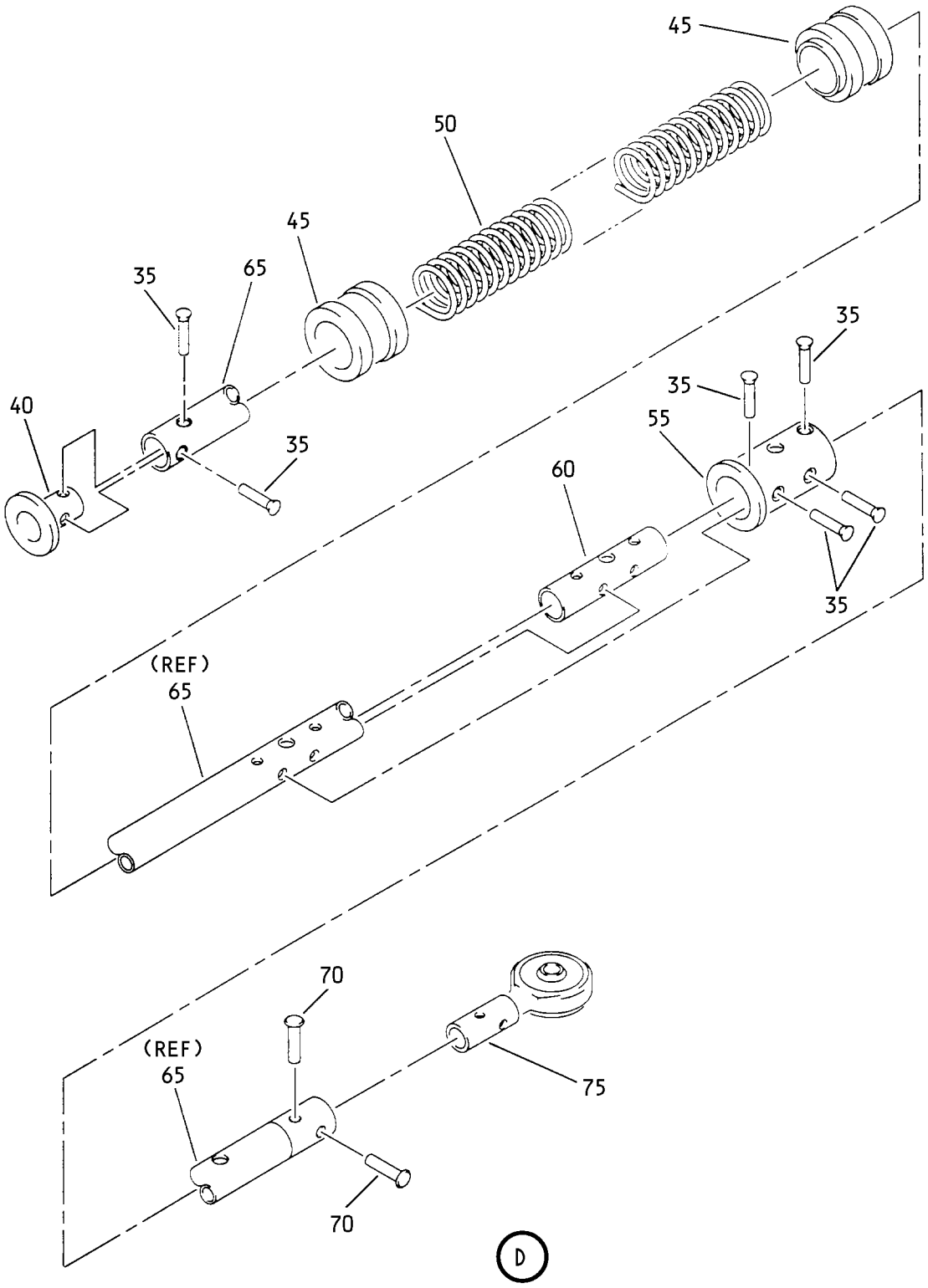
Rudder Control Force Limiter Assembly
Figure 1 (Sheet 1)

L05695



Rudder Control Force Limiter Assembly
Figure 1 (Sheet 2)

L05696



Rudder Control Force Limiter Assembly
Figure 1 (Sheet 3)

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1A	251N3220-1		LIMITER ASSY-FORCE, RUD CONT	A	RF
-1B	251N3220-2		LIMITER ASSY-FORCE, RUD CONT	B	RF
5	BACB10AD7K		.ROD END	A	1
-5A	BACB10DE6-07D		.ROD END	B	1
10	NAS509-7		.NUT		1
15	NAS1193K7CP		.LOCKING DEVICE		1
20	BACR15BA5AD		.RIVET- (SIZE DETERMINE ON INST)		9
25	253W1266-1		.STOP		1
30	251N3223-1		.TUBE ASSY-INNER		1
35	BACR15BA5AD		..RIVET- (SIZE DETERMINE ON INST)		6
40	251N1069-4		..STOP-END		1
45	253W1267-1		..RING-SLIDE		2
50	253W1265-1		..SPRING		1
55	253W3105-1		..SLEEVE		1
60	251N1067-1		..PLUG		1
65	251N3222-1		..TUBE-INNER		1
70	MS20615-6MP		..RIVET		2
75	REP5H8FS436		..BEARING- (V21335) (SPEC BACB10AE11) (OPT ABR5H101 (VS0352)) (OPT HHRE5H8-1 (V38443)) (OPT ABR5H101 (V50294))		1
80	251N1069-1		.STOP		1
85	251N3221-1		.TUBE-OUTER		1

- Item Not Illustrated