BOEING

COMPONENT
MAINTENANCE MANUAL

LEADING EDGE SLAT DRIVE DRIVESHAFT ASSEMBLY

PART NUMBERS 256T5710-101,-103,-105,-107,-109, -111,-113,-115,-117,-119, -121,-123,-125,-127,-129, -131,-133,-135,-137,-139, -201,-203,-205,-207,-209, -211,-213,-215,-217,-301, -401,-403,-501,-503

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

KD6837

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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2	BLANK	
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2	BLANK	
LIST OF EFFECTIVE PAGES		
1	JUL 01/99	01
THRU LAST PAGE		
CONTENTS		
1	JUL 01/99	01
2	BLANK	
INTRODUCTION		
1	JUL 01/99	01
2	BLANK	
DESCRIPTION & OPERATION		
1	JUL 01/99	01
2	BLANK	
CLEANING		
401	JUL 01/99	01
402	BLANK	
CHECK		
501	JUL 01/99	01
502	JUL 01/99	01
REPAIR-GENERAL		
601	JUL 01/99	01
602	JUL 01/99	01

PAGE	DATE	CODE
REPAIR 1-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	JUL 01/99	01
605	JUL 01/99	01
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REPAIR 1-2		
601	JUL 01/99	01
602	JUL 01/99	01
REPAIR 2-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
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602	JUL 01/99	01
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REPAIR 3-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	JUL 01/99	01
REPAIR 3-2		
601	JUL 01/99	01
602	JUL 01/99	01
REPAIR 4-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	JUL 01/99	01

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PAGE	DATE	CODE
REPAIR 4-2		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	BLANK	
REPAIR 5-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	JUL 01/99	01
REPAIR 5-2		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
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REPAIR 6-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	BLANK	
REPAIR 7-1		
601	JUL 01/99	01
602	JUL 01/99	01
REPAIR 8-1		
601	JUL 01/99	01
602	JUL 01/99	01
603	JUL 01/99	01
604	BLANK	
REPAIR 9-1		
601	JUL 01/99	01
602	JUL 01/99	01
REPAIR 10-1		
601	JUL 01/99	01
602	JUL 01/99	01

PAGE	DATE	CODE
ASSEMBLY		
701	JUL 01/99	01
702	BLANK	
FITS AND CLEARANCES		
801	JUL 01/99	01
802	BLANK	
ILLUSTRATED PARTS LIST		
1001	JUL 01/99	01
1002	JUL 01/99	01
1003	JUL 01/99	01
1004	JUL 01/99	01
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1016	JUL 01/99	01
1017	JUL 01/99	01
1018	JUL 01/99	01
1019	JUL 01/99	01
1020	BLANK	

* = REVISED, ADDED OR DELETED

TABLE OF CONTENTS

Paragraph Title	Page
Description and Operation	1
Testing and Fault Isolation	*[1]
Disassembly	*[2]
Cleaning	401
Check	501
Repair	601
Assembly	701
Fits and Clearances	801
Special Tools	*[1]
Illustrated Parts List	1001

*[1] Not Applicable.

*[2] Special instructions not required. Use standard industry practices.

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:

LEADING EDGE SLAT DRIVE DRIVESHAFT ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

   A. The leading edge slat drive driveshaft assemblies are made with aluminum tubes of different lengths. Steel fittings and/or couplings are attached to each end of the tube.

2. Operation

   A. The driveshaft assemblies transmit power from the power drive unit to the actuators to extend and retract the leading edge slats.

3. Leading Particulars (Approximate)

   A. Length -- 8 to 60 inches

   B. Diameter -- 2 inches

   C. Weight -- 1 to 2 pounds

CLEANING

1. General

   A. This procedure has the data necessary to clean the driveshaft assembly.

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

2. Cleaning

   A. References

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

   B. Procedure

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

CHECK

1. General

   A. This procedure has the data necessary 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 chapters identified in this procedure.

2. Check

   A. References

      (1) SOPM 20-20-01, Magnetic Particle Inspection

      (2) 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 or magnetic particle check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

      (2) Do a magnetic particle check (SOPM 20-20-01) of these parts:

         (a) IPL Fig. 1 -- Coupling (10), fitting (15)

         (b) IPL Fig. 2 -- Coupling (10), fitting (15, 20)

         (c) IPL Fig. 3 -- Coupling (10), fitting (15, 20)

         (d) IPL Fig. 4 -- Fitting (10)

         (e) IPL Fig. 5 -- Coupling (10), fitting (15), shaft (20)

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

         (a) IPL Fig. 1 -- Tube (20)

         (b) IPL Fig. 2 -- Tube (25)

         (c) IPL Fig. 3 -- Tube (25)

(d) IPL Fig. 4 -- Tube (15)

(e) IPL Fig. 5 -- Tube (25)

(4) Make sure that the driveshaft assembly is straight to 0.005 inch FIM for each foot of length.

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
256T5710-101 THRU -139	DRIVESHAFT	1-1, 1-2
256T5710-201 THRU -217	DRIVESHAFT	2-1, 2-2
256T5710-301	DRIVESHAFT	3-1, 3-2
256T5710-401,-403	DRIVESHAFT	4-1, 4-2
256T5710-501,-503	DRIVESHAFT	5-1, 5-2
256T2504	SHAFT	6-1
256T2801	COUPLING	7-1
256T2802	FITTING	8-1
256T2803	FITTING	9-1
256T2806	FITTING	10-1

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

KD6840

DRIVESHAFT ASSEMBLY - REPAIR 1-1

256T5710-101 THRU -139

1. General

A. This procedure has the data necessary to disassemble and assemble the driveshaft assembly, and to replace parts on the assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

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

2. Replacement of Parts

NOTE: If replacement of the tube (20) is necessary, we recommend that you replace the assembly. This is to make sure that the holes for the rivets (5) will be aligned after they are machined.

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

(2) A00436 Sealant -- BMS 5-26, Type II, Class A (SOPM 20-60-04) (optional)

B. References

(1) SOPM 20-10-02, Machining of Alloy Steel

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

C. Procedure

(1) Disassemble the driveshaft assembly.

(a) Remove the rivets (5), then remove the fitting (15) and the coupling (10) from the tube (20).

(2) Assemble the driveshaft assembly. Refer to Fig. 601.

(a) If new parts are used, install the fitting (15) in the tube (20) and machine the holes for the rivets (5) as shown. Remove the parts from the tube.

(b) Apply sealant to the faying surfaces of the tube (20) and fitting (15), then install the fitting and the coupling (10) in the tube.

(c) Install the rivets (5) with sealant. Make sure that the rivets are against the tube only at the tangent point with the tube OD, as shown in Fig. 601. Also make sure that the rivet shanks are not more than 0.010 inch above the rivet collar.

3. Oversize Rivet Repair

NOTE: If there is damage to the rivet holes, it is possible to repair the damage with oversize holes and rivets.

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-20-01, Magnetic Particle Inspection

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

B. Procedures (Fig. 601)

(1) Disassemble the driveshaft assembly. Refer to Para. 2.C.(1).

(2) Do a magnetic particle check of the holes in the fitting (15). Refer to SOPM 20-20-01.

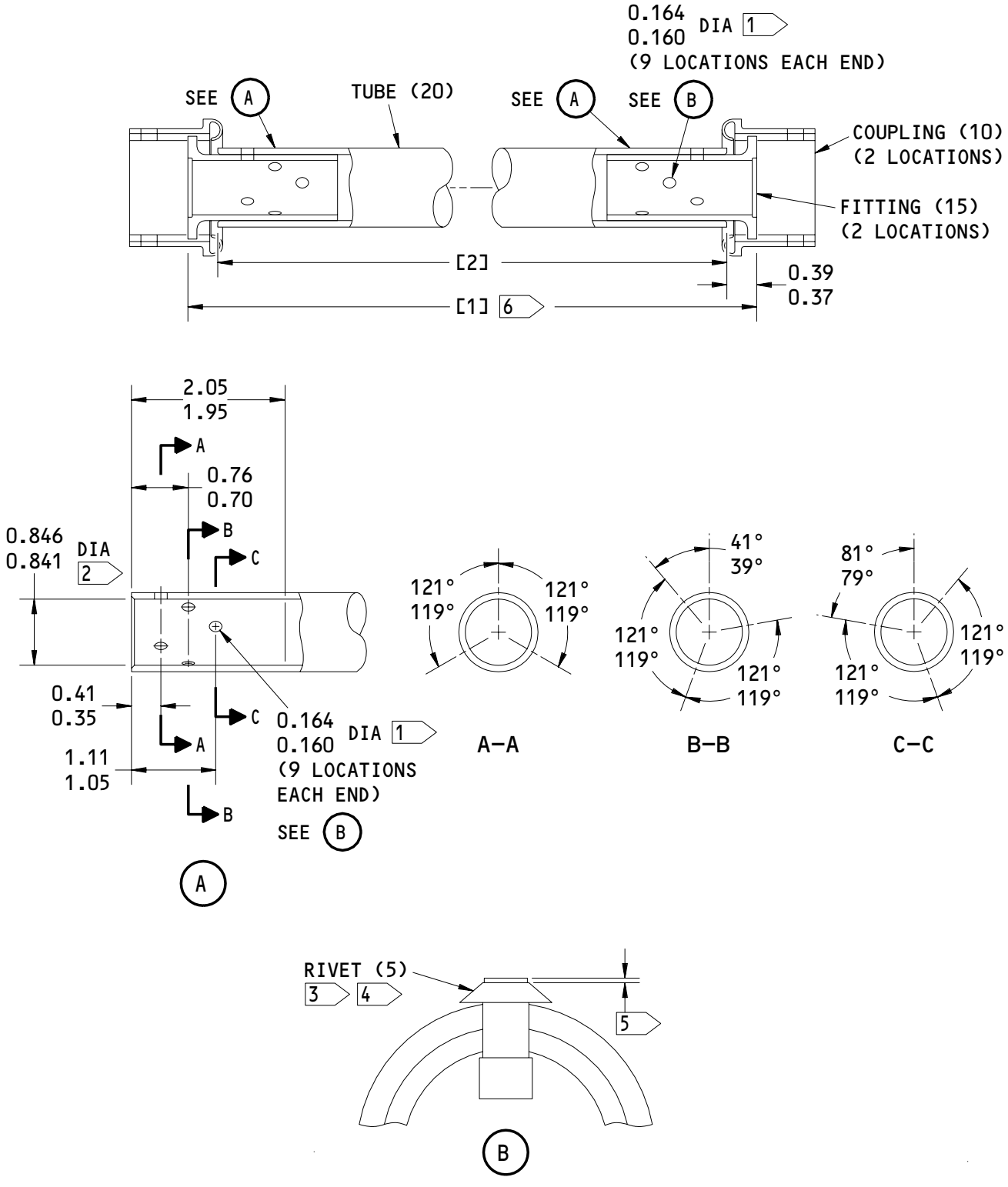
(3) Do a penetrant check of the holes in the tube (20). Refer to SOPM 20-20-02.

(4) Drill 0.192-0.196 inch diameter oversize holes to remove defects, as shown in Fig. 601.

(5) Do a magnetic particle check or penetrant check of the machined rivet holes, as applicable.

(6) Refinish the parts of the driveshaft assembly if necessary. Refer to Repair 1-2.

(7) Assemble the driveshaft assembly with NAS1398MW6-3 oversize rivets. Refer to Para. 2.C.(2). Make sure the coupling (10) can move freely over the shanks of the oversize rivets.



256T5710-101 thru -139
Driveshaft Assembly - Fitting Replacement
Figure 601 (Sheet 1)

K10203

ASSEMBLY PART NUMBER	TUBE PART NUMBER	ASSEMBLY LENGTH [1]	TUBE LENGTH [2] (REF)
256T5710-101	256T5710-102	46.74-46.80	45.98-46.04
256T5710-103	256T5710-104	44.39-44.45	43.63-43.69
256T5710-105	256T5710-106	53.87-53.93	53.11-53.17
256T5710-107	256T5710-108	41.39-41.45	40.63-40.69
256T5710-109	256T5710-110	56.77-56.83	56.01-56.07
256T5710-111	256T5710-112	54.37-54.43	53.61-53.67
256T5710-113	256T5710-114	35.15-35.21	34.39-34.45
256T5710-115	256T5710-116	40.56-40.62	39.80-39.86
256T5710-117	256T5710-118	19.68-19.74	18.92-18.98
256T5710-119	256T5710-120	36.76-36.82	36.00-36.06
256T5710-121	256T5710-122	9.68-9.74	8.92-8.98
256T5710-123	256T5710-124	15.53-15.59	14.77-14.83
256T5710-125	256T5710-126	30.37-30.43	29.61-29.67
256T5710-127	256T5710-128	31.83-31.89	31.07-31.13
256T5710-129	256T5710-130	31.47-31.53	30.71-30.77
256T5710-131	256T5710-132	7.00-7.06	6.24-6.30
256T5710-133	256T5710-134	8.15-8.21	7.39-7.45
256T5710-135	256T5710-136	25.21-25.27	25.45-25.51
256T5710-137	256T5710-138	10.20-10.26	9.44-9.50
256T5710-139	256T5710-140	14.98-15.04	14.22-14.28

1 IF NECESSARY, DRILL 0.192-0.196 DIA HOLES FOR OVERSIZE RIVETS

2 APPLY SEALANT TO THIS SURFACE DURING ASSEMBLY

3 INSTALL RIVETS (5) WITH SEALANT

4 THE RIVET HEAD MUST BE AGAINST THE TUBE OUTSIDE DIA TANGENT POINT ONLY

5 THE RIVET SHANK MUST NOT BE MORE THAN 0.010 ABOVE THE COLLAR

6 THE DRIVESHAFT MUST BE STRAIGHT TO 0.005 FIM FOR EACH FOOT OF LENGTH

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

256T5710-101 thru -139
Driveshaft Assembly - Fitting Replacement
Figure 601 (Sheet 2)

DRIVESHAFT ASSEMBLY - REPAIR 1-2

256T5710-101 THRU -139

1. General

A. This procedure has the data necessary to refinish the parts of the driveshaft assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

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

2. Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

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

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

(4) SOPM 20-43-03, Chemical Conversion Coatings for Aluminum

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

C. Procedures

(1) Coupling (10) -- Refer to REPAIR 7-1.

(2) Fitting (15) -- Refer to REPAIR 10-1.

(3) Tube (20) -- Chemical treat and apply BMS 10-11, type 1 primer (F-18.07), but do not apply primer on the part of the ID that is machined to 0.841-0.846 inch diameter. Material: Aluminum alloy.

DRIVESHAFT ASSEMBLY - REPAIR 2-1

256T5710-201 THRU -217

1. General

A. This procedure has the data necessary to disassemble and assemble the driveshaft assembly, and to replace parts on the assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 2 for the item numbers.

2. Replacement of Parts

NOTE: If replacement of the tube (25) is necessary, we recommend that you replace the assembly. This is to make sure that the holes for the rivets (5) will be aligned after they are machined.

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

(2) A00436 Sealant -- BMS 5-26, Type II, Class A (SOPM 20-60-04) (optional)

B. References

(1) SOPM 20-10-02, Machining of Alloy Steel

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

C. Procedure

(1) Disassemble the driveshaft assembly.

(a) Remove the rivets (5), then remove the fitting (15, 20) and the coupling (10) from the tube (25).

(2) Assemble the driveshaft assembly. Refer to Fig. 601.

(a) If new parts are used, install the fitting (15, 20) in the tube (25) and machine the holes for the rivets (5) as shown. Remove the parts from the tube.

(b) Apply sealant to the faying surfaces of the tube (25) and fitting (15, 20), then install the fitting and the coupling (10) in the tube.

(c) Install the rivets (5) with sealant. Make sure that the rivets are against the tube only at the tangent point with the tube OD, as shown in Fig. 601. Also make sure that the rivet shanks are not more than 0.010 inch above the rivet collar.

3. Oversize Rivet Repair

NOTE: If there is damage to the rivet holes, it is possible to repair the damage with oversize holes and rivets.

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-20-01, Magnetic Particle Inspection

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

B. Procedures (Fig. 601)

(1) Disassemble the driveshaft assembly. Refer to Para. 2.C.(1).

(2) Do a magnetic particle check of the holes in the fitting (15, 20). Refer to SOPM 20-20-01.

(3) Do a penetrant check of the holes in the tube (25). Refer to SOPM 20-20-02.

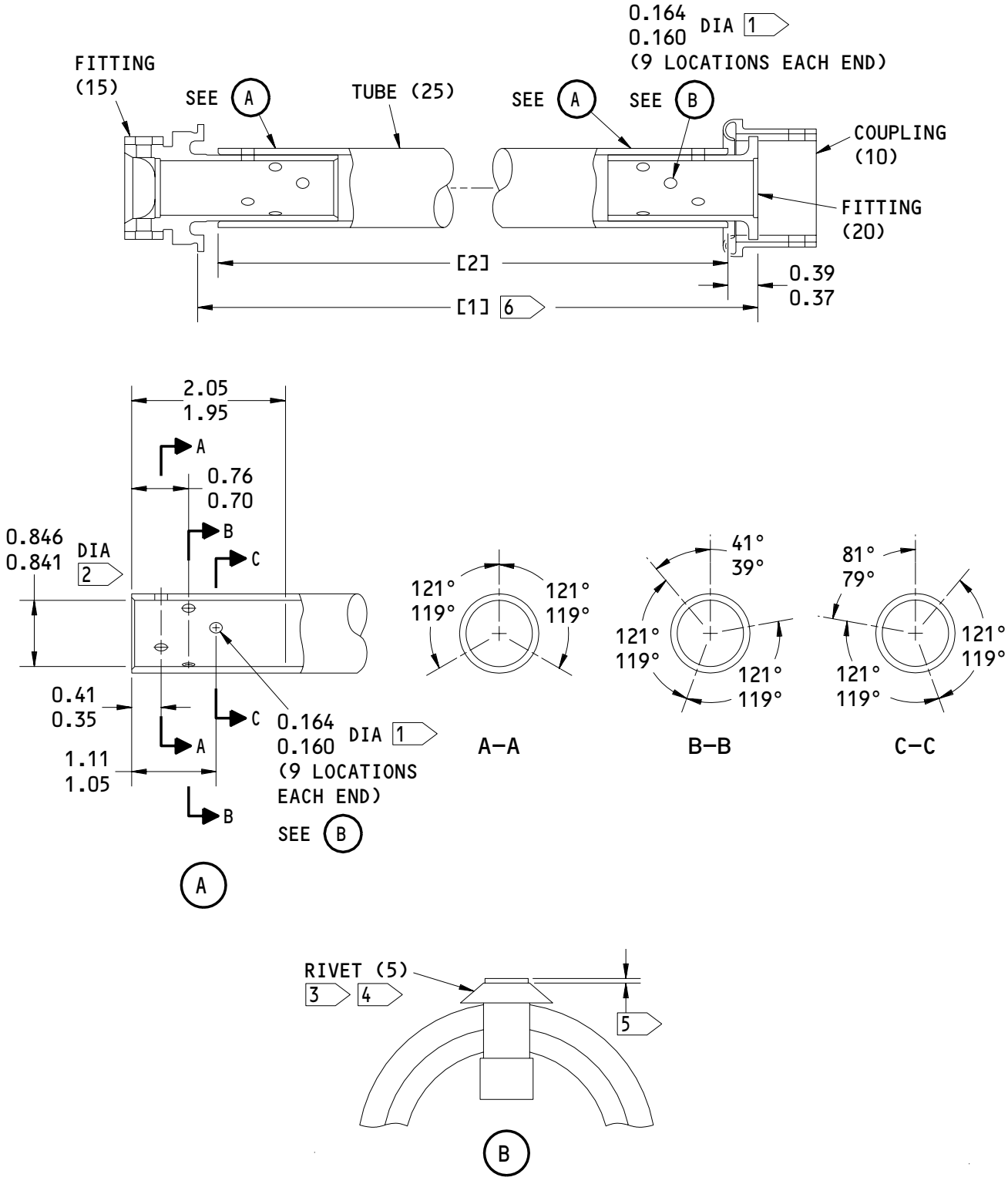
(4) Drill 0.192-0.196 inch diameter oversize holes to remove defects, as shown in Fig. 601.

(5) Do a magnetic particle check or penetrant check of the machined rivet holes, as applicable.

(6) Refinish the parts of the driveshaft assembly if necessary. Refer to Repair 2-2.

(7) Assemble the driveshaft assembly with NAS1398MW6-3 oversize rivets. Refer to Para. 2.C.(2). Make sure the coupling (10) can move freely over the shanks of the oversize rivets.

(8) Touch up the finish on the driveshaft assembly. Refer to Repair 2-2.



256T5710-201 thru -217
Driveshaft Assembly - Fitting Replacement
Figure 601 (Sheet 1)

K10311

ASSEMBLY PART NUMBER	TUBE PART NUMBER	ASSEMBLY LENGTH [1]	TUBE LENGTH [2] (REF)
256T5710-201	256T5710-202	47.88 47.82	47.24 47.18
256T5710-203	256T5710-204	45.53 45.47	44.89 44.83
256T5710-205	256T5710-206	42.23 42.17	41.59 41.53
256T5710-207	256T5710-208	43.03 42.97	42.39 42.33
256T5710-209	256T5710-210	36.39 36.33	35.75 35.69
256T5710-211	256T5710-212	58.62 58.56	57.98 57.92
256T5710-213	256T5710-214	55.09 55.03	54.45 54.39
256T5710-215	256T5710-216	42.72 42.66	42.08 42.02
256T5710-217	256T5710-218	40.91 40.85	40.27 40.21

1 IF NECESSARY, DRILL 0.192-0.196 DIA HOLES FOR OVERSIZE RIVETS

2 APPLY SEALANT TO THIS SURFACE DURING ASSEMBLY

3 INSTALL RIVETS (5) WITH SEALANT

4 THE RIVET HEAD MUST BE AGAINST THE TUBE OUTSIDE DIA TANGENT POINT ONLY

5 THE RIVET SHANK MUST NOT BE MORE THAN 0.010 ABOVE THE COLLAR ON THE END WITH THE COUPLING (10)

6 THE DRIVESHAFT MUST BE STRAIGHT TO 0.005 FIM FOR EACH FOOT OF LENGTH

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

256T5710-201 thru -217
Driveshaft Assembly - Fitting Replacement
Figure 601 (Sheet 2)

DRIVESHAFT ASSEMBLY - REPAIR 2-2

256T5710-201 THRU -217

1. General

A. This procedure has the data necessary to refinish the driveshaft assembly and its parts.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 2 for the item numbers.

2. Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

(2) C00260 Enamel -- BMS 10-11, type 2 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

(4) SOPM 20-43-03, Chemical Conversion Coatings for Aluminum

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

C. Procedures

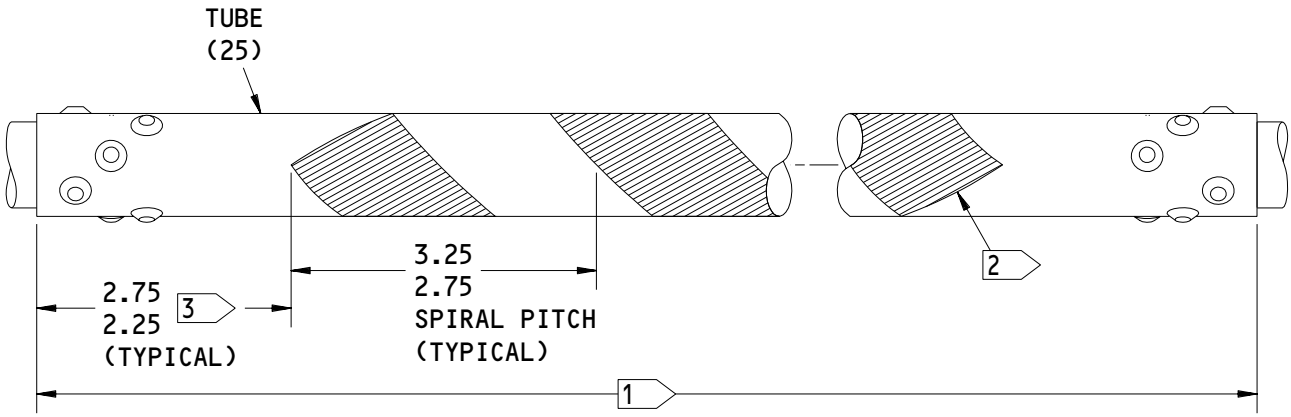
(1) Coupling (10) -- Refer to REPAIR 7-1.

(2) Fitting (15) -- Refer to REPAIR 8-1.

(3) Fitting (20) -- Refer to REPAIR 10-1.

(4) Tube (25) -- Chemical treat and apply BMS 10-11, type 1 primer (F-18.07), but do not apply primer on the part of the ID that is machined to 0.841-0.846 inch diameter. Material: Aluminum alloy.

(5) Driveshaft assembly (256T5710-215, -217 only) -- Apply BMS 10-11, type 2 enamel (SRF-14.905-2226), color safety orange, on the tube and the rivets. Do not apply enamel on the coupling or end fittings. Apply BMS 10-11, type 2 enamel, color BAC701 or BAC706 black, in a continuous spiral stripe, as shown in Fig. 601.



256T5710-215,-217 ONLY

1 APPLY ORANGE ENAMEL ON THIS AREA

2 APPLY BLACK ENAMEL STRIPE
0.94-1.06 INCH WIDE

3 DISTANCE TO END OF SPIRAL PATTERN.
ANGULAR CLOCKING NOT REQUIRED

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

256T5710-201 thru -217
Driveshaft Assembly - Refinish Details
Figure 601

K10753

DRIVESHAFT ASSEMBLY - REPAIR 3-1

256T5710-301

1. General

A. This procedure has the data necessary to disassemble and assemble the driveshaft assembly, and to replace parts on the assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-09/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 3 for the item numbers.

2. Replacement of Parts

NOTE: If replacement of the tube (25) is necessary, we recommend that you replace the assembly. This is to make sure that the holes for the rivets (5) will be aligned after they are machined.

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

(2) A00436 Sealant -- BMS 5-26, Type II, Class A (SOPM 20-60-04) (optional)

B. References

(1) SOPM 20-10-02, Machining of Alloy Steel

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

C. Procedure

(1) Disassemble the driveshaft assembly.

(a) Remove the rivets (5), then remove the fitting (15, 20) and the coupling (10) from the tube (25).

(2) Assemble the driveshaft assembly. Refer to Fig. 601.

(a) If new parts are used, install the fitting (15, 20) in the tube (25) and machine the holes for the rivets (5) as shown. Remove the parts from the tube.

(b) Apply sealant to the faying surfaces of the tube (25) and fitting (15, 20), then install the fitting and the coupling (10) in the tube.

(c) Install the rivets (5) with sealant. Make sure that the rivets are against the tube only at the tangent point with the tube OD, as shown in Fig. 601. Also make sure that the rivet shanks are not more than 0.010 inch above the rivet collar.

3. Oversize Rivet Repair

NOTE: If there is damage to the rivet holes, it is possible to repair the damage with oversize holes and rivets.

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-20-01, Magnetic Particle Inspection

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

B. Procedures (Fig. 601)

(1) Disassemble the driveshaft assembly. Refer to Para. 2.C.(1).

(2) Do a magnetic particle check of the holes in the fitting (15, 20). Refer to SOPM 20-20-01.

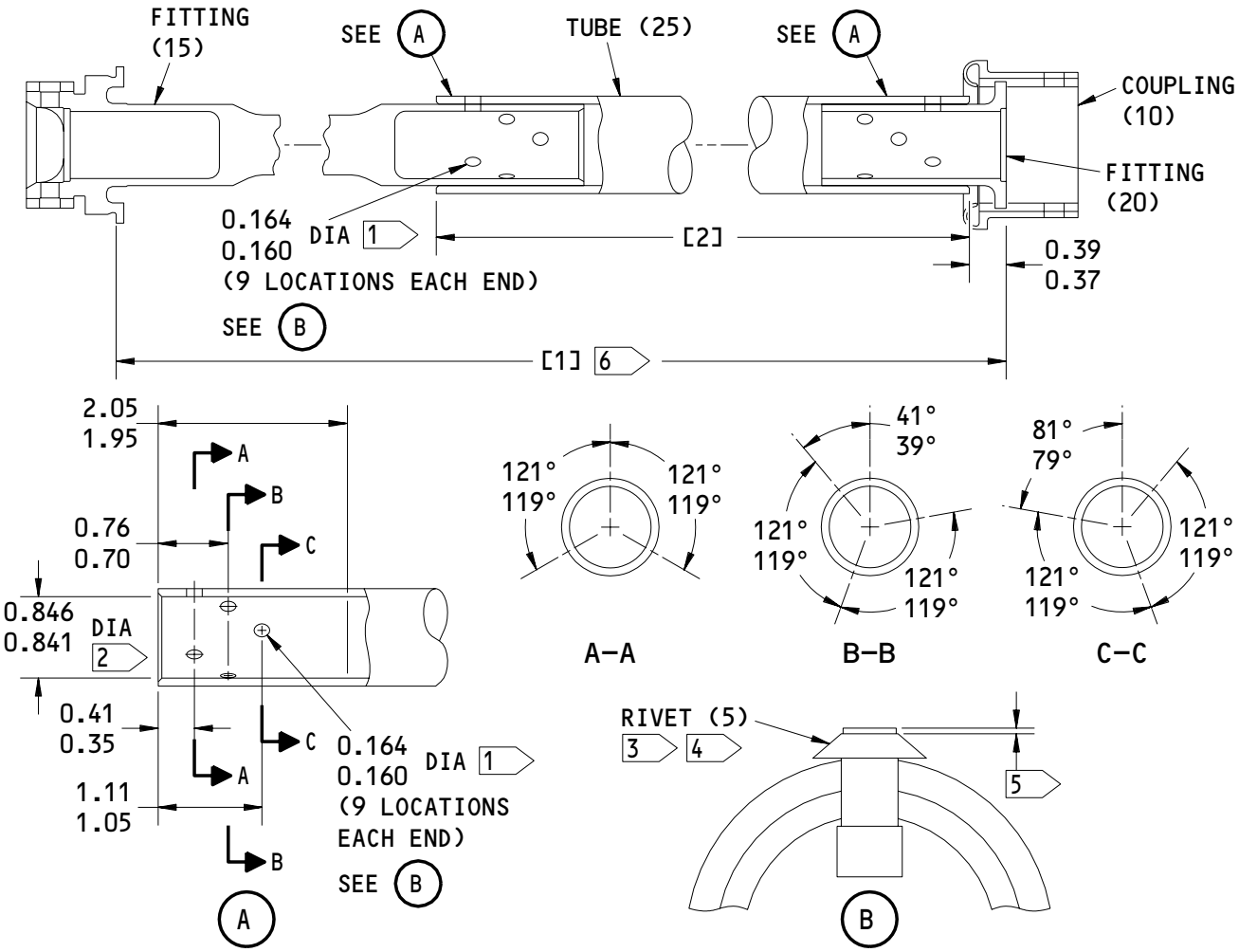
(3) Do a penetrant check of the holes in the tube (25). Refer to SOPM 20-20-02.

(4) Drill 0.192-0.196 inch diameter oversize holes to remove defects, as shown in Fig. 601.

(5) Do a magnetic particle check or penetrant check of the machined rivet holes, as applicable.

(6) Refinish the parts of the driveshaft assembly if necessary. Refer to Repair 3-2.

(7) Assemble the driveshaft assembly with NAS1398MW6-3 oversize rivets. Refer to Para. 2.C.(2). Make sure the coupling (10) can move freely over the shanks of the oversize rivets.



1 IF NECESSARY, DRILL 0.192–0.196 DIA HOLES FOR OVERSIZE RIVETS

2 APPLY SEALANT TO THIS SURFACE DURING ASSEMBLY

3 INSTALL RIVETS (5) WITH SEALANT

4 THE RIVET HEAD MUST BE AGAINST THE TUBE OUTSIDE DIA TANGENT POINT ONLY

5 THE RIVET SHANK MUST NOT BE MORE THAN 0.010 ABOVE THE COLLAR ON THE END WITH THE COUPLING (10)

6 THE DRIVESHAFT MUST BE STRAIGHT TO 0.005 FIM FOR EACH FOOT OF LENGTH

ASSEMBLY PART NUMBER	TUBE PART NUMBER	ASSEMBLY LENGTH [1]	TUBE LENGTH [2] (REF)
256T5710-301	256T5710-302	44.03 43.97	37.11 37.05

ITEM NUMBERS REFER TO IPL FIG. 3

ALL DIMENSIONS ARE IN INCHES

256T5710-301
Driveshaft Assembly – Fitting Replacement
Figure 601

K10132

DRIVESHAFT ASSEMBLY - REPAIR 3-2

256T5710-301

1. General

   A. This procedure has the data necessary to refinish the parts of the driveshaft assembly.

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

   C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 3 for the item numbers.

2. Refinish

   A. Consumable Materials

      NOTE: Equivalent material can be used.

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

   B. References

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

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

      (3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

      (4) SOPM 20-43-03, Chemical Conversion Coatings for Aluminum

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

   C. Procedures

      (1) Coupling (10) -- Refer to REPAIR 7-1.

      (2) Fitting (15) -- Refer to REPAIR 9-1.

      (3) Fitting (20) -- Refer to REPAIR 10-1.

(4) Tube (25) -- Chemical treat and apply BMS 10-11, type 1 primer (F-18.07), but do not apply primer on the part of the ID that is machined to 0.841-0.846 inch diameter. Material: Aluminum alloy.

DRIVESHAFT ASSEMBLY - REPAIR 4-1

256T5710-401, -403

1. General

   A. This procedure has the data necessary to disassemble and assemble the driveshaft assembly, and to replace parts on the assembly.

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

   C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

   D. Refer to IPL Fig. 4 for the item numbers.

2. Replacement of Parts

   NOTE: If replacement of the tube (15) is necessary, we recommend that you replace the assembly. This is to make sure that the holes for the rivets (5) will be aligned after they are machined.

   A. Consumable Materials

      NOTE: Equivalent material can be used.

      (1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

      (2) A00436 Sealant -- BMS 5-26, Type II, Class A (SOPM 20-60-04) (optional)

   B. References

      (1) SOPM 20-10-02, Machining of Alloy Steel

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

   C. Procedure

      (1) Disassemble the driveshaft assembly.

         (a) Remove the rivets (5), then remove the fitting (10) from the tube (15).

(2) Assemble the driveshaft assembly. Refer to Fig. 601.

(a) If new parts are used, install the fitting (10) in the tube (25) and machine the holes for the rivets (5) as shown. Remove the parts from the tube.

(b) Apply sealant to the faying surfaces of the tube (15) and fitting (10), then install the fitting in the tube.

(c) Install the rivets (5) with sealant. Make sure that the rivets are against the tube only at the tangent point with the tube OD, as shown in Fig. 601. Also make sure that the rivet shanks are not more than 0.010 inch above the rivet collar.

3. Oversize Rivet Repair

NOTE: If there is damage to the rivet holes, it is possible to repair the damage with oversize holes and rivets.

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-20-01, Magnetic Particle Inspection

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

B. Procedures (Fig. 601)

(1) Disassemble the driveshaft assembly. Refer to Para. 2.C.(1).

(2) Do a magnetic particle check of the holes in the fitting (10). Refer to SOPM 20-20-01.

(3) Do a penetrant check of the holes in the tube (15). Refer to SOPM 20-20-02.

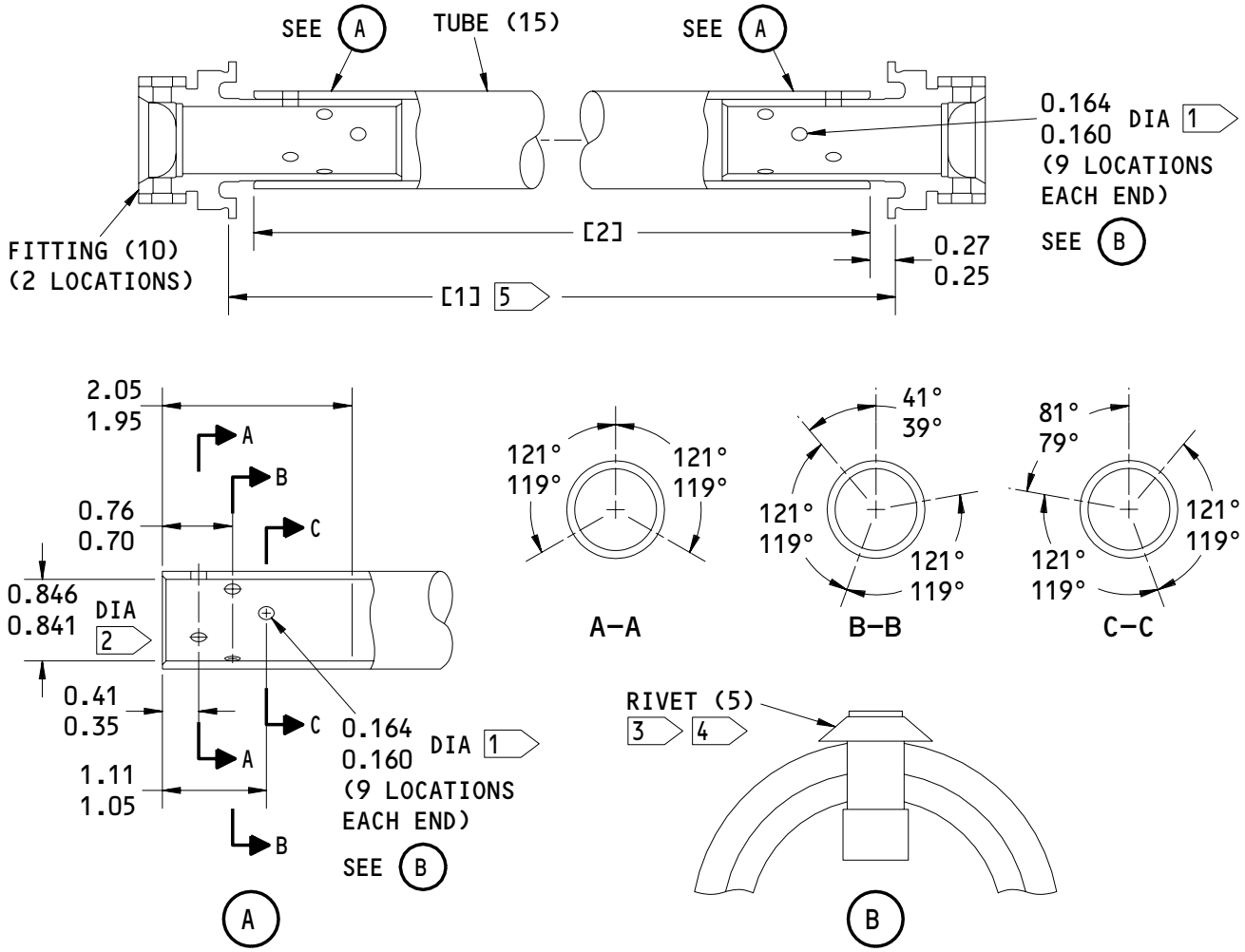
(4) Drill 0.192-0.196 inch diameter oversize holes to remove defects, as shown in Fig. 601.

(5) Do a magnetic particle check or penetrant check of the machined rivet holes, as applicable.

(6) Refinish the parts of the driveshaft assembly if necessary. Refer to Repair 4-2.

(7) Assemble the driveshaft assembly with NAS1398MW6-3 oversize rivets. Refer to Para. 2.C.(2).

(8) Touch up the finish on the driveshaft assembly. Refer to Repair 4-2.



1 IF NECESSARY, DRILL 0.192–0.196 DIA HOLES FOR OVERSIZE RIVETS

2 APPLY SEALANT TO THIS SURFACE DURING ASSEMBLY

3 INSTALL RIVETS (5) WITH SEALANT

4 THE RIVET HEAD MUST BE AGAINST THE TUBE OUTSIDE DIA TANGENT POINT ONLY

5 THE DRIVESHAFT MUST BE STRAIGHT TO 0.005 FIM FOR EACH FOOT OF LENGTH

ASSEMBLY PART NUMBER	TUBE PART NUMBER	ASSEMBLY LENGTH [1]	TUBE LENGTH [2] (REF)
256T5710-401	256T5710-402	43.76 43.70	43.24 43.18
256T5710-403	256T5710-404	45.16 45.10	44.64 44.58

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

256T5710-401,-403
Driveshaft Assembly – Fitting Replacement
Figure 601

K10494

DRIVESHAFT ASSEMBLY - REPAIR 4-2

256T5710-401, -403

1. General

A. This procedure has the data necessary to refinish the parts of the driveshaft assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 4 for the item numbers.

2. Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

(2) C00260 Enamel -- BMS 10-11, type 2 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

(4) SOPM 20-43-03, Chemical Conversion Coatings for Aluminum

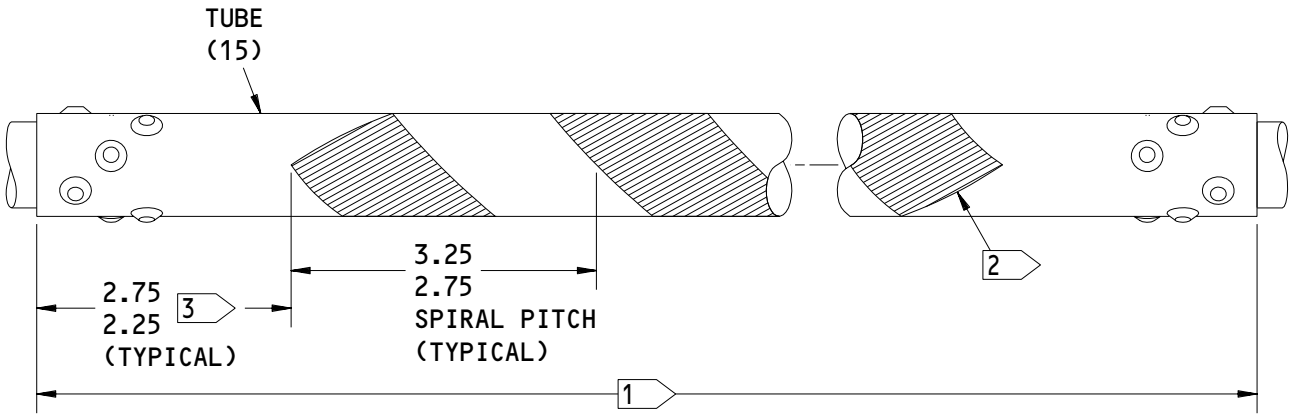
(5) SOPM 20-60-02, Finishing Materials

C. Procedures

(1) Fitting (10) -- Refer to REPAIR 8-1.

(2) Tube (15) -- Chemical treat and apply BMS 10-11, type 1 primer (F-18.07), but do not apply primer on the part of the ID that is machined to 0.841-0.846 inch diameter. Material: Aluminum alloy.

(3) Driveshaft assembly (256T5710-403 only) -- Apply BMS 10-11, type 2 enamel (SRF-14.905-2226), color safety orange, on the tube and the rivets. Do not apply enamel on the end fittings. Apply BMS 10-11, type 2 enamel, color BAC701 or BAC706 black, in a continuous spiral stripe, as shown in Fig. 601.



256T5710-403 ONLY

1 APPLY ORANGE ENAMEL ON THIS AREA

2 APPLY BLACK ENAMEL STRIPE
0.94-1.06 INCH WIDE

3 DISTANCE TO END OF SPIRAL PATTERN.
ANGULAR CLOCKING NOT REQUIRED

ITEM NUMBERS REFER TO IPL FIG. 4

ALL DIMENSIONS ARE IN INCHES

256T5710-401,-403
Driveshaft Assembly - Refinish Details
Figure 601

DRIVESHAFT ASSEMBLY - REPAIR 5-1

256T5710-501, -503

1. General

A. This procedure has the data necessary to disassemble and assemble the driveshaft assembly, and to replace parts on the assembly.

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 5 for the item numbers.

2. Replacement of Parts

NOTE: If replacement of the shaft (20) or tube (25) is necessary, we recommend that you replace the assembly. This is to make sure that the holes for the rivets (5) will be aligned after they are machined.

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

(2) A00436 Sealant -- BMS 5-26, Type II, Class A (SOPM 20-60-04) (optional)

B. References

(1) SOPM 20-10-02, Machining of Alloy Steel

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

C. Procedure

(1) Disassemble the driveshaft assembly.

(a) Remove the rivets (5), then remove the shaft (20), fitting (15), and coupling (10) from the tube (25).

(2) Assemble the driveshaft assembly. Refer to Fig. 601.

(a) If a new fitting (15) is used, install the fitting in the tube (25) and machine the holes for the rivets (5) as shown. Remove the parts from the tube.

(b) Apply sealant to the faying surfaces of the tube (25), fitting (15), and shaft (20), then install the fitting, coupling (10), and shaft in the tube.

(c) Install the rivets (5) with sealant. Make sure that the rivets are against the tube only at the tangent point with the tube OD, as shown in Fig. 601. Also make sure that the rivet shanks are not more than 0.010 inch above the rivet collar.

3. Oversize Rivet Repair

NOTE: If there is damage to the rivet holes, it is possible to repair the damage with oversize holes and rivets.

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-20-01, Magnetic Particle Inspection

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

B. Procedures (Fig. 601)

(1) Disassemble the driveshaft assembly. Refer to Para. 2.C.(1).

(2) Do a magnetic particle check of the holes in the fitting (15) or shaft (20). Refer to SOPM 20-20-01.

(3) Do a penetrant check of the holes in the tube (25). Refer to SOPM 20-20-02.

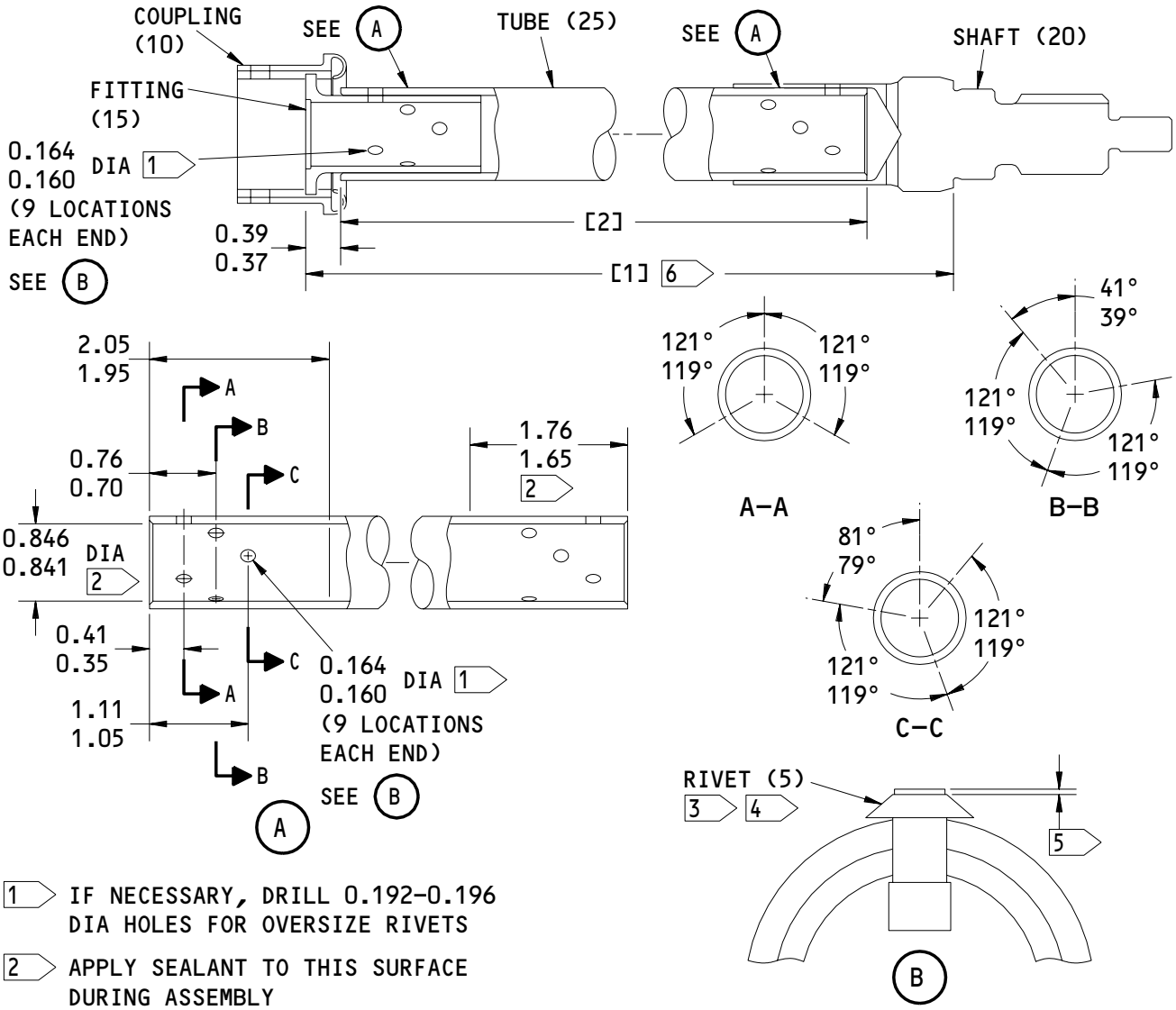
(4) Drill 0.192-0.196 inch diameter oversize holes to remove defects, as shown in Fig. 601.

(5) Do a magnetic particle check or penetrant check of the machined rivet holes, as applicable.

(6) Refinish the parts of the driveshaft assembly if necessary. Refer to Repair 5-2.

(7) Assemble the driveshaft assembly with NAS1398MW6-3 oversize rivets. Refer to Para. 2.C.(2). Make sure the coupling (10) can move freely over the shanks of the oversize rivets.

(8) Touch up the finish on the driveshaft assembly. Refer to Repair 5-2.



1 IF NECESSARY, DRILL 0.192–0.196 DIA HOLES FOR OVERSIZE RIVETS

2 APPLY SEALANT TO THIS SURFACE DURING ASSEMBLY

3 INSTALL RIVETS (5) WITH SEALANT

4 THE RIVET HEAD MUST BE AGAINST THE TUBE OUTSIDE DIA TANGENT POINT ONLY

5 THE RIVET SHANK MUST NOT BE MORE THAN 0.010 ABOVE THE COLLAR ON THE END WITH THE COUPLING (10)

6 THE DRIVESHAFT MUST BE STRAIGHT TO 0.005 FIM FOR EACH FOOT OF LENGTH

ASSEMBLY PART NUMBER	TUBE PART NUMBER	ASSEMBLY LENGTH [1]	TUBE LENGTH [2] (REF)
256T5710-501	256T5710-502	38.71 38.65	37.39 37.33
256T5710-503	256T5710-504	48.78 48.72	47.46 47.40

ITEM NUMBERS REFER TO IPL FIG. 5

ALL DIMENSIONS ARE IN INCHES

256T5710-501,-503
Driveshaft Assembly - Fitting Replacement
Figure 601

K10437

DRIVESHAFT ASSEMBLY - REPAIR 5-2

256T5710-501, -503

1. General

A. This procedure has the data necessary to refinish the driveshaft assembly and its parts.

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

C. Refer to the REPAIR - GENERAL (27-81-09/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 5 for the item numbers.

2. Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

(2) C00260 Enamel -- BMS 10-11, type 2 (SOPM 20-60-02)

B. References

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

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

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

(4) SOPM 20-43-03, Chemical Conversion Coatings for Aluminum

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

C. Procedures

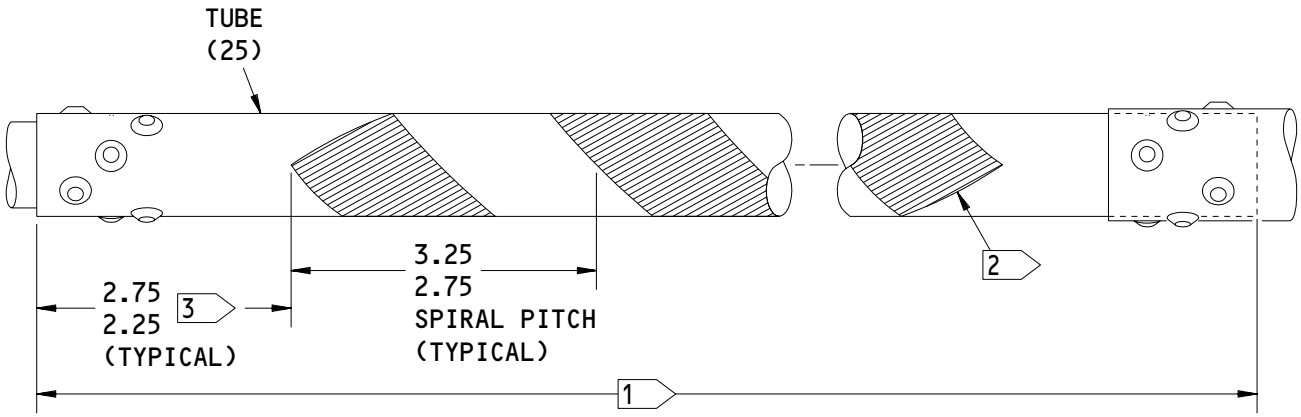
(1) Coupling (10) -- Refer to REPAIR 7-1.

(2) Fitting (15) -- Refer to REPAIR 10-1.

(3) Shaft (20) -- Refer to REPAIR 6-1.

(4) Tube (25) -- Chemical treat and apply BMS 10-11, type 1 primer (F-18.07), but do not apply primer on the part of the ID that is machined to 0.841-0.846 inch diameter. Material: Aluminum alloy.

(5) Driveshaft assembly -- Apply BMS 10-11, type 2 enamel (SRF-14.905-2226), color safety orange, on the tube and the rivets. Do not apply enamel on the end fittings. Apply BMS 10-11, type 2 enamel, color BAC701 or BAC706 black, in a continuous spiral stripe, as shown in Fig. 601.



1 APPLY ORANGE ENAMEL ON THIS AREA

2 APPLY BLACK ENAMEL STRIPE
0.94-1.06 INCH WIDE

3 DISTANCE TO END OF SPIRAL PATTERN.
ANGULAR CLOCKING NOT REQUIRED

ITEM NUMBERS REFER TO IPL FIG. 5

ALL DIMENSIONS ARE IN INCHES

256T5710-501,-503
Driveshaft Assembly - Refinish Details
Figure 601

K10759

SHAFT - REPAIR 6-1

256T2504-4

1. General

A. This procedure has the data necessary to repair and refinish the shaft (20).

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 5 for the item numbers.

E. General repair details:

(1) Material: 15-5PH CRES, 180-200 ksi

(2) Shot peen: All repaired surfaces
Shot size: 170-460
Intensity: 0.014A
Coverage: 2.0

2. Shaft Repair

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-10-03, Shot Peening

(3) SOPM 20-10-04, Grinding of Chrome Plated Parts

(4) SOPM 20-20-01, Magnetic Particle Inspection

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

(6) SOPM 20-42-03, Hard Chrome Plating

B. Procedures (Fig. 601)

(1) Machine as necessary, within the repair limits shown, to remove the damaged area. Refer to SOPM 20-10-02.

(2) Do a magnetic particle check of the machined surface. Refer to SOPM 20-20-01.

(3) Shot peen the machined surface. Refer to SOPM 20-10-03.

(4) Chrome plate (F-15.03) the machined surface. Make sure you do not chrome plate the fillet radius or the edges of the part.

(5) Grind the chrome plate to the design dimensions and finish shown. Make sure that the chrome plate thickness is not more than 0.015 inch after you grind the plate. Refer to SOPM 20-10-04.

3. Shaft Refinish

A. References

(1) SOPM 20-10-04, Grinding of Chrome Plated Parts

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-42-03, Hard Chrome Plating

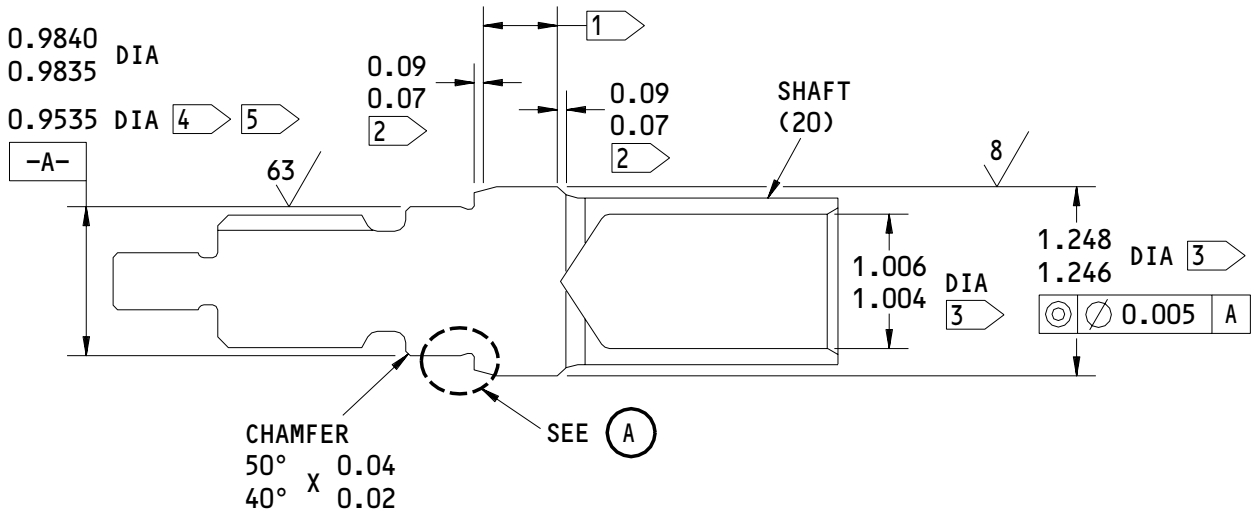
(4) SOPM 20-42-05, Bright Cadmium Plating

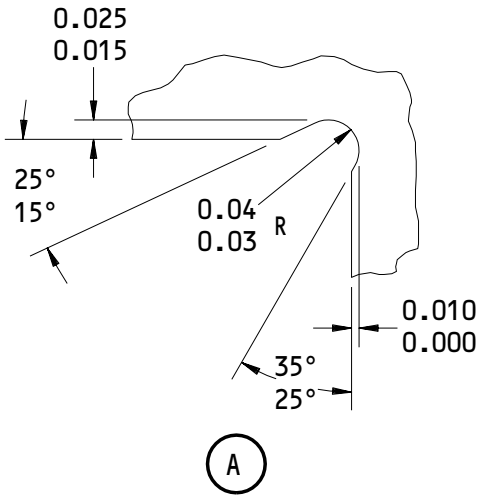
B. Procedures (Fig. 601)

(1) Cadmium plate (F-15.02) all over, but not on the surface to be chrome plated.

(2) Chrome plate (F-15.03) the surface shown.

(3) Grind the chrome plate to the design dimensions and finish shown. Make sure that the plating thickness is not less than 0.002 inch.





1 CHROME PLATE THIS SURFACE ONLY

2 CHROME PLATE RUNOUT THIS AREA

3 DIMENSIONS APPLY AFTER PLATING

4 REPAIR LIMIT

5 BUILD UP WITH CHROME PLATE AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. CHROME PLATE RUN-OUT 0.00-0.08. NO CHROME PLATE IN FILLET RADIUS OR ON EDGE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.008 R

ITEM NUMBERS REFER TO IPL FIG. 5

ALL DIMENSIONS ARE IN INCHES

256T2504-4
Shaft Repair
Figure 601

COUPLING - REPAIR 7-1

256T2801-1

1. General

A. This procedure has the data necessary to refinish the coupling (IPL Fig. 1, 2, 3, 5; 10).

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

C. General repair details:

(1) Material: 4140 Steel, 150-170 ksi

2. Coupling Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

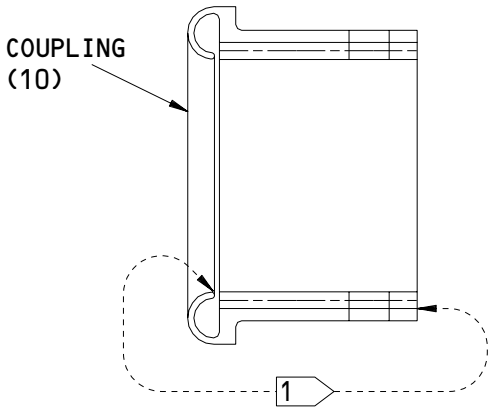
(4) SOPM 20-42-05, Bright Cadmium Plating

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

C. Procedures (Fig. 601)

(1) Cadmium plate (F-15.02) all over.

(2) Apply BMS 10-11, type 1 primer (F-20.02) on the surfaces shown.



1 APPLY PRIMER ON THESE SURFACES ITEM NUMBER REFERS TO IPL FIG. 1,2,3,5

256T2801-1
Coupling Refinish
Figure 601

K11404

FITTING - REPAIR 8-1

256T2802-1

1. General

A. This procedure has the data necessary to repair and refinish the fitting (IPL Fig. 2; 15), (IPL Fig. 4; 10).

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

C. General repair details:

(1) Material: 4340 Steel, 150-170 ksi

(2) Shot peen: All repaired surfaces
Shot size: 170-460
Intensity: 0.014A
Coverage: 2.0

2. Fitting Repair

A. References

(1) SOPM 20-10-02, Machining of Alloy Steel

(2) SOPM 20-10-03, Shot Peening

(3) SOPM 20-10-04, Grinding of Chrome Plated Parts

(4) SOPM 20-20-01, Magnetic Particle Inspection

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

(6) SOPM 20-42-03, Hard Chrome Plating

B. Procedures (Fig. 601)

(1) Machine as necessary, within the repair limits shown, to remove the damaged area. Refer to SOPM 20-10-02.

(2) Do a magnetic particle check of the machined surface. Refer to SOPM 20-20-01.

(3) Shot peen the machined surface. Refer to SOPM 20-10-03.

(4) Chrome plate (F-15.03) the machined surface. Refer to SOPM 20-42-03.

(5) Grind the chrome plate to the design dimensions and finish shown. Make sure that the chrome plate thickness is not more than 0.015 inch after you grind the plate. Refer to SOPM 20-10-04.

3. Fitting Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

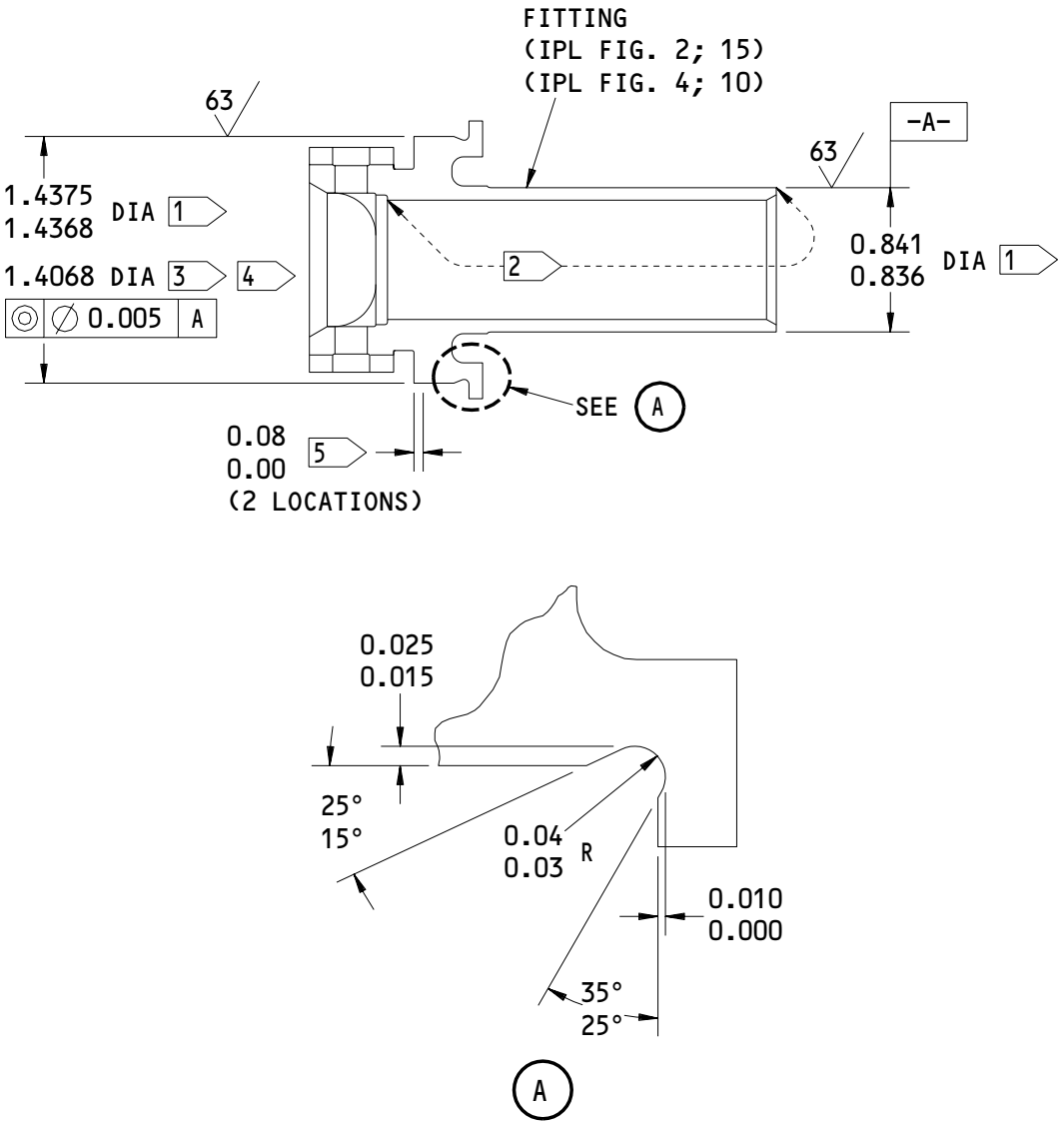
(4) SOPM 20-42-05, Bright Cadmium Plating

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

C. Procedures (Fig. 601)

(1) Cadmium plate (F-15.02) all over.

(2) Apply BMS 10-11, type 1 primer (F-20.02) on the surfaces shown.



1 DIMENSIONS APPLY AFTER PLATING

2 APPLY PRIMER ON THESE SURFACES

3 REPAIR LIMIT

4 BUILD UP WITH CHROME PLATE AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. 0.005 MINIMUM PLATING THICKNESS

5 PLATING RUNOUT. STOP PLATING 0.00-0.02 FROM INTERFACE EDGE AND FILLET RADII

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.008 R

ALL DIMENSIONS ARE IN INCHES

256T2802-1
Fitting Repair
Figure 601

K11422

FITTING - REPAIR 9-1

256T2803-5

1. General

A. This procedure has the data necessary to refinish the fitting (15).

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

C. Refer to the REPAIR - GENERAL (27-81-26/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Fig. 3 for the item numbers.

E. General repair details:

(1) Material: 15-5PH CRES, 180-200 ksi

2. Fitting Refinish

A. References

(1) SOPM 20-30-03, General cleaning Procedures

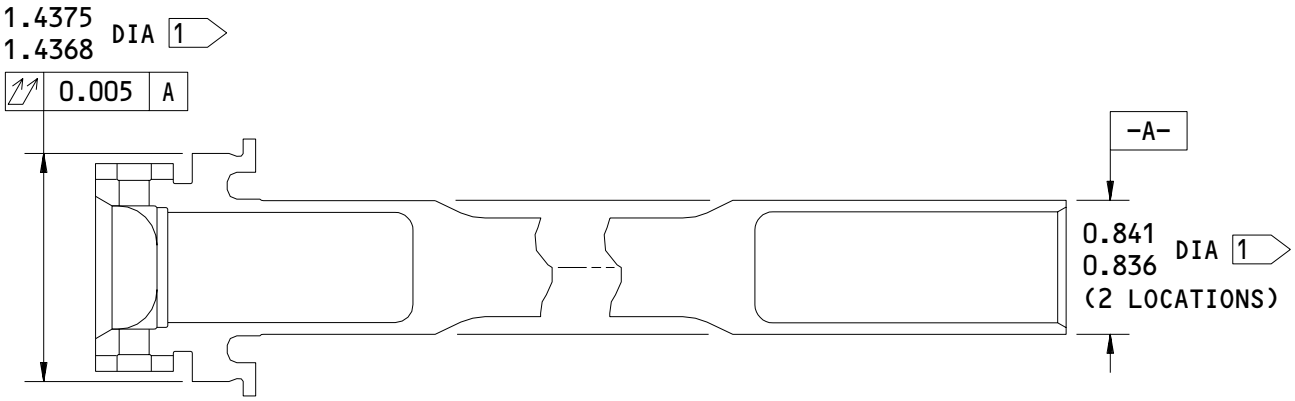
(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-42-05, Bright Cadmium Plating

B. Procedures (Fig. 601)

(1) Passivate (F-17.09).

(2) Cadmium plate (F-15.02) all external surfaces and splines. Plating throw-in is permitted at the shaft ends.



ITEM NUMBERS REFER TO IPL FIG. 3

1 DIMENSIONS APPLY AFTER PLATING

ALL DIMENSIONS ARE IN INCHES

256T2803-5
Fitting Refinish
Figure 601

K11519

FITTING - REPAIR 10-1

256T2806-1

1. General

A. This procedure has the data necessary to refinish the fitting (IPL Fig. 1, 5; 15), (IPL Fig. 2, 3; 20).

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

C. General repair details:

(1) Material: 4340 Steel, 150-170 ksi

2. Fitting Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

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

B. References

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

(2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes

(3) SOPM 20-41-02, Application of Chemical and Solvent Resistant Finishes

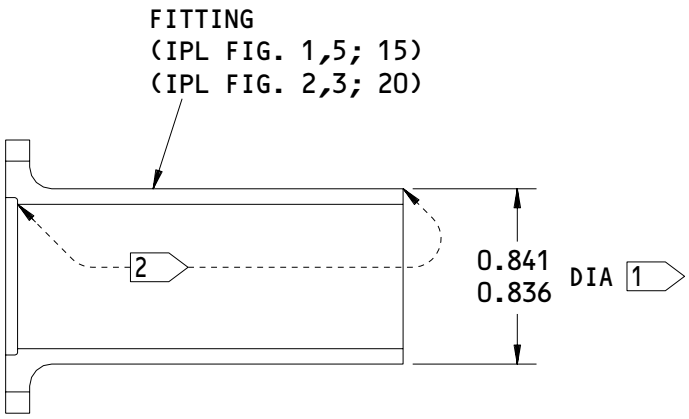
(4) SOPM 20-42-05, Bright Cadmium Plating

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

C. Procedures (Fig. 601)

(1) Cadmium plate (F-15.02) all over.

(2) Apply BMS 10-11, type 1 primer (F-20.02) on the surfaces shown.



1 DIMENSIONS APPLY AFTER PLATING

2 APPLY PRIMER ON THESE SURFACES

ALL DIMENSIONS ARE IN INCHES

256T2806-1
Fitting Refinish
Figure 601

K11524

ASSEMBLY

1. Assembly

   A. Refer to the applicable Repair section for the assembly procedures for the driveshaft assembly.

2. Storage

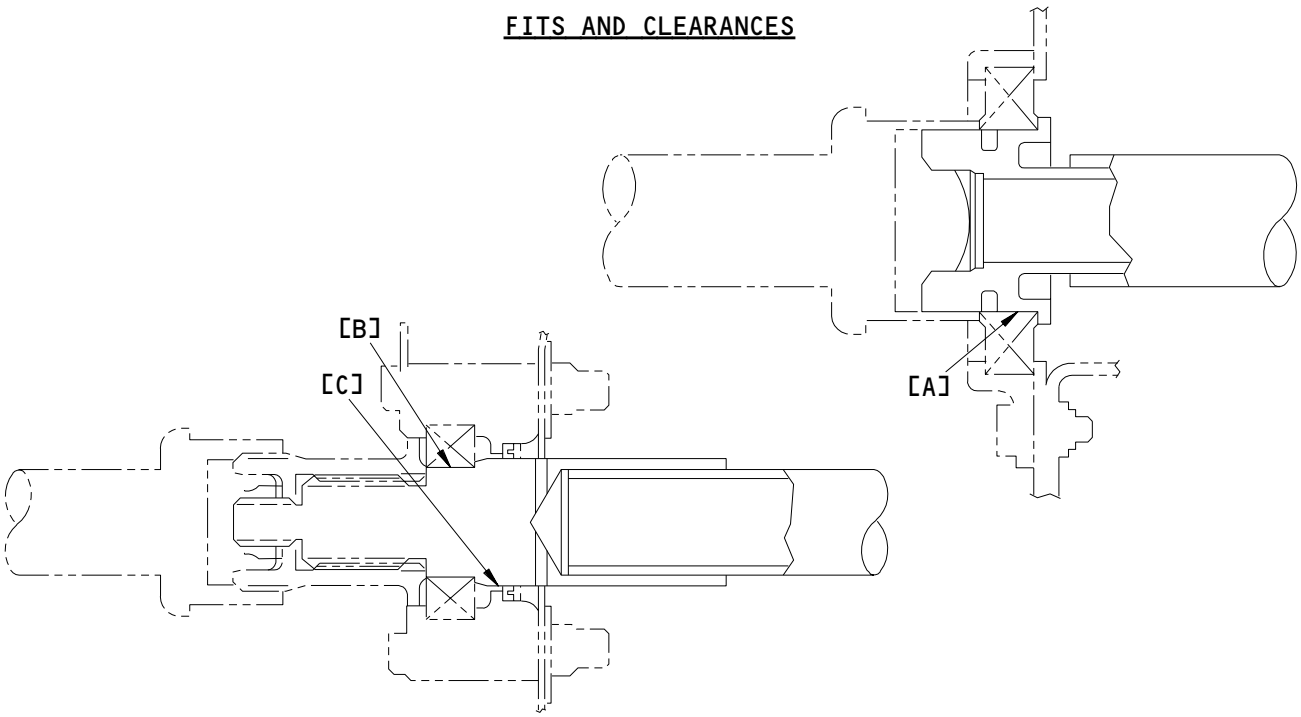
   A. References

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

   B. Procedure

      (1) Use standard industry procedures to store this component. Refer to SOPM 20-44-02 for more data.

FITS AND CLEARANCES



REF LETTER	REF IPL MATING ITEM NO.	DESIGN DIMENSION				SERVICE WEAR LIMIT		
		DIMENSION		ASSEMBLY CLEARANCE 1		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID 2	1.4370	1.4375	-0.0005	0.0007		1.4395	0.002
	OD 3	1.4368	1.4375			1.4360		
[B]	ID 4	0.9839	0.9843	-0.0001	0.0008		0.9845	0.001
	OD 20 5	0.9835	0.9840			0.9833		
[C]	ID 6	1.246	1.248	-0.002	0.002		1.250	0.004
	OD 20 5	1.246	1.248			1.246		

1 > NEGATIVE VALUES SHOW INTERFERENCE FIT

2 > INSTALLATION PART BACB10AW23J

3 > IPL FIG. 2; 15, OR IPL FIG. 4; 10

4 > INSTALLATION PART BACB10BA25PP

5 > IPL FIG. 5

6 > INSTALLATION PART AR10401-218WC

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801

K11551

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.

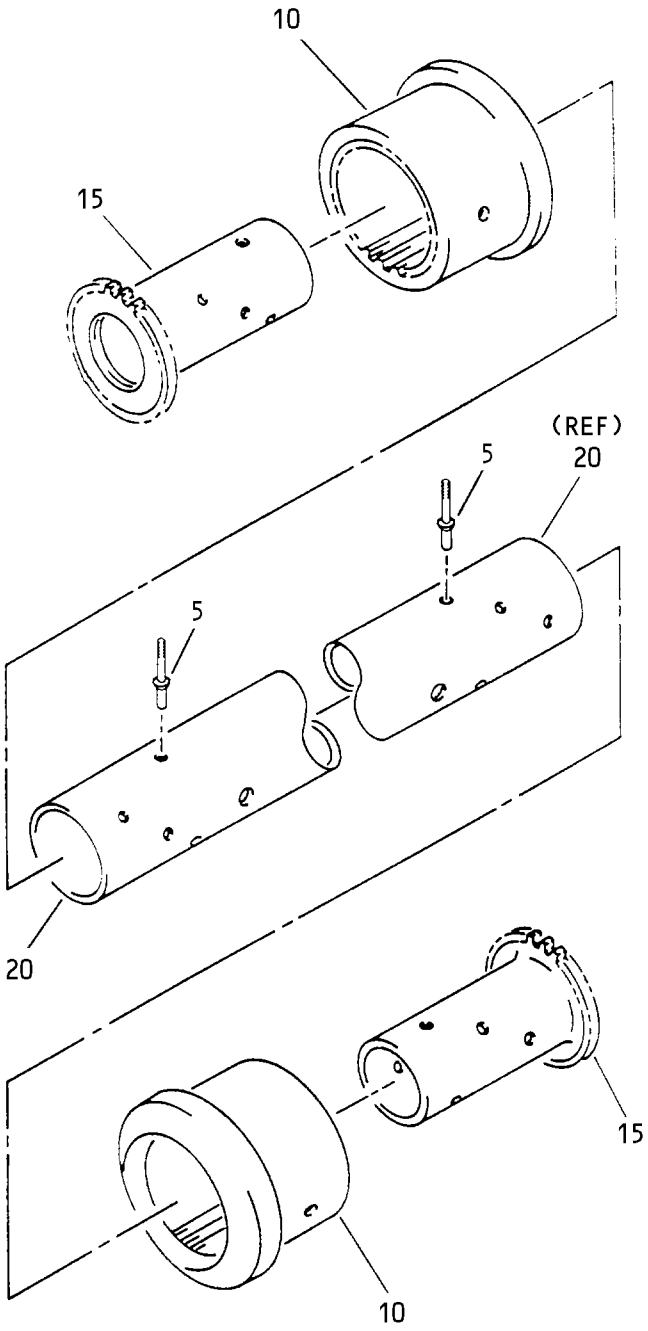
6. Parts Interchangeability

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.

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1398MW5-3		1	5A	18
		2	5A	18
		3	5A	18
		4	5A	18
		5	5A	18
NAS1398MW5A3		1	5	18
		2	5	18
		3	5	18
		4	5	18
		5	5	18
NAS1398MW6-3		1	5B	AR
		2	5B	AR
		3	5B	AR
		4	5B	AR
		5	5B	AR
256T2504-4		5	20	1
256T2801-1		1	10	2
		2	10	1
		3	10	1
		5	10	1
256T2802-1		2	15	1
		4	10	2
256T2803-5		3	15	1
256T2806-1		1	15	2
		2	20	1
		3	20	1
		5	15	1
256T5710-101		1	1A	RF
256T5710-102		1	20	1
256T5710-103		1	1B	RF
256T5710-104		1	20A	1
256T5710-105		1	1C	RF
256T5710-106		1	20B	1
256T5710-107		1	1D	RF
256T5710-108		1	20C	1
256T5710-109		1	1E	RF
256T5710-110		1	20D	1
256T5710-111		1	1F	RF
256T5710-112		1	20E	1
256T5710-113		1	1G	RF
256T5710-114		1	20F	1
256T5710-115		1	1H	RF

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
256T5710-116		1	20G	1
256T5710-117		1	1J	RF
256T5710-118		1	20H	1
256T5710-119		1	1K	RF
256T5710-120		1	20J	1
256T5710-121		1	1L	RF
256T5710-122		1	20K	1
256T5710-123		1	1M	RF
256T5710-124		1	20L	1
256T5710-125		1	1N	RF
256T5710-126		1	20M	1
256T5710-127		1	1P	RF
256T5710-128		1	20N	1
256T5710-129		1	1Q	RF
256T5710-130		1	20P	1
256T5710-131		1	1R	RF
256T5710-132		1	20Q	1
256T5710-133		1	1S	RF
256T5710-134		1	20R	1
256T5710-135		1	1T	RF
256T5710-136		1	20S	1
256T5710-137		1	1U	RF
256T5710-138		1	20T	1
256T5710-139		1	1V	RF
256T5710-140		1	20U	1
256T5710-201		1	1W	RF
		2	1	RF
256T5710-202		2	25	1
256T5710-203		1	1X	RF
		2	1A	RF
256T5710-204		2	25A	1
256T5710-205		1	1Y	RF
		2	1B	RF
256T5710-206		2	25B	1
256T5710-207		1	1Z	RF
		2	1C	RF
256T5710-208		2	25C	1
256T5710-209		1	2	RF
		2	1D	RF
256T5710-210		2	25D	1
256T5710-211		1	2A	RF
		2	1E	RF

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
256T5710-212		2	25E	1
256T5710-213		1	2B	RF
		2	1F	RF
256T5710-214		2	25F	1
256T5710-215		1	2C	RF
		2	1G	RF
256T5710-216		2	25G	1
256T5710-217		1	2D	RF
		2	1H	RF
256T5710-218		2	25H	1
256T5710-301		1	2E	RF
256T5710-301		3	1	RF
256T5710-302		3	25	1
256T5710-401		1	2F	RF
		4	1	RF
256T5710-402		4	15	1
256T5710-403		1	2G	RF
		4	1A	RF
256T5710-404		4	15A	1
256T5710-501		1	2H	RF
		5	1	RF
256T5710-502		5	25	1
256T5710-503		1	2J	RF
		5	1A	RF
256T5710-504		5	25A	1



Leading Edge Slat Drive Driveshaft Assembly
Figure 1

KD6848

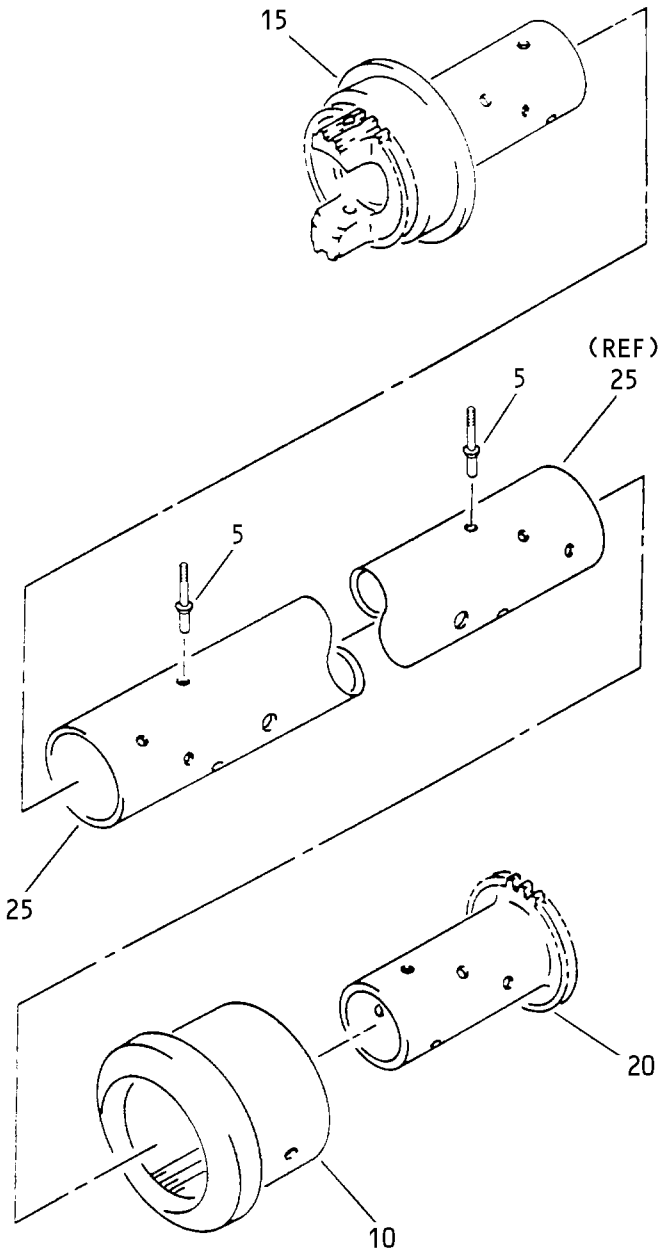
FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1A	256T5710-101		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	A	RF
-1B	256T5710-103		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	B	RF
-1C	256T5710-105		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	C	RF
-1D	256T5710-107		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	D	RF
-1E	256T5710-109		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	E	RF
-1F	256T5710-111		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	F	RF
-1G	256T5710-113		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	G	RF
-1H	256T5710-115		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	H	RF
-1J	256T5710-117		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	J	RF
-1K	256T5710-119		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	K	RF
-1L	256T5710-121		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	L	RF
-1M	256T5710-123		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	M	RF
-1N	256T5710-125		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	N	RF
-1P	256T5710-127		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	P	RF
-1Q	256T5710-129		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	Q	RF
-1R	256T5710-131		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	R	RF

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1S	256T5710-133		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	S	RF
-1T	256T5710-135		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	T	RF
-1U	256T5710-137		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	U	RF
-1V	256T5710-139		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	V	RF
-1W	256T5710-201		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	W	RF
-1X	256T5710-203		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	X	RF
-1Y	256T5710-205		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	Y	RF
-1Z	256T5710-207		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	Z	RF
-2	256T5710-209		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	AA	RF
-2A	256T5710-211		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	AB	RF
-2B	256T5710-213		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	AC	RF
-2C	256T5710-215		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	AD	RF

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-2D	256T5710-217		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 2)	AE	RF
-2E	256T5710-301		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 3)	AF	RF
-2F	256T5710-401		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 4)	AG	RF
-2G	256T5710-403		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 4)	AH	RF
-2H	256T5710-501		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 5)	AJ	RF
-2J	256T5710-503		DRIVE SHAFT ASSY-L.E. SLAT DRIVE (FOR DETAILS SEE FIG. 5)	AK	RF
5	NAS1398MW5A3		.RIVET- (OPT ITEM 5A)	A-V	18
-5A	NAS1398MW5-3		.RIVET- (OPT ITEM 5)	A-V	18
-5B	NAS1398MW6-3		.RIVET-OVERSIZE	A-V	AR
10	256T2801-1		.COUPLING	A-V	2
15	256T2806-1		.FITTING	A-V	2
20	256T5710-102		.TUBE	A	1
-20A	256T5710-104		.TUBE	B	1
-20B	256T5710-106		.TUBE	C	1
-20C	256T5710-108		.TUBE	D	1
-20D	256T5710-110		.TUBE	E	1
-20E	256T5710-112		.TUBE	F	1
-20F	256T5710-114		.TUBE	G	1
-20G	256T5710-116		.TUBE	H	1
-20H	256T5710-118		.TUBE	J	1
-20J	256T5710-120		.TUBE	K	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-20K	256T5710-122		.TUBE	L	1
-20L	256T5710-124		.TUBE	M	1
-20M	256T5710-126		.TUBE	N	1
-20N	256T5710-128		.TUBE	P	1
-20P	256T5710-130		.TUBE	Q	1
-20Q	256T5710-132		.TUBE	R	1
-20R	256T5710-134		.TUBE	S	1
-20S	256T5710-136		.TUBE	T	1
-20T	256T5710-138		.TUBE	U	1
-20U	256T5710-140		.TUBE	V	1

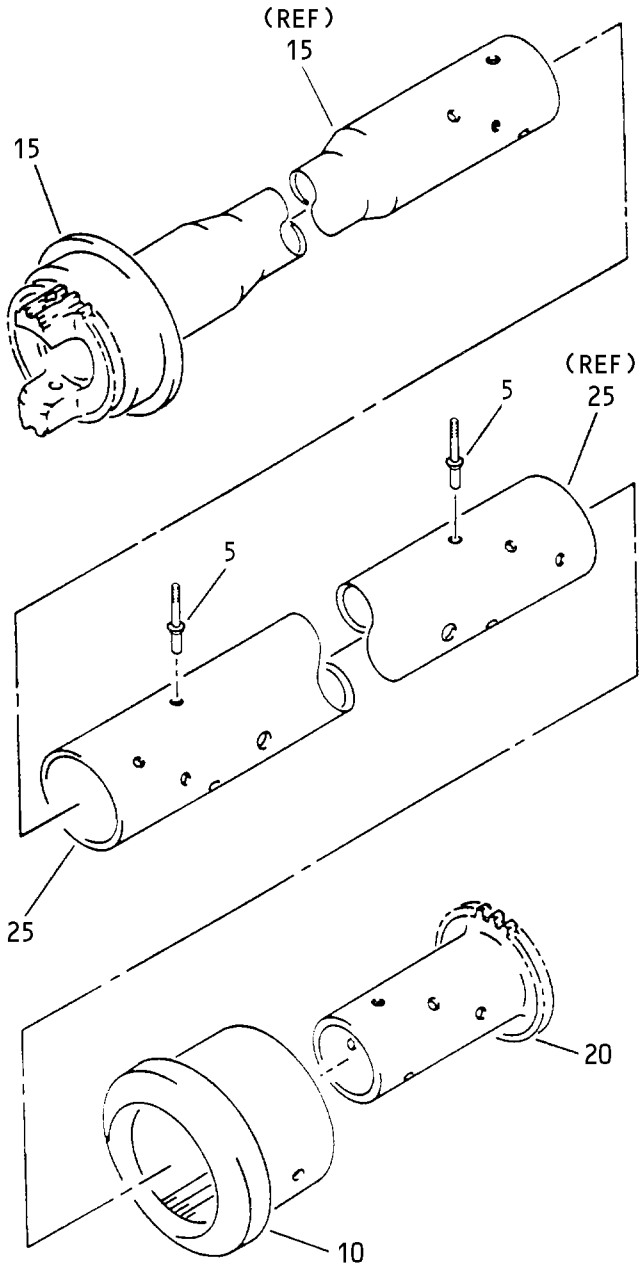
- Item Not Illustrated



Leading Edge Slat Drive Driveshaft Assembly
Figure 2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02-					
-1	256T5710-201		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	W	RF
-1A	256T5710-203		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	X	RF
-1B	256T5710-205		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	Y	RF
-1C	256T5710-207		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	Z	RF
-1D	256T5710-209		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AA	RF
-1E	256T5710-211		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AB	RF
-1F	256T5710-213		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AC	RF
-1G	256T5710-215		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AD	RF
-1H	256T5710-217		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AE	RF
5	NAS1398MW5A3		.RIVET- (OPT ITEM 5A)	W-AE	18
-5A	NAS1398MW5-3		.RIVET- (OPT ITEM 5)	W-AE	18
-5B	NAS1398MW6-3		.RIVET-OVERSIZE	W-AE	AR
10	256T2801-1		.COUPLING	W-AE	1
15	256T2802-1		.FITTING	W-AE	1
20	256T2806-1		.FITTING	W-AE	1
25	256T5710-202		.TUBE	W	1
-25A	256T5710-204		.TUBE	X	1
-25B	256T5710-206		.TUBE	Y	1
-25C	256T5710-208		.TUBE	Z	1
-25D	256T5710-210		.TUBE	AA	1
-25E	256T5710-212		.TUBE	AB	1
-25F	256T5710-214		.TUBE	AC	1
-25G	256T5710-216		.TUBE	AD	1
-25H	256T5710-218		.TUBE	AE	1

- Item Not Illustrated

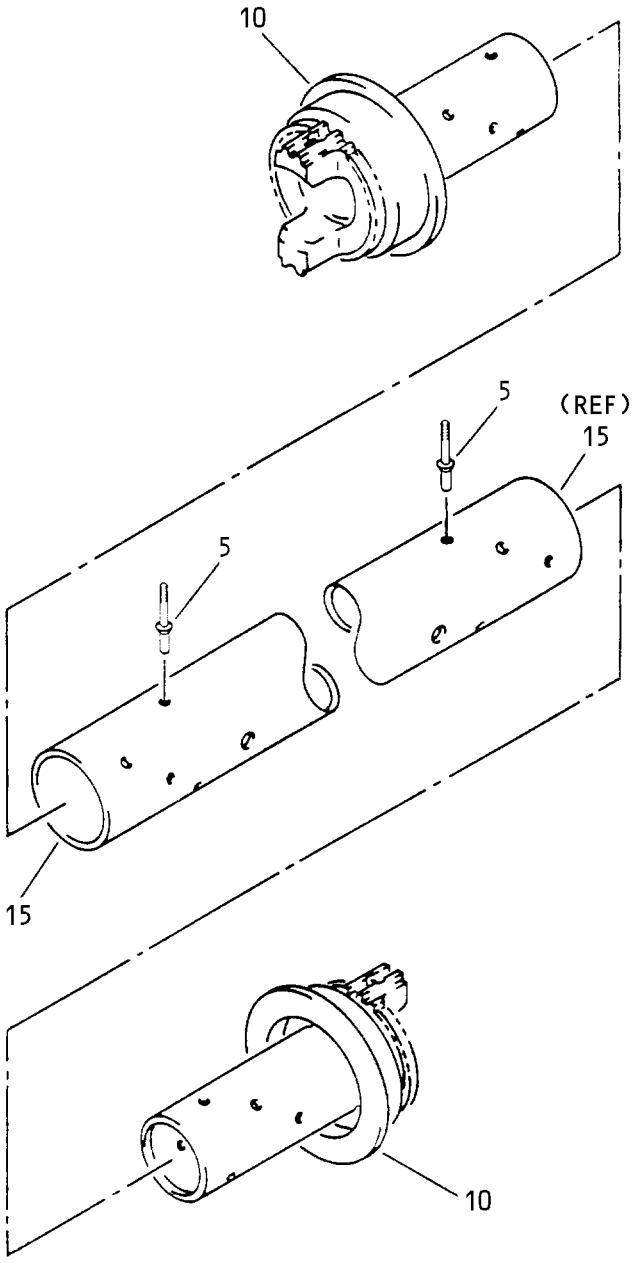


Leading Edge Slat Drive Driveshaft Assembly
Figure 3

KD6876

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
03-					
-1	256T5710-301		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AF	RF
5	NAS1398MW5A3		.RIVET- (OPT ITEM 5A)	AF	18
-5A	NAS1398MW5-3		.RIVET- (OPT ITEM 5)	AF	18
-5B	NAS1398MW6-3		.RIVET-OVERSIZE	AF	AR
10	256T2801-1		.COUPLING	AF	1
15	256T2803-5		.FITTING	AF	1
20	256T2806-1		.FITTING	AF	1
25	256T5710-302		.TUBE	AF	1

- Item Not Illustrated

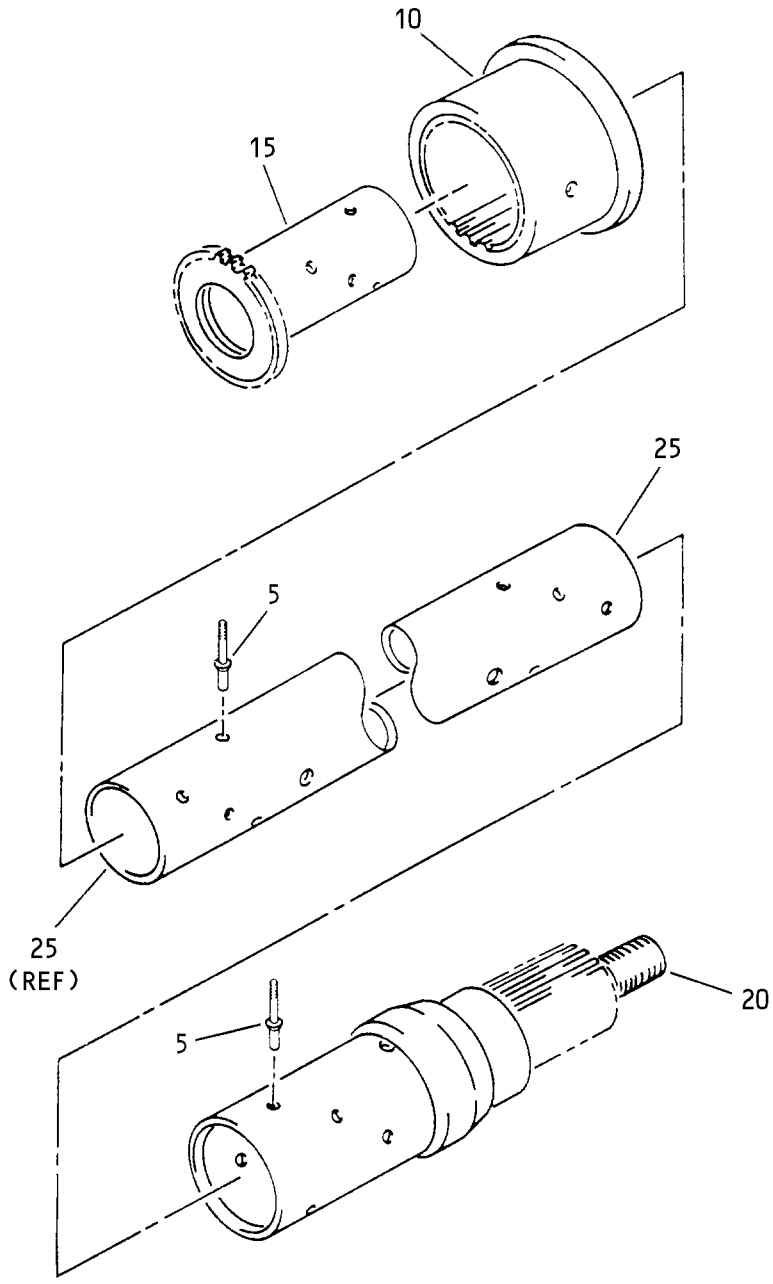


Leading Edge Slat Drive Driveshaft Assembly
Figure 4

KD6884

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
04-					
-1	256T5710-401		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AG	RF
-1A	256T5710-403		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AH	RF
5	NAS1398MW5A3		.RIVET- (OPT ITEM 5A)	AG,AH	18
-5A	NAS1398MW5-3		.RIVET- (OPT ITEM 5)	AG,AH	18
-5B	NAS1398MW6-3		.RIVET-OVERSIZE	AG,AH	AR
10	256T2802-1		.FITTING	AG,AH	2
15	256T5710-402		.TUBE	AG	1
-15A	256T5710-404		.TUBE	AH	1

- Item Not Illustrated



Leading Edge Slat Drive Driveshaft Assembly
Figure 5

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
05-					
-1	256T5710-501		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AJ	RF
-1A	256T5710-503		DRIVE SHAFT ASSY-L.E. SLAT DRIVE	AK	RF
5	NAS1398MW5A3		.RIVET- (OPT ITEM 5A)	AJ,AK	18
-5A	NAS1398MW5-3		.RIVET- (OPT ITEM 5)	AJ,AK	18
-5B	NAS1398MW6-3		.RIVET-OVERSIZE	AJ,AK	AR
10	256T2801-1		.COUPLING	AJ,AK	1
15	256T2806-1		.FITTING	AJ,AK	1
20	256T2504-4		.SHAFT	AJ,AK	1
25	256T5710-502		.TUBE	AJ	1
-25A	256T5710-504		.TUBE	AK	1

- Item Not Illustrated