COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

EXTENSION (CFM56-3) RING ASSEMBLY

PART NUMBER 333A1100–10, –12, –13, –4, –8, –9, 333A1130–5

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COMPONENT MAINTENANCE MANUAL

Revision No. 33
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To: All holders of EXTENSION (CFM56-3) RING ASSEMBLY 78-31-33.

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.

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Location of Change	Description of Change
	NO HIGHLIGHTS

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COMPONENT MAINTENANCE MANUAL

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 INCORPORA~ TION INTO MANUAL
		PRR 33468	MAR 5/87
		PRR 33743	MAR 5/87
SB 71-1149			SEP 5/90

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	
Number	Date	Date	Initials

Revision		Filed	
Number	Date	Date	Initials

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

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

EXTENSION RING ASSEMBLY (CFM 56-3) - DESCRIPTION AND OPERATION

1. **Description**

   A. The extension ring assembly consists of aluminum alloy inner and outer rings connected together by four strut assemblies. The outer ring has an acoustical panel attached for noise reduction. Seals are attached to the aft sides of the inner and outer rings and to aft sides of the strut assemblies in the 3, 6 and 9 o'clock positions.

2. **Operation**

   A. The extension ring is an extension of the fan airflow duct between the engine and thrust reverser.

3. **Leading Particulars (Approximate)**

   A. Width – 12 inches

   B. Diameter – 62 inches

   C. Weight – 86 pounds

(NOT APPLICABLE)

DISASSEMBLY

1. DISASSEMBLY

A. Disassemble this component only as necessary to complete fault isolation, determine the serviceability of parts, perform required repairs, and restore the unit to serviceable condition.

(NOT APPLICABLE)

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 the SOPM subjects identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Check

A. References

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

B. Procedure

(1) Check all parts for obvious defects in accordance with standard industry practices.

(2) Magnetic particle check the following parts per SOPM 20-20-01.

(a) Upper Splice Plate (235)

(b) Extension Ring Lower Fitting (305)

(3) Penetrant check the following parts per SOPM 20-20-02.

(a) Ring Segment - Outer (1, 5)

(b) Ring Segment - Inner (45, 50, 55)

(c) Supports (100, 155)

(4) Check compression moulded acoustical panels (10A, 15A, 20A) per the following damage limits.

(a) Edge chips that are not more than 0.03-inch in depth and 0.10-inch in length are permitted.

(b) Fiber break out around drilled and countersunk holes are permitted if they are less than 0.03-inch in depth and 0.10-inch in length.

(c) Panels that are loose in all directions must be replaced.

(d) If the damage exceeds the above limits, replace the panel.

(5) Check bonded acoustic panel assemblies (10, 10B, 15, 15B, 20, 20B).

(a) Bonded acoustic panel assemblies have no allowable damage.

1) Replace bonded acoustic panel assemblies when damaged.

REPAIR

1. Content

A. Repair, refinish and replacement procedures are included in separate REPAIR sections as follows:

Table 601:

P/N	NAME	REPAIR
333A1100	EXTENSION RING	1-1
333A1110 333A1180	ACOUSTIC PANEL	2-1
333A1120	RING SEGMENT-OUTER	3-1
333A1130	RING SEGMENT-INNER	4-1
–	MISC SEALS	5-1
–	MISC PARTS REFINISH	6-1

2. Standard Practices and References

A. Refer to the following standard practices and references as applicable for details of procedures in individual repairs.

- SOPM 20-30-02 Stripping of Protective Finishes
- SOPM 20-30-03 General Cleaning Procedures
- SOPM 20-41-01 Decoding Table for Boeing Finish Codes
- SOPM 20-41-02 Application of Chemical and Solvent Resist and Finishes
- SOPM 20-43-01 Chromic Acid Anodizing
- SOPM 20-43-03 Alodizing
- SOPM 20-50-08 Application of Solid Film Lubricants
- SOPM 20-50-12 Application of Adhesives
- SOPM 20-60-02 Finishing Materials
- SOPM 20-60-03 Lubricants
- SOPM 20-60-04 Miscellaneous Materials
- 71-00-01 Application and Repair of BMS 10-102 Insulative Coating System

3. Materials

NOTE: Equivalent substitutes may be used.

A. Insulative Coating

(1) coating, C00926 BMS 10-102, Type 1

(2) fire resistant synthetic rubber coating, A01047 BMS 10-102, Type 2

B. Top Coat – sealant - silicone rubber, A50101 RTV560

C. Top Coat – RTV60 adhesive, A00578

D. Kevlar Mat – non-woven mat, G50417 No. 49 Non-Woven (1 inch long fibers)) - kevlar non-woven mat, G50385 No. 29 (Optional to No. 49)

E. Silica Fibers – silica fiber, G50384 Hitco No. F100-A25

F. Adhesive – adhesive, A00027 Type 60
G. Sealant – sealant, A00160 BMS 5-63
H. Sealant – adhesive, A00335 Type 68
I. Repair Coating – RTV 106 adhesive, A00081 RTV106
J. Antistatic Coating – coating, C00767 BMS 10-21, Type 3
K. Potting Compound – compound, A00218 BMS 5-28, Type 9
L. Potting Compound – BMS 5-28, Type 14
M. Primer – primer, C00175 BMS 10-79, Type 3
N. Primer – primer, C00259 BMS 10-11
O. Primer – primer, B50082 MIL-P-8585 zinc chromate
P. Enamel – coating, C50069BMS 10-11, Type 2, Color BAC 702 white gloss
Q. Enamel – coating, C00260 BMS 10-11, Type 2, Color BAC 707 gray gloss
R. Lubricant – solid film lubricant, D50093 Dri-lube Type 6, Class 2

EXTENSION RING - REPAIR 1-1

333A1100–4, –8, –9, –10, –12, –13, –14, –15

1. General

A. This procedure has the data necessary to refinish the extension ring (1, IPL Figure 1).

B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Application of Insulative Coating (REPAIR 1-1, Figure 601)

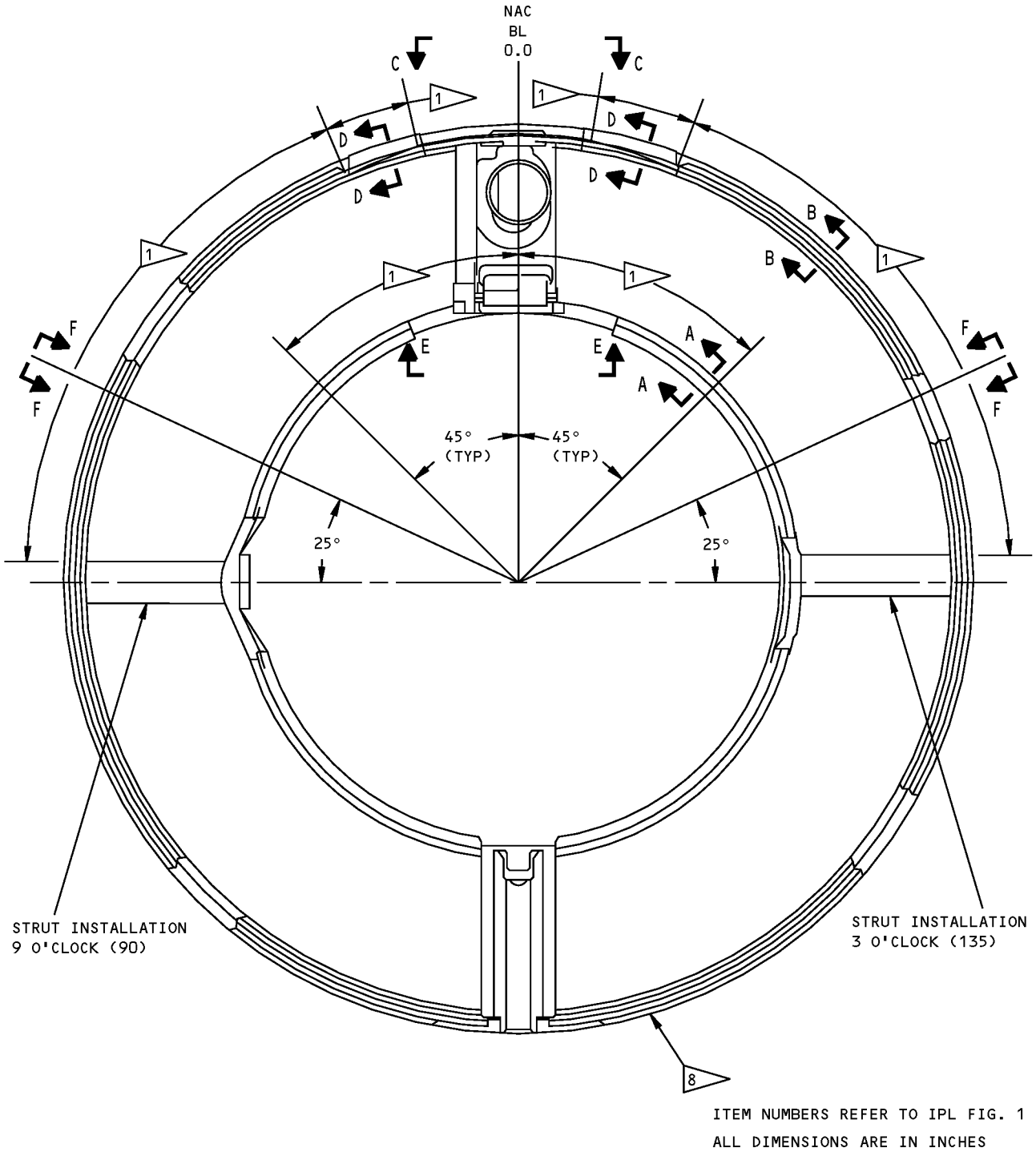
A. Apply coating, C00926 insulation per procedure in 71-00-01 and REPAIR 1-1, Figure 601.

B. Alternate acoustic panel repair procedure

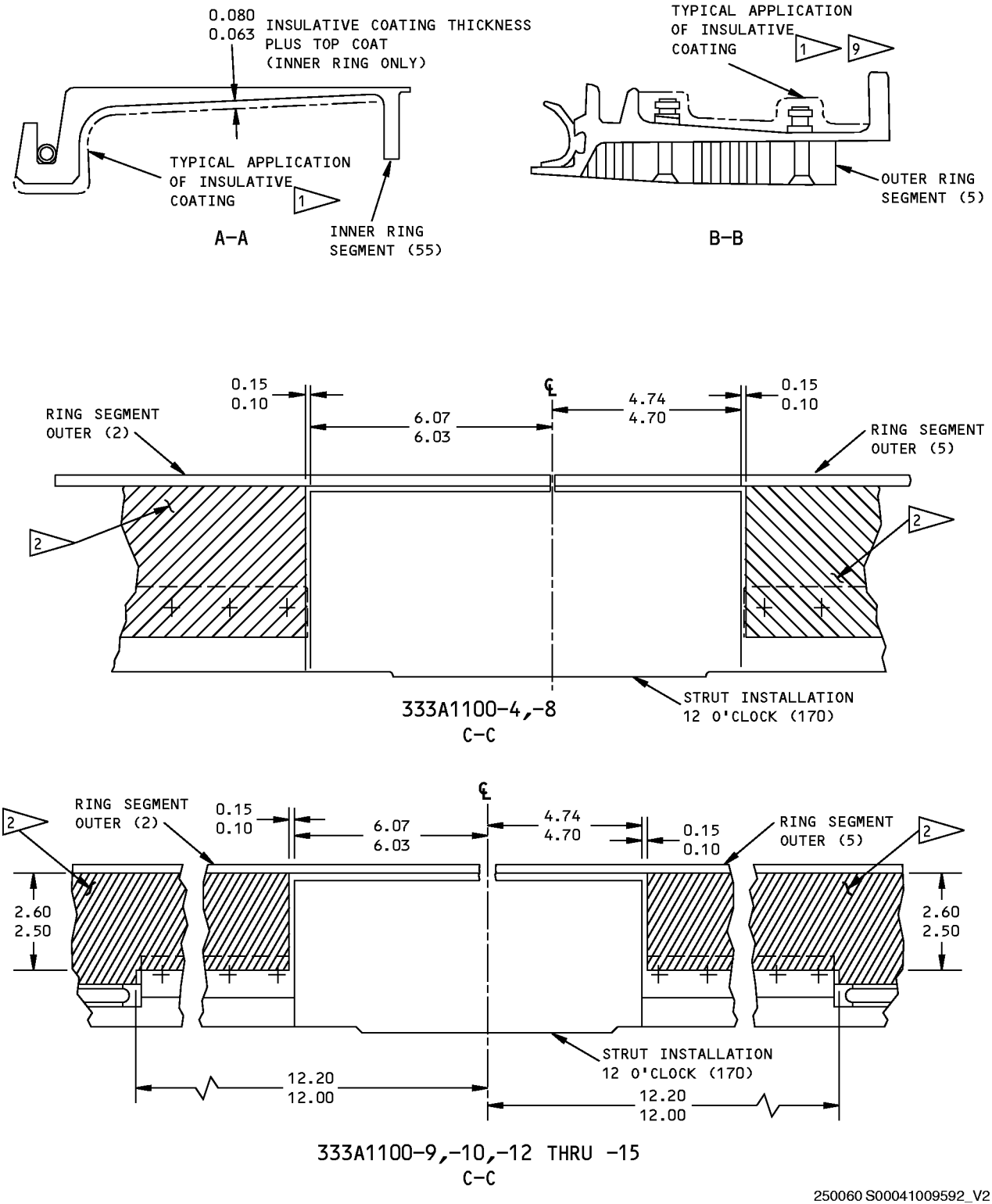
(1) Remove approximately 0.250-inch of the existing insulative coating around the fastener collars (35, 35A).

(2) Upon panel (10, 15, 20) replacement, install collars (35B, 35C).

(3) Apply topcoat repair coating to a thickness of 0.063-0.093 inch over the removed area and the fastener collars (35B, 35C) per 71-00-01, par. 12.



333A1100-4,-8,-9,-10,-12 thru -15 Insulative Coating Application
Figure 601 (Sheet 1 of 4)



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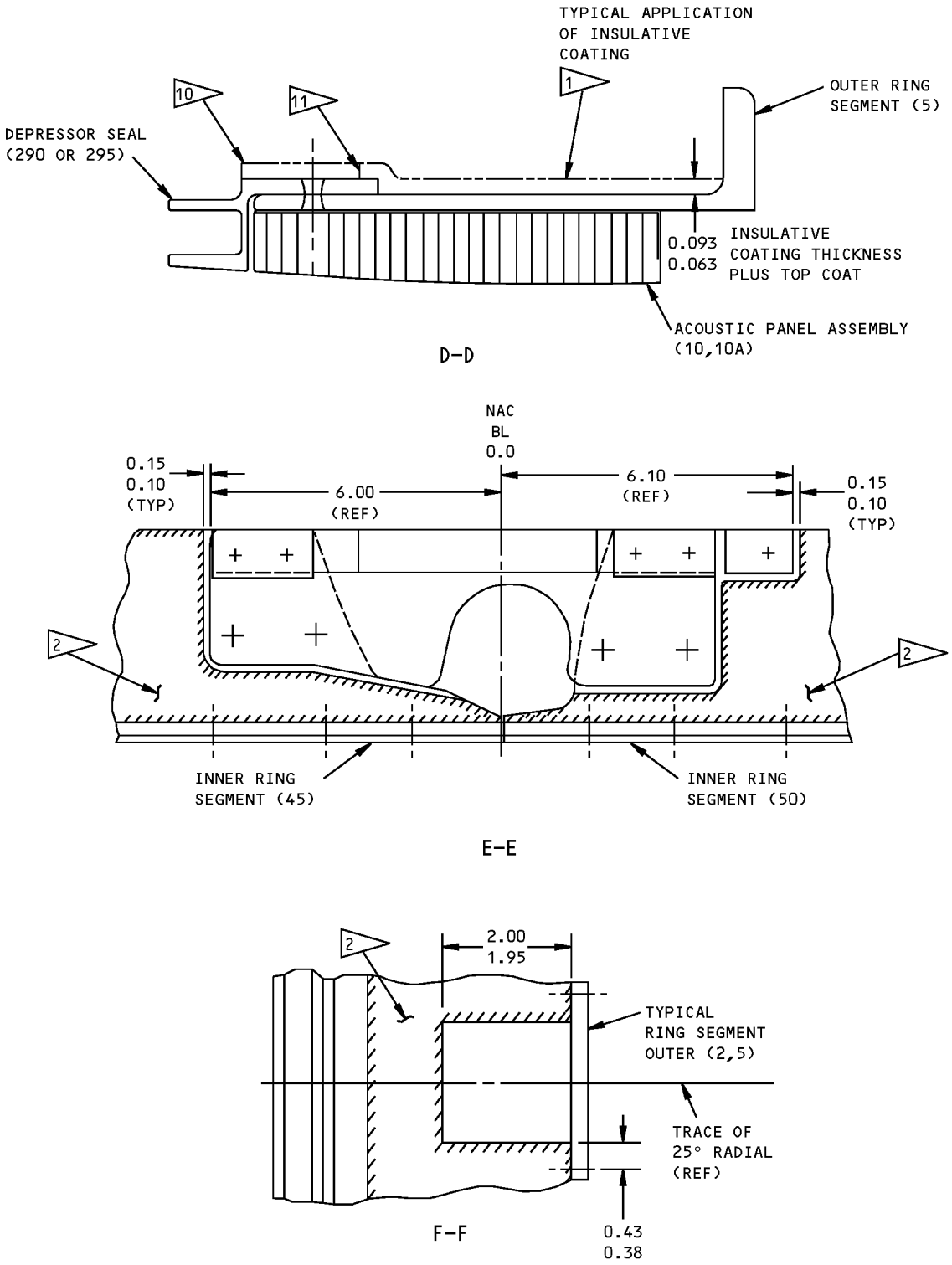
333A1100-4,-8,-9,-10,-12 thru -15 Insulative Coating Application
Figure 601 (Sheet 2 of 4)



333A1100-4,-8,-9,-10,-12 thru -15 Insulative Coating Application
Figure 601 (Sheet 3 of 4)

1. APPLY BMS 10-102 TYPE I WITH FIBER FILLED TOP COAT AND NON-WOVEN MAT TO INDICATED AREAS. OPTIONAL TO SUBSTITUTE CROWN METRO 64-C1-2 TYPE I/68-C3-1. TYPE II IN LIEW OF MA-24S
2. APPLY BMS 10-102 TYPE I TO SHADED AREAS ONLY
3. INSIDE CORNERS MAY HAVE UP TO 3 TIMES THE TYPICAL THICKNESS
4. APPLY TOP COAT OVER BMS 10-102 TYPE I PER 5 6 AND 7
5. MACHINE MIX 10 TO 15 PERCENT BY WEIGHT OF HITCO F100-A25 SILICA FIBERS (HITCO DIV. OF AMRCO STEEL, GARDENA, CA) IN RTV560 TOPCOAT MATERIAL AND APPLY 0.010 TO 0.020 INCH THICK SPRAY COAT ON SURFACE OF BMS 10-102 TYPE I. DILUTE MIX WITH 25 TO 50 PERCENT BY VOLUME NAPHTHA TO FACILITATE SPRAYING
6. WHILE 5 SPRAY COAT IS STILL WET. APPLY NON-WOVEN KEVLAR 49 MAT (1 INCH LONG FIBERS WEIGHT 0.4 OZ PER SQ YARD BINDER TYPE POLYESTER TO THE WET SURFACE OF THE SPRAYED TOPCOAT. PRESS MAT INTO THE TOPCOAT SO THAT MAT IS SMOOTHLY IMPREG-NATED IN THE FIBER-FILLED RTV560 TOPCOAT. THE KEVLAR 49 MAT (INTERNATIONAL PAPER COMPANY, CORPORATE RESEARCH CENTER, TUXEDO PARK, NY) MAY BE CUT INTO STRIPS AND LAID IN PLACE WITH 1/4 TO 1/2 INCH OVERLAPS TO ACCOMODATE CONTOUR OF THE ASSY. ADDITION OF RTV TOPCOAT MATERIAL (FILLED OR UNFILLED) IS REQUIRED IN OVERLAP AREA. IN SUFFICIENT QUANTITY TO OBTAIN ADHESION BETWEEN OVERLAPPED PLIES. THE KEVLAR MAT IS NOT INTENDED TO COVER FASTENER COLLARS UNLESS THICKNESS OF BMS 10-102 TYPE I IS EQUIVALENT OR GREATER THAN COLLAR LENGTH AND A REASONABLY SMOOTH APPEARANCE WILL RESULT. THE KEVLAR MAT MAY BE OMITTED FROM FASTENER LINES PROVIDING THE WIDTH OF THE AREA NOT COVERED BY MAT DOES NOT EXCEED 1 1/4 INCH. OTHER AREAS SMALLER THAN 1 1/4 INCH X 1 1/4 INCH NEED NOT BE COVERED BY MAT
7. APPLY A FINAL SPRAY COAT OF FIBER-FILLED RTV560 TOPCOAT MATERIAL TO A THICKNESS OF 0.010 TO 0.020 INCH TO ALL BMS 10-102 TYPE I COVERED AREAS
8. REAR VIEW OF 333A1100-4,-8,-9,-10,-12 THRU -15
9. SEE REPAIR 1-1, PARAGRAPH 1B. ALTERNATE ACOUSTIC PANEL REPLACEMENT PROCEDURE
10. EDGE OF BMS 10-102 TYPE I FOR 333A1100-4,-8 ONLY
11. EDGE OF BMS 10-102 TYPE I FOR 333A1100-9,-10,-12 THRU -15

REFINISH

REF 1 THROUGH 7

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

333A1100-4,-8,-9,-10,-12 thru -15 Insulative Coating Application
Figure 601 (Sheet 4 of 4)

ACOUSTIC PANEL REPAIR 2-1

1. General

A. This procedure has the data necessary to refinish the acoustic panel IPL Figure 1.

B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Edge Damage Repair (333A1110-1, -2, -3 only) (REPAIR 2-1, Figure 601)

A. Remove all potting not solidly bonded to core. Do not cut back to exceed limits of REPAIR 2-1, Figure 601.

B. Pot as shown in REPAIR 2-1, Figure 601.

C. Finish as shown in REPAIR 2-1, Figure 601.

3. Acoustic Panel Attachment to Outer Ring (REPAIR 2-1, Figure 601)

A. Fay surface seal outer ring (1, 5) and acoustic panel (10, 15, 20).

B. Attach panels (10, 15, 20) to outer rings (1, 5) with fasteners (25, 30, 35). Install bolts (25, 30) with wet sealant, fillet seal collars (35), except do not fillet seal collars that will subsequently be covered with insulative coating.

4. Acoustic Panel Assembly (10, 15, 20) Replacement (REPAIR 2-1, Figure 601)

A. Remove the acoustic panel assembly (10, 15, 20) from the outer ring segments (1, 5) by removing the collars (35) and bolts (25, 30). Discard the collars and damaged bolts. Bolts may be used again if not damaged.

NOTE: If alternate acoustic panel repair procedure per REPAIR 1-1 is used remove only 0.250 insulative coating around fastener collars (35). Do not remove entire insulative coating in this area.

B. Install the acoustic panel assembly as follows:

(1) Put the acoustic panel assembly on the outer ring segments, and align the bolt holes.

(2) If you replace the acoustic panel assembly with panel assembly with same bolt hole configuration, no modification of the panel assembly is required.

(3) If you replace the bonded acoustic panel assembly, P/N 333A1110 with a compression molded panel assembly, P/N 333A1180, do the steps that follow:

(a) Set the acoustic panel assembly in position with one of the two pilot holes located in the compression molded panel assembly and clamp them together.

NOTE: The bonded acoustic panel assembly has 8 holes. The compression molded panel assembly is delivered with only two pilot holes. Four new holes in the outer ring segment must be drilled to install the compression molded panel assembly. See REPAIR 2-1, Figure 602.

(b) Back drill eight 0.187-0.190 inch diameter holes through the compression molded panel using the acoustic panel assembly as a template.

(c) Remove acoustic panel assembly, locate and drill remaining four 0.187-0.190 inch diameter holes through compression molded panel assembly using dimensions shown in REPAIR 2-1, Figure 602.

(d) Apply finish per REPAIR 2-1, Paragraph 5..

(4) Apply sealant, A00160 to the threads of the bolts.

(5) Install the bolts (25, 30) in the acoustic panel assembly.

NOTE: Install the long bolts at the aft location, and the short bolts at the forward location.

(6) Install a new collar (35) on each bolt.

NOTE: If alternate acoustic panel repair procedure per REPAIR 1-1 is used install collars (35B, 35C).

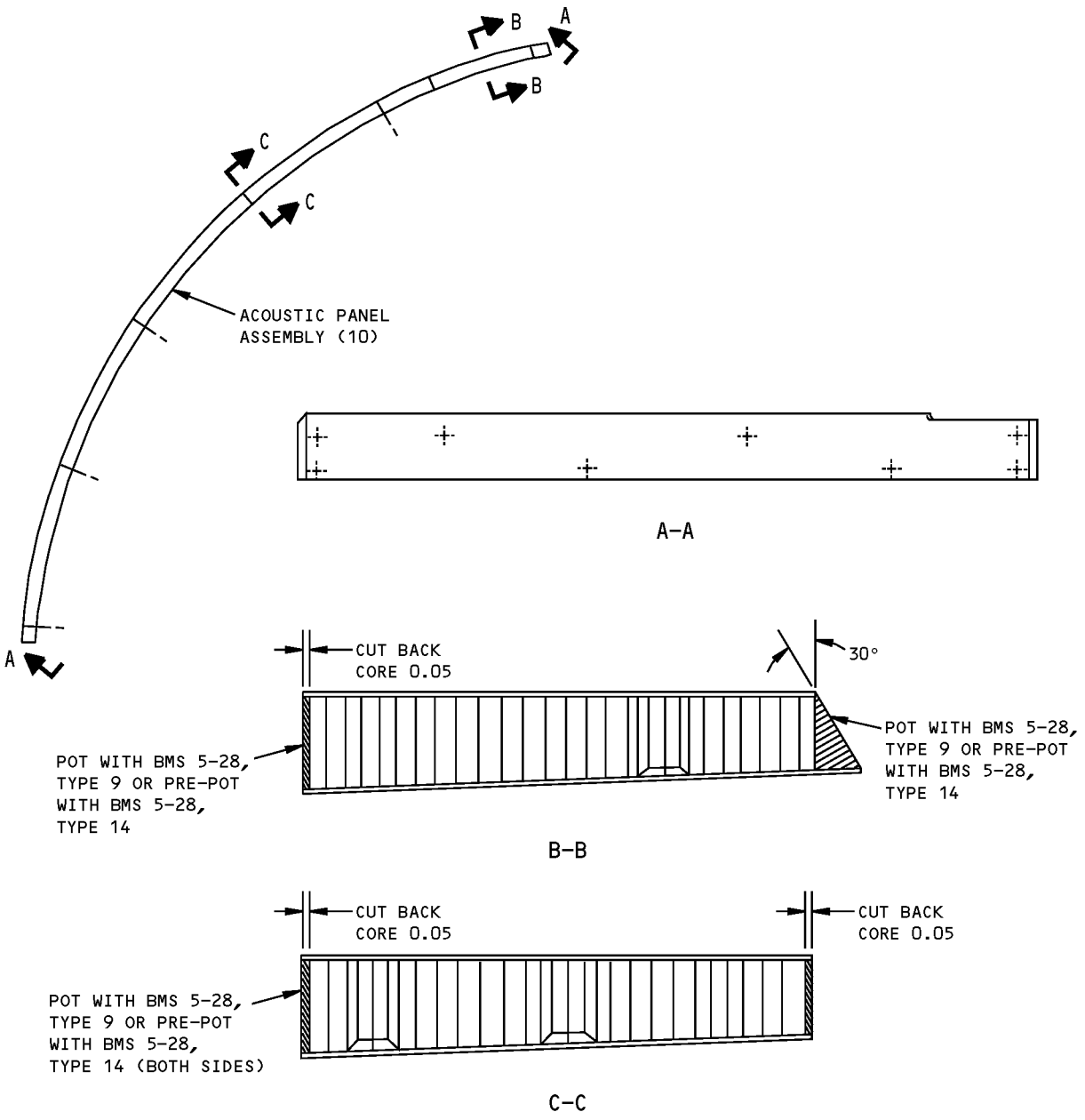
5. Refinish

A. Bonded Acoustic Panel Assemblies (10, 10B, 15, 15B, 20, 20B) – Apply an aluminized epoxy primer (SRF-14.963) on the exposed surfaces of the perforated skin. Overspray on the edges is allowed. Apply primer, C00259 (F-20.02) on the other exposed surfaces and potted edges. Material: Composite.

B. Compression Molded Panel Assemblies (10A, 10C, 15A, 15C, 20A, 20C) – Prepare surface and apply coating, C00767 (F-14.685) and apply primer, C00175 per SOPM 20-44-04 (F-19.47). Anti-static coating must be in at least two fastener hole countersinks to insure electrical conductivity. Mask fastener hole countersinks prior to application of primer to the panel surface. Do not apply primer in fastener hole countersinks. New panels from Boeing include the anti-static coating and primer on the surface, but it is necessary to reapply the anti-static coating in at least two fastener hole countersinks. Material: BMS 8-327, type I, Epoxy Sheet Molding Compound.

(1) Apply insulative coating per REPAIR 1-1.

(2) Apply the sealant, A00160 to the surfaces that touch other panels.



REFINISH

ACOUSTIC PANEL ASSY (10,10B,15,15B,20,20B)
--APPLY ALUMINIZED EPOXY PRIMER (SRF-14.963)
TO EXPOSED SURFACE OF PERFORATED SKIN.
APPLY ONE COAT OF PRIMER BMS 10-11,
TYPE 1 ON REMAINING EXPOSED SURFACES
(INCLUDING POTTED EDGES)

REPAIR

APPLY TO ACOUSTICAL PANEL ASSEMBLIES
333A1110-1,-2,-3

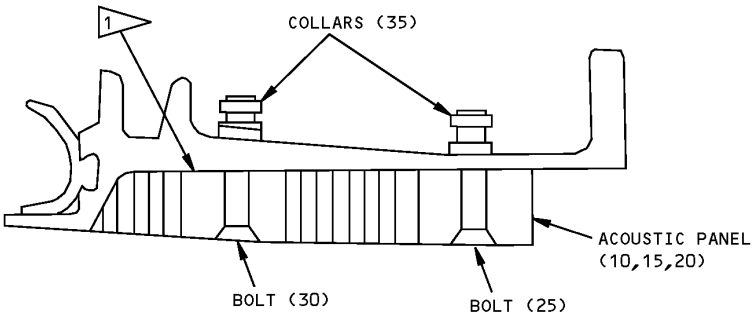
MATERIAL: COMPOSITE

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

333A1110-1,-2,-3

Acoustic Panel Assembly Repair
Figure 601 (Sheet 1 of 3)

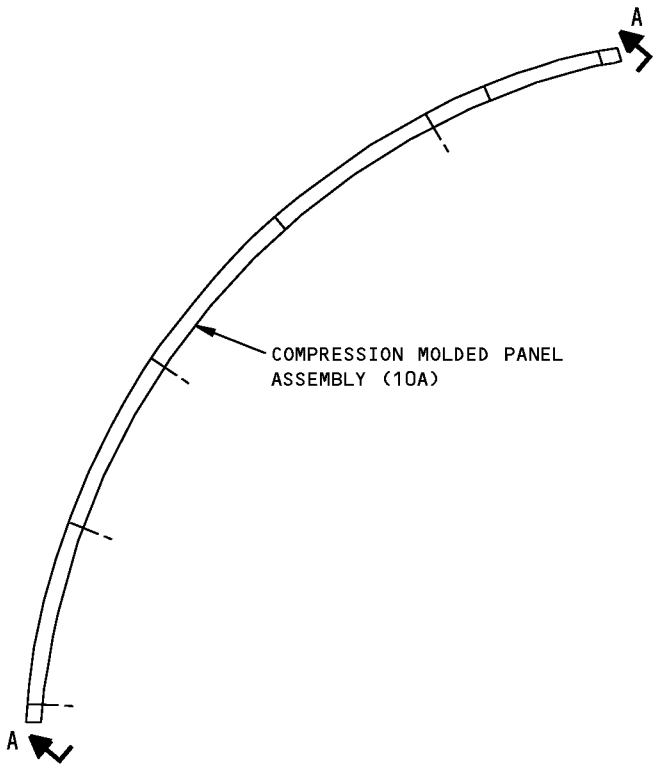


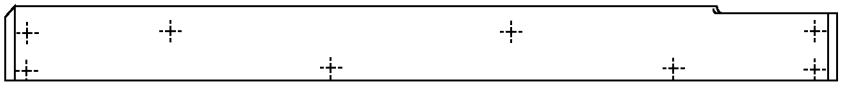
1 FAY SURFACE SEAL

ITEM NUMBERS REFER TO IPL FIG. 1

333A1110-1,-2,-3

Acoustic Panel Assembly Repair
Figure 601 (Sheet 2 of 3)





A–A

REFINISH

COMPRESSION MOLDED PANEL ASSEMBLY (10A,10C,15A,15C, 20A,20C) -- PREPARE SURFACE AND APPLY BMS 10-21, TYPE 3 ANTISTATIC COATING (SRF-14.685) AND APPLY ONE COAT BMS 10-79, TYPE 3 PRIMER PER SOPM 20-44-04 (F-19.47), ANTI-STATIC COATING MUST BE IN AT LEAST TWO FASTENER HOLE COUNTERSINKS TO INSURE ELECTRICAL CONDUCTIVITY

REPAIR

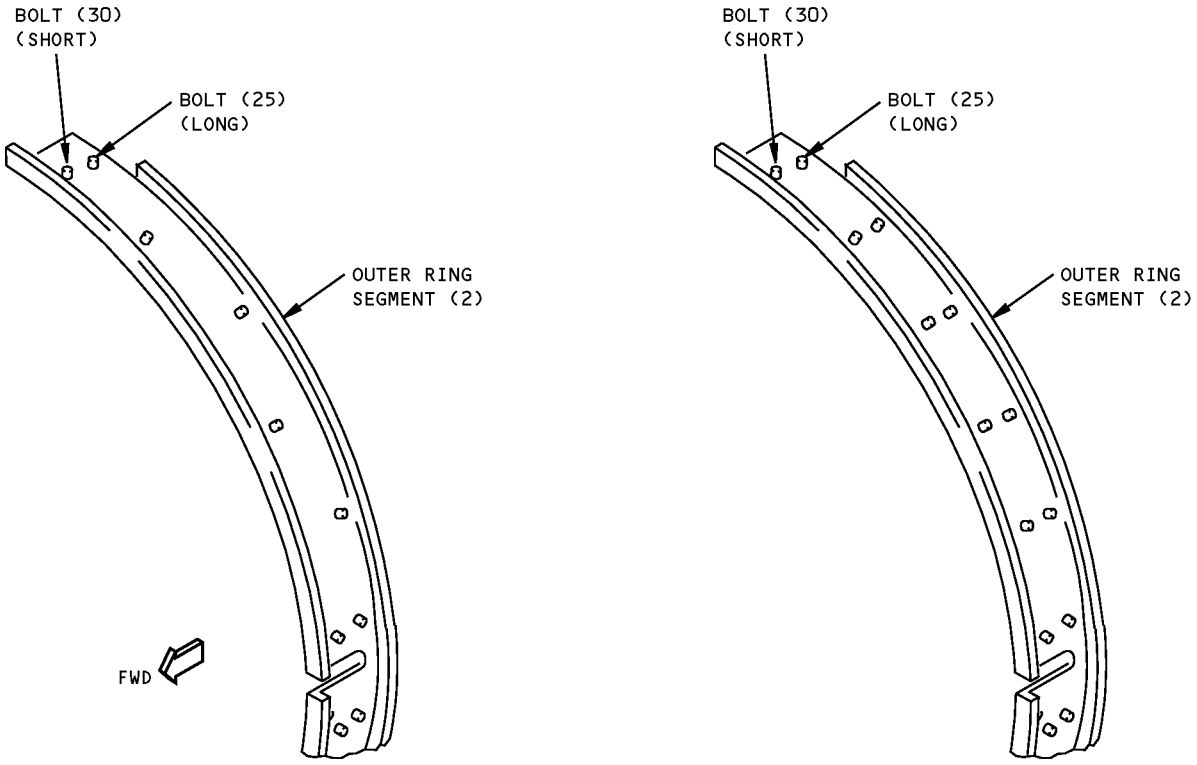
MATERIAL: BMS 8-327, TYPE 1 EPOXY SHEET MOLDING COMPOUND

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

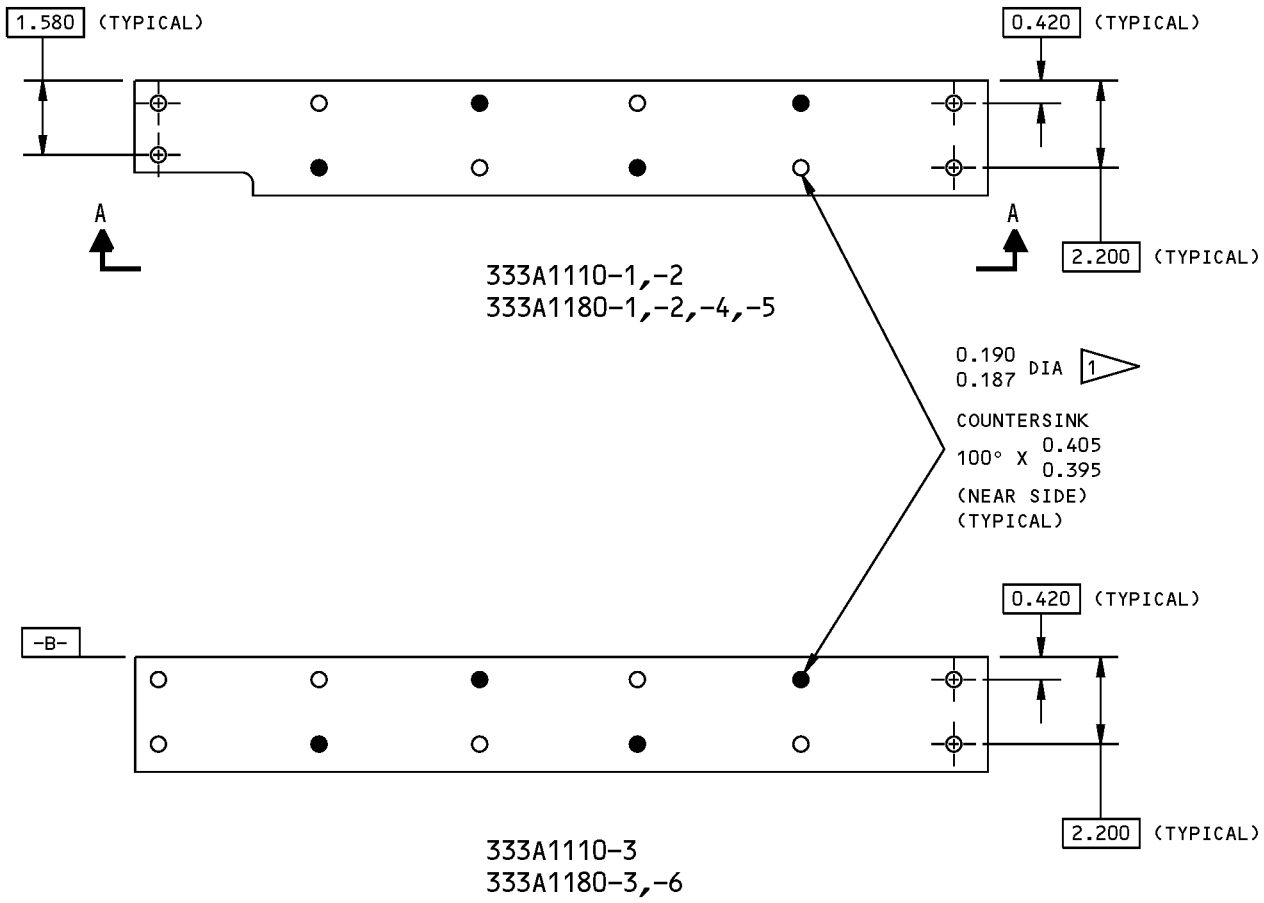
333A1180-1 THRU -6

Acoustic Panel Assembly Repair
Figure 601 (Sheet 3 of 3)



BOLT INSTALLATION CONFIGURATION
(TYPICAL)

333A1110-1,-2,-3 333A1180-1,-2,-3,-4,-5,-6 Acoustic Panel Assembly Replacement
Figure 602 (Sheet 1 of 2)



● BONDED ACOUSTIC PANEL ASSEMBLIES 333A1110-1,-2,-3 DO NOT HAVE HOLES AT THESE LOCATIONS

1 FASTENER HOLE LOCATIONS ARE ENGINEERING NOMINAL. ACTUAL LOCATIONS TO BE CONTROLLED BY AND COORDINATED TO EXISTING TOOLING

333A1110-1,-2,-3 333A1180-1,-2,-3,-4,-5,-6 Acoustic Panel Assembly Replacement
Figure 602 (Sheet 2 of 2)

RING SEGMENT - OUTER REPAIR 3-1

333A1120–1, –2, –4

1. General

A. This procedure has the data necessary to refinish the ring segment (2,5, IPL Figure 1).

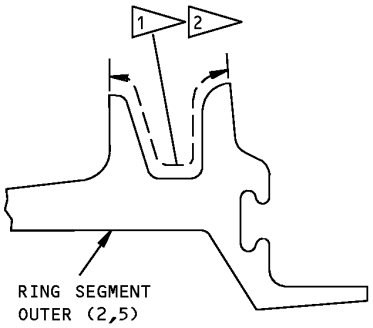
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Finish Repair (REPAIR 3-1, Figure 601)

A. Repair consists of restoration of original finish per REPAIR 3-1, Figure 601.



1 SHOT PEEN AREA SHOWN (THIS AREA EXTENDS CIRCUMFERENTIALLY AROUND THE RING) PRIOR TO HARD ANODIZE. SHOT PEEN: 0.0230–0.0550 SHOT SIZE, 0.006A–0.009A INTENSITY. FADE OUT IN MINIMUM AREA BEYOND AREA INDICATED. SURFACE TO HAVE 32AA FINISH AFTER PEENING.

2 APPLY 0.002 INCH THICK HARD ANODIZE AND SODIUM DICHROMATE SEAL PER BAC 5821, CLASS 2, GRADE 1. DRI-LUBE PER BAC 5811, TYPE VI, CLASS 2 (SOPM 20-50-08) TO THIS AREA (AREA EXTENDS CIRCUMFERENTIALLY AROUND RING)

3 AREAS NOT COVERED BY 1 AND 2 FLASH HARD ANODIZE 0.0002–0.0004 INCH THICK AND SODIUM DICHROMATE SEALED PER MIL-A-8625 OR SULFURIC ACID ANODIZE AND SODIUM DICHROMATE SEAL PER MIL-A-8625 OR ANODIZE PER (F-17.05). APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.03) COLOR BAC 702 WHITE GLOSS. DO NOT APPLY (F-21.03) TO ATTACH HOLES

REFINISH
REF 1 2 3

ITEM NUMBERS REFER TO IPL FIG. 1

333A1120-1,-2,-4 Outer Ring Segment Refinish
Figure 601

BOEING

COMPONENT MAINTENANCE MANUAL

RING SEGMENT - INNER REPAIR 4-1

333A1130–1, –2, –3, –5

1. General

A. This procedure has the data necessary to refinish the inner ring segment (45,50,55, IPL Figure 1).

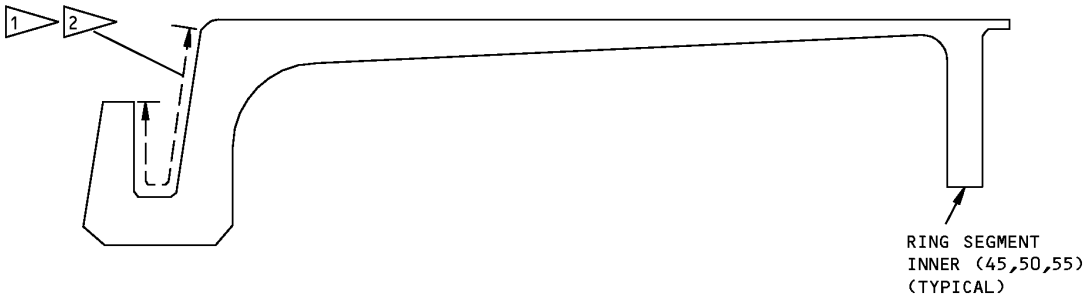
B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Finish Repair (REPAIR 4-1, Figure 601)

A. Repair consists of restoration of original finish per REPAIR 4-1, Figure 601



1 SHOT PEEN AREA SHOWN (THIS AREA EXTENDS CIRCUMFERENTIALLY AROUND THE RING) PRIOR TO HARD ANODIZE. SHOT PEEN: 0.0230–0.0550 SHOT SIZE, 0.006A–0.009A INTENSITY. FADE OUT IN MINIMUM AREA BEYOND AREA INDICATED. SURFACE TO HAVE 32AA FINISH AFTER PEENING.

2 APPLY 0.002 INCH THICK HARD ANODIZE AND SODIUM DICHROMATE SEAL PER BAC 5821, CLASS 2, GRADE 1. DRI-LUBE PER BAC 5811, TYPE VI, CLASS 2 (SOPM 20-50-08) TO THIS AREA (AREA EXTENDS CIRCUMFERENTIALLY AROUND RING)

3 AREAS NOT COVERED BY 1 AND 2 FLASH HARD ANODIZE 0.0002–0.0004 INCH THICK AND SODIUM DICHROMATE SEALED PER MIL-A-8625 OR SULFURIC ACID ANODIZE AND SODIUM DICHROMATE SEAL PER MIL-A-8625 OR ANODIZE PER (F-17.05). APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.03) COLOR BAC 702 WHITE GLOSS. DO NOT APPLY (F-21.03) TO ATTACH HOLES

REFINISH
REF 1 2 3

ITEM NUMBERS REFER TO IPL FIG. 1

333A1130-1,-2,-3,-5 Inner Ring Segment Refinish
Figure 601

MISCELLANEOUS SEALS - REPAIR 5-1

1. General

A. This procedure has the data necessary to refinish the ring segment IPL Figure 1

B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2. Replacement of Seals (REPAIR 5-1, Table 601 and REPAIR 5-1, Figure 601)

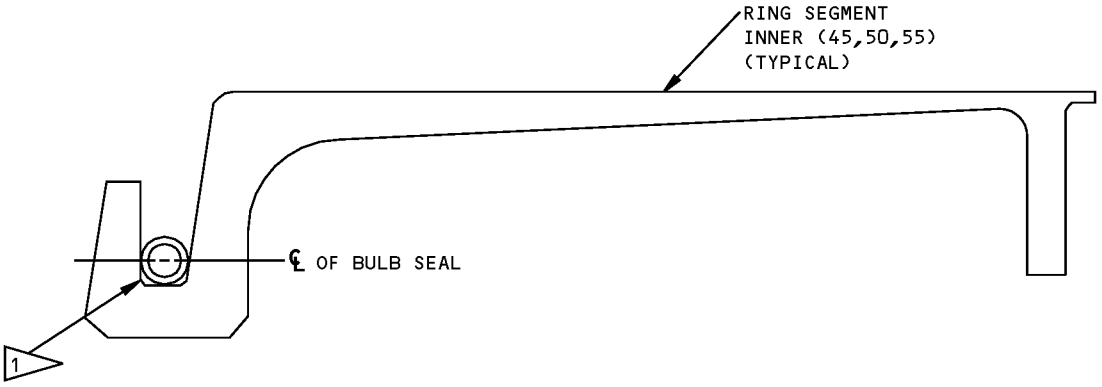
A. Repair of seals listed in REPAIR 5-1, Table 601 consist of removing damaged or worn seals and replacing with new seals.

Table 601: Seal Replacement

Seal Item No.	Attached To	Adhesive (SOPM 20-50-12)	Remarks
40	Ring Segments- Outer (1,5)	None	Cut to length but allow 0.00 to 0.006 inch interference with seals on struts (90,135,175 and 245). NOTE: A special tool is needed for the installation of this seal.
85	Ring Segments- Inner (45,50,55)	adhesive, A00335 for seal (85),adhesive, A00027 for seal (85A) (see REPAIR 2-1, Figure 602)	Trim ends of seal (85,85A) at each inner ring quadrant to match seals or end plugs on struts (90,135, 175, and 245).
107	Fairing Assembly (105)	adhesive, A00027	
110	Strut Assembly (95)	None	Adjust end plugs (112,113) to fit in groove on 9 o'clock strut installa- tion (90). Trim seal (111) to fit. Bond end plugs (112,113) to seal (111). Use adhesive, A00335 adhesive with end plugs (112,113), use adhesive, A00027 adhesive with end plugs (112A,113A).
115, 120, 125	Strut install -9 o'clock (90)	adhesive, A00335	
145	Strut assembly (140)	None	Adjust end plugs (147,148) to fit inner groove on 3 o'clock strut installation (135). Trim seal (146) to fit. Bond end plugs (147,148) to seal (146). Use adhesive, A00335 adhesive with end plugs (147,148). Use adhesive, A00027 adhesive with end plugs (147A, 148A).
152	Fairing Assembly (150)	adhesive, A00027	

Table 601: Seal Replacement (Continued)

Seal Item No.	Attached To	Adhesive (SOPM 20-50-12)	Remarks
160	3 o'clock Strut Installation (135)	adhesive, A00335	
180	Strut Assembly (175)	adhesive, A00335	
185	Strut Assembly (175)	adhesive, A00335	
230	Splice Plate- Upper (235)	adhesive, A00335	
260,265	Fairing Assembly (255,257)	adhesive, A00027	
270	Fire Wall Assembly	None	
280	Bracket Assembly (285)	adhesive, A00027	



1 CONTROL THE AMOUNT OF ADHESIVE USED TO BOND BULB SEAL SUCH THAT NO ADHESIVE SHALL OOZE PAST THE MAXIMUM OD OF BULB SEAL AT CENTERLINE OF SEAL AS SHOWN

333A1100-5,-7

Seal Adhesive Application
Figure 601

MISCELLANEOUS PARTS REFINISH REPAIR 6-1

1. General

A. This procedure has the data necessary to refinish the miscellaneous parts.

B. Refer to REPAIR-GENERAL, Paragraph 2. for the Standard Overhaul Practices Manual (SOPM) subjects identified in this procedure.

C. Refer to REPAIR-GENERAL, Paragraph 3. for the description of the consumable codes identified in this procedure.

D. Refer to IPL Figure 1 for item numbers.

2.

A. Repair of parts listed in REPAIR 6-1, Table 601 consists of restoration of the original finish.

Table 601: Refinish Details

ITEM	MATERIAL	FINISH
Support (100,155) (Substrate parts)	Aluminum alloy	Anodize (F-17.05) and apply primer, C00259 (F-20.02)
Fairing Assembly (105, 150)	Aluminum alloy	Anodize (F-17.07), apply primer, C00175 (F-19.47) and coating, C50075(F-19.39)
Fairing Assembly (105A, 150A)	Aluminum alloy	Anodize (F-17.07), apply primer, C00175 (F-19.47) and coating, C50084(F-20.63)
Angle (126A,129A,161A, 164A)	Aluminum alloy	Chemical treat or chromic acid anodize and apply primer, C00259 (F-18.05).
Filter (127,130,162,165)	Aluminum alloy	Chromic acid anodize (F-12.04) and apply primer, B50082 (F-20.08).
Splice Plate (235), Lower Fitting (305)	17-4PH Cres	Passivate (F-17.09)
Fairing Assembly (255, 257) (Substrate parts)	Aluminum alloy	Anodize (F-17.05) primer, C00259 (F-20.02) and coating, C50069 (F-21.02)

ASSEMBLY

1. ASSEMBLY

A. Assemble minor details per standard industrial practices. Refer to Power-Plant Buildup 71-00-02 for assembly of the extension ring assembly.

BOEING®

COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

(NOT APPLICABLE)

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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.

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
333A1100-10		1	1C	RF
333A1100-12		1	1D	RF
333A1100-13		1	1E	RF
333A1100-14		1	1F	RF
333A1100-15		1	1G	RF
333A1100-3		1	40	2
333A1100-4		1	1	RF
333A1100-5		1	85	4
333A1100-7		1	85A	4
333A1100-8		1	1A	RF
333A1100-9		1	1B	RF
333A1110-1		1	10	1
		1	10B	1
333A1110-2		1	15	1
		1	15B	1
333A1110-3		1	20	2
		1	20B	1
333A1120-1		1	2	1
333A1120-2		1	5	1
333A1120-4		1	5A	1
333A1130-1		1	45	1
333A1130-2		1	50	1
333A1130-3		1	55	1
333A1130-5		1	45A	1
333A1140–9		1	95C	1
333A1140-10		1	90C	1
333A1140-3		1	90	1
333A1140-4		1	95	1
333A1140-5		1	90A	1
333A1140-6		1	95A	1
333A1140-7		1	95B	1
333A1140-8		1	90B	1
333A1141–9		1	140C	1
333A1141-10		1	135C	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
333A1141-3		1	135	1
333A1141-4		1	140	1
333A1141-5		1	135A	1
333A1141-6		1	140A	1
333A1141-7		1	140B	1
333A1141-8		1	135B	1
333A1142-1		1	155	1
333A1142-2		1	158	1
333A1143-1		1	100	1
333A1143-2		1	103	1
333A1144-13		1	105	1
333A1144-14		1	150	1
333A1144-19		1	105A	1
333A1144-20		1	150A	1
333A1145-27		1	270	2
333A1145-28		1	110	1
333A1145-29		1	145	1
333A1145-30		1	273	2
333A1145-31		1	272	2
333A1145-32		1	272A	2
333A1145-33		1	111	1
333A1145-34		1	112	1
333A1145-35		1	113	1
333A1145-36		1	146	1
333A1145-37		1	147	1
333A1145-38		1	148	1
333A1145-39		1	112A	1
333A1145-40		1	113A	1
333A1145-41		1	147A	1
333A1145-42		1	110A	1
333A1145-43		1	148A	1
333A1145-44		1	145A	1
333A1145-45		1	270A	2
333A1145-46		1	110B	1
333A1145-47		1	145B	1

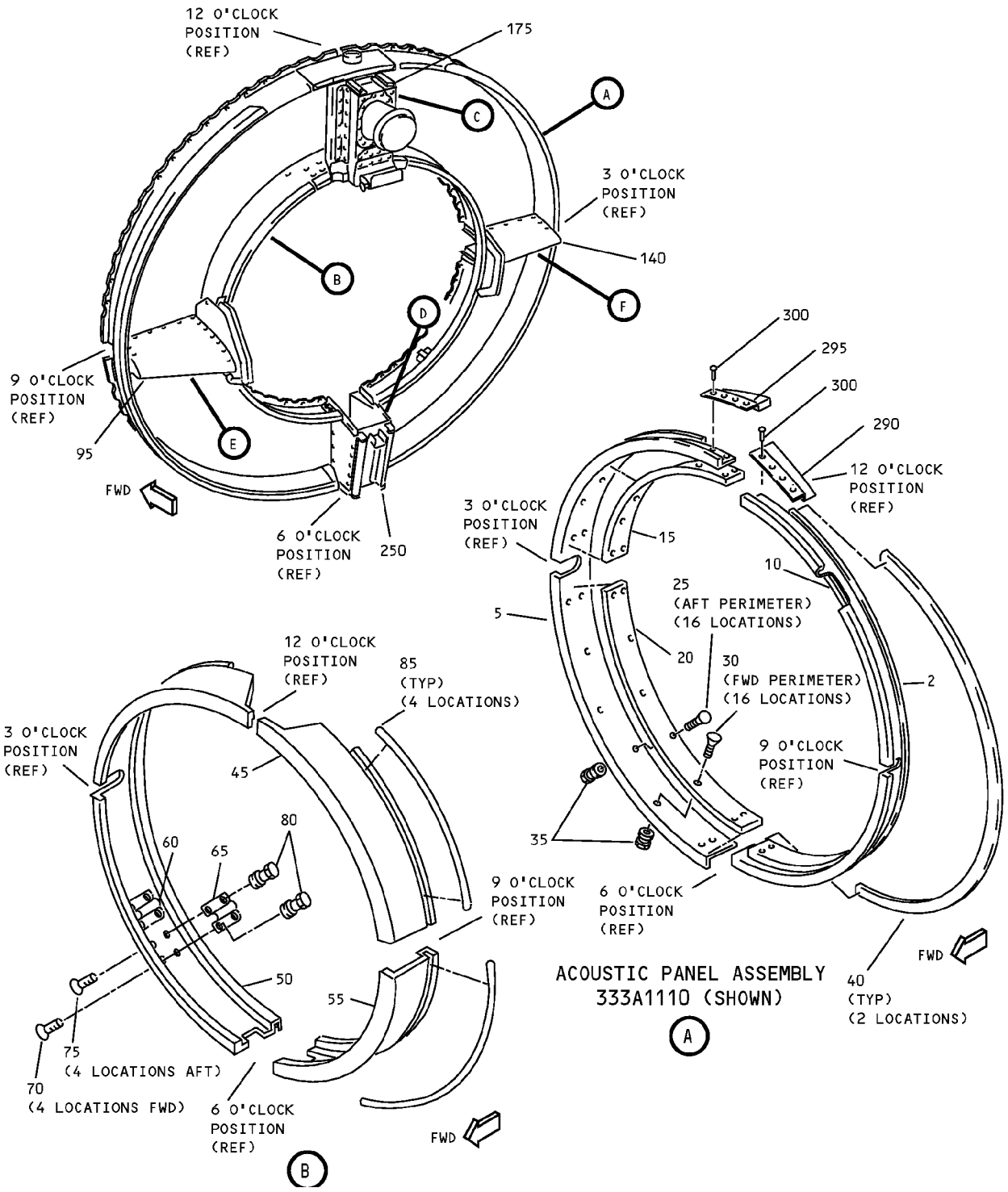
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
333A1145-49		1	111A	1
333A1145-50		1	146A	1
333A1146-1		1	126	1
333A1146-15		1	167	1
333A1146-17		1	161	1
333A1146-18		1	164	1
333A1146-2		1	129	1
333A1146-22		1	129A	1
333A1146-23		1	161A	1
333A1146-24		1	164A	1
333A1148-1		1	130A	1
		1	162	1
333A1148-2		1	127A	1
		1	165	1
333A1148-5		1	130	1
		1	162A	1
333A1148-6		1	127	1
		1	165A	1
333A1150-3		1	170	1
333A1150-4		1	175	1
333A1150-6		1	170A	1
333A1150-7		1	175A	1
333A1152-1		1	235	1
333A1152-3		1	235A	1
333A1152-5		1	235B	1
333A1154-1		1	186	1
333A1154-2		1	190	1
333A1154-3		1	190K	1
333A1154-4		1	194K	1
333A1154-6		1	189	1
333A1154-7		1	189K	1
333A1159-1		1	249	2
333A1160-3		1	245	1
333A1160-4		1	250	1
333A1160-5		1	250A	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
333A1160-6		1	250B	1
333A1161-1		1	305	1
333A1162-11		1	255A	1
333A1162-12		1	257A	1
333A1162-7		1	255	1
333A1162-8		1	257	1
333A1163-12		1	275	1
333A1163-14		1	275A	1
333A1163-2		1	285	1
333A1165-1		1	247A	1
333A1165-2		1	248A	1
333A1165-5		1	247	1
333A1165-6		1	248	1
333A1169-1		1	290	1
333A1169-2		1	295	1
333A1170-1		1	194	1
333A1171-1		1	193K	2
333A1172-8		1	206	1
333A1172-9		1	209	1
333A1174-4		1	260	1
333A1174-5		1	265	1
333A1174-6		1	260A	1
333A1174-7		1	265A	1
333A1174-8		1	260B	1
333A1174-9		1	265B	1
333A1177-1		1	60	1
333A1177-2		1	65	1
333A1180-1		1	10A	1
333A1180-2		1	15A	1
333A1180-3		1	20A	2
333A1180-4		1	10C	1
333A1180-5		1	15C	1
333A1180-6		1	20C	1
33A1146-21		1	126A	1
AN960416L		1	246J	6

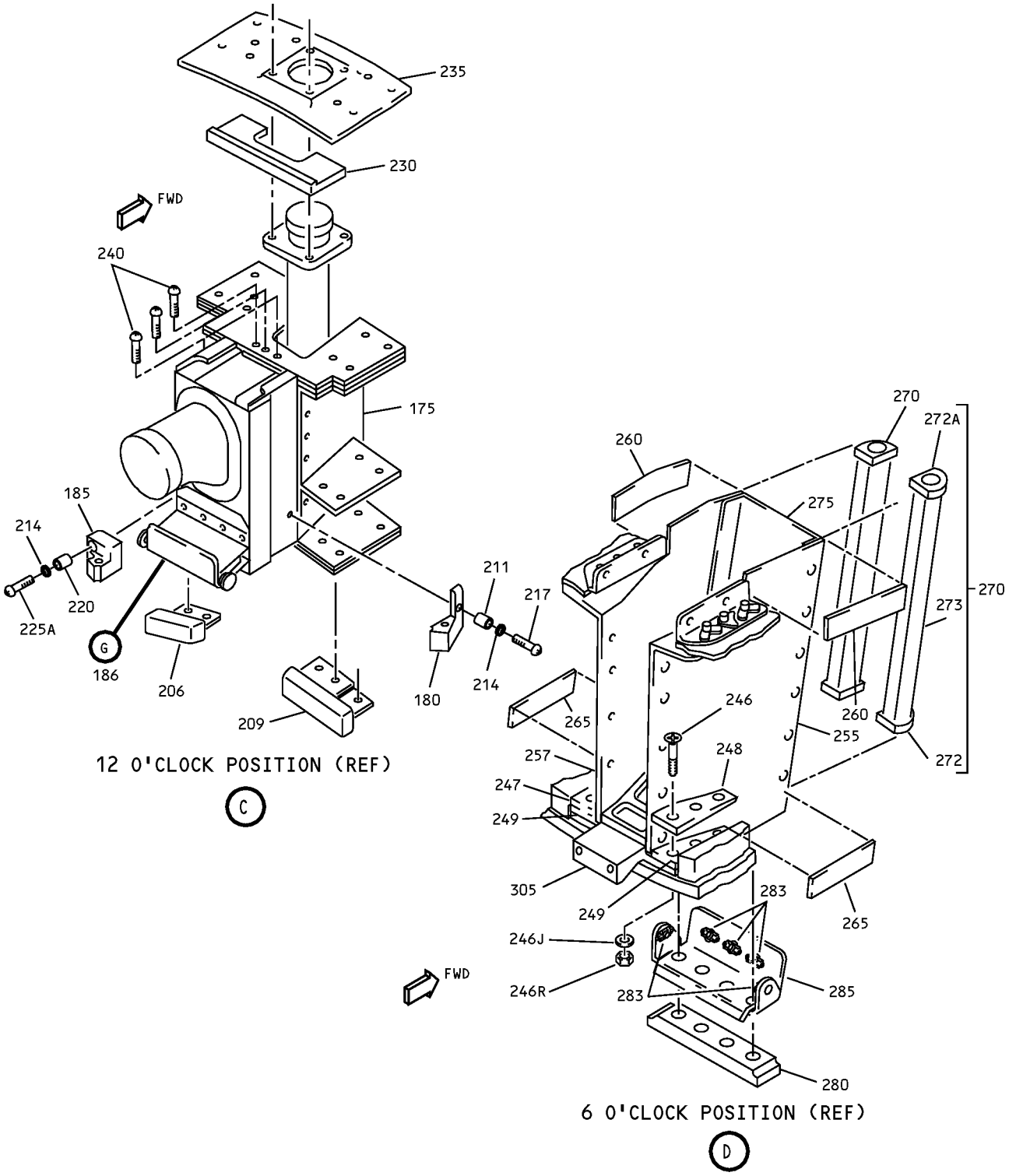
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
AN960C10L		1	214	2
AN960C416L		1	192K	2
BACB30FN5A4		1	70	4
BACB30FN5A5		1	75	4
BACB30LE3U4		1	188	4
BACB30LE3U6		1	187	4
BACB30LE4U18		1	191	2
BACB30LK3-14		1	225A	1
BACB30LK3-2		1	240	3
BACB30LK3-5		1	217	1
BACB30LR4-10		1	246	6
BACB30NN3K3		1	128	2
		1	131	2
		1	163	2
		1	166	2
BACB30NN3K4		1	166L	6
BACB30NY6K11		1	25	16
		1	25A	24
		1	128A	2
		1	131A	2
		1	163A	2
		1	166A	2
BACB30NY6K12		1	30	16
		1	30A	24
		1	128F	1
		1	131F	1
		1	163F	1
BACB39NY6K12		1	166F	1
BACC30AB6SW		1	35B	32
		1	35C	48
BACC30AG5		1	80	8
BACC30AG6		1	35	32
		1	35A	48
BACC30X6SW		1	128K	6
		1	131K	6

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	163K	6
		1	166K	6
BACN10JB3CD		1	101	12
		1	126F	2
		1	129F	2
		1	156	4
		1	161F	2
		1	164F	2
BACN10JB3CM		1	283	5
BACN10JC4CM		1	193	2
		1	246R	6
BACN10JN3CD		1	156A	4
BACN10MT3		1	166N	6
BACW10AU3		1	166M	6
MS20002C4		1	191K	2
MS20427M		1	126K	2
		1	129K	2
		1	161K	2
		1	164K	2
MS20427M3		1	102	24
		1	157	8
MS20427M5		1	300	8
NAS1057T3-025		1	211	1
NAS1057T3-075		1	220	1
NAS1057T4-090		1	192	2
NAS1057T4-104		1	192A	2
NAS1195-3XH		1	156B	4
NAS1200-3		1	282	10
NAS463X10		1	101A	12
		1	156C	4
S333A101-10		1	180	1
S333A101-11		1	185	1
S333A101-25		1	230	1
S333A101-30		1	115	1
S333A101-31		1	120	1

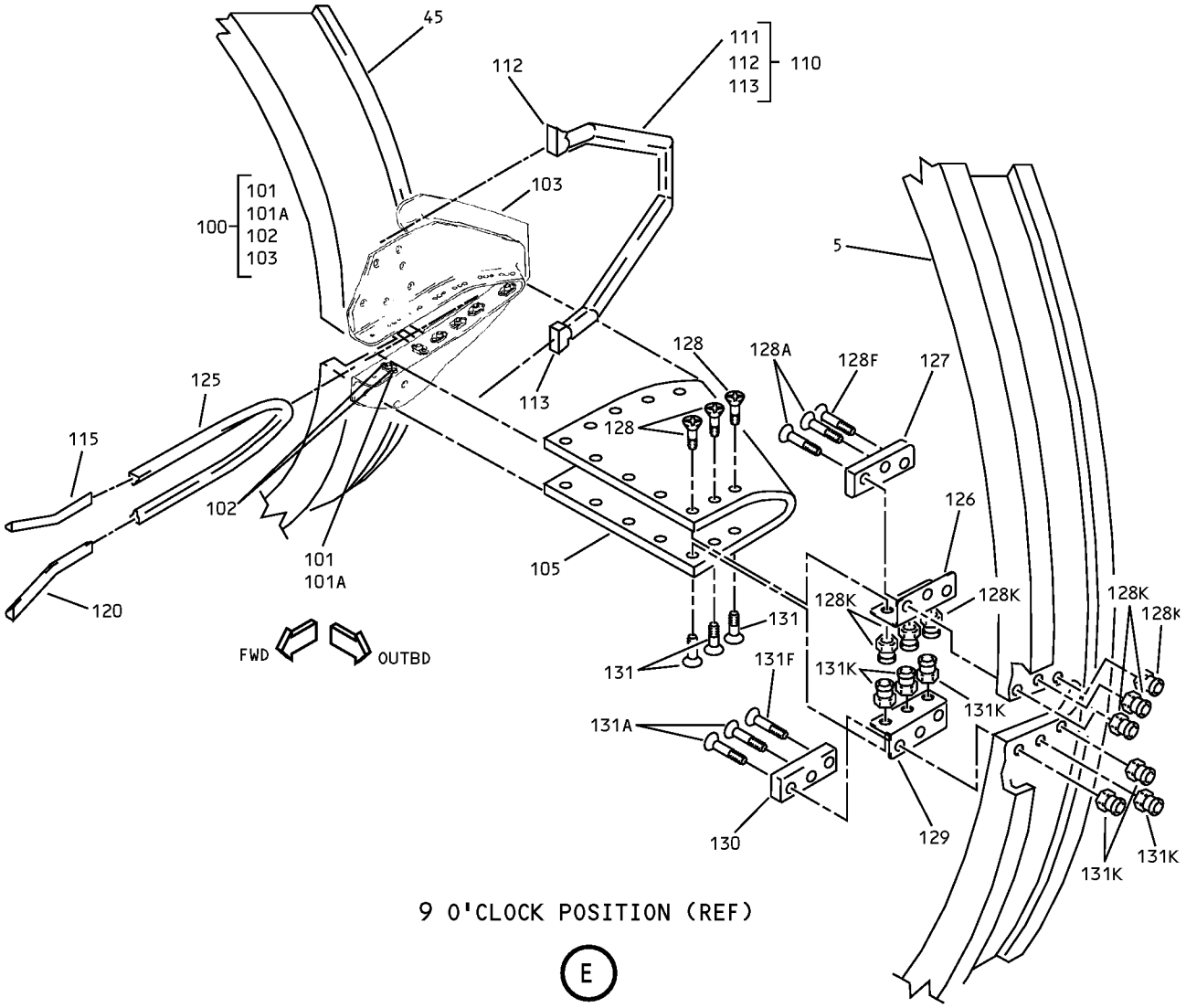
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
S333A101-32		1	160	1
S333A101-33		1	125	1
S333A101-34		1	230A	1
		1	230B	1
S333A101-35		1	125A	1
S333A101-36		1	115A	1
S333A101-37		1	120A	1
S333A101-38		1	160A	1
S333A101-5		1	107	1
		1	152	1
S333A101-8		1	280	1



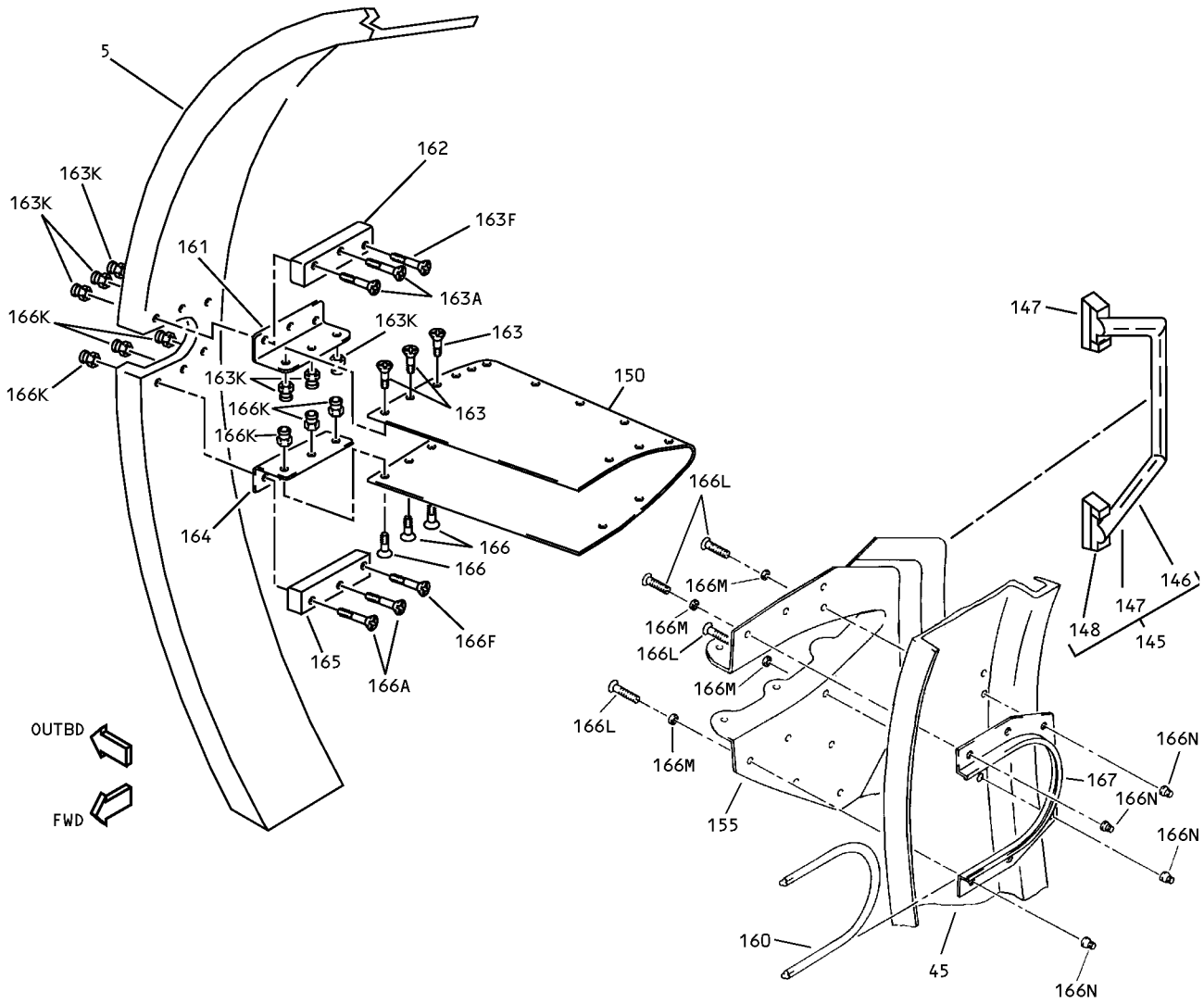
Extension Ring Assembly
IPL Figure 1 (Sheet 1 of 5)



Extension Ring Assembly
IPL Figure 1 (Sheet 2 of 5)



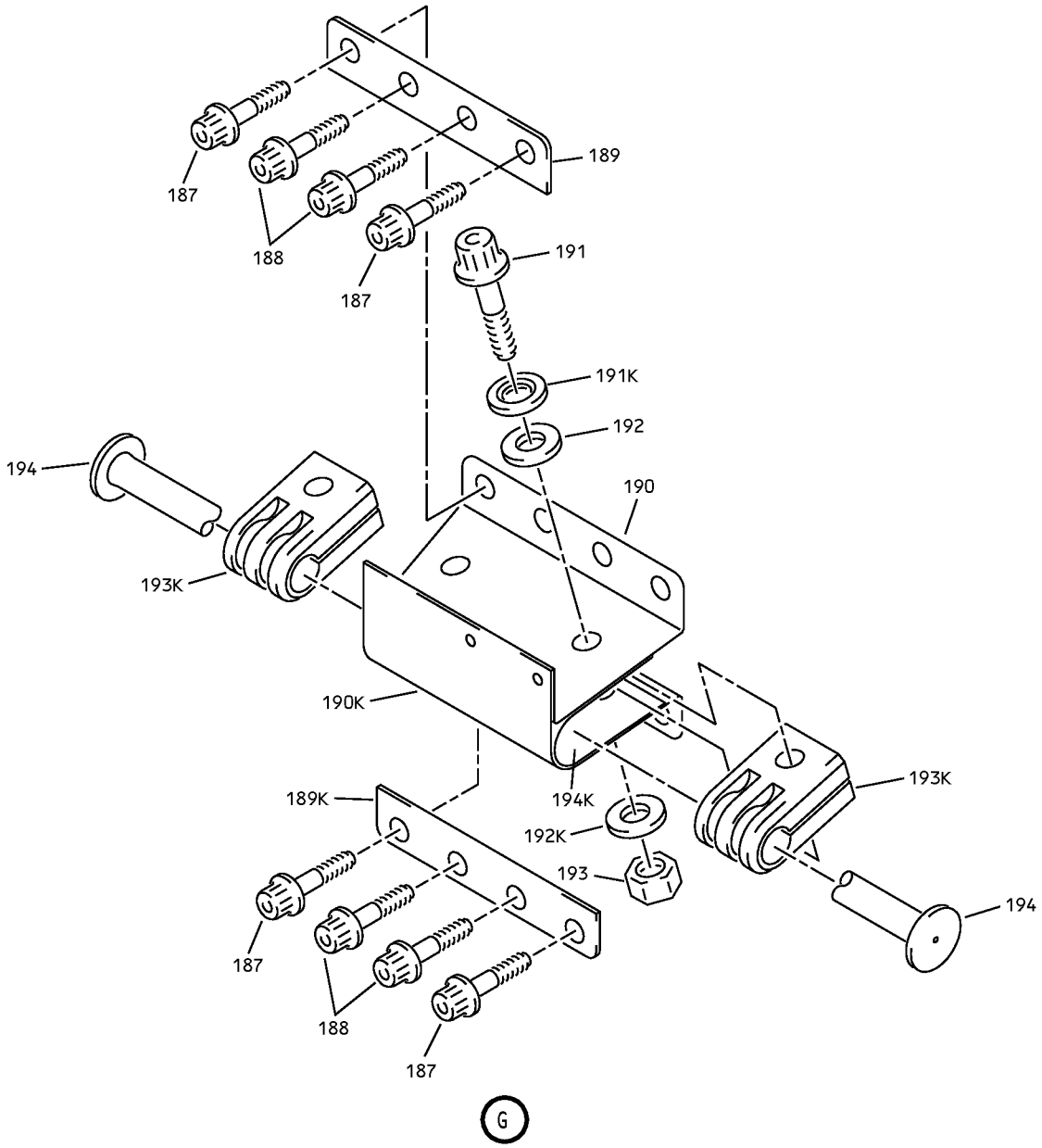
Extension Ring Assembly
IPL Figure 1 (Sheet 3 of 5)



3 O'CLOCK POSITION (REF)

F

Extension Ring Assembly
IPL Figure 1 (Sheet 4 of 5)



Extension Ring Assembly
IPL Figure 1 (Sheet 5 of 5)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1	333A1100-4		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	A	RF
–1A	333A1100-8		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS) (PRE SB 737-71-1149)	B	RF
–1B	333A1100-9		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS) (PRE SB 737-71-1149)	C	RF
–1C	333A1100-10		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	D	RF
–1D	333A1100-12		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	E	RF
–1E	333A1100-13		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	F	RF
–1F	333A1100-14		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	G	RF
–1G	333A1100-15		EXTENSION RING ASSEMBLY (SEE P/P BUILDUP 71-00-02 FOR INSTALLATION DETAILS)	H	RF
2	333A1120-1		. RING SEGMENT-OUTER		1
5	333A1120-2		. RING SEGMENT-OUTER	A, B, C	1
–5A	333A1120-4		. RING SEGMENT-OUTER	D, E, F, G, H	1
10	333A1110-1		. ACOUSTIC PANEL ASSY	A, B, C	1
–10A	333A1180-1		. COMPRESSION MOLDED PANEL ASSY (ITEMS 10A,10C OPT ITEMS 10,10B) (OPT ITEM 10C)	D, E, F, G, H	1
–10B	333A1110-1		. ACOUSTIC PANEL ASSEMBLY (ITEMS 10A,10C OPT ITEMS 10,10B)	D	1
–10C	333A1180-4		. COMPRESSION MOLDED PANEL ASSY (ITEMS 10A,10C OPT ITEMS 10,10B) (OPT ITEM 10A)	F, G, H	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–					
15	333A1110-2		. ACOUSTIC PANEL ASSEMBLY	A, B, C	1
–15A	333A1180-2		. COMPRESSION MOLDED PANEL ASSY (OPT ITEM 15B) (OPT ITEM 15C)	D, E, F, G, H	1
–15B	333A1110-2		. ACOUSTIC PANEL ASSEMBLY (OPT ITEM 15A,15C)	D	1
–15C	333A1180-5		. COMPRESSION MOLDED PANEL ASSY (OPT ITEM 15B) (OPT ITEM 15A)	F, G, H	1
20	333A1110-3		. ACOUSTIC PANEL ASSEMBLY	A, B, C	2
–20A	333A1180-3		. COMPRESSION MOLDED PANEL ASSY (OPT ITEM 20B) (OPT ITEM 20C)	D, E, F, G, H	2
–20B	333A1110-3		. ACOUSTIC PANEL ASSEMBLY (OPT ITEM 20A,20C)	D	1
–20C	333A1180-6		. COMPRESSION MOLDED PANEL ASSY (OPT ITEM 20B) (OPT ITEM 20A)	F, G, H	1
25	BACB30NY6K11		. BOLT (USED WITH ITEMS 10,15, 20)	A, B, C	16
–25A	BACB30NY6K11		. BOLT (USED WITH ITEMS 10A, 15A,20A)	D, E, F, G, H	24
30	BACB30NY6K12		. BOLT (USED WITH ITEMS 10,15, 20)	A, B, C	16
–30A	BACB30NY6K12		. BOLT (USED WITH ITEMS 10A, 15A,20A)	D, E, F, G, H	24
35	BACC30AG6		. COLLAR (USED WITH ITEMS 10,15, 20)	A, B, C	32
–35A	BACC30AG6		. COLLAR (USED WITH ITEMS 10A, 15A,20A)	D, E, F, G, H	48
–35B	BACC30AB6SW		. COLLAR (USED WITH ITEMS 10, 15,20) (BACC30AB6SW IS REQUIRED WHEN PERFORMING ALTERNATE REPAIR PROCEDURE PER REPAIR 1-1, 1B)	A, B, C	32

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–35C	BACC30AB6SW		. COLLAR (USED WITH ITEMS 10A, 15A,20A) (BACC30AB6SW IS REQUIRED WHEN PERFORMING ALTERNATE REPAIR PROCEDURE PER REPAIR 1-1, 1B)	D	48
40	333A1100-3		. SEAL CHEVRON		2
45	333A1130-1		. RING SEGMENT-INNER	A-F	1
–45A	333A1130-5		. RING SEGMENT-INNER	G, H	1
50	333A1130-2		. RING SEGMENT-INNER		1
55	333A1130-3		. RING SEGMENT-INNER		1
60	333A1177-1		. BRACKET		1
65	333A1177-2		. BRACKET		1
70	BACB30FN5A4		. HI-LOCK		4
75	BACB30FN5A5		. HI-LOCK		4
80	BACC30AG5		. COLLAR		8
85	333A1100-5		. SEAL	A	4
85A	333A1100-7		. SEAL	B, C, D, E, F, G, H	4
90	333A1140-3		. STRUT INSTAL-9 O'CLOCK	A	1
–90A	333A1140-5		. STRUT INSTAL-9 O'CLOCK	B, C, D, E	1
–90B	333A1140-8		. STRUT INSTAL-9 O'CLOCK	F, G	1
–90C	333A1140-10		. STRUT INSTAL-9 O'CLOCK	H	1
95	333A1140-4		. . STRUT ASSEMBLY (USED ON ITEM 90)		1
–95A	333A1140-6		. . STRUT ASSEMBLY (USED ON ITEM 90A) (LIMITED USAGE)		1
–95B	333A1140-7		. . STRUT ASSEMBLY (USED ON ITEMS 90A,90B) (LIMITED USAGE)		1
–95C	333A1140–9		. . STRUT ASSEMBLY (USED ON ITEM 90C)		1
100	333A1143-1		. . . SUPPORT ASSEMBLY		1
101	BACN10JB3CD		. . . . NUTPLATE		12

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
101A	NAS463X10		. . . . SPACER		12
102	MS20427M3		. . . . RIVET		24
103	333A1143-2		. . . . SUPPORT		1
105	333A1144-13		. . . FAIRING ASSY (USED ON ITEMS 95, 95A, 95B)		1
–105A	333A1144-19		. . . FAIRING ASSY (USED ON ITEM 95C)		1
107	S333A101-5		. . . . SEAL		1
110	333A1145-28		. . . SEAL ASSEMBLY (USED ON ITEM 95)		1
–110A	333A1145-42		. . . SEAL ASSY (USED ON ITEM 95A)		1
–110B	333A1145-46		. . . SEAL ASSY (USED ON ITEMS 95B,95C)		1
111	333A1145-33		. . . . SEAL (USED ON ITEMS 110,110A)		1
–111A	333A1145-49		. . . . SEAL (USED ON ITEM 110B)		1
112	333A1145-34		. . . . END PLUG (USED ON ITEM 110)		1
–112A	333A1145-39		. . . . END PLUG (USED ON ITEMS 110A,110B)		1
113	333A1145-35		. . . . END PLUG (USED ON ITEM 110)		1
–113A	333A1145-40		. . . . END PLUG (USED ON ITEMS 110A,110B)		1
115	S333A101-30		. . SEAL	A-D	1
–115A	S333A101-36		. . SEAL	E, F,G,H	1
120	S333A101-31		. . SEAL	A-D	1
–120A	S333A101-37		. . SEAL	E, F,G,H	1
125	S333A101-33		. . SEAL	A-D	1
–125A	S333A101-35		. . SEAL	E, F,G,H	1
126	333A1146-1		. . ANGLE ASSEMBLY-UPPER 9 O'CLOCK		1
–126A	33A1146-21		. . . ANGLE		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–					
–126F	BACN10JB3CD		. . . NUTPLATE		2
–126K	MS20427M		. . . . RIVET		2
127	333A1148-6		. . FILLER		1
–127A	333A1148-2		. . FILLER (OPT ITEM 127)		1
128	BACB30NN3K3		. . BOLT		2
128A	BACB30NY6K11		. . HI-LOK FASTENER		2
128F	BACB30NY6K12		. . HI-LOK FASTENER		1
128K	BACC30X6SW		. . COLLAR		6
129	333A1146-2		. . ANGLE ASSEMBLY-LOWER 9 O'CLOCK		1
–129A	333A1146-22		. . . ANGLE		1
–129F	BACN10JB3CD		. . . NUTPLATE		2
–129K	MS20427M		. . . . RIVET		2
130	333A1148-5		. . FILLER		1
–130A	333A1148-1		. . FILLER (OPT ITEM 130)		1
131	BACB30NN3K3		. . BOLT		2
131A	BACB30NY6K11		. . HI-LOK FASTENER		2
131F	BACB30NY6K12		. . HI-LOK FASTENER		1
131K	BACC30X6SW		. . COLLAR		6
–135	333A1141-3		. STRUT INSTALLATION-3 O'CLOCK	A	1
–135A	333A1141-5		. STRUT INSTALLATION-3 O'CLOCK	B-E	1
–135B	333A1141-8		. STRUT INSTALLATION-3 O'CLOCK	F, G	1
–135C	333A1141-10		. STRUT INSTALLATION-3 O'CLOCK	H	1
140	333A1141-4		. . STRUT ASSY (USED ON ITEM 135)		1
–140A	333A1141-6		. . STRUT ASSY (USED ON ITEM 135A) (LIMITED USAGE)		1
–140B	333A1141-7		. . STRUT ASSY (USED ON ITEMS 135A,135B) (LIMITED USAGE)		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–					
–140C	333A1141–9		. . STRUT ASSY (USED ON ITEMS 135C)		1
145	333A1145-29		. . . SEAL ASSEMBLY (USED ON ITEM 140)		1
–145A	333A1145-44		. . . SEAL ASSEMBLY (USED ON ITEM 140A)		1
–145B	333A1145-47		. . . SEAL ASSEMBLY (USED ON ITEM 140B)		1
146	333A1145-36		. . . . SEAL (USED ON ITEMS 145,145B)		1
–146A	333A1145-50		. . . . SEAL (USED ON ITEM 145B)		1
147	333A1145-37		. . . . END PLUG (USED ON ITEM 145)		1
–147A	333A1145-41		. . . . END PLUG (USED ON ITEMS 145A,145B)		1
148	333A1145-38		. . . . END PLUG (USED ON ITEM 145)		1
–148A	333A1145-43		. . . . END PLUG (USED ON ITEMS 145A,145B)		1
150	333A1144-14		. . . FAIRING ASSEMBLY (USED ON ITEMS 140, 140A, 140B)		1
–150A	333A1144-20		. . . FAIRING ASSEMBLY (USED ON ITEM 135C)		1
152	S333A101-5		. . . . SEAL		1
155	333A1142-1		. . . SUPPORT ASSEMBLY		
156	BACN10JB3CD		. . . . NUTPLATE		4
–156A	BACN10JN3CD		. . . . NUTPLATE (OPT ITEM 156)		4
156B	NAS1195-3XH		. . . . SPACER		4
–156C	NAS463X10		. . . . SPACER (OPT ITEM 156B)		4
157	MS20427M3		. . . . RIVET		8
158	333A1142-2		. . . . SUPPORT		1
160	S333A101-32		. . SEAL	A-E	1
–160A	S333A101-38		. . SEAL	F	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–					
161	333A1146-17		. . ANGLE ASSEMBLY-UPPER 3 O'CLOCK		1
–161A	333A1146-23		. . . ANGLE		1
–161F	BACN10JB3CD		. . . NUTPLATE		2
–161K	MS20427M		. . . . RIVET		2
162	333A1148-1		. . FILLER		1
–162A	333A1148-5		. . FILLER (OPT ITEM 162)		1
163	BACB30NN3K3		. . BOLT		2
163A	BACB30NY6K11		. . HI-LOK FASTENER		2
163F	BACB30NY6K12		. . HI-LOK FASTENER		1
163K	BACC30X6SW		. . COLLAR		6
164	333A1146-18		. . ANGLE ASSEMBLY-LOWER 3 O'CLOCK		1
–164A	333A1146-24		. . . ANGLE		1
–164F	BACN10JB3CD		. . . NUTPLATE		2
–164K	MS20427M		. . . . RIVET		2
165	333A1148-2		. . FILLER		1
–165A	333A1148-6		. . FILLER (OPT ITEM 165)		1
166	BACB30NN3K3		. . BOLT		2
166A	BACB30NY6K11		. . HI-LOK FASTENER		2
166F	BACB39NY6K12		. . HI-LOK FASTENER		1
166K	BACC30X6SW		. . COLLAR		6
166L	BACB30NN3K4		. . BOLT		6
166M	BACW10AU3		. . WASHER		6
166N	BACN10MT3		. . NUT		6
167	333A1146-15		. . RETAINER		1
–170	333A1150-3		. STRUT INSTALLATION-12 O'CLOCK	A-D	1
–170A	333A1150-6		. STRUT INSTALLATION-12 O'CLOCK	E, F, G, H	1
175	333A1150-4		. . STRUT ASSEMBLY		1
–175A	333A1150-7		. . STRUT ASSEMBLY	E, F	1
180	S333A101-10		. . . SEAL LOWER RH		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–					
185	S333A101-11		. . . SEAL LOWER LH		1
186	333A1154-1		. . . BUMPER ASSY		1
			ATTACHING PARTS		
187	BACB30LE3U6		. . . BOLT		4
188	BACB30LE3U4		. . . BOLT		4
			- - - - - - - * - - - - - - - -		
189	333A1154-6		. . . . FILLER		1
189K	333A1154-7		. . . . FILLER		1
190	333A1154-2		. . . . PLATE-TOP CLAMP		1
190K	333A1154-3		. . . . PLATE-BOTTOM CLAMP		1
191	BACB30LE4U18		. . . . BOLT		2
191K	MS20002C4		. . . . WASHER-CSK		2
192	NAS1057T4-090		. . . . SPACER (REPLACED BY 192A)		2
–192A	NAS1057T4-104		. . . . SPACER (REPLACES ITEM 192)		2
192K	AN960C416L		. . . . WASHER		2
193	BACN10JC4CM		. . . . NUT		2
193K	333A1171-1		. . . . BUSHING-BUMPER		2
194	333A1170-1		. . . . STOP ASSY		1
194K	333A1154-4		. . . . BUSHING-SHIELD		1
206	333A1172-8		. . SEAL ASSEMBLY		1
209	333A1172-9		. . SEAL ASSEMBLY		1
211	NAS1057T3-025		. . SPACER		1
214	AN960C10L		. . WASHER		2
217	BACB30LK3-5		. . BOLT		1
220	NAS1057T3-075		. . SPACER		1
225	BACN10JB3C		DELETED		
225A	BACB30LK3-14		. . BOLT		1
230	S333A101-25		. . SEAL (LIMITED USAGE)	A-D	1
–230A	S333A101-34		. . SEAL (LIMITED USAGE)	A-D	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–					
–230B	S333A101-34		. . SEAL (LIMITED USAGE)	E, F	1
235	333A1152-1		. . SPLICE PLATE-UPPER (LIMITED USAGE)		1
–235A	333A1152-3		. . SPLICE PLATE-UPPER (LIMITED USAGE)		1
–235B	333A1152-5		. . SPLICE PLATE-UPPER (LIMITED USAGE)		1
240	BACB30LK3-2		. . BOLT		3
–245	333A1160-3		. STRUT INSTALLATION-6 O'CLOCK	A-H	1
246	BACB30LR4-10		. . BOLT		6
246J	AN960416L		. . WASHER		6
246R	BACN10JC4CM		. . NUT		6
247	333A1165-5		. . FILLER		1
–247A	333A1165-1		. . FILLER (OPT ITEM 247)		1
248	333A1165-6		. . FILLER		1
–248A	333A1165-2		. . FILLER (OPT ITEM 248)		1
249	333A1159-1		. . SHIM (INSTALLATION OF SHIM IS OPTIONAL. PEEL 0.003 INCH LAMINATIONS AS REQUIRED)		2
250	333A1160-4		. . LOWER STRUT ASSEMBLY (LIMITED USAGE)		1
–250A	333A1160-5		. . LOWER STRUT ASSEMBLY (LIMITED USAGE)		1
–250B	333A1160-6		. . LOWER STRUT ASSEMBLY (LIMITED USAGE)		1
255	333A1162-7		. . . FAIRING ASSEMBLY (LH) (USED ON ITEM 250)		1
–255A	333A1162-11		. . . FAIRING ASSEMBLY (LH) (USED ON ITEMS 250A,250B)		1
257	333A1162-8		. . . FAIRING ASSEMBLY (RH) (USED ON ITEM 250)		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–					
257A	333A1162-12		. . . FAIRING ASSEMBLY (RH) (USED ON ITEMS 250A,250B)		1
260	333A1174-4		. . . . SEAL (OPT ITEM 260A)	A-D	1
–260A	333A1174-6		. . . . SEAL	A-D	1
–260B	333A1174-8		. . . . SEAL	E, F	1
265	333A1174-5		. . . . SEAL (OPT ITEM 265A)	A-D	1
–265A	333A1174-7		. . . . SEAL		1
–265B	333A1174-9		. . . . SEAL	E, F	1
270	333A1145-27		. . . SEAL ASSEMBLY (USED ON ITEM 250)		2
270A	333A1145-45		. . . SEAL ASSEMBLY (USED ON ITEMS 250A,250B)		2
272	333A1145-31		. . . . END PLUG		2
272A	333A1145-32		. . . . END PLUG		2
273	333A1145-30		. . . . SEAL		2
275	333A1163-12		. . . FIREWALL ASSY (USED ON ITEMS 250,250A)		1
–275A	333A1163-14		. . . FIREWALL ASSY (USED ON ITEM 250B)		1
280	S333A101-8		. . . SEAL		
–282	NAS1200-3		. . . RIVET (USED ON ITEM 283)		10
283	BACN10JB3CM		. . . NUT PLATE		5
285	333A1163-2		. . . BRACKET ASSEMBLY		1
			INSTALLATION PARTS		
290	333A1169-1		DEPRESSOR SEAL-12 O'CLOCK STRUT (LH)		1
295	333A1169-2		DEPRESSOR SEAL-12 O'CLOCK STRUT (RH)		1
300	MS20427M5		RIVET		8
305	333A1161-1		LOWER FITTING-EXTENSION RING 6 O'CLOCK STRUT		1

–Item not Illustrated