

 **BOEING**  
COMPONENT  
MAINTENANCE MANUAL

TO: ALL HOLDERS OF PRE COOLER EXHAUST DUCT KISS SEAL ASSEMBLY, COMPONENT  
MAINTENANCE MANUAL 36-12-06

REVISION NO. 2 DATED MAR 01/96

HIGHLIGHTS

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

CHAPTER/SECTION  
AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE

Added top assembly, P/N 312T1310-9 per PRRB10991-1.

1

TR & SB RECORD

1

1005

REPAIR-GEN

Edited without technical change.

601

REPAIR 1-1

601

REPAIR 2-1

601

1006

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HIGHLIGHTS

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# PRE COOLER EXHAUST DUCT KISS SEAL ASSEMBLY

## PART NUMBERS 312T1310-1,-9

COMPONENT MAINTENANCE MANUAL  
WITH  
ILLUSTRATED PARTS LIST

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TITLE PAGE

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01.1



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



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRRB 1099-1	MAR 01/96

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TR & SB RECORD

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 MAINTENANCE MANUAL

PAGE	DATE	CODE	PAGE	DATE	CODE
36-12-06			REPAIR 1-1		
			*601	MAR 01/96	01.1
			602	BLANK	
TITLE PAGE			REPAIR 2-1		
*1	MAR 01/96	01.1	*601	MAR 01/96	01.1
2	BLANK		602	BLANK	
REVISION RECORD			ASSEMBLY		
1	OCT 10/84	01	701	OCT 10/84	01
2	BLANK		702	BLANK	
TR & SB RECORD			ILLUSTRATED PARTS LIST		
*1	MAR 01/96	01.1	1001	OCT 10/84	01
2	BLANK		1002	OCT 10/84	01
LIST OF EFFECTIVE PAGES			1003	OCT 10/84	01
*1	MAR 01/96	01	1004	OCT 10/84	01
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			*1006	MAR 01/96	01.1
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1	OCT 01/89	01.1			
2	BLANK				
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501	OCT 10/84	01			
502	BLANK				
REPAIR-GENERAL					
*601	MAR 01/96	01.1			
602	BLANK				

\* = REVISED, ADDED OR DELETED

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### INTRODUCTION

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

This manual is divided into separate sections:

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

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

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices.

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.

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INTRODUCTION

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PRECOOLER EXHAUST KISS-SEAL ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

A. The kiss seal assembly consists of a seal assembly and a duct assembly connected together by 12 spring loaded guides. The seal assembly travels towards the duct assembly 0.50 inch when compressed. The kiss seal assembly interfaces with the precooler exhaust duct assembly.

2. Leading Particulars (Approx)

Width -- 7.0 inches

Diameter -- 9.0 inches

Weight -- 7 pounds

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DESCRIPTION & OPERATION

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DISASSEMBLY

1. Disassembly

- A. Remove nuts (15), washers (10), and separate the seal assembly (5) from duct assembly (10).
- B. Slide out spring guides (20) and springs (25) from bolts (7).

NOTE: Do not remove sockets (50) from duct assembly (30) unless necessary for repair or replacement.

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DISASSEMBLY

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CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Penetrant check per 20-20-02 -- spring guide (20), socket (50), washer (10).
3. Spring Check
  - A. Compress spring (25) and check that load is 6.9-8.3 lbs at 2.34 in. length.
  - B. Compress spring (25) and check that load is 13.7-16.7 lbs at 3.09 in length.

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CHECK

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REPAIR – GENERAL1. Content

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

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
312T1310-2	SEAL ASSY	1-1
312T1310-5	DUCT ASSY	2-1

2. Standard Practices

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

20-30-03 General Cleaning Procedures  
 20-41-01 Decoding Table for Boeing Finish Codes

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REPAIR-GENERAL

01.1

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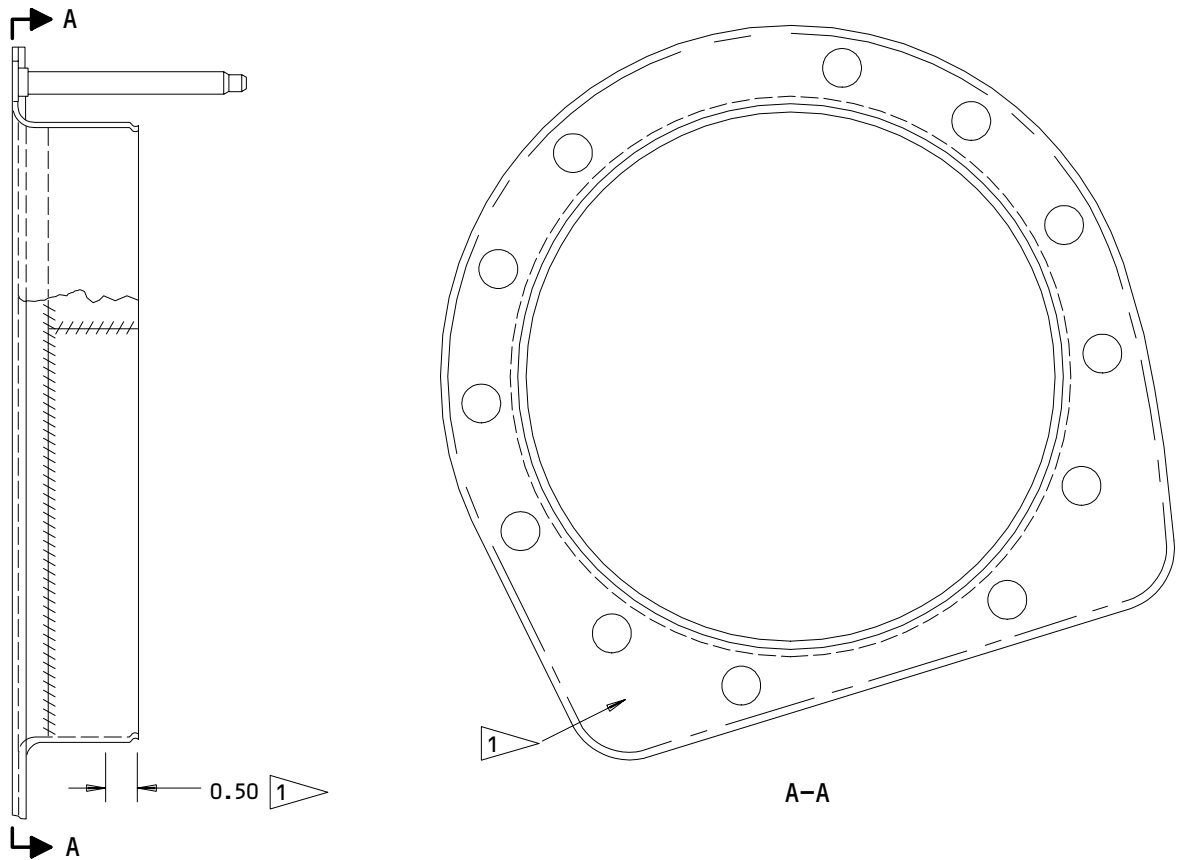
SEAL ASSEMBLY – REPAIR 1-1

312T1310-2

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

1. Fusion Welding Repair

**NOTE:** Refer to CMM 36-10-06 for repair of damaged thin-wall ducts.



**REFINISH**

1 APPLY DETONATION GUN COATING OF TUNGSTEN CARBIDE COBALT DESIGNATED LW-IN40 OF 0.003-0.006, SURFACE ROUGHNESS NOT TO EXCEED 180AA. OVERSPRAY PERMISSIBLE ON ADJACENT SURFACE

MATERIAL: INCONEL 625 PER AMS 5599  
 ALL DIMENSIONS ARE IN INCHES

312T1310-2  
 Seal Assembly Repair  
 Figure 601

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 REPAIR 1-1  
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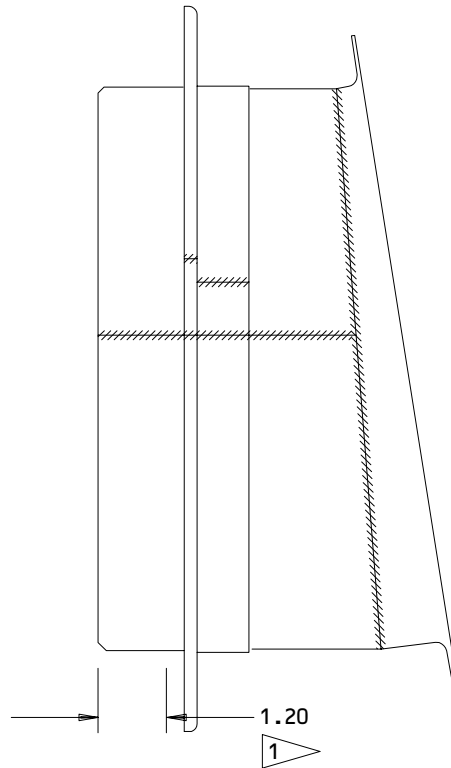
SEAL ASSEMBLY – REPAIR 2-1

312T1310-5

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

1. Fusion Welding Repair

**NOTE:** Refer to CMM 36-10-06 for repair of damaged thin-wall ducts.

REFINISH

APPLY DETONATION GUN COATING OF TUNGSTEN CARBIDE COBALT DESIGNATED LW-IN40 OF 0.003-0.006, SURFACE ROUGHNESS NOT TO EXCEED 180AA. OVERSPRAY PERMISSIBLE ON ADJACENT SURFACE

MATERIAL: INCONEL 625 PER AMS 5599  
 ALL DIMENSIONS ARE IN INCHES

312T1310-5  
 Duct Assembly Repair  
 Figure 601

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REPAIR 2-1

01.1

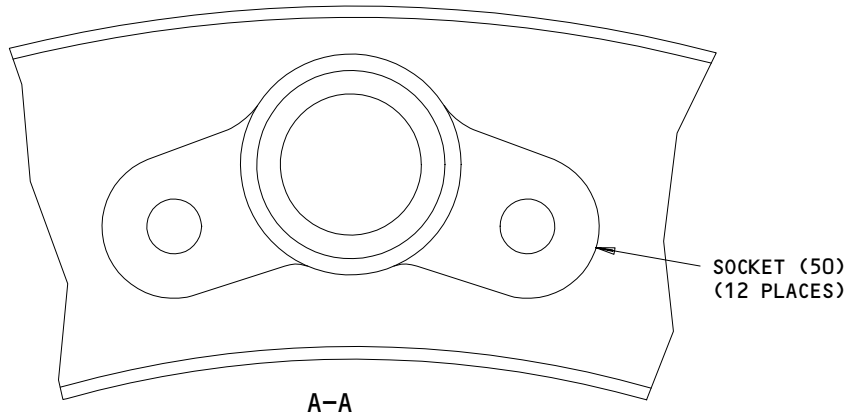
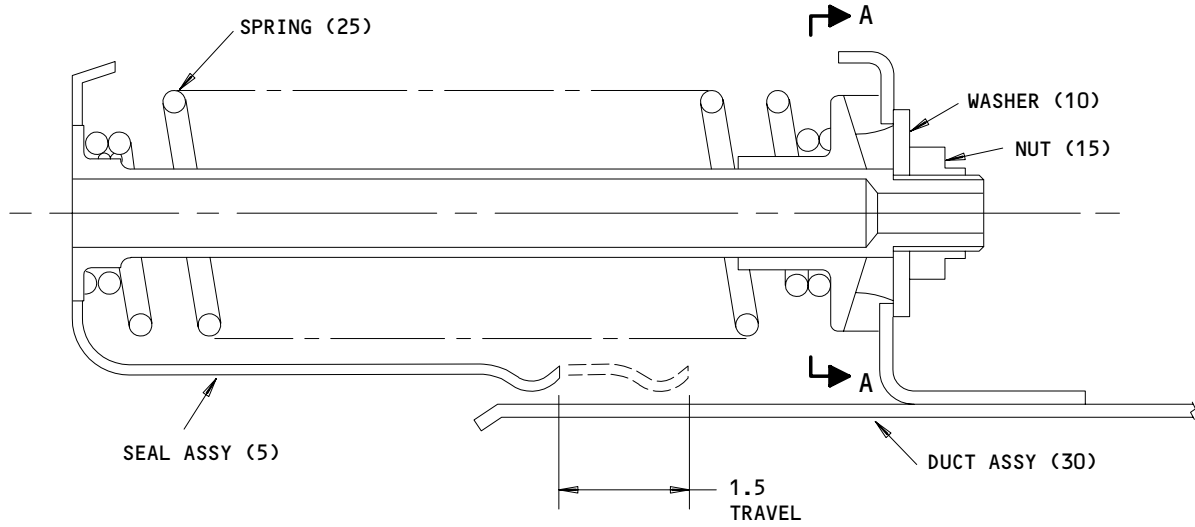
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ASSEMBLY

1. Assembly

- A. Install springs (25) and spring guides (20) into bolts (7).
- B. Install seal assembly (5) into duct assembly (30) with washers (10) and nuts (15) (Fig. 701).



Assembly Detail  
 Figure 701

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ILLUSTRATED PARTS LIST

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

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

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

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

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

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

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

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

6. Parts Interchangeability

Optional  
(OPT)

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

Supersedes, Superseded By  
(SUPSDS, SUPSD BY)

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

Replaces, Replaced By  
(REPLS, REPLD BY)

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

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ILLUSTRATED PARTS LIST

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VENDORS

06710 VALLEY-TODECO INCORPORATED  
12975 BRADLEY AVENUE  
SYLMAR, CALIFORNIA 91342

06725 AIR INDUSTRIES CORPORATION  
12570 KNOTT STREET  
GARDEN GROVE, CALIFORNIA 92641

06950 SCREWCORP VSI CORP AEROSPACE PRODUCTS DIV FAIRCHILD IND INC  
13001 EAST TEMPLE AVENUE  
CITY OF INDUSTRY, CALIFORNIA 91764

08524 DEUTSCH CO FASTENER DIV  
PO BOX 92925 7001 WEST IMPERIAL HIGHWAY  
LOS ANGELES, CALIFORNIA 90045

11815 TOWNSEND DIV OF TEXTRON INC CHERRY FASTENER UNIT  
BOX 2157 1224 EAST WARNER AVENUE  
SANTA ANA, CALIFORNIA 92707

15653 MICRODOT AEROSPACE FASTENING SYS DIV OF MICRODOT INC  
800 SOUTH COLLEGE BLVD PO BOX 3001  
FULLERTON, CALIFORNIA 92634

17943 FEDERAL MANUFACTURING CORPORATION  
6910 FARMDALE AVENUE  
NORTH HOLLYWOOD, CALIFORNIA 91605

27624 PAUL R BRILES INC P.B. FASTENER DIV  
1700 WEST 132ND STREET PO BOX 1157  
GARDENA, CALIFORNIA 90249

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

72962 AMERACE CORP ESNA DIV  
2330 VAUXHALL ROAD  
UNION, NEW JERSEY 07083

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

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VENDORS

92215 VOI-SHAN DIV OF VSI CORP SUB OF FAIRCHILD INDUSTRIAL INC  
8463 HIGUERA STREET  
CULVER CITY, CALIFORNIA 90230

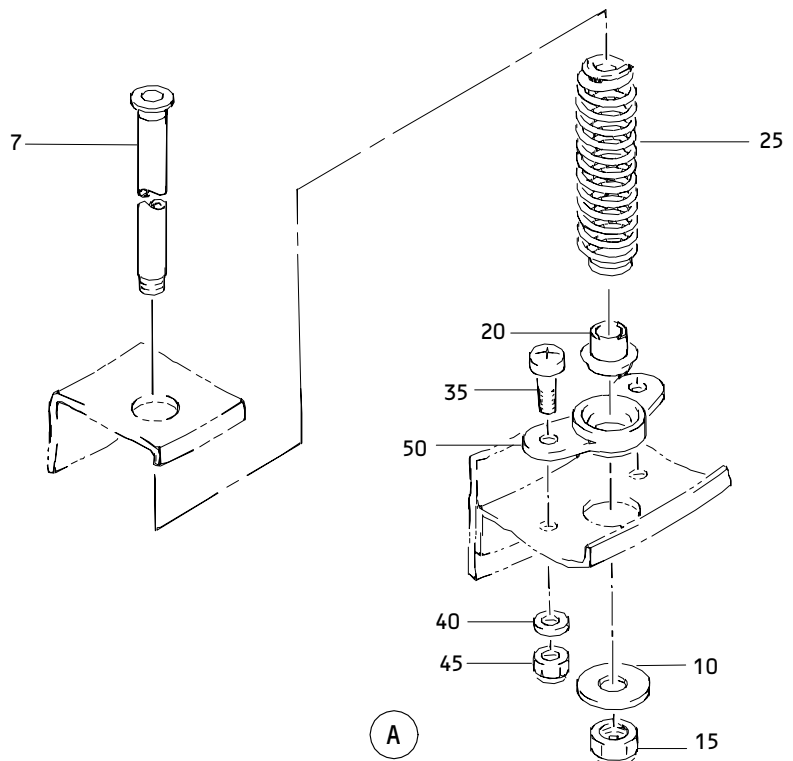
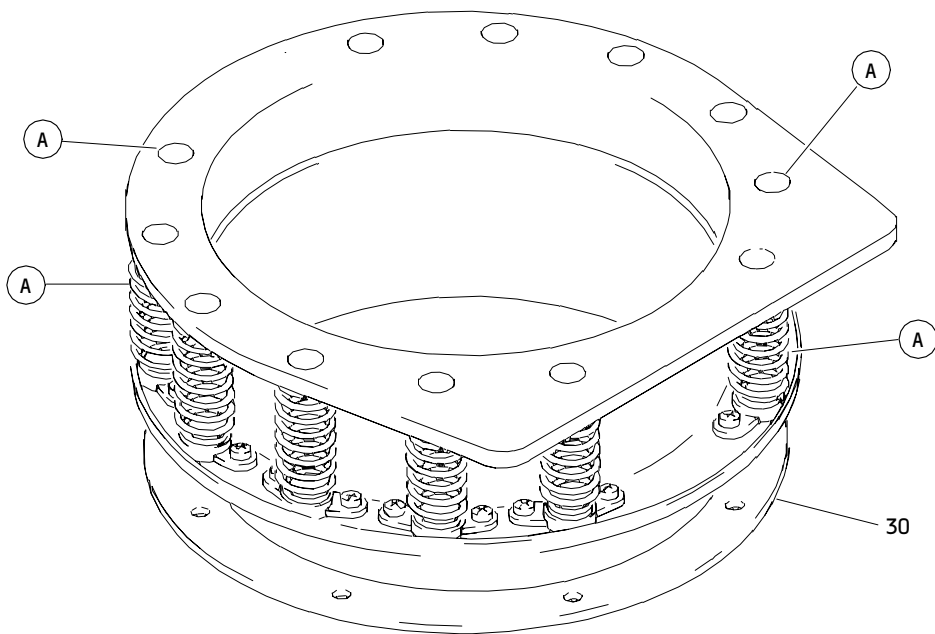
97928 LITTON FASTENING SYSTEMS DIV OF LITTON SYSTEMS INC  
3969 PARAMONT BOULEVARD  
LAKEWOOD, CALIFORNIA 90712

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ILLUSTRATED PARTS LIST

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Kiss Seal Assembly  
 Figure 1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	312T1310-1		SEAL ASSY-KISS	A	RF
-1A	312T1310-9		SEAL ASSY-KISS *[1]	B	RF
-5	312T1310-2		.SEAL ASSY	A	1
			ATTACHING PARTS		
7	315T3141-11		.BOLT	A	12
10	315T3141-7		.WASHER	A	12
15	BR1110C4M		.NUT-	A	12
			(V52828)		
			(SPEC BACN10JC4CM)		
			(OPT H01-4BAC		
			(V15653))		
			(OPT NS202101SE048		
			(V80539))		
			(OPT T6C428JM		
			(V11815))		
			(OPT VN303D048		
			(V92215))		
			(OPT 109LH9075-4W		
			(V72962))		
			(OPT 97E48		
			(V80539))		
			-----*		
20	315T3141-3		.GUIDE-SPR	A	12
25	315T3140-1		.SPRING	A	12
30	312T1310-5		.DUCT ASSY	A	1
			ATTACHING PARTS		
35	BACB30LK3U2		.BOLT-	A	24
			(V06710)		
			(SPEC BACB30LK3U2)		
			(OPT BACB30LK3U2		
			(V06725))		
			(OPT BACB30LK3U2		
			(V06950))		
			(OPT BACB30LK3U2		
			(V08524))		
			(OPT BACB30LK3U2		
			(V17943))		
			(OPT BACB30LK3U2		
			(V27624))		
			(OPT BACB30LK3U2		
			(V80539))		
			(OPT BACB30LK3U2		
			(V92215))		
			(OPT BACB30LK3U2		
			(V97928))		

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ILLUSTRATED PARTS LIST

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-40	AN960C10		.WASHER	A	24
45	BACN10JC3M		DELETE		
45A	BACN10JC3CM		.NUT	A	24
			-----*-----		
50	315T3141-2		.SOCKET- (OPT ITEM 50A)	A	12
-50A	78310		.SOCKET- (OPT ITEM 50)	A	12

\*[1] Not illustrated. KISS Seal Assembly, P/N 312T1310-9 consists of tube, P/N 312T1310-6 and Flange, P/N 312T1310-8 welded together.

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