COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

PRECOOLER INSTALLATION COMPONENTS

PART NUMBER 322A2341–3, –4, –5, –6, 332A2341–1, –2, 332A2371–1, –3

PUBLISHED BY BOEING COMMERCIAL AIRPLANES GROUP, SEATTLE, WASHINGTON, USA
A DIVISION OF THE BOEING COMPANY
PAGE DATE: Jul 01/2009

COMPONENT MAINTENANCE MANUAL

Revision No. 8
Jul 01/2009

To: All holders of PRECOOLER INSTALLATION COMPONENTS 36-12-07.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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Location of Change	Description of Change
	NO HIGHLIGHTS

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A = Added, R = Revised, D = Deleted, O = Overflow

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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

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		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

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When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

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.

COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

(NOT APPLICABLE)

(NOT APPLICABLE)

(NOT APPLICABLE)

REPAIR

1. General

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

Table 601:

PART NUMBER	NAME	REPAIR
332A2341	LINK ASSEMBLY	1-1,1-2
332A2371	INLET ASSEMBLY	2-1, 2-2

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
∨	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 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
◎ | Ø 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
⌖ | 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 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

LINK ASSEMBLY - REPAIR 1-1

332A2341–1, –2, –3, –4, –5, –6

1. General

A. This repair tells how to replace the parts of the link assembly.

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

C. Refer to the IPL Figure 1, IPL Figure 2 ,IPL Figure 3, IPL Figure 4, IPL Figure 5 and IPL Figure 6for item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

C. Procedure

NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the old bushings from the clevis.

(2) Install replacement bushings by the shrink-fit method with grease, D00633 or grease, D00015 (SOPM 20-50-03).

(3) It is not necessary to machine the bushing bore or flanges.

3. Clevis Replacement

A. Procedure

(1) Remove the old clevis from the link .

(2) Install a replacement clevis on the link with one nut and adjust it to the dimension shown in REPAIR 1-1, Figure 601.

(3) Make sure the clevis is turned to the angle with the rod end bearing as shown in REPAIR 1-1, Figure 601.

(4) Use the inspection hole to make sure there is minimum thread engagement.

4. Rod End Bearing Replacement

A. Procedure

(1) Remove the old rod end bearing from the link.

(2) Install a replacement rod end bearing on the link with one nut and adjust to the dimensions shown in REPAIR 1-1, Figure 601.

(3) Make sure the clevis is turned to the angle with the rod end bearing as shown in REPAIR 1-1, Figure 601

(4) Use the inspection hole to make sure there is minimum thread engagement.

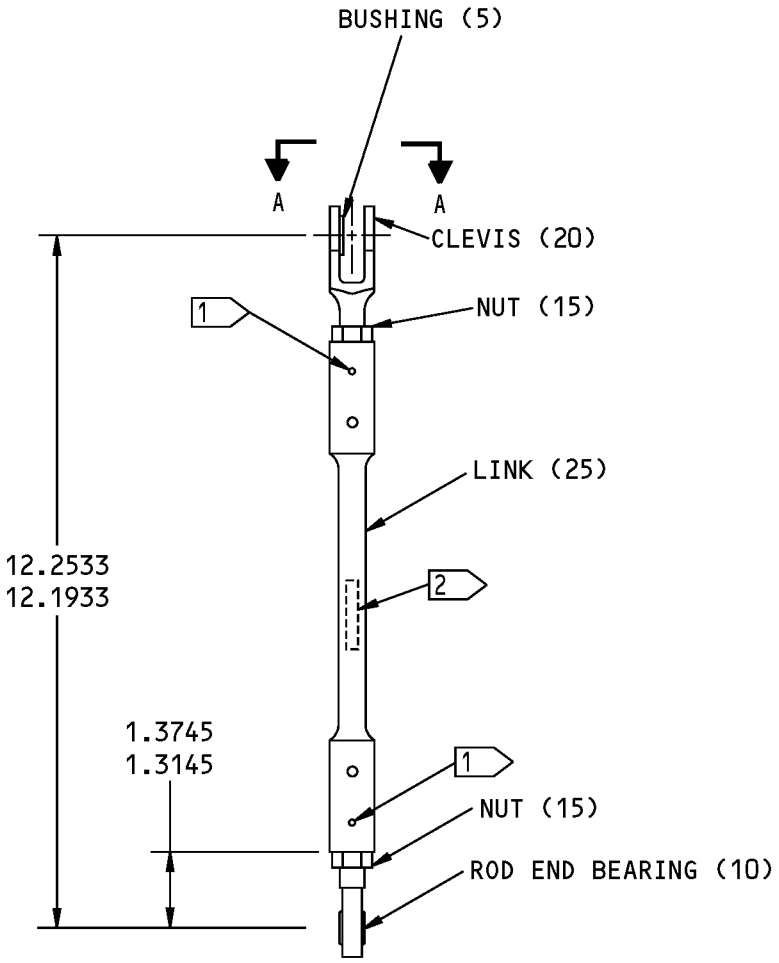
5. Bearing Ball Replacement

A. Procedure

(1) Turn and remove the old ball.

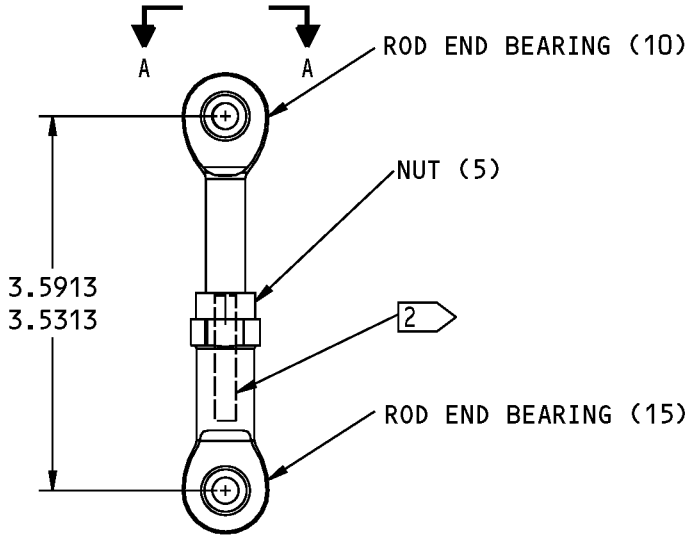
(2) Install a replacement ball with grease.

(3) Tie the ball to the link to hold these parts together.



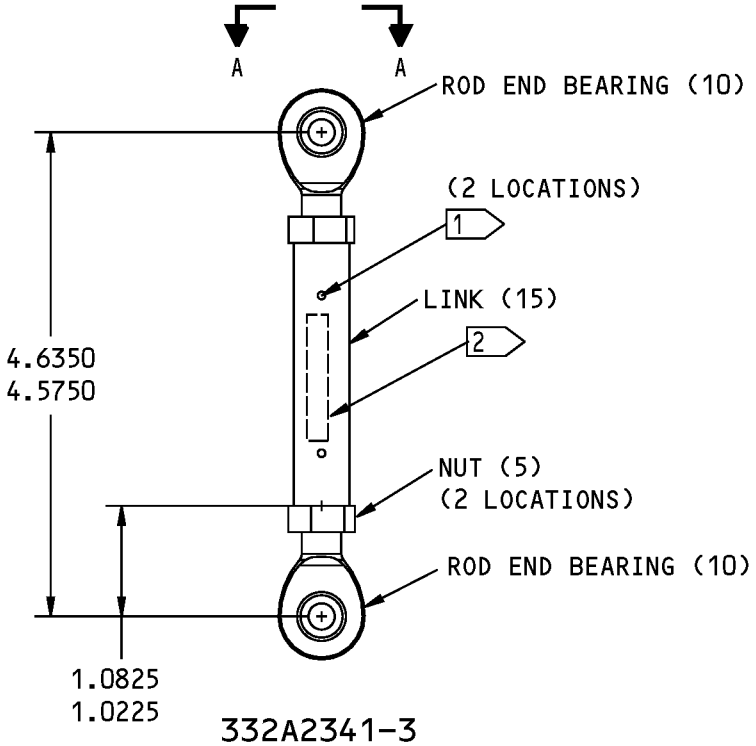
332A2341-1
(ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 1)

332A2341-1 thru -6 Link Assembly Repair
Figure 601 (Sheet 1 of 4)



332A2341-2

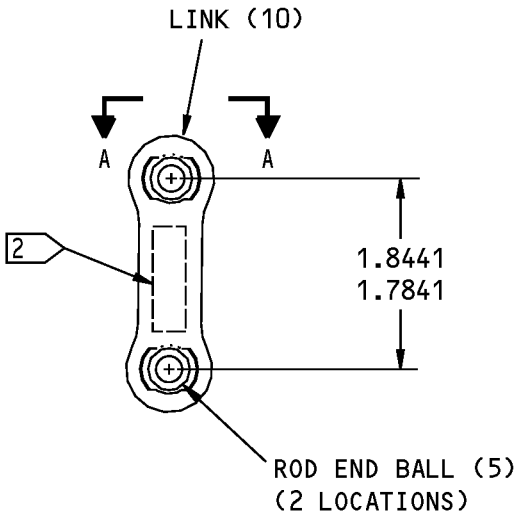
ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 2



332A2341-3

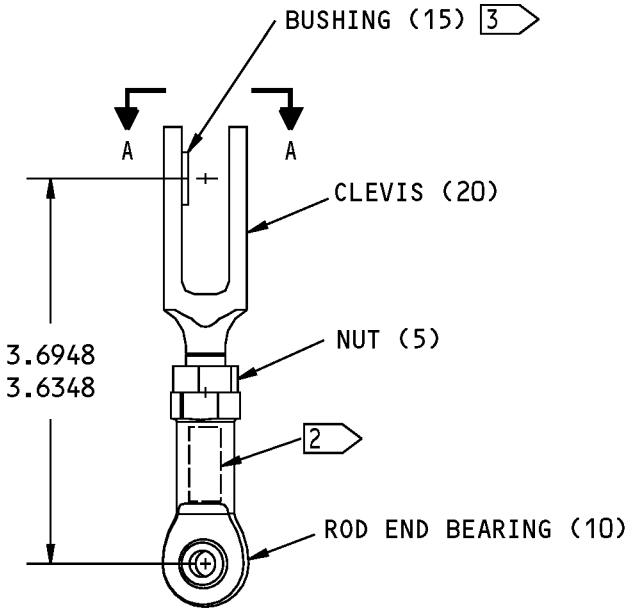
ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 3

332A2341-1 thru -6 Link Assembly Repair
Figure 601 (Sheet 2 of 4)



332A2341-4

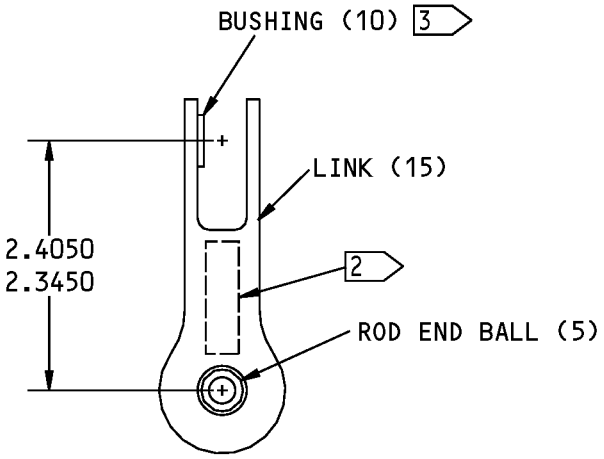
(ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 4)



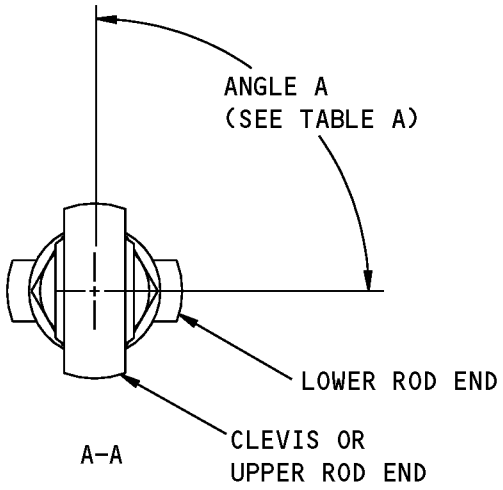
332A2341-5

(ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 5)

332A2341-1 thru -6 Link Assembly Repair
Figure 601 (Sheet 3 of 4)



332A2341-6
(ITEM NUMBERS ON THIS SHEET REFER TO IPL FIG. 6)



PART NUMBER	ANGLE A (±2°)
332A2341-1	0°
332A2341-2	0°
332A2341-3	0°
332A2341-5	99.7995°
332A2341-6	90.0000°

TABLE A

1 INSPECTION HOLE, TO LOOK FOR MINIMUM THREAD ENGAGEMENT

2 PART NUMBER

3 INSTALL THE BUSHING BY THE SHRINK-FIT METHOD (SOPM 20-50-03) WITH BMS 3-33 OR BMS 3-24 GREASE

ALL DIMENSIONS ARE IN INCHES

332A2341-1 thru -6 Link Assembly Repair
Figure 601 (Sheet 4 of 4)

CLEVIS - REPAIR 1-2

332A2342 –1, –2, –3, –4

1. General

A. This repair tells how to repair and refinish link detail parts.

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

C. Refer to REPAIR-GENERAL, Figure 601 for the standard true position dimensioning symbols shown in the repair.

D. Refer to IPL Figure 1and REPAIR 1-1, Figure 601, IPL Figure 2, IPL Figure 3, IPL Figure 4, IPL Figure 5and IPL Figure 6for item numbers.

E. General repair details.

(1) Material: (All links and clevises) 15-5PH CRES, 150-170 ksi

2. Holes for Bushing

A. Procedure

NOTE: For the decoding table for the Boeing finish codes, refer to SOPM 20-41-01.

(1) Machine the hole as necessary, within repair limits, to remove defects (REPAIR 1-2, Figure 601).

(2) Break all the sharp edges.

(3) Do a magnetic particle check as shown in SOPM 20-20-01.

(4) Make an oversize bushing (REPAIR 1-2, Figure 602) as follows:

(a) Bushing material: 17-4 PH CRES, AMS 5643, solution treated, heat treated to 180-200 ksi.

(b) Break all the sharp edges.

(c) Passivate (F-17.25).

(5) Install the oversize bushing as shown in REPAIR 1-1, Paragraph 2..

3. Detail Part Refinish

A. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for the Boeing finish codes, refer to SOPM 20-41-01.

(1) Clevis (20, IPL Figure 1) – Passivate (F-17.25).

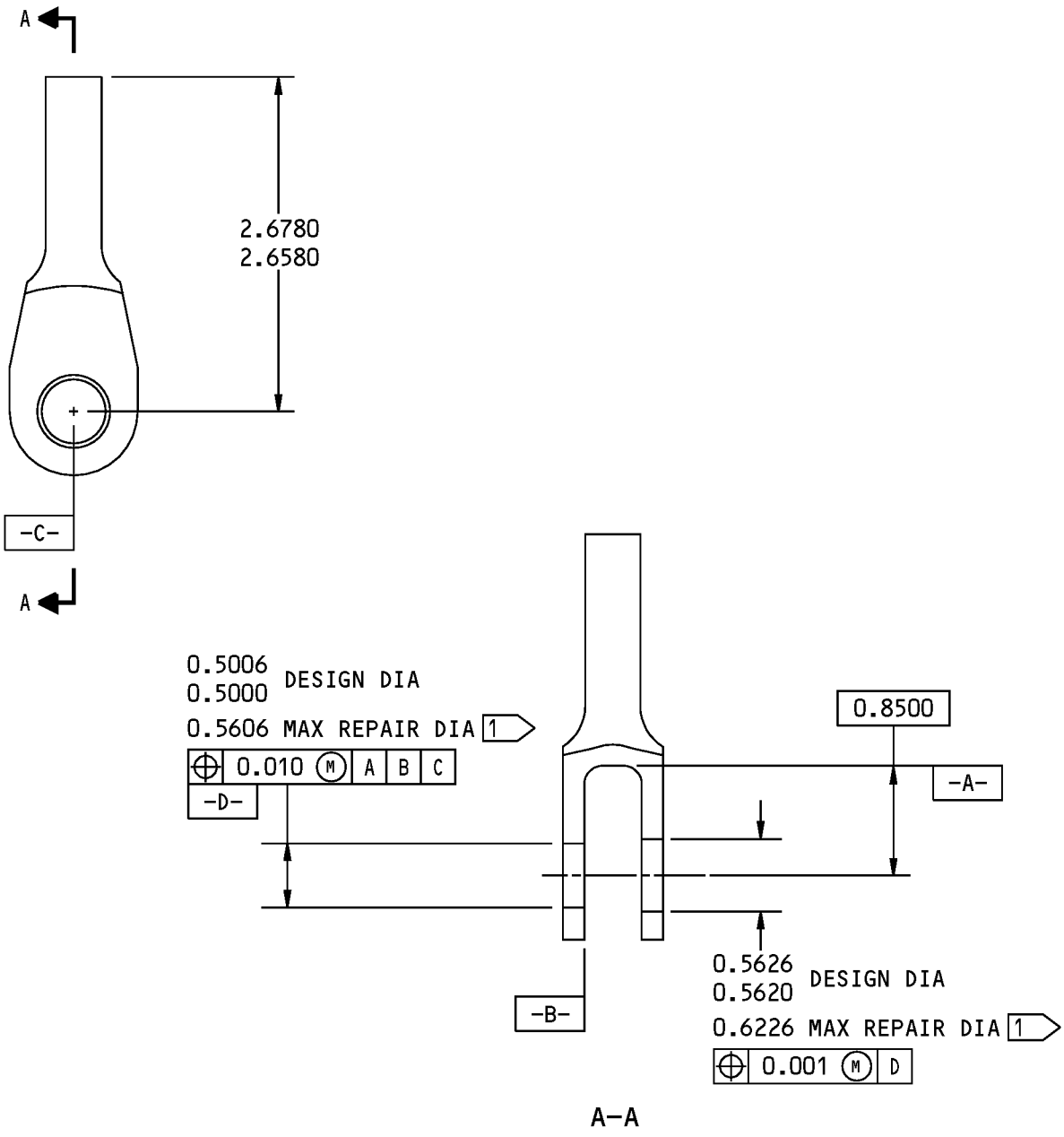
(2) Link (25, IPL Figure 1) – Passivate (F-17.25).

(3) Link (15, IPL Figure 3) – Passivate (F-17.25).

(4) Link (10, IPL Figure 4) – Passivate (F-17.25).

(5) Clevis (20, IPL Figure 5) – Passivate (F-17.25).

(6) Link (15, IPL Figure 6) – Passivate (F-17.25).



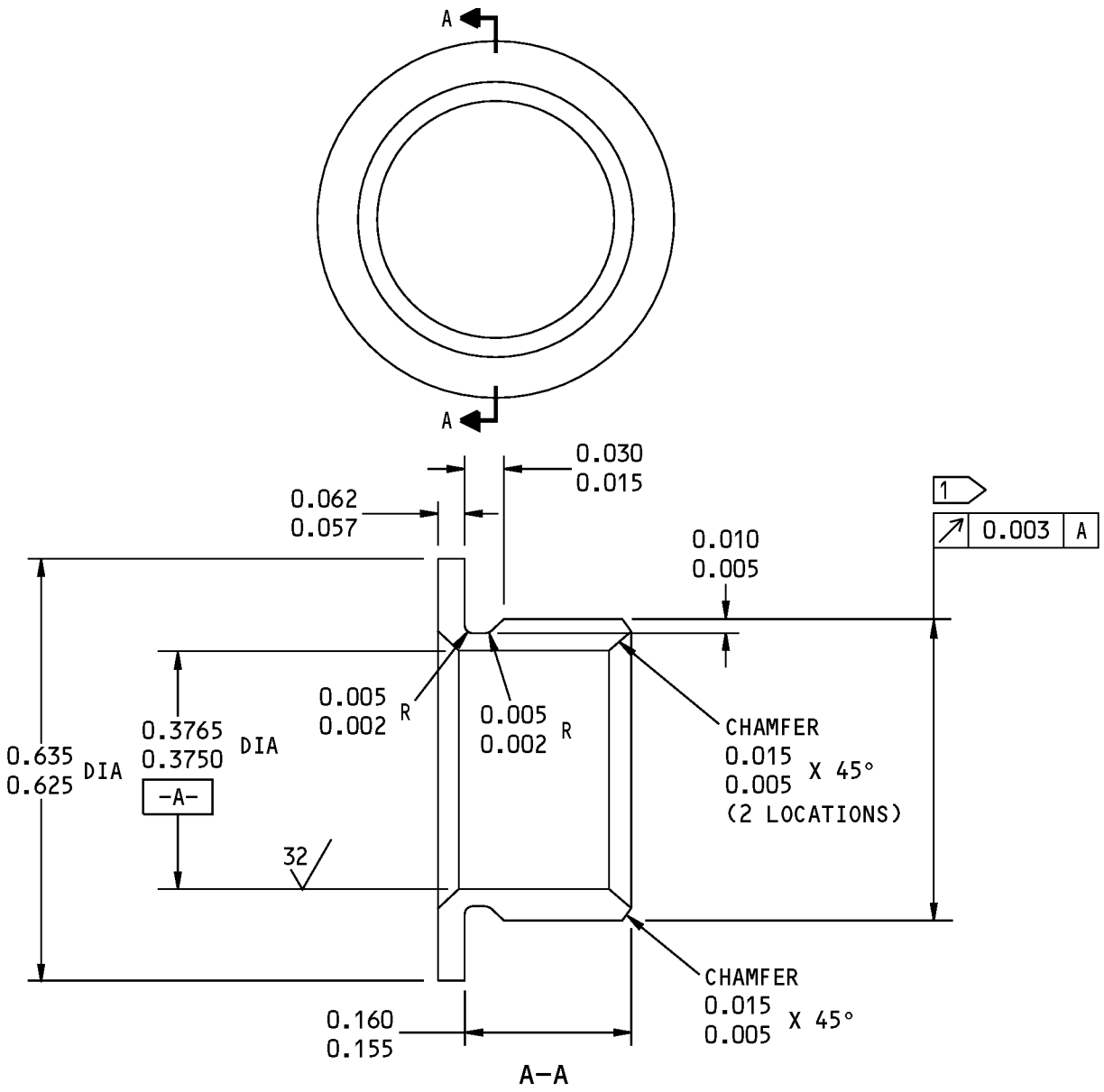
1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

125 ALL MACHINED SURFACES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

332A2342-1 Clevis Repair
Figure 601



REPLACES BUSHING (5)

1 LUG HOLE REPAIR DIAMETER PLUS 0.0004-0.0016 INTERFERENCE

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

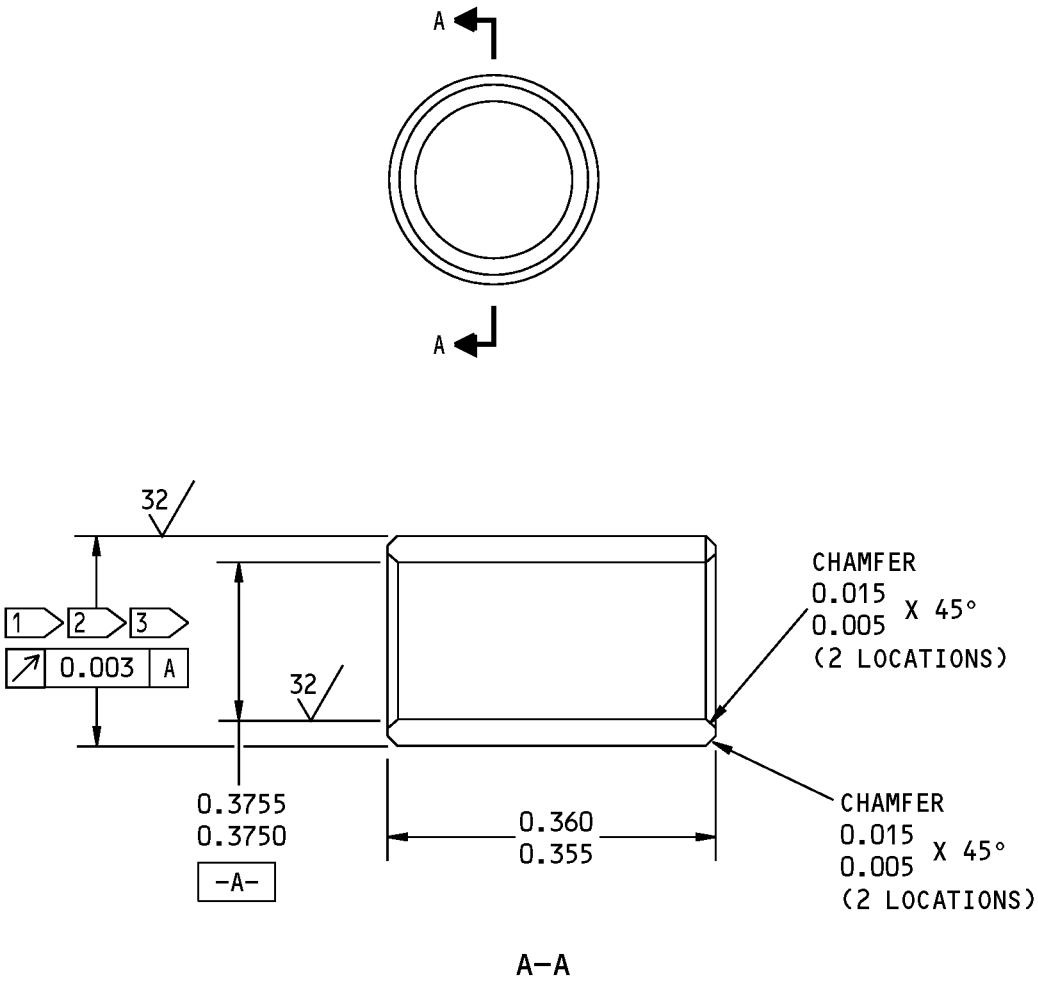
MATERIAL: 17-4PH CRES, 180-200 KSI

FINISH: PASSIVATE (F-17.25)

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 602



A–A

OVERSIZE BUSHING REPLACEMENT FOR BUSHING (90)

1. THE OUTSIDE DIAMETER OF THE BUSHING IS EQUAL TO THE BUSHING HOLE INSIDE DIAMETER PLUS CLEARANCE 0.0005–0.0016 INCH.
2. CHROME PLATE, 0.001–0.002 INCH THICK (F-15.34) IN THIS AREA
3. DIMENSION AFTER CHROME PLATING

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603

INLET ASSEMBLY - REPAIR 2-1

332A2371–1, –3

1. General

A. This repair tells how to replace the parts of the inlet assembly.

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

C. Refer to the IPL Figure 7 for item numbers.

2. Nutplate Replacement

A. Procedure

(1) Remove the rivets and the old nutplate.

(2) Install a replacement nutplate with new rivets.

3. Inlet Assembly 332A2371-3 Topcoat

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

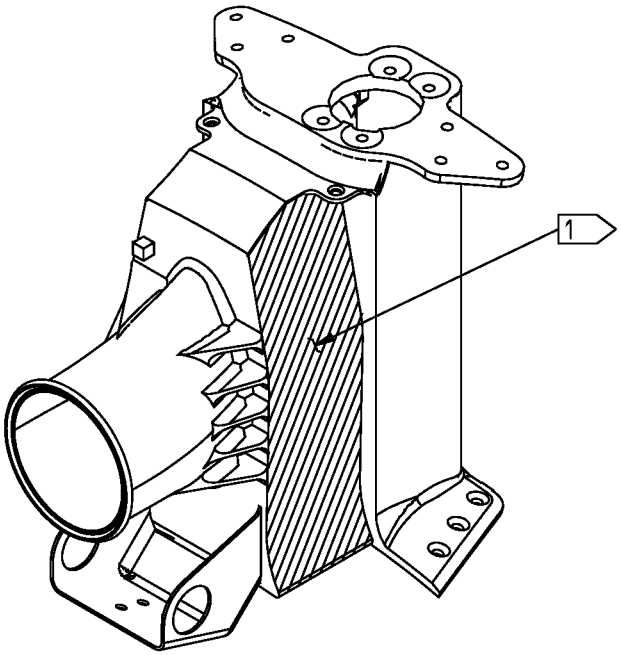
Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00304	Coating - Teflon Filled, Non Decorative, Sprayable Material	BMS 10-86 Type I

B. Procedure (REPAIR 2-1, Figure 601)

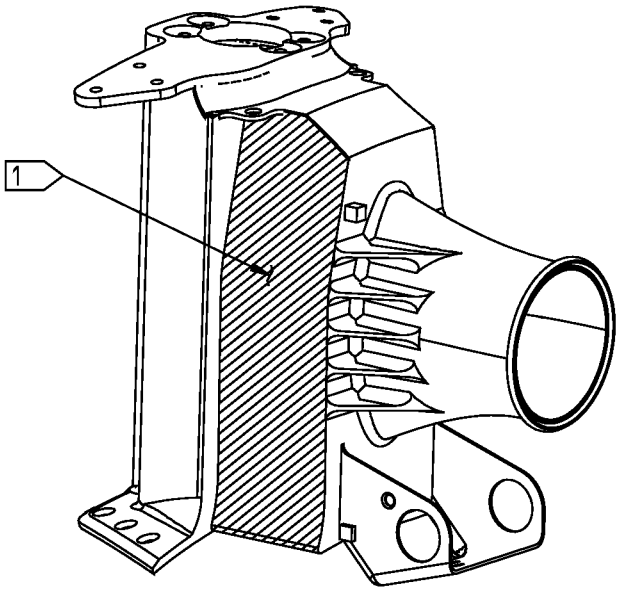
NOTE: This finish, when applied to the 332A2371-1 inlet assembly, makes it into a 322A2371-3 inlet assembly.

(1) Abrasive clean and apply primer, C00259 (F-20.02) to the area shown.

(2) Apply coating, C00304 (F-14.9625) to the area that has the primer.



RIGHT SIDE



LEFT SIDE

1 CLEAN THIS AREA AND APPLY PRIMER (F-18.12) AND ABRASION RESISTANT COATING (F-14.9625)

332A2371-3 Inlet Assembly Refinish
Figure 601

INLET CASTING 2-2

332A2371–2

1. General

A. This repair tells how to repair and refinish the inlet casting.

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

C. Refer to REPAIR-GENERAL, Figure 601 for the standard true position dimensioning symbols shown in the repair.

D. General repair details.

(1) Material: Ti-6Al-2Sn-4Zr-2Mo Titanium alloy

2. Gouges on the Aft Vertical Surface

A. References

Reference	Title
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

(1) If the part has paint on it, remove the paint with a dry abrasive blast (SOPM 20-30-03). Use aluminum oxide, 180-grit or finer, and only sufficient pressure to remove the painr.

(2) Clean the surface by the BAC5753 chemical method in SOPM 20-30-03, or by mechanical methods (SOPM 20-10-07).

(3) Fusion weld the dmaged area (BAC5975 Class A) with AMS 4952 filler metal or AWS A.5.16 Class ER-6A1-2Sn-4Zr-2Mo filler material.

(4) Penetrant examine (SOPM 20-20-02).

(5) Blend out the area of the weld (SOPM 20-10-07).

(6) Penetrant examine again (SOPM 20-20-02).

(7) Stress relieve (BAC5613).

3. Casting Refinish

A. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

B. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for the Boeing finish codes, refer to SOPM 20-41-01.

(1) Apply no finish (F-25.01).

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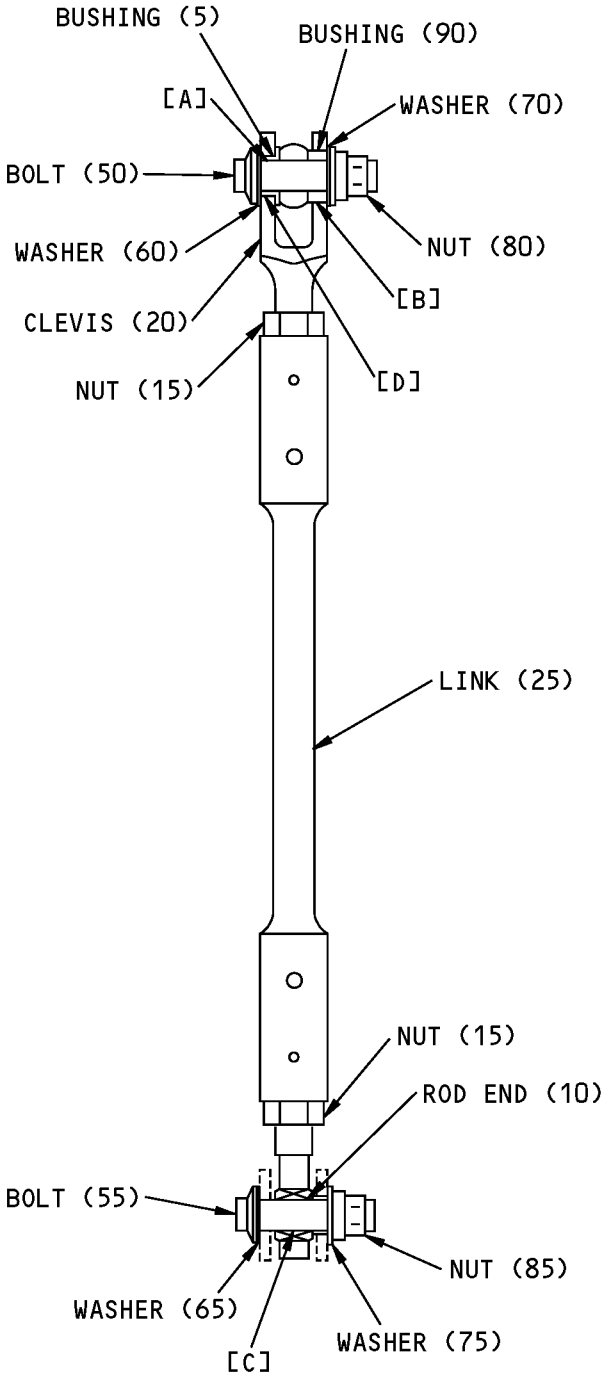
COMPONENT MAINTENANCE MANUAL

ASSEMBLY

(NOT APPLICABLE)



Fit and Clearances
Figure 801 (Sheet 1 of 2)

REF LETTER	REF IPL		DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	FIG. NO.	MATING ITEM NO.	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
			MIN	MAX	MIN	MAX	MIN	MAX	
[A]	1	ID 5	0.3750	0.3765	0.0005	0.0030	0.3720	0.3780	0.0045
		OD 50	0.3735	0.3745					
[B]	1	ID 20	0.5625	0.5626	0.0005	0.0016	0.5606	0.5630	0.0020
		OD 90	0.5610	0.5615					
[C]	1	ID 10	0.2495	0.2500	0.0000	0.0015	0.2480	0.2505	0.0020
		OD 55	0.2485	0.2495					
[D]	1	ID 20	0.5000	0.5006	-0.0013	0.0000			
		OD 5	0.5006	0.5013					

* ALL DIMENSIONS ARE IN INCHES

Fit and Clearances
Figure 801 (Sheet 2 of 2)

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
06710	LAMSON AND SESSIONS CO THE VALLEY-TODECO 12975 BRADLEY AVENUE SYLMAR, CALIFORNIA 91342-3830 FORMERLY VALLEY BOLT CORP VB0097 IN NORTH HOLLYWOOD, CA
11815	CHERRY AEROSPACE FASTENERS DIV OF TEXTRON 1224 EAST WARNER AVENUE PO BOX 2157 SANTA ANA, CALIFORNIA 92707-0157 FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS TOWNSEND DIV OF TEXTRON INC V71087
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
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
57606	REXNORD CORP PSI BEARINGS DIV 2175 UNION PL SIMI VALLEY, CALIFORNIA 93065-1661 FORMERLY PSI BEARINGS

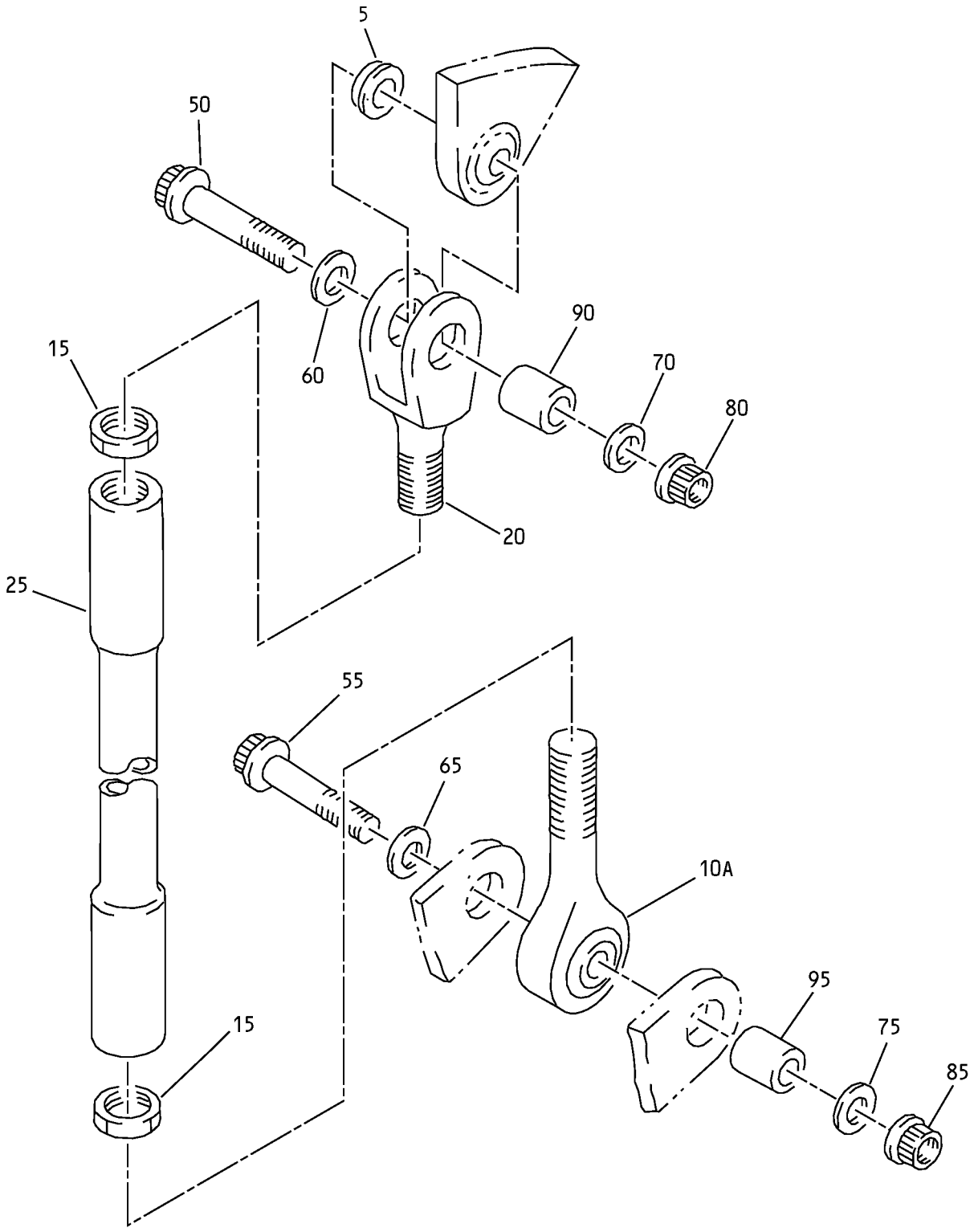
Code	Name
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
80539	SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA 2701 SOUTH HARBOR BOULEVARD SANTA ANA, CALIFORNIA 92704-5803 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539 AND STANDARD PRESSED STEEL WESTERN DIV V17279
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1		12
		1		12
101F9201M3		7	10	3
101F9201M4		7	15	4
332A2339-17		3	15	1
332A2341-1		1	1A	RF
332A2341-2		1	1B	RF
		2	1A	RF
332A2341-3		1	1C	RF
		3	1A	RF
332A2341-4		1	1D	RF
		4	1A	RF
332A2341-5		1	1E	RF
		5	1A	RF
332A2341-6		1	1F	RF
		6	1A	RF
332A2342-1		1	20	1
332A2342-2		4	10	1
332A2342-3		5	20	1
332A2342-4		6	15	1
332A2371-1		1	3	RF
		7	1A	RF
332A2371-2		7	20	1
332A2371-3		1	3A	RF
		7	1B	RF
332A3339-32		1	25	1
AS3485-10		1	85	1
		2	65	2
		3	65	2
		4	70	2
		5	65	2
AS3485-12		1	80	1
BACB28AK04-030		2	70	2
		3	70	2

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		4	80	1
		5	70	2
BACB28AK04-038		1	95	1
BACB28AK04-042		4	75	1
BACB28AK06-036		1	90	1
BACB28X4E010		6	10	1
BACB28X4E015		5	15	1
BACB28X6P016		1	5	1
BACB30PN4-14		2	50	2
		3	50	2
		4	55	1
		5	50	2
BACB30PN4-16		4	50	1
BACB30PN4C18		1	55	1
BACB30PN6C15		1	50	1
BACN10JN3C		7	10	3
BACN10JN4C		7	15	4
BACR15GE3C		7	5	14
BACW10BP4ACU		1	65	1
		2	55	2
		3	55	2
		4	60	2
		5	55	2
BACW10BP6ACU		1	60	1
BRFM20C3		7	10	3
BRFM20C4		7	15	4
MF1031-3BAC		7	10	3
MF1031-4BAC		7	15	4
MF53050-3		7	10	3
MF53050-4		7	15	4
NAS1149C0432R		1	75	1
		2	60	2
		3	60	2
		4	65	2
		5	60	2

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS1149C0632R		1	70	1
NAS509-6C		2	5	1
		3	5	2
		5	5	1
NAS509-7C		1	15	2
NS103218S02		7	10	3
NS103218S048		7	15	4
P33390		3	10	2
P34000		2	15	1
		5	10	1
P34001		4	5	2
		6	5	1
P3A2070		2	10	1
P3A2080		1	10A	1
S312N305A04F		2	15	1
		5	10	1
S312N305A04M		3	10	2
S312N305A04M113		2	10	1
S312N305A06M112		1	10A	1
S312N305B04		4	5	2
		6	5	1
T8126C3C		7	10	3
T8126C4C		7	15	4
VN252B02		7	10	3
VN252B048		7	15	4
VTA07390		2	15	1
		5	10	1
VTA07400		3	10	2



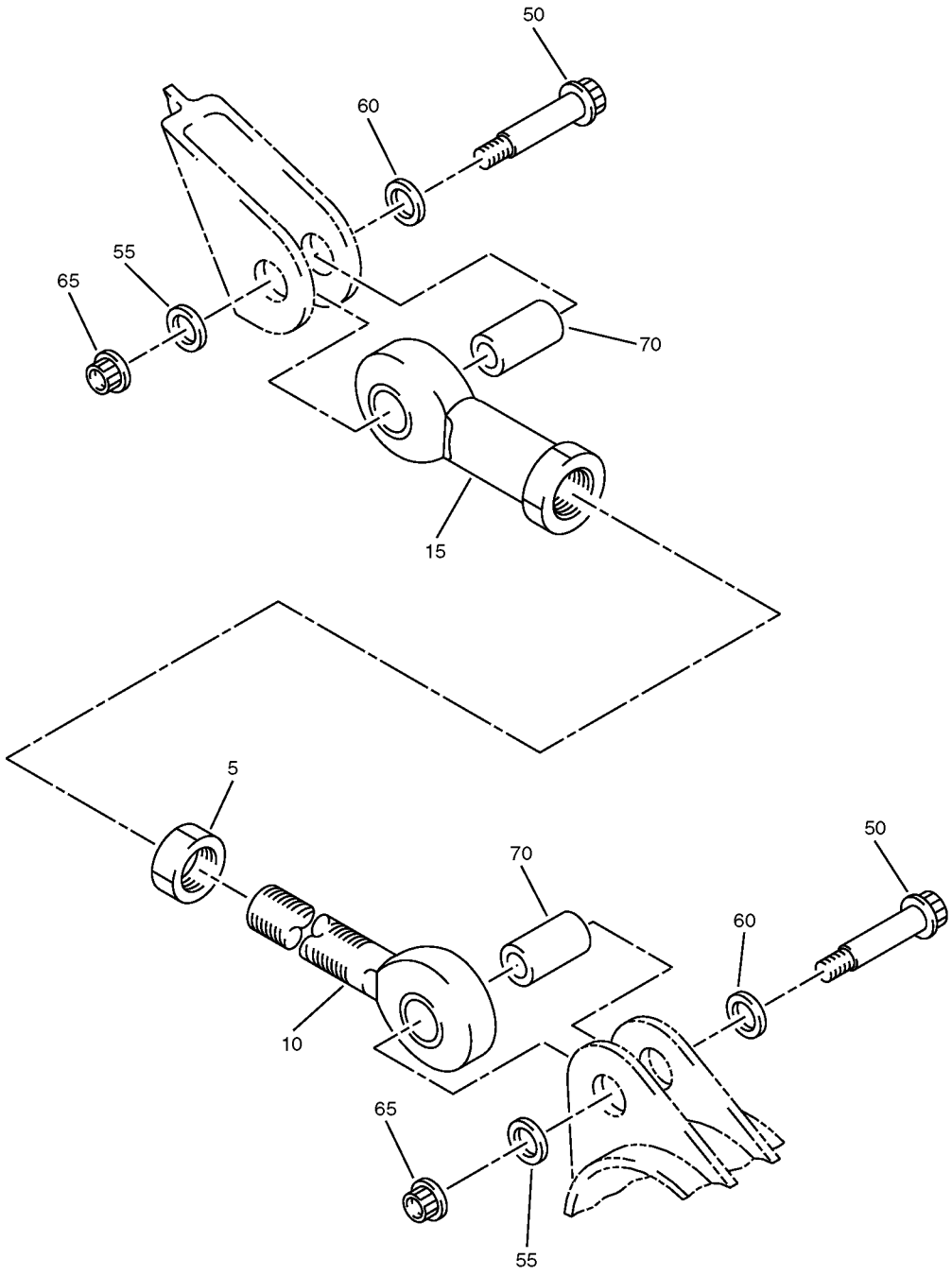
Duct Support Link Assembly
IPL Figure 1

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
			PRECOOLER INSTALLATION		
			COMPONENTS		
–1A	332A2341-1		LINK ASSY-DUCT SPRT	A	RF
–1B	332A2341-2		LINK ASSY-DUCT SPRT (FOR DETAILS SEE FIG. 2)	B	RF
–1C	332A2341-3		LINK ASSY-DUCT SPRT (FOR DETAILS SEE FIG. 3)	C	RF
–1D	332A2341-4		LINK ASSY-DUCT SPRT (FOR DETAILS SEE FIG. 4)	D	RF
–1E	332A2341-5		LINK ASSY-DUCT SPRT (FOR DETAILS SEE FIG. 5)	E	RF
–1F	332A2341-6		LINK ASSY-DUCT SPRT (FOR DETAILS SEE FIG. 6)	F	RF
–3	332A2371-1		INLET ASSY-12 O'CLOCK STRUT (FOR DETAILS SEE FIG. 7)	G	RF
–3A	332A2371-3		INLET ASSY-12 O'CLOCK STRUT (ALT FROM 332A2371-1) (FOR DETAILS SEE FIG. 7)	H	RF
5	BACB28X6P016		. BUSHING	A	1
10	S312N305A06M112		DELETED		
10A	P3A2080		. BEARING-ROD END (V57606) (SPEC S312N305A06M112)	A	1
15	NAS509-7C		. NUT	A	2
20	332A2342-1		. CLEVIS	A	1
25	332A3339-32		. LINK	A	1
			INSTALLATION PARTS		
50	BACB30PN6C15		BOLT	A	1
55	BACB30PN4C18		BOLT	A	1
60	BACW10BP6ACU		WASHER	A	1
65	BACW10BP4ACU		WASHER	A	1
70	NAS1149C0632R		WASHER	A	1
75	NAS1149C0432R		WASHER	A	1
80	AS3485-12		NUT	A	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
85	AS3485-10		NUT	A	1
90	BACB28AK06-036		BUSHING	A	1
95	BACB28AK04-038		BUSHING	A	1

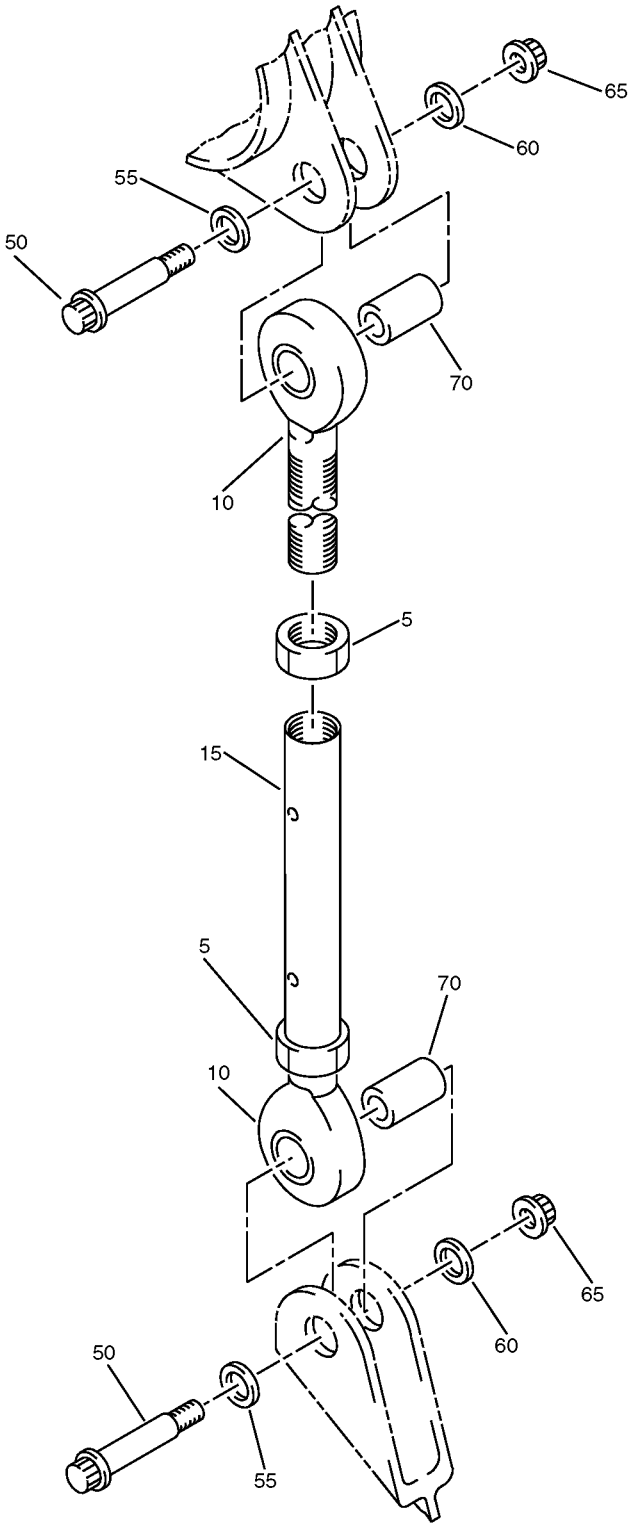
–Item not Illustrated



Duct Link Support Assembly
IPL Figure 2

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1A	332A2341-2		LINK ASSY-DUCT SPRT	B	RF
5	NAS509-6C		. NUT	B	1
10	P3A2070		. BEARING-ROD END (V57606) (SPEC S312N305A04M113)	B	1
15	VTA07390		. BEARING-ROD END (V06710) (SPEC S312N305A04F) (OPT P34000 (V57606))	B	1
			INSTALLATION PARTS		
50	BACB30PN4-14		BOLT	B	2
55	BACW10BP4ACU		WASHER	B	2
60	NAS1149C0432R		WASHER	B	2
65	AS3485-10		NUT	B	2
70	BACB28AK04-030		BUSHING	B	2

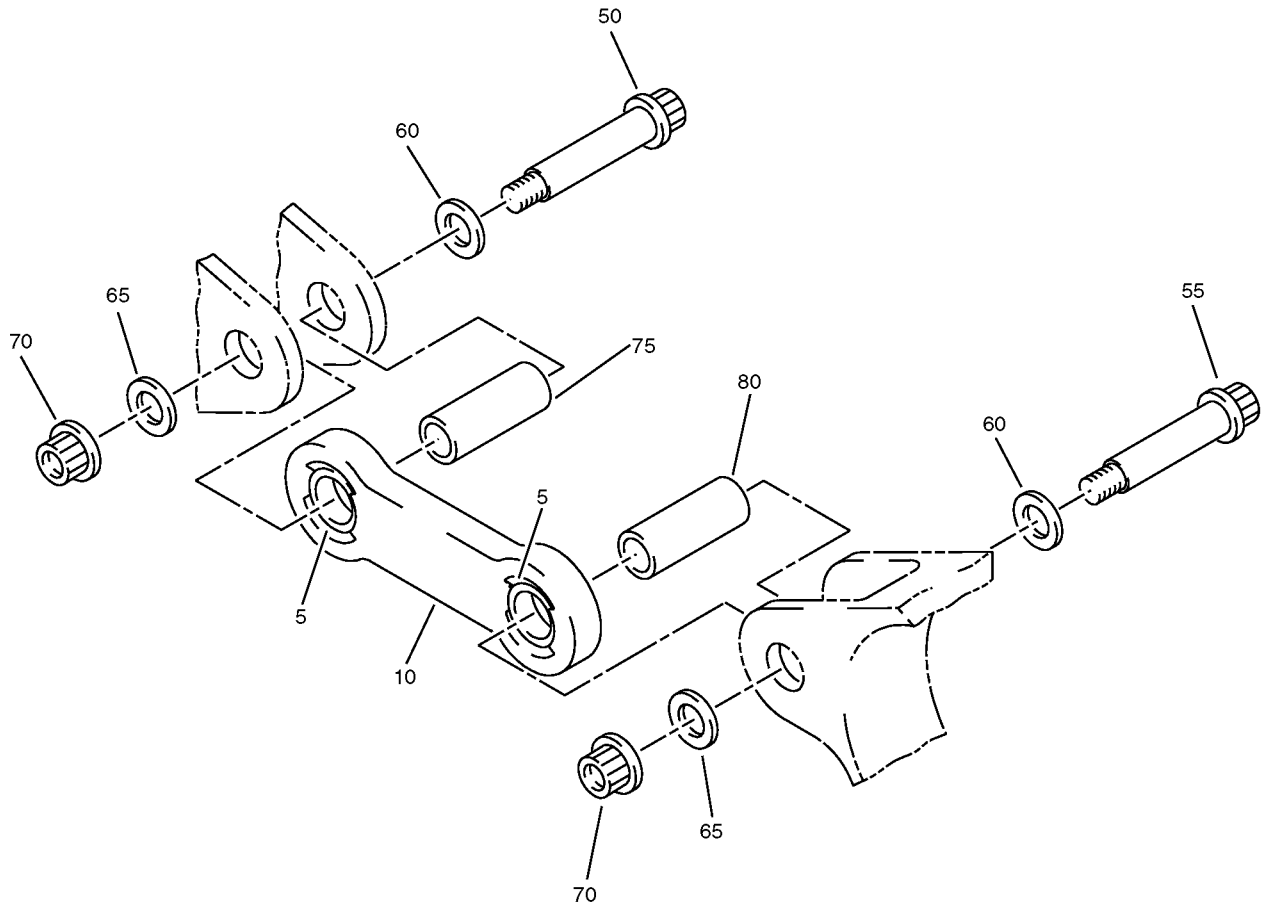
–Item not Illustrated



Duct Support Link Assembly
IPL Figure 3

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
3–					
–1A	332A2341-3		LINK ASSY-DUCT SPRT	C	RF
5	NAS509-6C		. NUT	C	2
10	P33390		. BEARING-ROD END (V57606) (SPEC S312N305A04M) (OPT VTA07400 (V06710))	C	2
15	332A2339-17		. LINK	C	1
			INSTALLATION PARTS		
50	BACB30PN4-14		BOLT	C	2
55	BACW10BP4ACU		WASHER	C	2
60	NAS1149C0432R		WASHER	C	2
65	AS3485-10		NUT	C	2
70	BACB28AK04-030		BUSHING	C	2

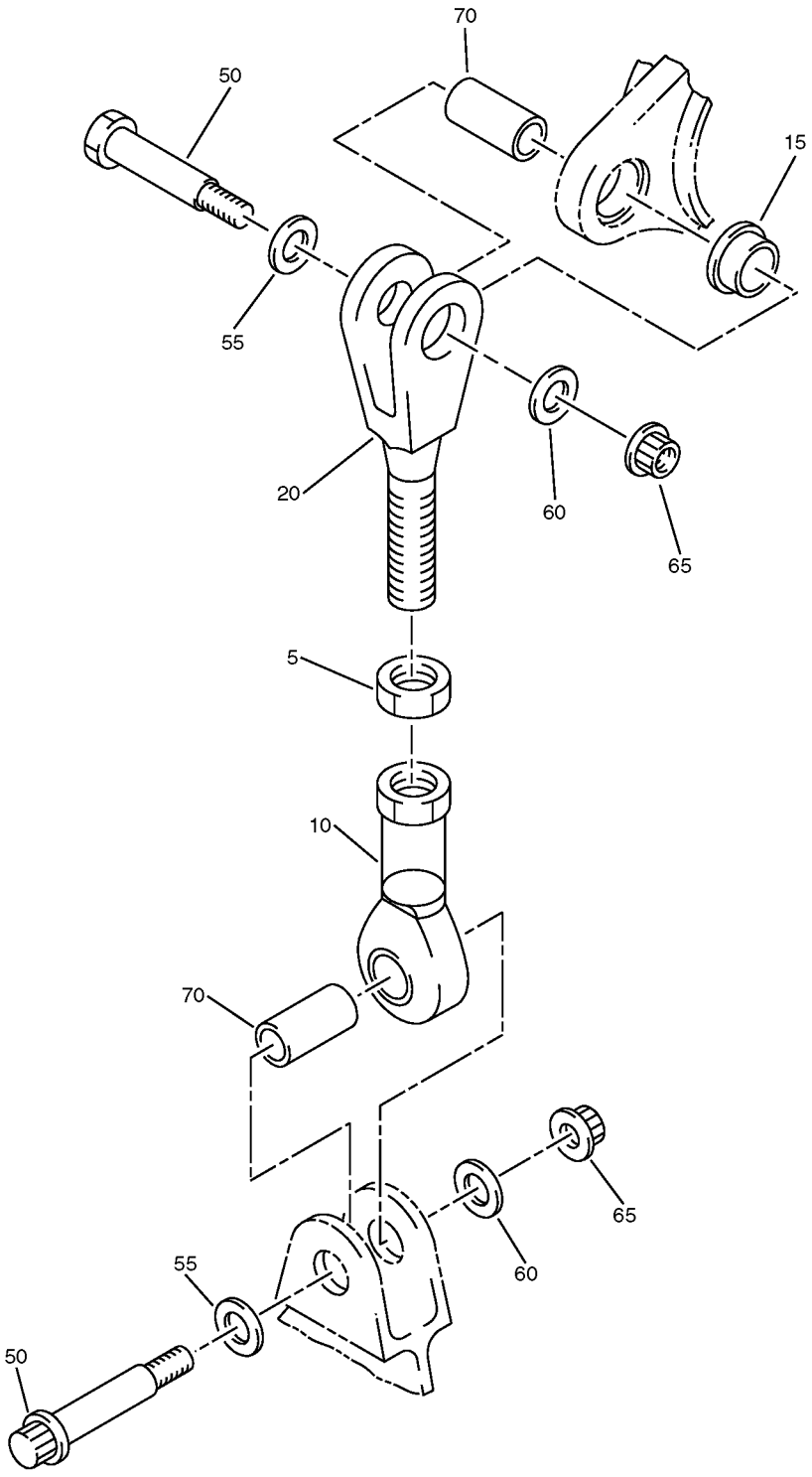
–Item not Illustrated



Duct Support Link Assembly
IPL Figure 4

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
4–					
–1A	332A2341-4		LINK ASSY-DUCT SPRT	D	RF
5	P34001		. BALL-ROD END (V57606) (SPEC S312N305B04)	D	2
10	332A2342-2		. LINK	D	1
			INSTALLATION PARTS		
50	BACB30PN4-16		BOLT	D	1
55	BACB30PN4-14		BOLT	D	1
60	BACW10BP4ACU		WASHER	D	2
65	NAS1149C0432R		WASHER	D	2
70	AS3485-10		NUT	D	2
75	BACB28AK04-042		BUSHING	D	1
80	BACB28AK04-030		BUSHING	D	1

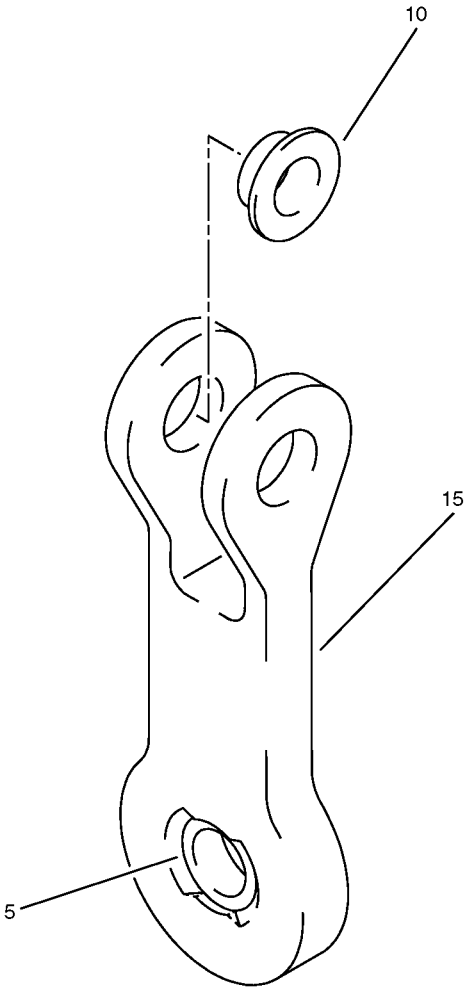
–Item not Illustrated



Duct Support Link Assembly
IPL Figure 5

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
5–					
–1A	332A2341-5		LINK ASSY-DUCT SPRT	E	RF
5	NAS509-6C		. NUT	E	1
10	VTA07390		. BEARING-ROD END (V06710) (SPEC S312N305A04F) (OPT P34000 (V57606))	E	1
15	BACB28X4E015		. BUSHING	E	1
20	332A2342-3		. CLEVIS	E	1
			INSTALLATION PARTS		
50	BACB30PN4-14		BOLT	E	2
55	BACW10BP4ACU		WASHER	E	2
60	NAS1149C0432R		WASHER	E	2
65	AS3485-10		NUT	E	2
70	BACB28AK04-030		BUSHING	E	2

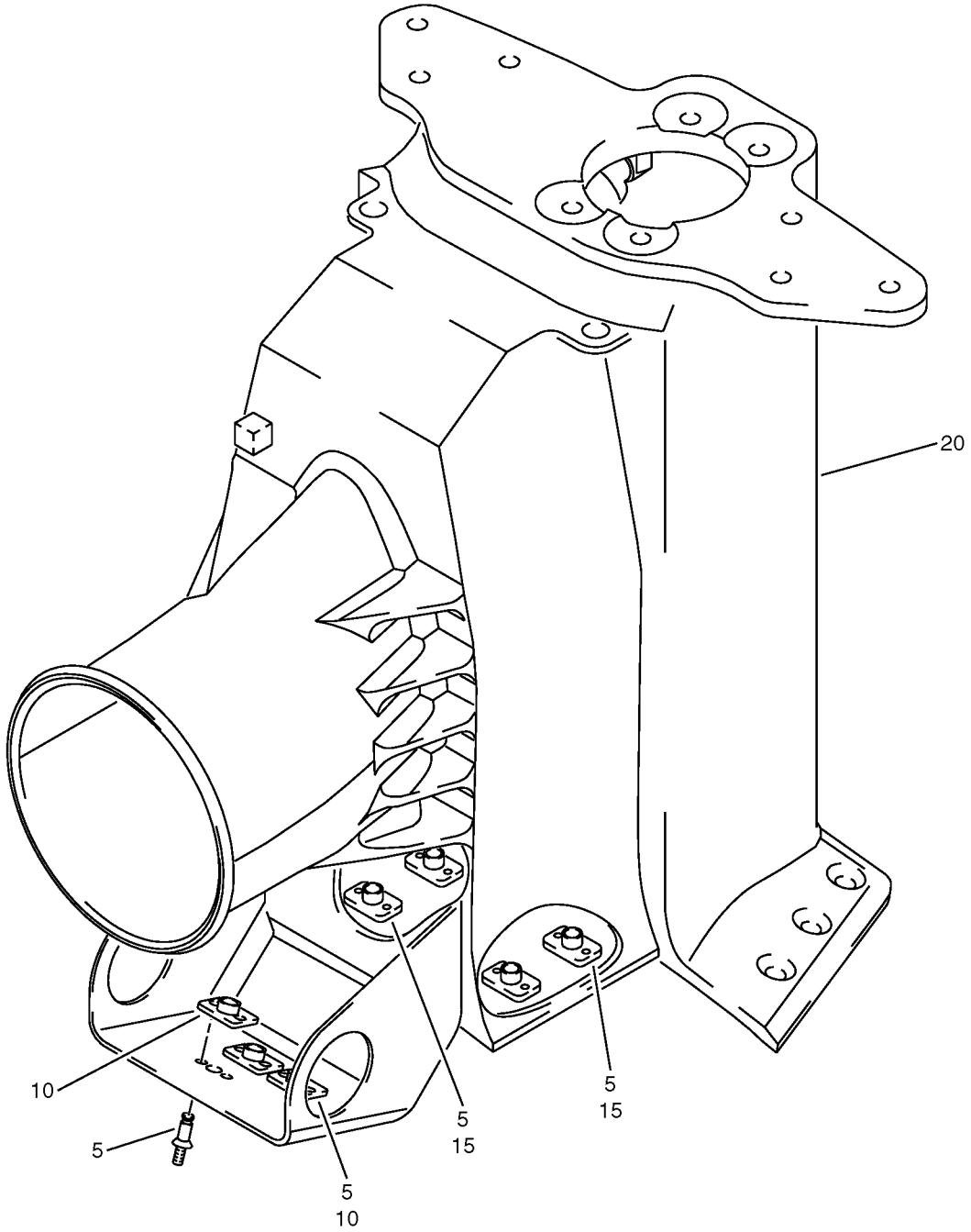
–Item not Illustrated



Duct Support Link Assembly
IPL Figure 6

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
6–					
–1A	332A2341-6		LINK ASSY-DUCT SPRT	F	RF
5	P34001		. BALL-ROD END (V57606) (SPEC S312N305B04)	F	1
10	BACB28X4E010		. BUSHING	F	1
15	332A2342-4		. LINK	F	1

–Item not Illustrated



12 O'Clock Strut Inlet Assembly
IPL Figure 7

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
7–					
–1A	332A2371-1		INLET ASSY-12 O'CLOCK STRUT	G	RF
–1B	332A2371-3		INLET ASSY-12 O'CLOCK STRUT (ALT FROM 332A2371-1)	H	RF
5	BACR15GE3C		. RIVET (SIZE DETERMINED ON INST)	G, H	14
10	MF53050-3		. NUTPLATE (V15653) (SPEC BACN10JN3C) (OPT MF1031-3BAC (V15653)) (OPT NS103218S02 (V80539)) (OPT VN252B02 (V92215)) (OPT 101F9201M3 (V72962)) (OPT T8126C3C (V11815)) (OPT BRFM20C3 (V52828))	G, H	3
15	MF53050-4		. NUTPLATE (V15653) (SPEC BACN10JN4C) (OPT BRFM20C4 (V52828)) (OPT MF1031-4BAC (V15653)) (OPT NS103218S048 (V80539)) (OPT VN252B048 (V92215)) (OPT 101F9201M4 (V72962)) (OPT T8126C4C (V11815))	G, H	4
20	332A2371-2		. CASTING	G, H	1

–Item not Illustrated