COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

CFM-56 MINOR COMPONENTS

PART NUMBER 310A2041–10, –5, –6, –9, 332A1908–35, –39, –55, –58

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COMPONENT MAINTENANCE MANUAL

Revision No. 13
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To: All holders of CFM-56 MINOR COMPONENTS 71-04-26.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

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COMPONENT MAINTENANCE MANUAL

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
	71-8		SEP 05/90
737-71-1181			DEC 05/90
		PRR 38013	SEP 01/97
		PRR 38040-15	SEP 01/97

All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

Revision		Filed	
Number	Date	Date	Initials

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Temporary Revision		Inserted		Removed	
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Temporary Revision		Inserted		Removed	
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INTRODUCTION

1. General

A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.

B. This manual is divided into different parts:

(1) Title Page

(2) Transmittal Letter

(3) Highlights

(4) List of Effective Pages

(5) Table of Contents

(6) Temporary Revision & Service Bulletin Record

(7) Record of Revisions

(8) Record of Temporary Revisions

(9) Introduction

(10) Procedures & IPL Sections

C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.

D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.

E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.

F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.

G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.

CFM-56 MINOR COMPONENTS - DESCRIPTION AND OPERATION

1. DESCRIPTION

A. This manual contains the data for the overhaul of the CFM-56 minor components. The overhaul functions which cannot be done when you use the standard industry practices are included in the repair instructions for each component.

COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

DISASSEMBLY

1. **General**
   A. This procedure tells how to disassemble the CFM-56 minor components.
   B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
2. **Disassembly**
   A. Procedures
      (1) Disassemble this component only as necessary to isolate defects, do necessary repairs, and put the component back in a serviceable condition.

CLEANING

1. General

A. This procedure tells how to clean the CFM-56 minor components.

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

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedures

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

CHECK

1. General

A. Do a check of all parts for defects. Refer to standard industry practices.

2. Check

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

B. Procedure

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

(a) Link (IPL Figure 1; 15, 20)

(b) End cap (IPL Figure 1; 110)

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

(a) Pin (IPL Figure 1; 100)

REPAIR

1. General

A. Instructions for repair, refinish and replacement are divided into procedures as follows:

Table 601:

P/N	NAME	REPAIR
332A1908	DEFLECTOR ASSEMBLY	1-1
310A2041	THRUST LINK ASSEMBLY	2-1,2-2
310A2042	THRUST LINK PIN	3-1
—	REFINISH OF OTHER PARTS	4-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in REPAIR-GENERAL, Figure 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
V	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
Ø	DIAMETER
S Ø	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
Ⓜ	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 B WITHIN 0.002
// | 0.002 | A	PARALLEL TO 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 PLANE A
⌓ | 0.020 | A	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
◎ | Ø 0.0005 | C	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
≡ | 0.010 | A	SYMMETRICAL WITH A WITHIN 0.010
∠ | 0.005 | A	ANGULAR TOLERANCE 0.005 WITH A
⌖ | Ø 0.002 Ⓢ | B	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
⊥ | Ø 0.010 Ⓜ | A 0.510 Ⓟ	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
[2.000] OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME

0.020 | A	
A | 0.020	

True Position Dimensioning Symbols
Figure 601

DEFLECTOR ASSEMBLY - REPAIR 1-1

332A1908–36, –38, –40

1. General

A. This procedure has the data necessary to repair the deflector assembly.

2. Repair of a Crack in the Deflector

NOTE: Do not repair the cracks that are more than 3.75 inches in length. Replace the component.

A. To repair a crack to the deflector (95, IPL Figure 2), use steps B thru E.

B. Stop drill a 0.25-inch hole as shown in REPAIR 1-1, Figure 601.

C. Make repair plates as shown in REPAIR 1-1, Figure 601. Make the repair plates for the deflector assembly 332A1908-36, -38 out of INCONEL 625. Make the repair plates for the deflector assembly 332A1908-40 out of CRES 321, 347 and passivate (F-17.09).

D. Use the subsequent steps to install the rivets.

(1) The rivets must be 0.3125 inch from the crack and the footprint of the washer. This is a minimum.

(2) Keep a 0.625 grid pattern as shown in REPAIR 1-1, Figure 601 where possible.

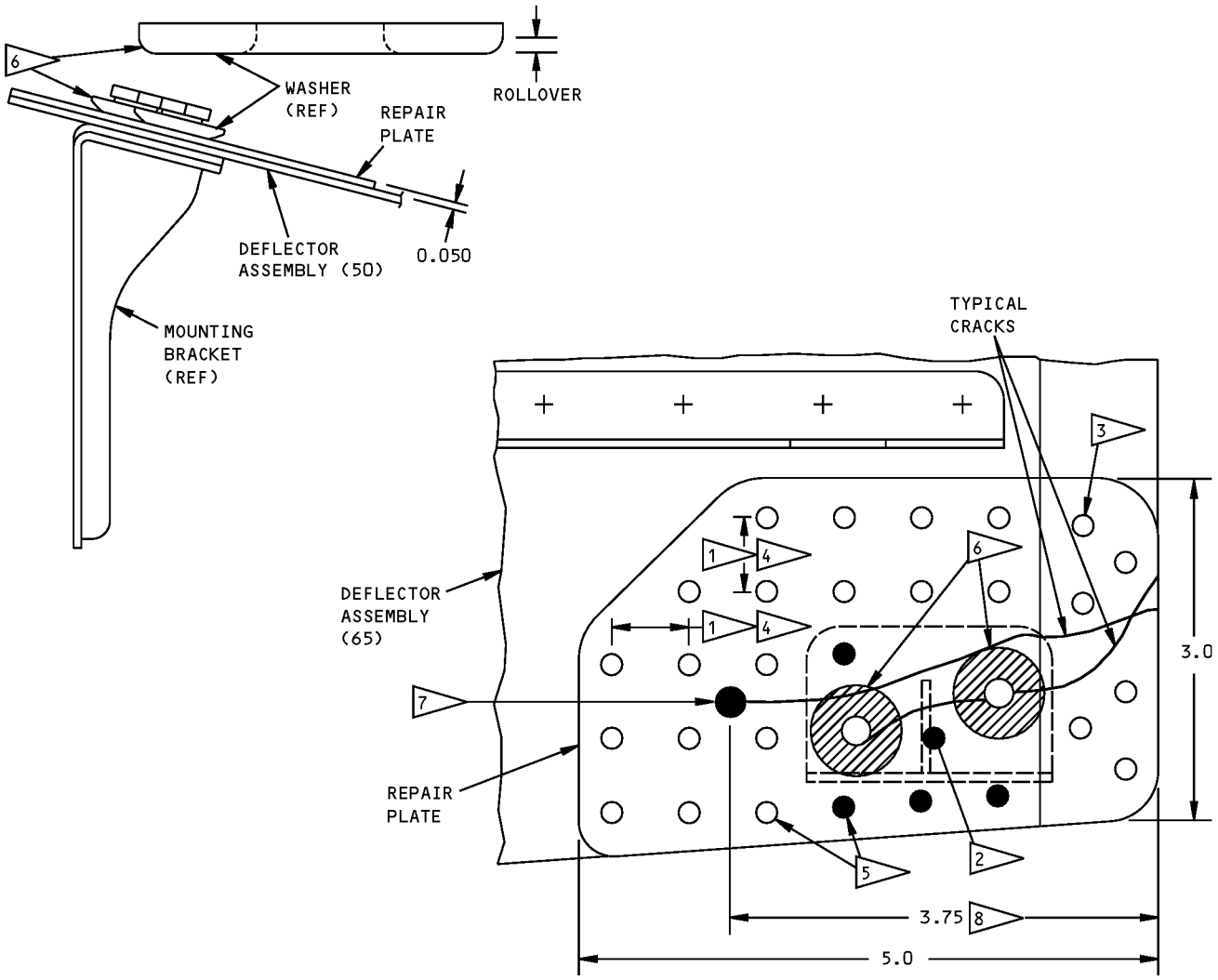
(3) Use two rivets on both sides of a crack on the bent up flange. This is a minimum.

(4) Put two rows of rivets on all sides of the crack for all the cracks.

E. Install the washer BACW10P186C with the rollover against the repair plate as shown in REPAIR 1-1, Figure 601.

3. Refinish of the deflector assembly 332A1908-40 only

A. Passivate (F-17.09) the striker plate (90A, IPL Figure 2), the deflector (95A, IPL Figure 2) and the angle (75A, 80A, 85A, IPL Figure 2).



REFINISH

1. KEEP A 0.625 INCH GRID PATTERN WHERE POSSIBLE
2. THE RIVETS MUST BE 0.3125 INCH FROM THE CRACK AND THE FOOT PRINT OF THE WASHER
3. USE TWO RIVETS ON BOTH SIDES OF THE CRACK ON THE BENT UP FLANGE
4. THERE MUST BE TWO ROWS OF RIVETS ON BOTH SIDES OF ALL CRACKS
5. USE THE RIVETS AS SHOWN BELOW
   - O MS20615-M5
   - ● NAS1200M5
6. WHEN INSTALLING DEFLECTOR ASSEMBLY TO MOUNTING BRACKET, INSTALL THE WASHER BACW10P-186C WITH THE ROLLOVER AGAINST THE REPAIR PLATE
7. STOP DRILL 0.25 INCH
8. MAXIMUM LENGTH OF THE CRACK FOR REPAIR IS 3.75 INCHES

ALL THE DIMENSIONS ARE IN INCHES

THE ITEM NUMBERS REFER TO IPL FIG. 2

332A1908-36,-38,-40 Repair of the Deflector Assembly
Figure 601

THRUST LINK ASSEMBLY - REPAIR 2-1

310A2041–5, –6, –9, –10

1. Bushing Replacement

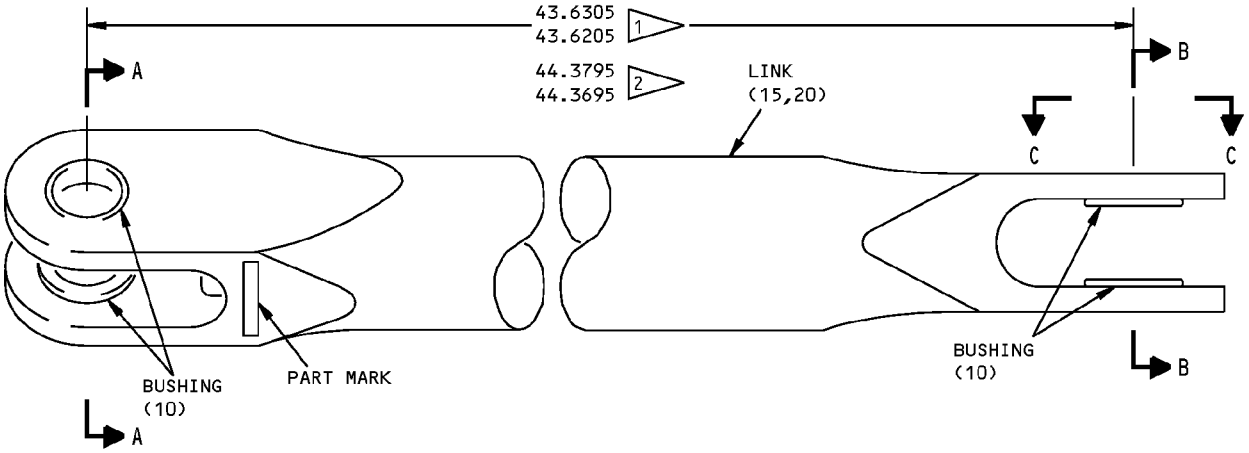
A. Remove the bushing (IPL Figure 1; 10).

B. Before the bushing (IPL Figure 1; 10) installation, machine the bushing inside diameter to a 0.7473-0.7463 diameter maintaining 0.001 FIM to the bushing outside diameter.

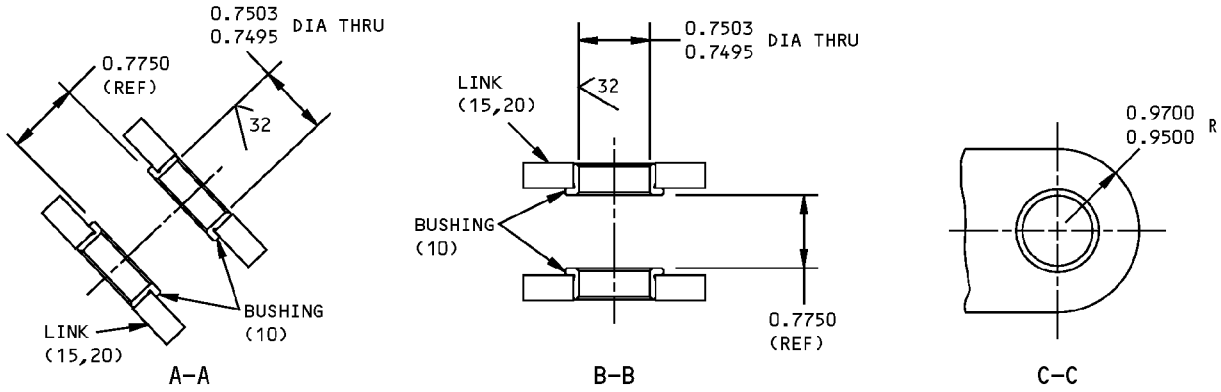
C. Install the bushing (IPL Figure 1; 10) as shown in the SOPM 20-50-03 using the shrink-fit method.

D. Machine the bushing (IPL Figure 1; 10) inside diameter as shown in REPAIR 2-1, Figure 601.

E. Break sharp edges.



310A2041-5,-9 SHOWN
310A2041-6,-10 OPPOSITE



1 DIMENSION FOR 310A2041-5,-6
2 DIMENSION FOR 310A2041-9,-10

REPAIR

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

310A2041-5,-6,-9,-10 Bushing Replacement
Figure 601

THRUST LINK - REPAIR 2-2

310A2041–7, –8, –11, –12

1. Lug Hole Repair

A. Machine the worn or damaged hole for the bushing (IPL Figure 1; 10), as necessary, to remove defects, cracks, and/or corrosion up to the repair limit shown in REPAIR 2-2, Figure 601.

B. Break all the sharp edges.

C. Do a magnetic particle check as shown in SOPM 20-20-01.

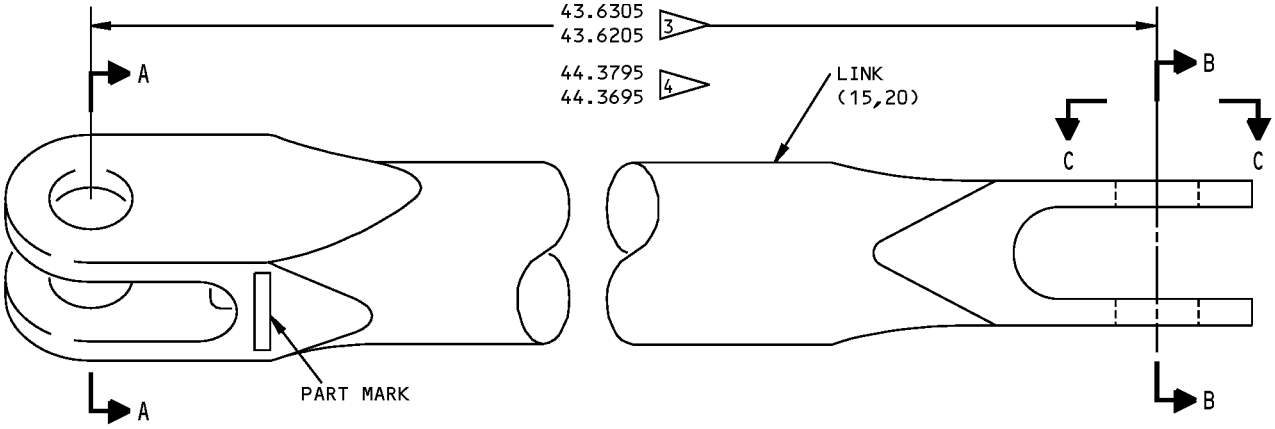
D. Shot peen the lug hole as shown in SOPM 20-10-03; intensity 0.014A-0.019A, coverage 2.0.

E. Make the oversize bushing as shown in REPAIR 2-2, Figure 602.

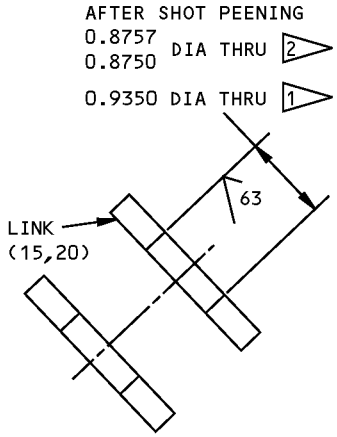
F. Refinish the lug holes as shown in REPAIR 2-2, Figure 601.

G. Install the oversize bushing on the thrust link as shown in REPAIR 2-1.

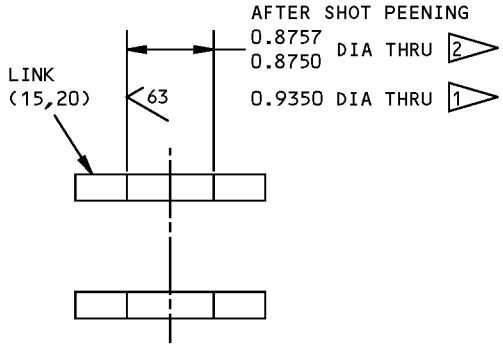
H. Refer to 737 SRM 54-70-90 for additional repair information.



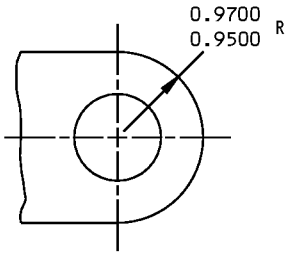
310A2041-7 SHOWN
310A2041-8 OPPOSITE



A-A



B-B



C-C

REFINISH

PASSIVATE (F-17.25)

REPAIR

REF 1

MATERIAL: 15-5 PH ROLLED BAR
150-170 KSI

SHOT PEEN: INTENSITY 0.014A-0.019A
COVERAGE 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

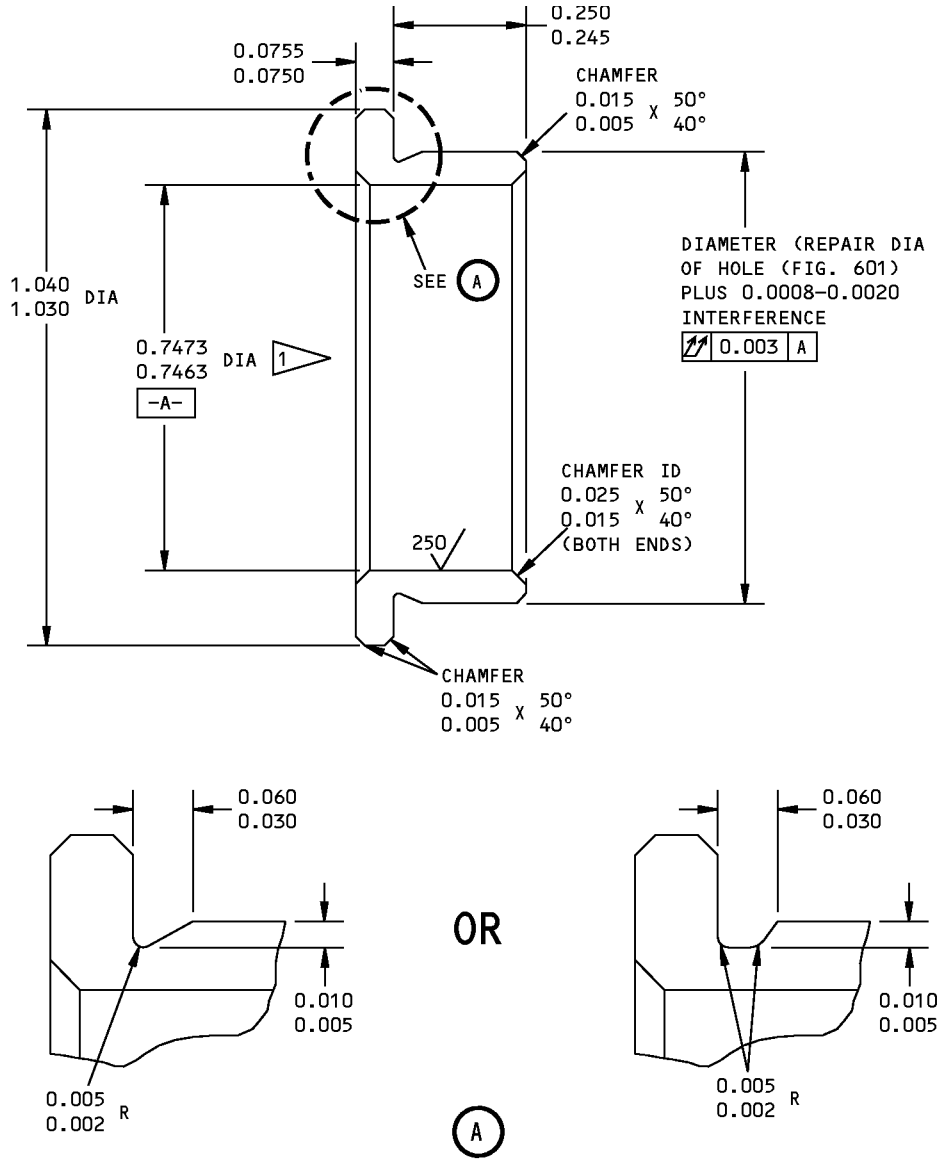
1 REPAIR LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

2 DESIGN DIMENSION

3 DIMENSION FOR 310A2041-7,-8

4 DIMENSION FOR 310A2041-11,-12

310A2041-7,-8,-11,-12 Thrust Link Repair
Figure 601



FINISH

PASSIVATE (QQ–P–35)

1 MAINTAIN BUSHING INSIDE DIAMETER AT 0.001 FIM PRIOR TO INSTALLATION

REPAIR

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: 15–5PH CRES, 32–37 HRC

BREAK ALL SHARP EDGES

MAGNETIC PARTICLE CHECK

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

OVERSIZE BUSHING REPLACEMENT FOR BACB28AT12D025B BUSHING (10)

Oversize Bushing Details
Figure 602

THRUST LINK PIN - REPAIR 3-1

310A2042–2, –3

1. Thrust Link Pin Repair

A. If the depth of wear, damage, and/or corrosion is greater than 0.010 inch, replace the pawl pin (IPL Figure 1; 100).

B. If the depth of wear, damage, and/or corrosion is less than 0.010 inch, repair the pawl pin (IPL Figure 1; 100) as follows:

(1) Machine or grind the pin shank outside diameter to remove 0.003-0.005 inch of material, including chrome plate, to remove defects, cracks, and/or corrosion up to the limits shown in REPAIR 3-1, Figure 601.

(2) Do a check to make sure the surface roughness is 32 microinches RA or smoother after machining the pin outside diameter.

(3) Break all sharp edges to a radius of 0.010-0.030 inch.

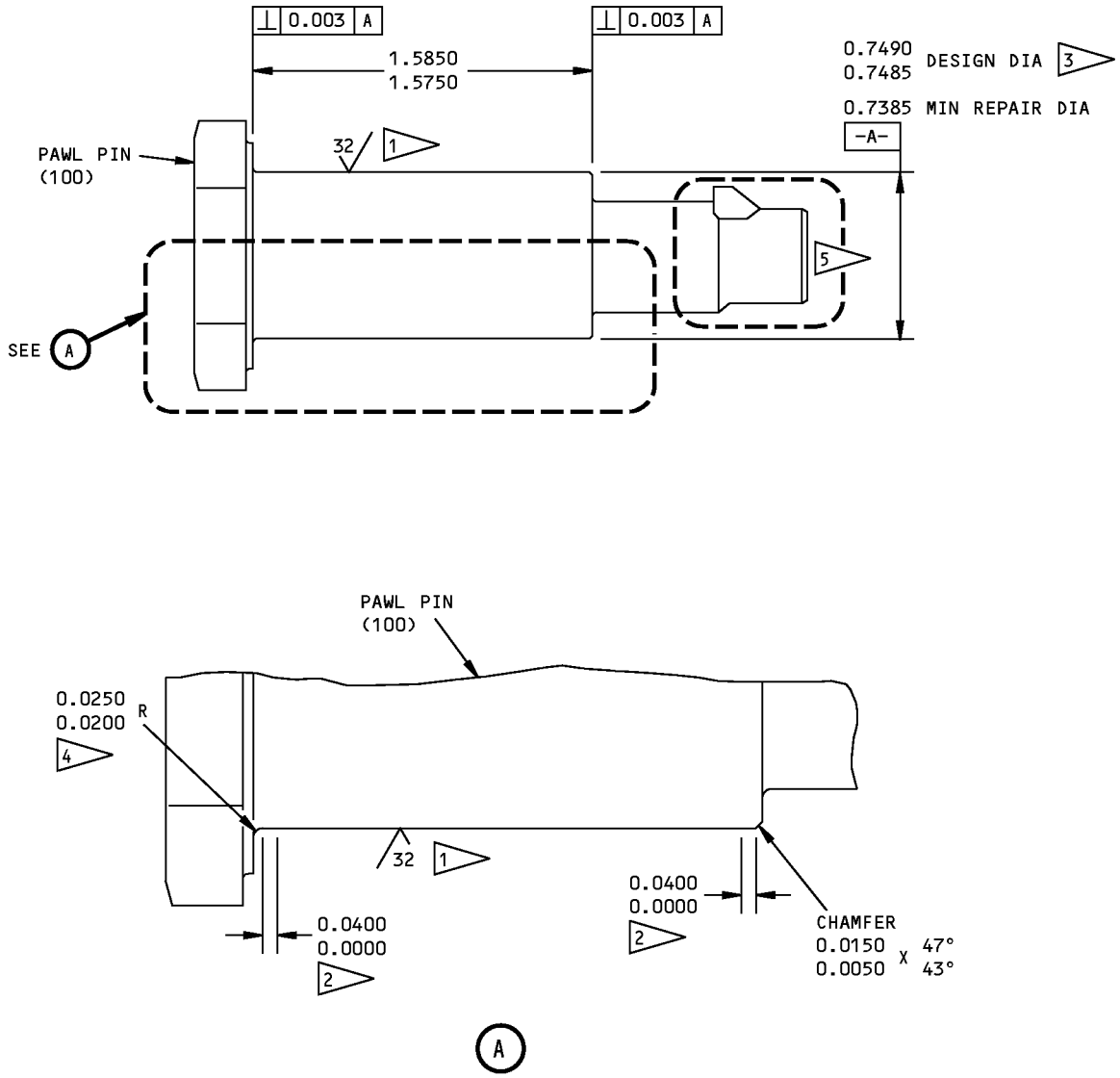
(4) Do a penetrant check as shown in SOPM 20-20-02.

(5) Mask threads and head to shank fillet radius. Shot peen all machined surfaces per SOPM 20-10-03.

(6) After shot peen, 0.0020 inch maximum material can be removed from the shank of the pin to get the necessary dimension and surface roughness before plating.

(7) Apply chrome plate (F-15.34) to the outside diameter of the pin per SOPM 20-42-03. Protect fillet radius from chrome plate particles during chrome plate.

(8) Grind the pin outside diameter to the design dimensions and surface roughness as shown in REPAIR 3-1, Figure 601.



1. SURFACE ROUGHNESS IS BEFORE AND AFTER CHROME PLATE
2. CHROME PLATE RUN OUT AREA
3. CHROME PLATE THIS SURFACE
4. SUPPLY PROTECTION FOR THE FILLET RADIUS DURING THE CHROME PLATING
5. SHOWN WITH PAWL FEATURE USED ON 310A2042-2. 310A2042-3 HAS COTTER PIN HOLE IN LIEU OF PAWL FEATURE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: NICKEL ALLOY 718 BAR (180-200 KSI)

SHOT PEEN: INTENSITY 0.014A-0.019A
COVERAGE 2

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

310A2042-2,-3 Pawl Pin Repair
Figure 601

MISCELLANEOUS PARTS - REPAIR 4-1

1. **Procedure**

A. Repair of parts listed in REPAIR 4-1, Table 601 consists of restoration of the original finish.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Figure 1		
End cap (110)	15-5PH, 180-200 ksi	Passivate (F-17.09)
IPL Figure 2		
Angle (75A, 80A, 85A), striker plate (90A), deflector (95A)	321 or 347 CRES	Prepare surface and passivate (F-17.09).

ASSEMBLY

1. General

A. This procedure has the data necessary to assemble the thrust link components.

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

C. Use standard industry practices and the steps below to assemble the thrust link components.

D. Refer to IPL Figure 1 for item numbers.

2. Thrust Link Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00006	Compound - Antiseize Pure Nickel Special - Never-Seez NSBT-8N	MIL-PRF-907F

B. References

Reference	Title
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-50-07	LUBRICATION

C. Procedure

(1) Apply Never-Seez NSBT-8N compound, D00006 as shown in SOPM 20-50-07 to the following surfaces:

(a) The threads of the pins

(b) The shanks of the pins

(c) Below the heads of the pins

(d) The bores of the bushings

(e) The flange facings of the bushings

(f) The bore of the spherical bearings

(g) The flat surface of the spherical ball bearings

(2) Install pin (100) through the link assembly (15, 20). See ASSEMBLY, Figure 701. For pin configurations available, see IPL Figure 1.

(a) Install the washer (105) on the pin. Locate the chamfered inside diameter towards the head of the pin.

(b) Point the pin (100) down on the forward engine thrust mounts.

1) Install sacrificial washer on the inside of the link clevis as shown. Locate the chamfered diameter on the bearing side.

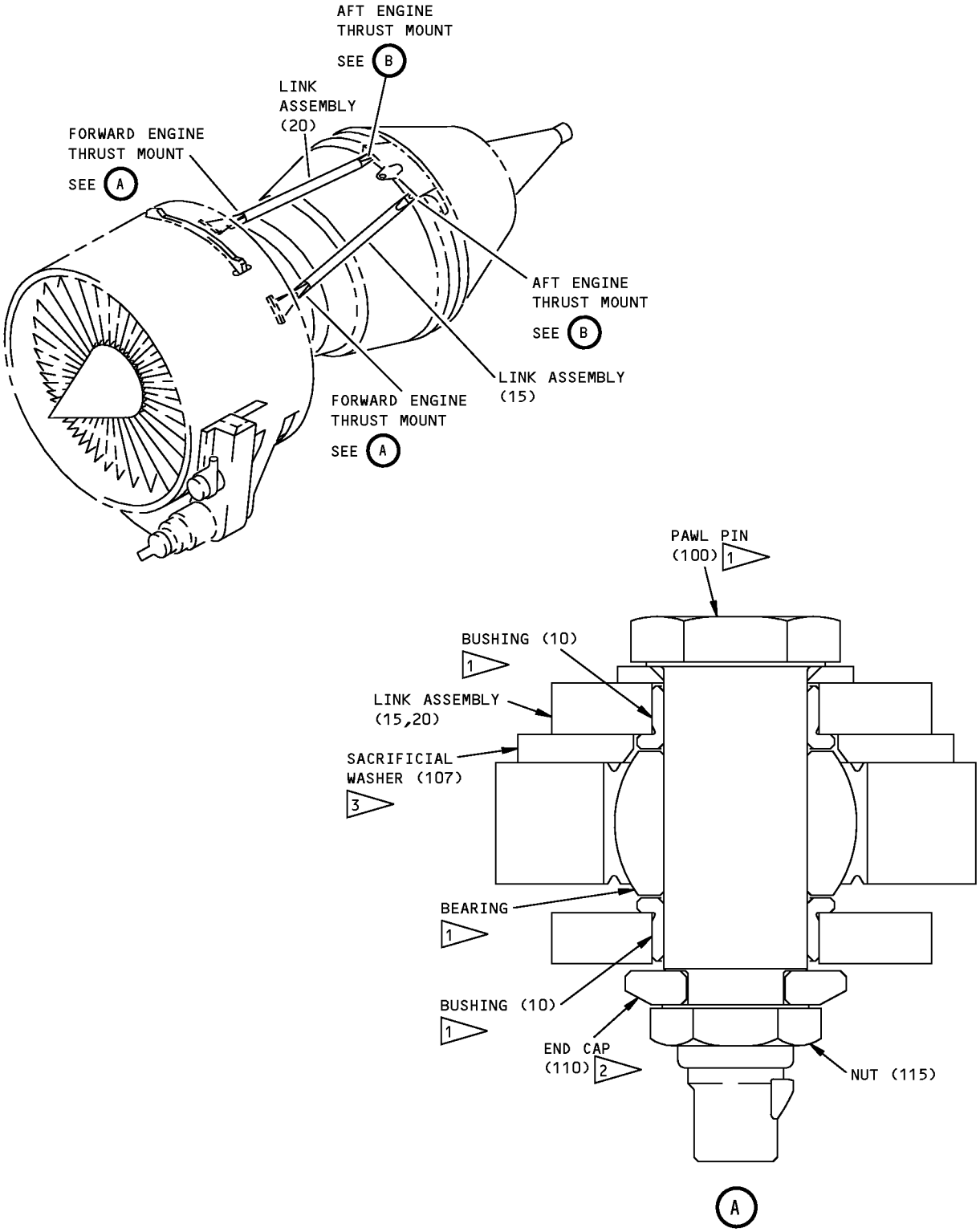
(c) Point the pin (100) up on the aft engine thrust mounts.

(3) Install the end cap (110) with flat side against shoulder of pin.

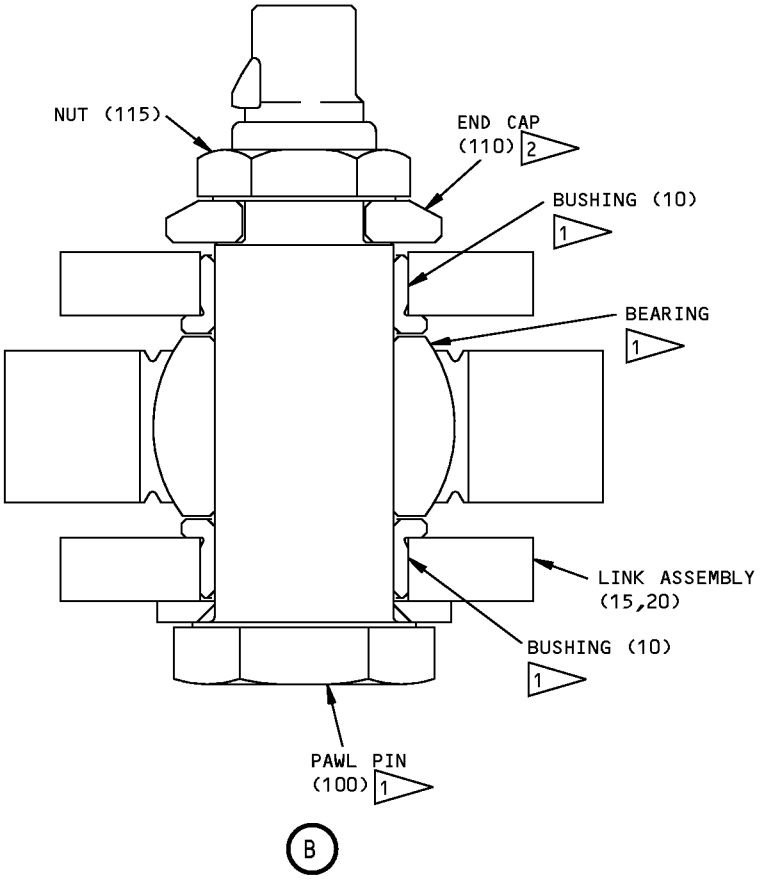
(4) Install the nut (115). Tighten nut (115) within torque range of 290-510 in-lbs. Torque may be applied to nut or pin head.

(a) Make sure the spring loaded pawl on the pin (100) is extended after the nut (115) is installed.

(5) If required, install the cotter pin as shown in SOPM 20-50-02.



Thrust Link Assembly
Figure 701 (Sheet 1 of 2)



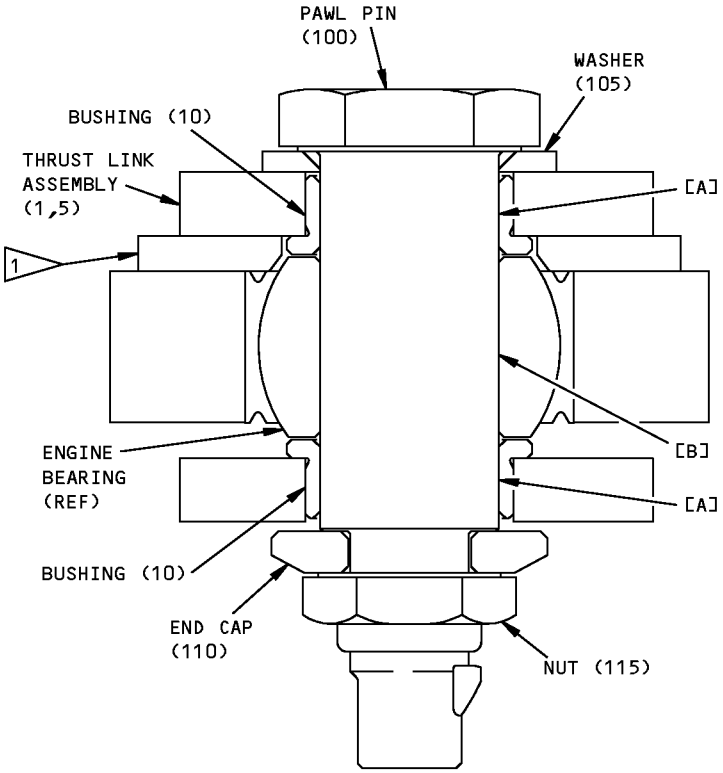
1 APPLY ANTI-SIEZE COMPOUND TO THE INDICATED PARTS

2 INSTALL END CAP WITH FLAT SIDE AGAINST SHOULDER OF PIN

3 INSTALL WITH CHAMFERED DIAMETER ON BEARING SIDE

Thrust Link Assembly
Figure 701 (Sheet 2 of 2)

FITS AND CLEARANCES



(TYPICAL)

REF LETTER	REF IPL FIG. 1, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
A	ID 10 OD 100	0.7495 0.7485	0.7503 0.7490	0.0005	0.0018	0.7467	0.7521	0.0036
B	ID ENGINE COMPONENT BEARING OD 100	0.7495 0.7485	0.7500 0.7490	0.0005	0.0015	0.7470	0.7515	0.0030

* ALL DIMENSIONS ARE IN INCHES

1 SACRIFICIAL WASHER USED ON FORWARD ENGINE THRUST MOUNTS ONLY

Fits and Clearances
Figure 801

COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(NOT APPLICABLE)

ILLUSTRATED PARTS LIST

1. Introduction

A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.

B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1 2 3 4 5 6 7

. Assembly

. Attaching parts for assembly

. . Detail parts for assembly

. . Subassembly

. . Attaching parts for subassembly

. . . Detail parts for subassembly

. . . Sub-subassembly

. . . Attaching parts for subassembly

. . . . . Details parts for sub-subassembly

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

C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.

D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.

E. Color-coded parts are identified with a single digit alpha following the dash number or with ''SP'' suffix. If the ''SP'' suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.

F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a ''~'' at the end of the line and will be continued on the next line. The ''~'' denotes that the part number continues on the next line.

G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.

(1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.

(2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.

H. Interchangeable Parts

Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

VENDOR CODES

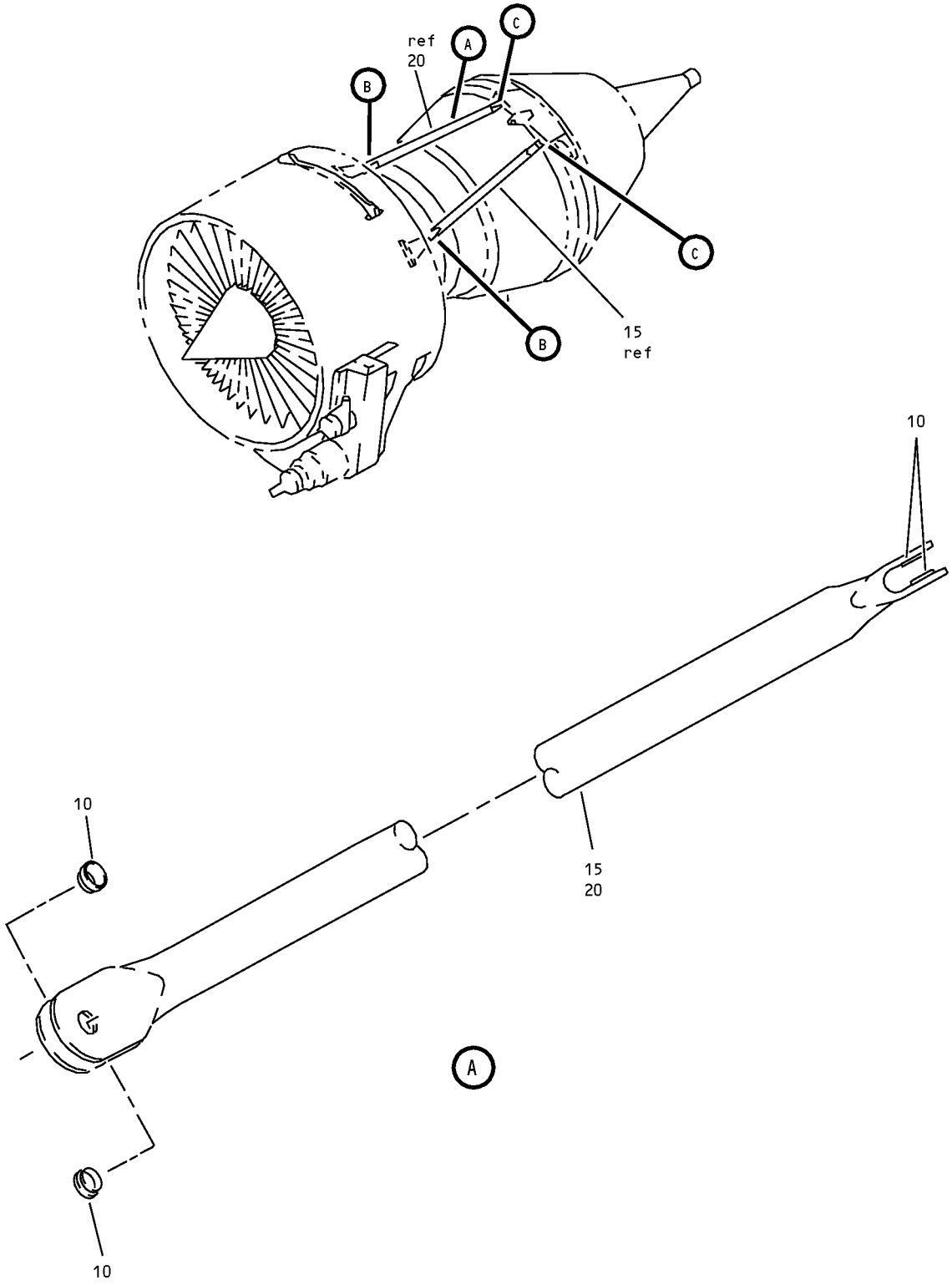
Code	Name
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
56878	SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV 301 HIGHLAND AVE JENKINTOWN, PENNSYLVANIA 19046 FORMERLY STANDARD PRESSED STEEL FORMERLY IN SALT LAKE, UTAH
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
85495	Replaced: [V85495] BRILES MFG CO SEE V97928 OMARK INDUSTRIES OMARK INDUSTRIES SEE PRECISION FASTENING PRECISION FASTENING SUB OF OMARK IND INC SEE DEUTSCH FASTENER CORP V08524 Replaced: [V08524] DEUTSCH FASTENER CORP SEE CODE V97928 Replaced: [V97928] HUCK INTL SEE V17446 HUCK INTL by Code: Name and Address below 17446: HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL

Code	Name
97928	Replaced: [V97928] SEE V17446 HUCK INTL by Code: Name and Address below 17446: HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL

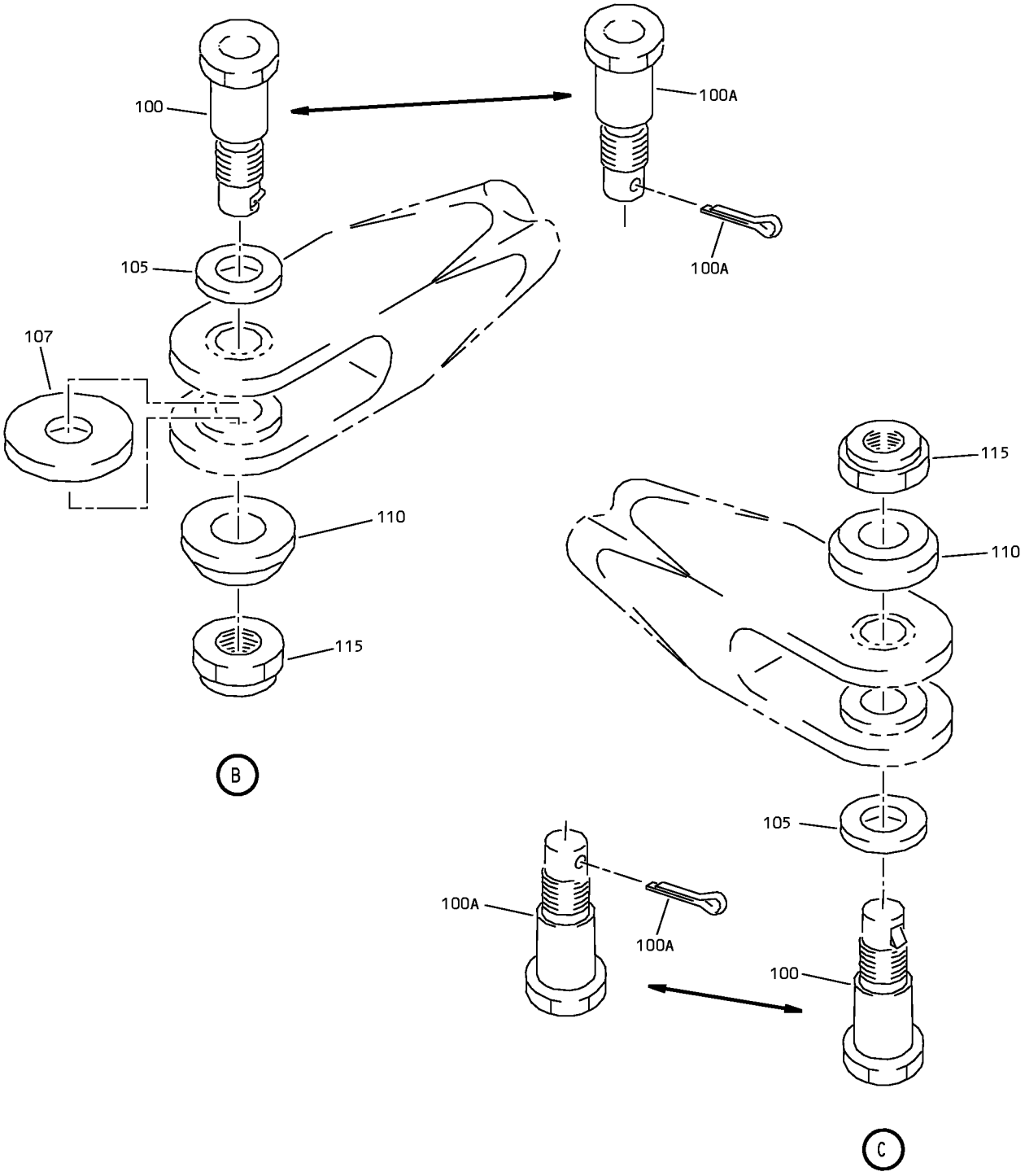
NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1		1
		1		1
109LH9074-8		1	115	4
310A2040-7		1	107	2
310A2041-10		1	5A	RF
310A2041-11		1	15A	1
310A2041-12		1	20A	1
310A2041-5		1	1A	RF
310A2041-6		1	5	RF
310A2041-7		1	15	1
310A2041-8		1	20	1
310A2041-9		1	1B	RF
310A2042-2		1	100	4
310A2042-3		1	100A	4
310A2043-1		1	110	4
332A1908-10		2	90	1
332A1908-14		2	50	1
332A1908-17		2	55	1
332A1908-19		2	40	1
332A1908-20		2	60	1
332A1908-21		2	45	1
332A1908-23		2	95	1
332A1908-35		1	7	RF
		2	1A	RF
332A1908-36		2	65	1
332A1908-37		2	75	1
332A1908-38		2	65A	1
		2	65C	1
332A1908-39		1	7A	RF
		2	1B	RF
332A1908-4		2	85	1
332A1908-40		2	65B	1
332A1908-41		2	90A	1
332A1908-42		2	95A	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
332A1908-43		2	75A	1
332A1908-44		2	85A	1
332A1908-45		2	80A	1
332A1908-5		2	80	1
332A1908-55		1	7B	RF
		2	1C	RF
332A1908-58		1	7C	RF
		2	1D	RF
332A1908-59		2	45A	1
69235-820CM		1	115	4
AN960C10L		2	15	6
BACB28AT12D025B		1	10	4
BACN10JC3CM		2	20	6
BACN10JC8CM		1	115	4
BACR15CE5M		2	35	1
BACS40R7T13		2	25	1
BACW10BP12ACU		1	105	4
BMN4122C1D2-8		1	115	4
		1	115	4
H01-8BAC		1	115	4
MS20615-5M		2	30	10
		2	70	26
NAS1802-3-6		2	5	4
NAS1802-3-8		2	10	2



Thrust Link Assembly
IPL Figure 1 (Sheet 1 of 2)



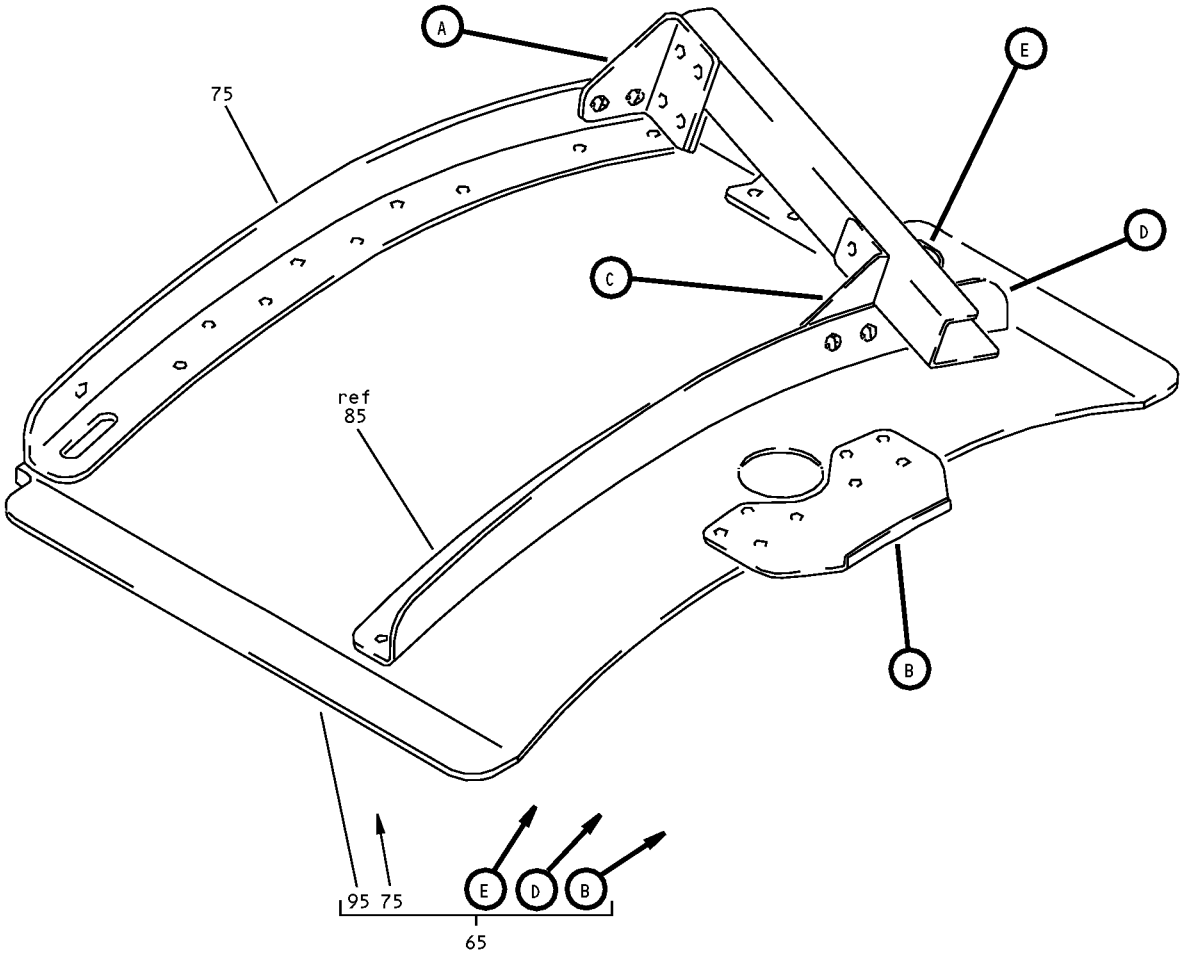
Thrust Link Assembly
IPL Figure 1 (Sheet 2 of 2)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–			MINOR COMPONENTS, CFM56		
–1A	310A2041-5		LINK ASSY-THRUST	A	RF
–1B	310A2041-9		LINK ASSY-THRUST	G	RF
–5	310A2041-6		LINK ASSY-THRUST	B	RF
–5A	310A2041-10		LINK ASSY-THRUST	H	RF
–7	332A1908-35		DEFLECTOR ASSY-PRECOOLER EXH (FOR DETAILS SEE FIG. 2)	C	RF
–7A	332A1908-39		DEFLECTOR ASSY-PRECOOLER EXH (FOR DETAILS SEE FIG. 2)	D	RF
–7B	332A1908-55		DEFLECTOR ASSY-PRECOOLER EXH (FOR DETAILS SEE FIG. 2)	E	RF
–7C	332A1908-58		DEFLECTOR ASSY-PRECOOLER EXH (FOR DETAILS SEE FIG. 2)	F	RF
10	BACB28AT12D025B		. BUSHING	A, B, G, H	4
15	310A2041-7		. LINK	A	1
–15A	310A2041-11		. LINK	G	1
20	310A2041-8		. LINK	B	1
–20A	310A2041-12		. LINK	H	1
			INSTALLATION PARTS	, H	
100	310A2042-2		PIN-PAWL (310A2042-3 PIN TOGETHER WITH BACP18BC03B07P COTTER PIN CAN REPLACE OR BE REPLACED BY 310A2042-2 PAWL PIN.)	A, B, G, H	4
–100A	310A2042-3		PIN-PAWL (310A2042-3 PIN TOGETHER WITH BACP18BC03B07P COTTER PIN CAN REPLACE OR BE REPLACED BY 310A2042-2 PAWL PIN.)	A, B, G, H	4
105	BACW10BP12ACU		WASHER	A, B, G, H	4
107	310A2040-7		WASHER, SACRIFICIAL	A, B, G, H	2

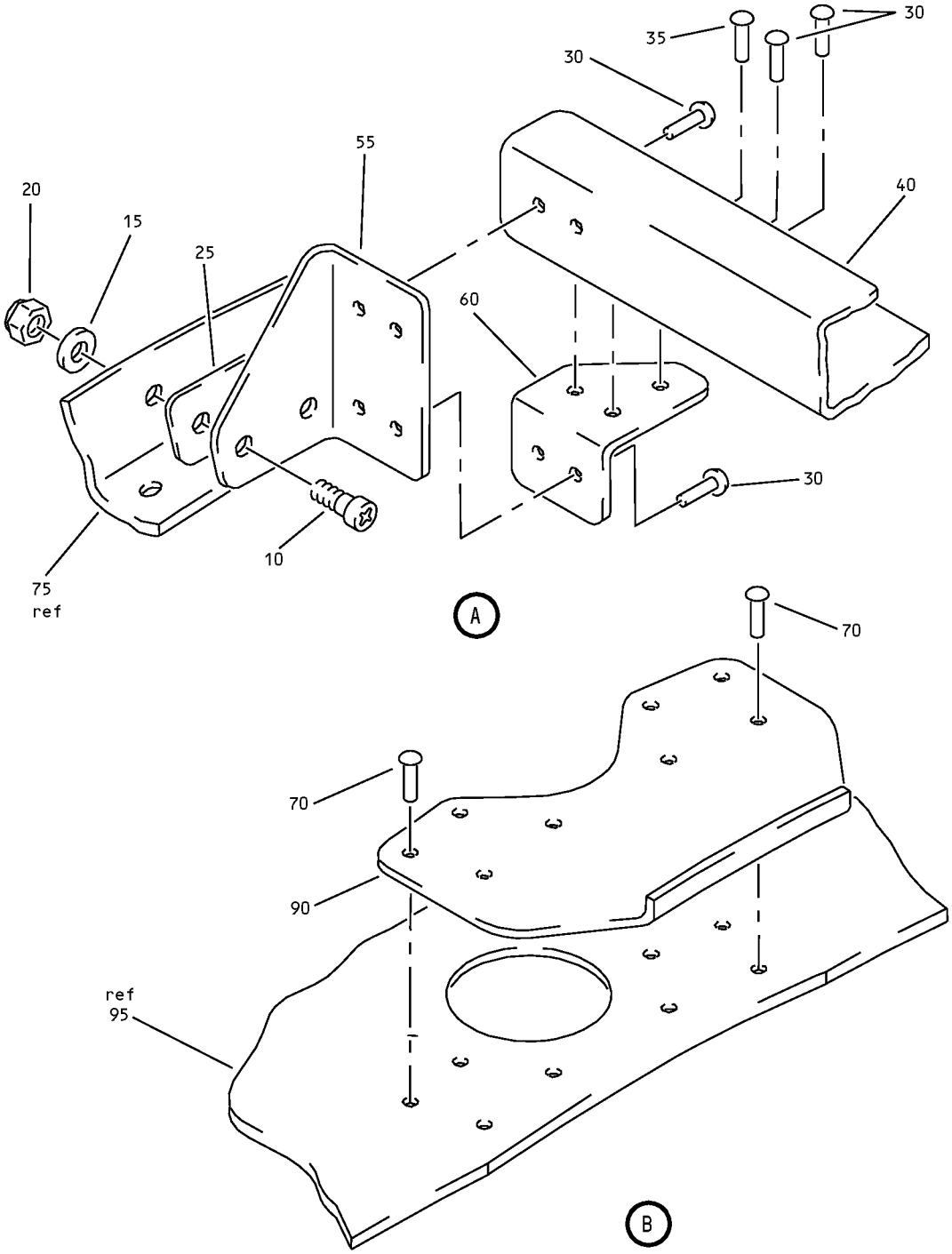
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
110	310A2043-1		CAP-END	A, B, G, H	4
115	H01-8BAC		NUT (V15653) (SPEC BACN10JC8CM) (OPT BMN4122C1D2-8 (V85495)) (OPT 109LH9074-8 (V72962)) (OPT 69235-820CM (V56878)) (OPT BMN4122C1D2-8 (V97928))	A, B, G, H	4

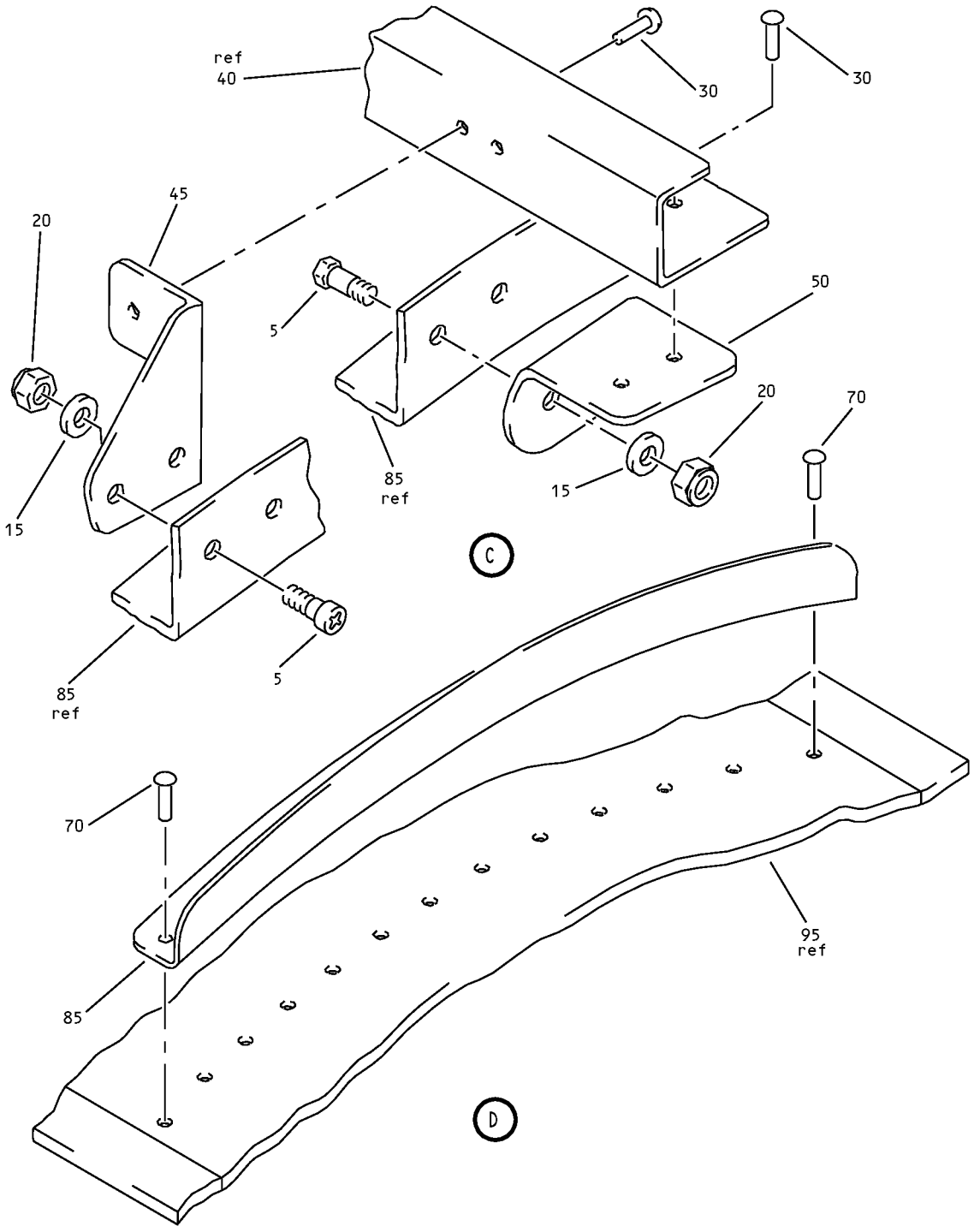
–Item not Illustrated



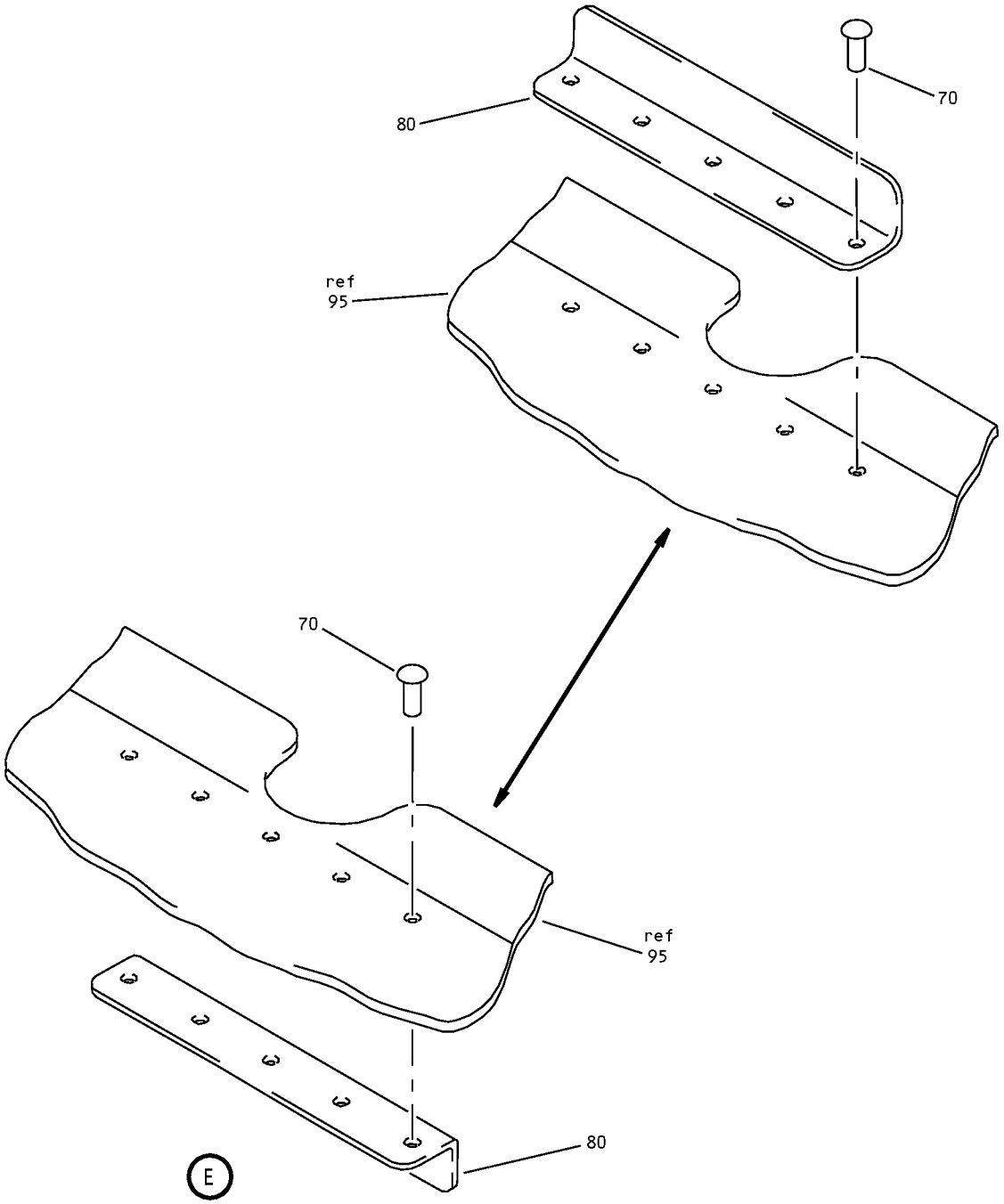
Deflector Assembly
IPL Figure 2 (Sheet 1 of 4)



Deflector Assembly
IPL Figure 2 (Sheet 2 of 4)



Deflector Assembly
IPL Figure 2 (Sheet 3 of 4)



Deflector Assembly
IPL Figure 2 (Sheet 4 of 4)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1A	332A1908-35		DEFLECTOR ASSEMBLY-PRE COOLER EXH (PRE SB 737-71-1181)	C	RF
–1B	332A1908-39		DEFLECTOR ASSEMBLY-PRE COOLER EXH (POST SB 737-71-1181)	D	RF
–1C	332A1908-55		DEFLECTOR ASSEMBLY-PRE COOLER EXH	E	RF
–1D	332A1908-58		DEFLECTOR ASSEMBLY-PRE COOLER EXH	F	RF
5	NAS1802-3-6		. SCREW	C-F	4
10	NAS1802-3-8		. SCREW	C-F	2
15	AN960C10L		. WASHER	C-F	6
20	BACN10JC3CM		. NUT	C-F	6
25	BACS40R7T13		. SHIM	C-F	1
30	MS20615-5M		. RIVET (SIZE DETERMINED ON INST)	C-F	10
35	BACR15CE5M		. RIVET (SIZE DETERMINED ON INST)	C-F	1
40	332A1908-19		. CHANNEL	C-F	1
45	332A1908-21		. BRACKET	C-E	1
45A	332A1908-59		. BRACKET	F	1
50	332A1908-14		. BRACKET	C-F	1
55	332A1908-17		. BRACKET	C-F	1
60	332A1908-20		. BRACKET	C-F	1
65	332A1908-36		. DEFLECTOR ASSEMBLY	C	1
65A	332A1908-38		. DEFLECTOR ASSEMBLY (OPT ITEM 65B)	D	1
65B	332A1908-40		. DEFLECTOR ASSEMBLY (OPT ITEM 65A)	D	1
65C	332A1908-38		. DEFLECTOR ASSEMBLY	E, F	1
70	MS20615-5M		. . RIVET (SIZE DETERMINED ON INST)	C-F	26
75	332A1908-37		. . ANGLE (USED ON ITEMS 65, 65A, 65C)		1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
75A	332A1908-43		. . ANGLE (USED ON ITEM 65B)		1
80	332A1908-5		. . ANGLE (USED ON ITEMS 65, 65A, 65C)		1
80A	332A1908-45		. . ANGLE (USED ON ITEM 65B)		1
85	332A1908-4		. . ANGLE (USED ON ITEMS 65, 65A, 65C)		1
85A	332A1908-44		. . ANGLE (USED ON ITEM 65B)		1
90	332A1908-10		. . PLATE-STRIKER (USED ON ITEMS 65, 65A, 65C)		1
90A	332A1908-41		. . PLATE-STRIKER (USED ON ITEM 65B)		1
95	332A1908-23		. . DEFLECTOR (USED ON ITEMS 65, 65A, 65C)		1
95A	332A1908-42		. . DEFLECTOR (USED ON ITEM 65B)		1

–Item not Illustrated