COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

INLET CFM56-3 COWL ASSEMBLY

PART NUMBER 301A1080–5, –6, –7, 314A1010–10, –11, –12, –13, –14, –15, –16, –2, –9

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COMPONENT MAINTENANCE MANUAL

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To: All holders of INLET CFM56-3 COWL ASSEMBLY 71-13-27.

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

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
71-13-27 ILLUSTRATED PARTS LIST (cont)					
1026	Mar 01/2006				
1027	Mar 01/2006				
1028	Mar 01/2006				
1029	Mar 01/2006				
1030	Mar 01/2006				
1031	Mar 01/2006				
1032	Mar 01/2006				
1033	Mar 01/2006				
1034	Mar 01/2006				
1035	Mar 01/2006				
1036	Mar 01/2006				
1037	Mar 01/2006				
1038	Mar 01/2006				
1039	Mar 01/2006				
1040	Mar 01/2006				
1041	Mar 01/2006				
1042	Mar 01/2006				
1043	Mar 01/2006				
1044	Mar 01/2006				
1045	Mar 01/2006				
1046	Mar 01/2006				
1047	Mar 01/2006				
1048	Mar 01/2006				
1049	Mar 01/2006				
1050	Mar 01/2006				
1051	Mar 01/2006				
1052	Mar 01/2006				
1053	Mar 01/2006				
1054	Mar 01/2006				
1055	Mar 01/2006				
1056	Mar 01/2006				

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

TABLE OF CONTENTS

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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 33275	MAR 5/87
		PRR 33405	MAR 5/87
		PRR 33806	MAR 5/87
		PRR 34023	MAR 5/87
		PRR 34762	JUN 5/91
737-71-1311			DEC 5/93
737-71-1336		PRR 35005-113	MAR 1/98

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	
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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.

INLET ASSEMBLY - CFM 56-3 - DESCRIPTION AND OPERATION

1. Description and Operation

A. The inlet assembly is made of five basic parts:

(1) Lip assembly skins - Materials: formed aluminum sheets, spliced at four locations.

(2) The fwd and aft bulkheads - Materials: aluminum chords and stiffeners with titanium webs.

(3) The TAI spray ring - Materials: welded Inconel tubing.

(4) The acoustic panel assembly - Materials: perforated aluminum/honeycomb/fiberglass/Epoxy bonded panels spliced together at three locations.

(5) The aft attach ring assembly - Materials: aluminum. These five parts act together to provide an optimum entrance for air entering the engine.

2. Leading Particulars (approximate)

A. Diameter – 80 inches

B. Length – 45 inches

C. Weight – 250 pounds

COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

DISASSEMBLY

1. General

A. This procedure has the data necessary to disassemble the inlet cowl assembly.

B. 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.

C. Refer to IPL Figure 1 for item numbers.

2. Disassembly (DISASSEMBLY, Figure 301, IPL Figure 1)

NOTE: Use repair fixture, SPL-5407 for disassembly of this component. (See DISASSEMBLY, Figure 301)

CAUTION: REPAIR FIXTURE, C71016 WILL MAINTAIN THE ALIGNMENT OF MACHINING POINTS AND ITS USE IS RECOMMENDED DURING DISASSEMBLY OF THE INLET COWL ASSEMBLY. IF USING THE REPAIR FIXTURE, C17016, THE ATTACH RING ASSEMBLY (327) SHOULD REMAIN ATTACHED TO THE REPAIR FIXTURE DURING THE ENTIRE REPAIR PROCEDURE OR WARPAGE OF THE ATTACH RING ASSEMBLY (327) OR THE INLET ASSEMBLY (1) MAY RESULT.

A. Use standard industry practices and these steps for disassembly of this component.

B. If applicable, load the inlet assembly (1) into the repair fixture, SPL-5407

(1) Place inlet assembly (1) in repair fixture.

(a) Install (2) drift pins and (2) bolts, MS 16996-41, to orient and secure attaching ring assembly (327) to repair fixture.

CAUTION: DO NOT OVERTIGHTEN ALIGNMENT PINS OR WARPAGE OF V-GROOVE CHORD OF BULKHEAD ASSEMBLY (5) MAY RESULT.

(2) Adjust V-groove alignment pins on repair fixture.

(a) Adjust clamp assembly C71016-4 by turning V-groove alignment pins until they bottom out in V-groove on outer chord of bulkhead assembly (5). Allow alignment pin block to pivot freely at the same time; do not deflect chord.

(b) Turn slide positioning screw of clamp assembly C71016-4 until slide contacts back of V-groove.

(c) Tighten clamp assembly C71016-4 bolts (AN 4-6) in the semicircular slots to prevent alignment pin blocks from pivoting. Apply, compound, A00226, to bolt head and adjacent angle.

(d) Turn lock-collars on alignment pins until lock-collar contacts alignment pin block. Tighten screws on lock-collars and apply compound, A00226, to lock-collar and alignment pin.

NOTE: The V-groove alignment pins can now be backed out when

removing lip assembly (93) and bulkhead assembly (5). The lock-collars prevent the alignment pins from moving past their original locations when repositioning alignment pins.

(3) Install locator assemblies, C71016-6, -7 on repair fixture.

NOTE: Install locator assemblies, C71016-6, -7 only if you are replacing acoustic panel assemblies with the same thickness.

Locator assemblies, C71016-6, -7 have different arm assemblies.

Do not tighten the four bolts attaching post assembly at this time.

(a) Loosen U-clamps on arm assembly and post assembly.

(b) Attach arm assembly to pan assembly (225, 249, 275, 303) allowing brace assembly to freely rotate and slide up and down. Tighten clamps, bolts, and apply, compound, A00226 to plate of brace assembly and arm assembly, post assembly tube and clamp, and bottom of post assembly and repair fixture base.

NOTE: Two hand knobs on face-plate of brace assembly attach brace assembly to post assembly, allowing pan assembly (225, 249, 275, 303) to be removed.

CAUTION: DO NOT OVERTIGHTED INNER BARREL POSITIONING PINS OR DAMAGE TO PANELS (257, 283, 285) MAY RESULT.

(4) Adjust inner barrel positioning pins on repair fixture.

(a) Turn inner barrel positioning pins until they just contact inner surface of panels (257, 283, 285).

(b) Turn lock-collars on positioning pins until positioning pin block is contacted and tighten screws on lock-collars. Apply, compound, A00226 to lock-collar and positioning pin.

NOTE: The inner barrel postioning pins can now be backed out when removing panel (257, 283, 285). The lock-collars prevent the inner barrel positioning pins from moving past thier original locations while turning in the positioning pins.

(5) Install and adjust (2) brackets,, on repair fixture in slots until (2) bolts AN 6-34 can be installed in the inlet lip assembly. Tighten all bolts and apply, compound, A00226, to four bolts locating brackets to base of repair fixture.

C. Remove fitting assembly (369) by removing bolts (367).

D. Apply masking tape over end of spray ring (137) tube to prevent contamination of spray ring (137) with debris.

E. Remove web assemblies (61, 63, 65, 71) by removing bolts (19, 21, 22, 35, 73, 75, 77, 79) and rivets (43). Record thickness and location of shims (41) for reference during assembly. Remove bolts AN 6-34 from brackets C71016-9.

F. Apply masking tape over holes in inner chord of forward bulkhead to prevent contamination of area forward of bulkhead with debris.

CAUTION: REMOVE AND REPLACE ONE PANEL (257, 283, 285) AT A TIME OR DISTORTION OR MISALIGNMENT OF PANEL ASSEMBLY (213) MAY RESULT.

G. Remove individual inner acoustical panels (257, 283, or 285).

(1) Remove pan assembly (225, 249, 275, 303) from panel (257, 283, 285) per DISASSEMBLY, Paragraph 2.J.. if panel (257, 283, 285) is being replaced.

(2) Remove bolts (191, 193, 195, 197) attaching all panels to aft bulkhead assembly (5).

NOTE: Not all collars visible on aft bulkhead (5) are mating collars for bolts (195, 197), they are part of the permanent structure of the aft bulkhead (5). Ensure collars are mated with bolt (195, 197) attaching panels to aft bulkhead assembly (5) before removing collars.

(3) If applicable, release alignment pins and slides on Repair Fixture, C71076.

(4) If applicable, back out inner barrel positioning pins from the individual panel being replaced.

(5) Remove lip assembly (93) and bulkhead assembly (5) as a unit from panel assembly (213). Record location and thickness of shims (201 , 203) for reference during assembly.

NOTE: Record location and thickness of shims only if you are replacing acoustic panel assemblies with the same thickness.

CAUTION: USE CARE DURING REMOVAL OF THE SPLICE PLATES (321, 323, 325) SO THAT YOU DO NOT DAMAGE THE ACOUSTIC PANELS.

(6) Remove splice plates (321, 323, 325) on each side of panel being removed, by removing bolts (311, 313, 315).

(7) Remove all bolts (205, 207) common to the individual panel being removed and three bolts (205) from each adjacent panel not being removed.

NOTE: The three bolts (205) removed from the two adjacent panels not being removed allows their edges to be bent slightly inward to aid in the removal of the one panel being replaced.

(8) Bend edges of panels not being removed inward slightly and pull panel being removed upward and slightly outward.

(9) Remove all remaining shimming and sealant from bulkhead assembly (5) and attaching ring assembly (327).

CAUTION: REMOVE AND REPLACE ONE LIP SKIN AT A TIME OR MISALIGNMENT OF LIP SKINS (129, 131, 133, 135) MAY RESULT. IF APPLICABLE, V-GROOVE ON OUTER CHORD OF BULKHEAD ASSEMBLY (5) SHOULD REMAIN SECURED WITH THE V-GROOVE ALIGNMENT PINS AND SLIDES OF REPAIR FIXTURE, C71016 WHEN REPLACING LIP SKIN (129, 131, 133, 135), OR DISTORTION OF V-GROOVE CHORD MAY RESULT.

H. Remove individual lip skins (129, 131, 133, or 135).

(1) Remove bolts (81, 83, 85, 87) attaching skin.

(2) Remove bolts (97, 99, 101, 102) attaching skin.

(3) Remove rivets (109) and nutplates (111) if rivets (109) are installed through skin .

(4) Remove rivets (105) attaching skin.

(5) Remove bolts (337), rivets (343), nutplate (345), and louver (347) if skin (133) is being replaced.

(6) Remove rivets (113, 115) attaching skin being removed.

NOTE: Do not remove rivets (113, 115) from skins (129, 131, 133, 135) not being replaced.

(7) Record location and thickness of shims (90, 107, 341) for reference during assembly.

I. Remove TAI spray ring (150).

(1) Remove bolts (81, 83, 85, 87) attaching all skins (129, 131, 133, 135).

(2) Remove bolts (97, 99, 101, 102) attaching all skins (129, 131, 133, 135).

(3) Remove rivets (109) and nutplates (111) if rivets (109) are installed through skins (129, 131, 133, 135).

(4) Remove rivets (105) attaching all skins (129, 131, 133, 135).

(5) Remove bolts (337), rivets (343), nutplate (345), and louver (347).

(6) Remove all skins (129, 131, 133, 135) as a unit.

(7) Record location and thickness of shims (90, 107, 341).

(8) Remove bolts (139) and clamps (147, 149).

NOTE: Do not remove support brackets (163 thru 187) unless replacement is necessary.

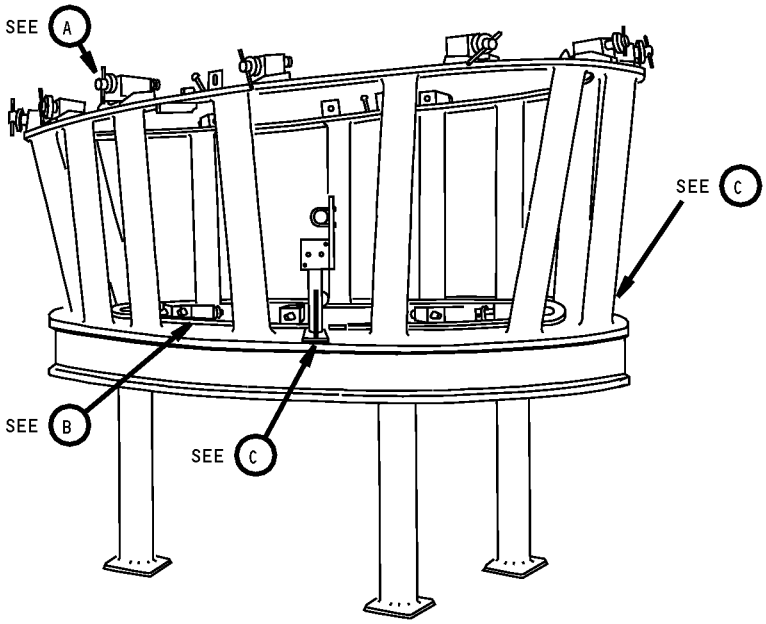
J. Remove pan assembly (225, 249, 275, 303) and clip assembly (233, 141, 267, 295).

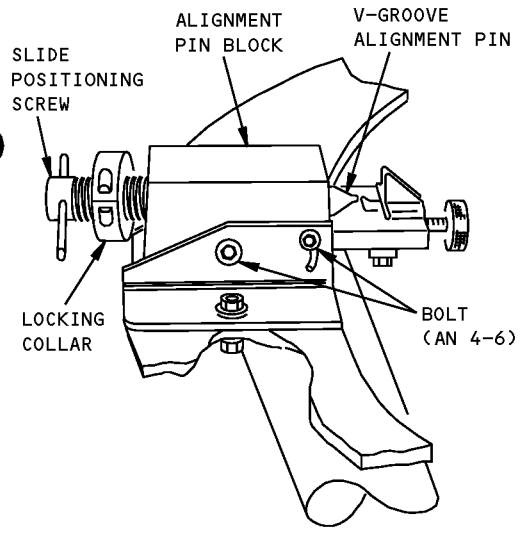
(1) Remove bolts (215, 217, 259, 261, 287, 289).

(2) Remove hand knobs attaching brace assembly to post assembly on repair fixture, SPL-5407 and remove pan assembly with brace assembly and arm assembly of repair fixture, SPL-5407 as a unit.

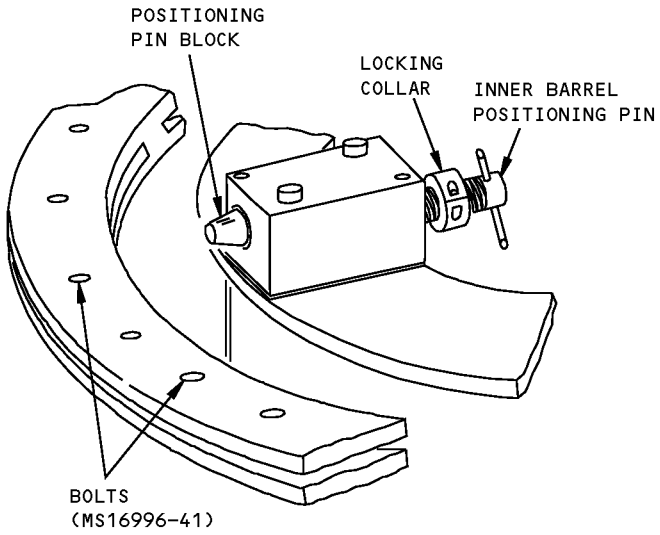
NOTE: The Locator assembly is installed only if acoustic panel assemblies with the same thickness are being replaced.

(3) Record thickness of shims (221, 223, 265, 293) for reference during assembly.

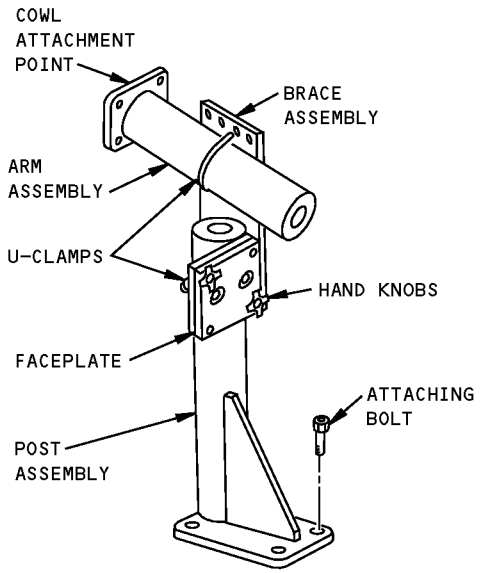




CLAMP ASSEMBLY
C71016-4
A



INNER BARREL POSITIONER
C71016-5
B



LOCATOR ASSEMBLY
C71016-6,-7
C

C71016 Inlet Repair Fixture
Figure 301

CLEANING

1. General

A. This procedure has the data necessary to clean the inlet cowl assembly.

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

C. Refer to IPL Figure 1 for item numbers.

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

CAUTION: DO NOT VAPOR DEGREASE EPOXY BONDED STRUCTURES WITH CHLORINATED CLEANING AGENTS SUCH AS METHYLENE CHLORIDE, TRICHLOROETHYLENE, AND TRICHLOROETHANE. CHLORINATED CLEANING AGENTS WILL CAUSE DAMAGE TO EPOXY BONDED STRUCTURES. 1,1,1-TRICHLOROETHANE IS ONE OF THE SOLVENTS ALLOWED FOR CLEANING COMPOSITE COMPONENTS. DO NOT SUBMERGE PARTS IN THE SOLVENT OR ALLOW STANDING SOLVENT ON THE PARTS OR DAMAGE MAY OCCUR. USE 1,1, 1-TRICHLOROETHANE ONLY AS A WIPE SOLVENT.

(1) Clean all parts in accordance with standard industry practices (Ref SOPM 20-30-03) except for epoxy bonded structures listed below.

(a) Panels (257, 283, 285; IPL Figure 1).

CHECK

1. General

A. This procedure has the data necessary to find defects in the material of the specified parts.

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

C. 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
737 NDT Part 1, 51-05-01	Tap Test Inspection of Honeycomb Sandwich Structure
737 NDT Part 9, 51-00-01	Non-Destructive Testing

B. Procedure

(1) Do a visual check for any obvious damage on all visible parts according to standard industry practices. Do the magnetic particle check or penetrant check if the visual check indicates possible damage to the parts listed.

(2) Magnetic particle check per SOPM 20-20-01 – Block (17).

(3) Penetrant check per SOPM 20-20-02 – Splice (117, 119, 121, 123), skin (129, 131, 133, 135), ring (335), louver (347), fitting assembly (369).

(4) Check panels (257, 283, 285) for evidence of delamination, internal water, scratches, and contour defects.

(a) If you see delamination or impact damage on a visual check, do an ultrasonic inspection or a tap test to find all of the damage.

NOTE: For the tap test, use a solid metal disk and tap the surface area lightly but firmly. Void areas will produce a dull sound as opposed to a sharp ring on a solid bonded area. Refer to 737 NDT Part 1, 51-05-01.

(b) Examine areas suspected of containing water radiographically or by thermography as shown in 737 NDT Part 9, 51-00-01.

(5) Refer to 737-300 Structural Repair Manual, 54-10-01 and 54-10-02 for allowable damage and repair data.

(6) Check seals (189, 359, 361, 363, 365) for deterioration and cracking.

REPAIR

1. General

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

Table 601:

P/N	NAME	REPAIR
314A1021	BLOCK ASSEMBLY	1-1
314A1013	BULKHEAD ASSEMBLY	2-1
- - -	MISCELLANEOUS PARTS REFINISH	3-1

2. Standard Practices

A. Refer to the following standard practices, 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 Resistant Finishes
- SOPM 20-43-01 Chromic Acid Anodizing
- SOPM 20-43-03 Alodizing
- SOPM 20-44-01 Application of Special Purpose Coating and Finishes
- SOPM 20-50-03 Bearing Installation and Retention
- SOPM 20-50-12 Application of Adhesives

3. Materials

NOTE: Equivalant substitutes may be used.

A. Chemical coating (colored film) (Ref SOPM 20-60-02)

B. Enamel – BMS 10-60, type 2, BAC707 grey gloss (Ref SOPM 20-60-02)

C. Coating (teflon-filled epoxy) – BMS 10-86, type 1, color white (Ref SOPM 20-60-02)

D. Sealant – BMS 5-63 (Ref SOPM 20-60-04) - BMS 5-95 (Ref 20-60-04)

E. Primer – BMS 10-11, type 1 (Ref SOPM 20-60-02)

- - BMS 10-79, type 2 (Ref SOPM 20-60-02)
- - Desoto high temperature (Ref SOPM 20-60-02)
- - Aluminized epoxy (Ref SOPM 20-60-02)

F. Sealant – BMS 5-63 (Ref SOPM 20-60-04)

G. Static Conditioner – Dexter 28-C-1 (Ref SOPM 20-60-02)

H. Adhesive – BMS 5-109, Type II, Class 2, Grade A (Ref SOPM 20-50-12)

BLOCK ASSEMBLY - REPAIR 1-1

314A1021–1

1. General

A. This procedure has the data necessary to repair and refinish the block assembly.

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

C. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00160	Sealant - Firewall - Hydraulic Fluid Resistant	BMS5-63
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

NOTE: For miscellaneous materials, refer to SOPM 20-60-04.

(1) Remove bushing (13, 15).

(2) Install bushing per SOPM 20-50-03 with wet sealant, A00160 or sealant, A00247. The maximum allowable gap under the bushing flange is 0.006 inch.

3. Refinish

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

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Block (17) – Apply, primer, C00259 (F-20.03), omit primer from bushing holes. Material: 15-5PH CRES, 150-170 ksi.

BULKHEAD ASSEMBLY - REPAIR 2-1

314A1013–1, –70, –75, –76, –83, –86

1. General

A. This procedure has the data necessary to repair and refinish the bulkhead assembly.

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

C. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00160	Sealant - Firewall - Hydraulic Fluid Resistant	BMS5-63

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Remove spacer (53) by removing bolts (49) and collars (51).

(2) Remove bushing (59).

(3) Install bushing per SOPM 20-50-03 except install with sealant, A00160.

(4) Machine bushing to 0.4997-0.5000 inch diameter.

(5) Replace nutplate (57) if required. Install nutplate and rivet with sealant, A00160; omit sealant, A00160 from threads.

(6) Install spacer (53) with bolts (49). Install bolts (49) with sealant, A00160; omit sealant, A00160 from threads.

3. Rubstrip Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00253	Adhesive - Epoxy, 2 Part, RT Cure	BMS5-109, Type II, Class 2
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00803	Primer - Polyurethane, High Temperature, Green	BAC5710, Type 51
C50074	Coating - Teflon Filled, Non Decorative, Sprayable Material (Color - BAC 700 White)	BMS 10-86 Type I

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-43-03	CHEMICAL CONVERSION COATINGS FOR ALUMINUM
SOPM 20-44-01	APPLICATION OF SPECIAL PURPOSE COATINGS AND FINISHES
SOPM 20-50-12	APPLICATION OF ADHESIVES
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

CAUTION: THE MINIMUM ALLOWABLE THICKNESS OF THE CHORD EXTRUSION IS 0.06 INCH. SEE FIG. 601.

(1) See REPAIR 2-1, Figure 601 for the location of the rubstrips and the wear area.

(2) If the chord extrusion is not worn or if the surface is worn but smooth, do as follows:

(a) Clean and finish any exposed metal surface withcoating, C00064 treatment as shown in SOPM 20-43-03.

(b) Apply primer, C00803 (F-19.43) to cover any treated metal and worn painted surfaces as shown in SOPM 20-44-01, application procedure.

(c) Remove the peel ply from the rubstrip (72).

(d) Install the rubstrip (72) equally spaced on the chord extrusion. Use adhesive, A00253 to bond the rubstrip to the chord extrusion as shown in SOPM 20-50-12, Type 94 application procedure.

(e) Apply teflon filled coating, C50074 (SRF-14.9624) in the chord extrusion wear area except where the rubstrips are applied.

CAUTION: THE MINIMUM ALLOWABLE THICKNESS OF THE CHORD EXTRUSION IS 0.06 INCH. SEE FIG. 601.

(3) If the chord extrusion is worn with grooves or rough abrasions, do as follows:

(see REPAIR 2-1, Figure 601)

(a) Smooth out the damaged areas and break any sharp edges to a 0.02-0.04 inch radius.

(b) Do steps REPAIR 2-1, Paragraph 3.C.(2)(a) through REPAIR 2-1, Paragraph 3.C.(2)(d).

4. Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00803	Primer - Polyurethane, High Temperature, Green	BAC5710, Type 51
C50074	Coating - Teflon Filled, Non Decorative, Sprayable Material (Color - BAC 700 White)	BMS 10-86 Type I

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

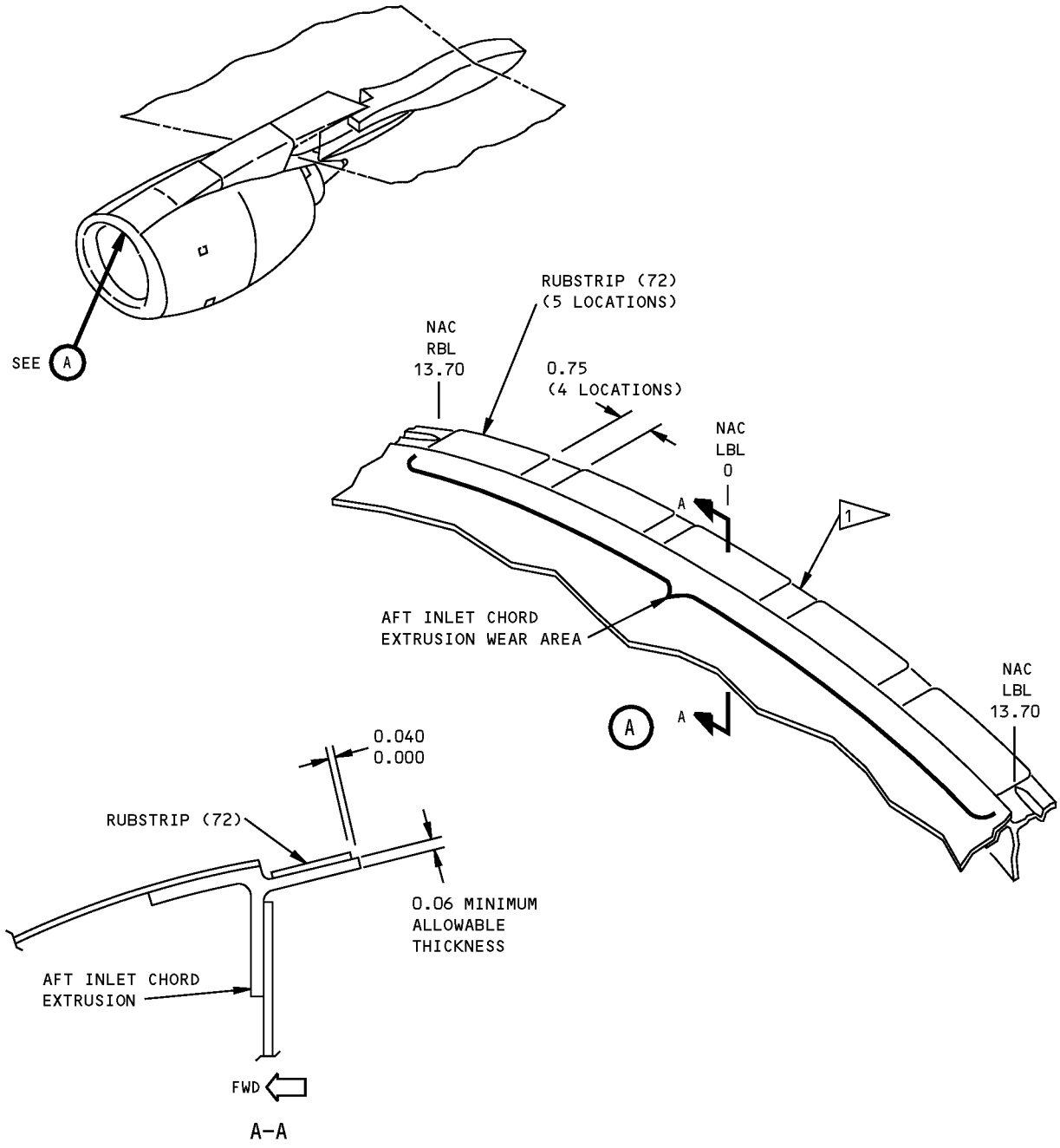
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Bulkhead assembly (5)

(a) Inner chords and stiffeners – Touch-up by chemically treating (colored film) coating, C00064 (F-17.10) and applying primer, C00803. Material: Aluminum alloy.

(b) Webs – Touch-up finish by applying primer, C00803 (F-19.43). Material: Titanium alloy.

(c) V-groove chord – Touch-up finish by chemically treating (colored film) coating, C00064 (F-17.10), applying primer, C00803 (F-19.43), and then applying teflon-filled epoxy coating, C50074, (SRF-14.9624). Material: Aluminum alloy.



1 APPLY BMS 10-86 TEFLON FILLED COATING TO THIS AREA

MATERIAL: CHORD EXTRUSION:
2024-O ALUMINUM
PER QQ-A-200/3
HT TR T42

ALL DIMENSIONS ARE IN INCHES

314A1013-1,-70,-75,-76,-83,-86 Rubstrip Replacement
Figure 601

MISCELLANEOUS PARTS - REPAIR 3-1

1. General

A. This procedure has the data necessary to refinish the parts which are not given in the other repairs.

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

C. Refer to IPL Figure 1 for item numbers.

2. Refinish details

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00058	Compound - Magna Static Conditioner Filler 28C1 (Formerly Dexter 28-C-1)	BAC 5837
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00319	Primer - Urethane Compatible, Corrosion Resistant	BMS10-79, Type II
C00803	Primer - Polyurethane, High Temperature, Green	BAC5710, Type 51
C50075	Coating - Exterior Protective Enamel, Gray	BMS10-60, Type II, BAC707 Gray
G02418	Water - De-ionized	

B. Procedure

(1) Repair of parts consists of restoration of the original finish. Refer to REPAIR 3-1, Table 601 for refinish details.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Striker plate (45)	15-5PH CRES, 180-200 ksi	Apply primer, C00259 (F-20.03).
Filler (47)	Al alloy	Apply primer, C00803 (F-19.43).
Spacer (53), Splice (117,119, 121,123)	Al alloy	Chromic acid anodize (F-17.04) and apply primer, C00803 (F-19.43).

Table 601: Refinish Details (Continued)

IPL FIG. & ITEM	MATERIAL	FINISH
Skin (129,131, 133,135)	Al alloy	Inner surface – Sulfuric acid anodize (F-17.03), except seal with de-ionized water, G02418. Apply primer, C00803 (F-19.43). Outer surface – Sulfuric acid anodize (F-17.03), except seal with de-ionized water, G02418.
Support brackets (163 thru 187)	15-5PH CRES, 180-200 ksi	Passivate (F-17.09).
Pan (231,255,281, 309), Clip (239,247,273, 301)	17-7PH CRES, 150-170 ksi	Apply primer, C00259 (F-20.03)
Panels (257,283, 285)	Perforated aluminum/honeycomb/ fiberglass/Epoxy sandwich	Inner surface (perforated skin) – Apply epoxy primer, C00319 (SRF- 14.963), overspray on edges is acceptable. Outer surface – Prepare surface and apply Magna 28C1 conditioner filler, C00058(SRF-14.67). Apply primer, C00259 (F-20.02). Edges – Apply primer, C00259 (F-20.02).
Splice plates (321, 323,325)	Al alloy	Chromic acid anodize and apply primer, C00259 (F-18.13).
Hoist plate (333)	Al alloy	Chemical treat (colored film) coating, C00064 (F-17.07) and apply primer, C00803(F-19.43).
Ring (335)	Al alloy	Touch-up finish by applying chemical (colored film) coating, C00064 (F-17.10) and applying primer, C00803 (F-19.43).
Louver (347)	Al alloy	Chromic acid or sulfuric acid anodize (F-17.05). Apply primer, C00319 and apply enamel coating, C50075 (F-19.40).
Retainer (355,357)	Al alloy	Chemical treat (colored film) coating, C00064 and apply primer, C00259 (F-18.03).

ASSEMBLY

1. General

A. This procedure has the data necessary to assemble the inlet cowl assembly.

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

C. Refer to IPL Figure 1 for item numbers.

2. Assembly

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For bolt and nut installation, refer to SOPM 20-50-01. For finishing materials, refer to SOPM 20-60-02. For lubricants, refer to SOPM 20-60-03. For miscellaneous materials , refer to SOPM 20-60-04.

NOTE: Use repair fixture, SPL-5407 to assembly this component. (See ASSEMBLY, Figure 703)

CAUTION: REMOVE AND REPLACE ONLY ONE PANEL ASSEMBLY (257, 283, 285) AT A TIME OR DISTORTION OR MISALIGNMENT OF THE INLET ASSEMBLY (1) MAY RESULT. IF THE REPAIR FIXTURE, C71016 WAS USED DURING DISASSEMBLY, THE ATTACH RING SHOULD REMAIN ATTACHED TO THE REPAIR FIXTURE THROUGHOUT THE REPAIR PROCEDURE OR WARPAGE OF THE ATTACH RING (327) AND/OR THE INLET ASSEMBLY (1) MAY RESULT.

A. Use standard industry practices and the following steps for assembly.

B. Install the panel assemblies (257, 283, 285) without using a repair fixture, C71016.

(1) General information.

(a) Bolts (191, 193, 195, 197) – 90% of the bolts must install flush within ±0.003 inch of the inner surface after installation. The remaining 10% of the bolts must install flush within +0.006/-0.005 inch of the inner surface after installation.

(b) Bolts (205, 207, 311, 313, 315) – All the bolts must install flush within +0.005/-0.003 inch of the inner surface.

CAUTION: TRIM THE PANEL ASSEMBLY (257, 283, 285) ONLY AS NECESSARY TO INSTALL THE PANEL ASSEMBLY. EXCESSIVE TRIMMING MAY DAMAGE THE PANEL ASSEMBLY.

(2) Install panel assembly (257, 283, 285).

(a) Bend the edges of the remaining panel assemblies slightly inward and slide the new panel assembly in place.

NOTE: Three bolts (205) from each of the remaining panel assemblies adjacent to the panel assembly being replaced should be removed to allow the remaining panel assemblies to bend slightly inward.

(b) The panel assembly may require trimming to allow installation in the inlet assembly (1).

(3) Align the new panel assembly to meet aerosmoothness requirements as shown in ASSEMBLY, Figure 701.

(a) Align the forward edge of the new panel assembly with the forward edge of the existing panel assemblies to achieve a gap between the skins (129, 131, 133, 135) and the panel assemblies (257, 283, 285) as shown in ASSEMBLY, Figure 701.

(b) Align the remaining edges of the new panel assembly to meet the gaps as shown in ASSEMBLY, Figure 701.

(c) Shim, as necessary, up to 0.062 inch maximum between the attach ring assembly (327) and the outside surface of the panel assembly to eliminate gap when aerosmoothness requirements on the inner surface are met.

NOTE: As an option, liquid shim may be used (0.030 inch maximum thickness) by itself, in combination with shim (211), or not at all. Do not apply liquid shim at this time. Apply liquid shim upon final installation of the panel assembly (257, 283, 285) into the bulkhead assembly (5).

1) Delaminate the shim (211) as necessary to eliminate the gap, or to reduce the gap to 0.030 inch maximum, if liquid shim is to be used.

2) Temporarily install the shim (211).

CAUTION: HOLES FOR BOLTS (191, 193, 195, 197, 205, 207) MUST BE PERPENDICULAR TO THE INNER SURFACE OF THE PANEL ASSEMBLY (257, 283, 285) OR BOLTS (191, 193, 195, 197, 205, 207) WILL NOT INSTALL PROPERLY.

(d) Clamp the attach ring assembly (327) to the panel assembly (257, 283, 285). Clamp the attach ring assembly (327) to a suitable fixture to make sure that the ring is flush with the aft edge of the panel assemblies and that it is planar.

(4) Drill holes and temporarily install bolts (191, 193, 195, 197, 205, 207) or equivalent to hold the replacement panel assembly in place.

NOTE: Drill holes in sequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly does not move when the bolts are installed and gaps between the panel assemblies are maintained. Drill enough holes to hold the panel assembly securely.

(a) Shim as necessary, up to 0.062 inch maximum between the bulkhead assembly (5) and the outside surface of the panel assembly to eliminate gap when aerosmoothness requirements on the inner surface are met.

NOTE: As an option, liquid shim may be used (0.030 inch maximum thickness) by itself, in combination with shim (201, 203), or not at all. Do not apply liquid shim at this time. Apply liquid shim upon final installation of the panel assembly (257, 283, 285) into the bulkhead assembly (5).

1) Delaminate the shim (201, 203) as necessary to eliminate the gap, or to reduce the gap to 0.030 inch maximum, if liquid shim is to be used.

2) Temporarily install the shim (201, 203).

(b) Drill the forward line of holes for bolts (191, 193).

1) Drill holes undersize, initially, from the outside using the holes in the bulkhead assembly as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (205, 207).

2) Install temporary bolts or equivalent to secure the panel assembly (257, 283, 285) to the bulkhead assembly (5).

(c) Drill the second (moving aft) line of holes for bolts (195, 197) in the panel assembly (257, 283, 285).

1) Drill holes undersize, initially, from the outside using the holes in the bulkhead assembly as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (195, 197).

2) Install temporary bolts or equivalent to secure the panel assembly (257, 283, 285) to the bulkhead assembly (5).

(d) Drill the holes for bolts (205, 207) to attach the attach ring assembly (327).

1) Drill holes undersize, initially, from the outside using the holes in the attach ring assembly (327) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (205, 207).

2) Install temporary bolts or equivalent to secure the attach ring (327) to the panel assembly (257, 283, 285).

CAUTION: TRIM THE PANEL ASSEMBLY (257, 283, 285) ONLY AS NECESSARY TO ACHIEVE THE GAPS SHOWN IN FIG. 701. EXCESSIVE TRIMMING MAY DAMAGE THE PANEL ASSEMBLY.

(5) Mark the panel assembly (257, 283, 285) in the areas where trimming is required.

(6) Remove the panel assembly and trim the new panel assembly, as necessary, to achieve the gaps between the panel assembly (257, 283, 285) and the lip skins (129, 131, 133) and between the new panel assembly (257, 283, 285) as shown in ASSEMBLY, Figure 701.

(7) Re-install the panel assembly and check the gaps as shown in ASSEMBLY, Figure 701.

(8) Remove the panel assembly and trim, as necessary, as shown in ASSEMBLY, Paragraph 2.B.(6), above.

(9) Reinstall the panel assembly and temporary bolts used previously.

(10) Drill the remaining holes in the forward lines of holes for bolts (191, 193, 197).

(11) Drill the holes for bolts (311, 313, 315) and temporarily install the splice plates (321, 323, 325).

NOTE: Install enough temporary bolts or equivalent to secure the filler block (322, 324, 326) and the splice plate (321, 323, 325) to the panel assembly (257, 283, 285).

(a) For thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) installed adjacent to thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) or thin panel assemblies (283D, 285F) at the splice joint.

1) Drill holes undersize, initially, from the outside using the holes in the splice plate (321, 323, 325) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).

2) Attach the splice plates (321, 323, 325) to the existing panel assembly with temporary bolts or equivalent.

3) Drill the remaining holes for bolts (311, 313, 315).

(b) For thin panel assemblies (283D, 285F) installed adjacent to thick panel assemblies (257 thru 257B, 283, 283A, 285 thru 285B) at the splice joints (Service Bulletin 838-71-1311).

1) Install the filler blocks (322, 324, 326) on the panel assembly (283D, 285F).

NOTE: The filler blocks (322, 324, 326) can be installed at this time or when the panel assemblies are installed permanently.

a) Reactivate the primer adhesive, A01037 on the panel assembly (283D, 285F) by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.

b) Install the filler blocks (322, 324, 326) flush with the edge of the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.

c) Clamp the filler blocks (322, 324, 326) in place.

2) Temporarily install the triangular-shaped hard shim created in ASSEMBLY, Paragraph 2.B.(11)(b)3)a) between the splice plate (321, 323, 325) and the panel assembly (257, 283, 285).

NOTE: Potting compound or a hard shim created in ASSEMBLY, Paragraph 2.B.(11)(b)3)a) may be installed in the triangular void between the panel assembly (257, 283, 285) and the splice plate (321, 323, 325). If using potting compound, do not install at this time.

3) Temporarily install shim required to eliminate the gap between the panel assembly (257, 283, 285) and/or the filler block (322, 324, 326) and the aft end of the splice plate (321, 323, 325).

NOTE: Maximum shim thickness is 0.10 inch. Shim under the area from the aft end of the splice plate to the bend in the splice plate.

a) Manufacture the shim:

<1> Manufacture the shim as necessary to fill the triangular void using shim stock 2024 or 7075 aluminum.

<2> Apply one coat primer, C00259 to shim as shown in SOPM 20-41-02 before installation.

b) Make sure the shim is flush with the edge of the panel assembly.

4) Drill holes undersize, initially, from the outside using the holes in the splice plate (321, 323, 325) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).

5) Drill the remaining holes for bolt (311, 313, 315).

(c) For thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) installed adjacent to thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) at the splice joints.

1) Drill holes undersize, initially, from the outside using the holes in the splice plate (321A, 323A, 325A) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).

2) Attach the splice plates (321A, 323A, 325A) to the existing panel assembly with temporary bolts.

3) Drill the remaining holes for bolts (311, 313, 315).

(12) Countersink all holes on the inside surface of the panel assembly.

(13) Refinish all machined and scratched areas of the panel assembly, except inner surfaces, with primer, C00259 (F-20.02).

(14) Refinish countersinks areas and all machined and scratched areas of the panel assembly with aluminized epoxy primer, C50048 (SRF-14.963).

(15) Clean all faying surfaces between the panel assembly (257, 283, 285), bulkhead assembly (5), and the attach ring assembly (327).

CAUTION: IF LIQUID SHIM IS TO BE USED, APPLY PARTING AGENT TO THE APPLICABLE FAYING SURFACES OF THE PANEL ASSEMBLY AND THE ATTACH RING ASSEMBLY.

(16) Permanently install the panel assembly (257, 283, 285).

(a) Shim the gap between the bulkhead assembly (5) and the panel assembly (257, 283, 285) using shims (201, 203), liquid shim, or both.

1) Apply one coat primer, C00259 to shims (201, 203).

2) If using shims (201, 203), install shims (201, 203) with wet sealant, A00247.

3) If using liquid shim, apply a bead of liquid shim to the panel assembly (257, 283, 285). Upon installation, inject liquid shim, as necessary, if voids occur and remove any excess.

(b) Install the panel assembly (257, 283, 285).

(c) Install the bolts (191, 193, 195, 197) in the two forward lines of bolt holes with wet sealant, A00247. If using liquid shim, install bolts before the liquid shim sets-up.

NOTE: Install bolts (191, 193, 195, 197) in sequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly does not move when the bolts are installed and gaps between the panel assemblies are maintained.

(d) Shim the gap between the attach ring assembly (5) and the panel assembly (257, 283, 285) using shims (211), liquid shim, or both.

1) Apply one coat primer, C00259 to shims (211).

2) If using shims (211), install shims (211) with wet sealant, A00247.

3) If using liquid shim, apply a bead of liquid shim to the panel assembly (257, 283, 285). Upon installation, inject liquid shim, as necessary, if voids occur and remove any excess.

(e) Install the bolts (205, 207) in the attach ring line of bolt holes with wet sealant, A00247. If using liquid shim, install bolts before the liquid shim sets-up.

NOTE: Install bolts (205, 207) in sequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly does not move when the bolts are installed and gaps between the panel assemblies are maintained.

(f) Install the splice plates (321, 323, 325).

1) For thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) installed adjacent to thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) or thin panel assemblies (283D, 285F) at the splice joint.

a) Apply parting agent to the outer surface of the panel assembly (257 thru 257C, 283 thru 283B, 285 thru 285C) and let dry.

b) Apply sealant, A00247 BMS 5-79 sealant to the splices.

c) Install the splices (321, 323, 325).

d) Install the bolts (311, 313, 315), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

CAUTION: INSTALL AND TIGHTEN BOLTS (311, 313, 315) AS SOON AS POSSIBLE AFTER THE ADHESIVE IS APPLIED TO THE FILLER BLOCKS AND/OR THE TRIANGULAR SHIMS. CLAMP THE FILLER BLOCK AND TRIANGULAR SHIM (IF APPLICABLE) TIGHTLY TO THE PANEL ASSEMBLY AND ENSURE PROPER ADHESION OF THE EPOXY ADHESIVE.

2) For thin panel assemblies (283D, 285F) installed adjacent to thick panel assemblies (257 thru 257B, 283 283A, 285 thru 285B) at the splice joints (Service Bulletin 737-71-1311).

   a) Install the filler blocks (322, 324, 326) on the panel assembly (283D, 285F).

      <1> Reactivate the adhesive, A01037 primer on the panel assembly (283D, 285F) by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.

      <2> Install the filler blocks (322, 324, 326) flush with the edge of the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.

      <3> Fillet seal the sealant, A00247.

   b) Fill the triangular void between the panel assembly and the splice plate.

      NOTE: The triangular void can be filled with either BMS 5-28, type 25 potting compound or a hard shim fabricated in ASSEMBLY, Paragraph 2.B.(11)(b)3)a).

      <1> If using potting compound, fill the void with BMS 5-28, type 25 potting compound.

      <2> Reactivate the adhesive, A01037 primer on the panel assembly (283D, 285F) where the triangular shim will be installed by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.

      <3> If using hard shim, apply one coat primer, C00259 primer to shim.

      <4> Bond the hard shim to the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.

   c) Install shim to eliminate the gap between the panel assembly (257, 283, 285) and/or the triangular shim and the aft end of the splice plates (321, 323, 325).

      <1> Apply one coat of primer, C00259 to shim manufactured in ASSEMBLY, Paragraph 2.B.(11)(b)3)a).

      <2> Install the shim with adhesive, A00253 as shown in SOPM 20-50-12.

   d) Apply parting agent to the outer surface of the filler block (322, 324, 326) and triangular shim and/or flat shim fabricated (if applicable) and let dry.

   e) Apply sealant, A00247 to the splices.

   f) Install the splices (321, 323, 325).

   g) Install the bolts (311, 323, 325), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

3) For thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) installed adjacent to thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) at the splice joints.

a) Apply parting agent to the outer surface of the panel assembly (257, 283, 285) and let dry.

b) Apply sealant, A00247 to the splices.

c) Install the splices (321A, 323A, 325A).

d) Install the bolts (311, 313, 315), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

(g) Fillet seal between the outer surface of the panel assembly (257, 283, 285) and the bulkhead assembly (5), the attach ring assembly (327), and the splice plates (321, 323, 325) with sealant, A00247.

(h) Fill the entire length of gaps between panel assemblies (257, 283, 285) with sealant, A00247 to a depth of 0.25 - 0.50 inch. Maintain aerosmoothness where applicable.

C. Install the panel assemblies (257, 283, 285) using a repair fixture, C71016 (ASSEMBLY, Figure 703).

(1) General information.

(a) Bolts (191, 193, 195, 197) – 90% of the bolts must install flush within ± 0.003 inch of the inner surface after installation. The remaining 10% of the bolts must install flush within +0.006/-0.005 inch of the inner surface after installation.

(b) Bolts (205, 207, 311, 313, 315) – All the bolts must install flush within +0.005/-0.003 inch of the inner surface.

(2) Install panel assembly (257, 283, 285).

CAUTION: TRIM THE PANEL ASSEMBLY (257, 283, 285) ONLY AS NECESSARY TO INSTALL THE PANEL ASSEMBLY. EXCESSIVE TRIMMING MAY DAMAGE THE PANEL ASSEMBLY.

(a) Bend the edges of the remaining panel assemblies slightly inward and slide the new panel assembly in place.

NOTE: Three bolts (205) from each of the remaining panel assemblies adjacent to the panel assembly being replaced should have been removed to allow the remaining panel assemblies to bend slightly inward.

(b) The panel assembly may require trimming to allow installation in the inlet assembly (1).

(3) Align the new panel assembly to meet aerosmoothness requirements as shown in ASSEMBLY, Figure 701.

(a) Align the forward edge of the new panel assembly with the forward edge of the existing panel assemblies to achieve a gap between the skins (129, 131, 133, 135) and the panel assemblies (257, 283, 285) as shown in ASSEMBLY, Figure 701.

(b) Align the remaining edges of the new panel assembly to meet the gaps as shown in ASSEMBLY, Figure 701.

(c) Turn the inner barrel positioning pin on the repair fixture until the lock collar is contacted.

(d) Temporarily install shims (211), up to 0.062 inch, between the attach ring assembly (327) and the outside surface of the panel assembly to hold the panel assembly in contact with the inner barrel positioning pin on the repair fixture.

NOTE: As an option, liquid shim may be used (0.030 inch maximum thickness) by itself, in combination with shim (211), or not at all. Do not apply liquid shim at this time. Apply liquid shim upon final installation of the panel assembly (257, 283, 285) into the bulkhead assembly (5).

1) Delaminate the shim (211) as necessary to eliminate the gap, or to reduce the gap to 0.030 inch maximum, if liquid shim is to be used.

2) Temporarily install the shim (211).

(4) Install the remainder of the inlet assembly (1) on panel assembly (213).

(a) Temporarily install bolts (195, 197) in panel assemblies which were not replaced.

(b) Temporarily install the web assembly *61).

(c) Rotate the lip assembly (93) and the bulkhead assembly (5) until (2) AN6-34 bolts can be installed in the inlet lip assembly.

(d) Turn the alignment pin on the repair fixture until the lock collar is contacted. The end of the alignment pin should be bottomed out in the V-groove. If it is not, reposition the lip assembly (93) and the bulkhead assembly (5), as required, so the V-groove alignment pins will bottom-out in the V-groove when the lock-collar contacts the alignment pin block and the V-groove chord of the bulkhead assembly (5) is not deflected into position, by the alignment pin.

(e) Turn the slide positioning screws on the repair fixture until the slide contacts the backside of the V-groove chord of the bulkhead assembly (5).

CAUTION: HOLES FOR BOLTS (191, 193, 195, 197, 205, 207) MUST BE PERPENDICULAR TO THE INNER SURFACE OF THE PANEL ASSEMBLY (257, 283, 285) OR BOLTS (191, 193, 195, 197, 205, 207) WILL NOT INSTALL PROPERLY.

(f) Remove web assembly (61).

NOTE: Block assembly locator and alignment pin blocks (remove at attach angles) of repair fixture may need to be removed to allow removal of web assembly (61).

(5) Drill holes and temporarily install bolts (191, 193, 195, 197, 205, 207) or equivalent to hold the replacement panel assembly in place.

NOTE: Drill holes in sequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly dows not move when the bolts are installed and gaps between the panel assemblies are maintained. Drill enough holes to hold the panel assembly securely.

(a) Shim, as necessary, up to 0.062 inch maximum between the bulkhead assembly (5) and the outside surface of the panel assembly to eliminate gap when aerosmoothness requirements on the inner surface are met.

NOTE: As an option, liquid shim may be used (0.030 inch maximum thickness) by itself, in combination with shim (201, 203), or not at all. Do not apply liquid shim at this time. Apply liquid shim upon final installation of the panel assembly (257, 283, 285) into the bulkhead assembly (5).

1) Delaminate the shim (201, 203) as necessary to eliminate the gap, or to reduce the gap to 0.030 inch maximum, if liquid shim is to be used.

2) Temporarily install the shim (201, 203).

(b) Drill the forward line of holes for bolts (191, 193).

1) Drill holes undersize, initially, from the outside using the holes in the bulkhead assembly as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (205, 207).

2) Install temporary bolts or equivalent to secure the panel assembly (257, 283, 285) to the bulkhead assembly (5).

(c) Drill the second (moving aft) line of holes for bolts (195, 197) in the panel assembly (257, 283, 285).

1) Drill holes undersize, initially, from the outside using the holes in the bulkhead assembly as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (195, 197).

2) Install temporary bolts or equivalent to secure the panel assembly (257, 283, 285) to the bulkhead assembly (5).

(d) Drill the holes for bolts (205, 207) to attach the attach ring assembly (327).

1) Drill holes undersize, initially, from the outside using the holes in the attach ring assembly (327) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (205, 207).

2) Install temporary bolts or equivalent to secure the attach ring (327) to the panel assembly (257, 283, 285).

CAUTION: TRIM THE PANEL ASSEMBLY (257, 283, 285) ONLY AS NECESSARY TO ACHIEVE THE GAPS SHOWN IN FIG. 701. EXCESSIVE TRIMMING MAY DAMAGE THE PANEL ASSEMBLY.

(6) Mark the panel assembly (257, 283, 285) in the areas where trimming is required.

(7) Remove the panel assembly and trim the new panel assembly, as necessary, to achieve the gaps between the panel assembly (257, 283, 285) and the lip skins (129, 131, 133) and between the new panel assembly (257, 283, 285) and the existing panel assemblies (257, 283, 285) as shown in ASSEMBLY, Figure 701.

(8) Re-install the panel assembly and check the gaps as shown in ASSEMBLY, Figure 701.

(9) Remove the panel assembly and trim, as necessary, as shown in ASSEMBLY, Paragraph 2.C.(6), above.

(10) Reinstall the panel assembly and temporary bolts used previously.

(11) Drill the remaining holes in the forward lines of holes for bolts (191, 193, 195, 197).

(12) Drill the holes for bolts (311, 313, 315) and temporarily install the splice plates (321, 323, 325).

NOTE: Install enough temporary bolts or equivalent to secure the splice plate (321, 323, 325) and, if applicable, the filler block (322, 324, 326) to the panel assembly (257, 283, 285).

(a) For thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) installed adjacent to thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) or thin panel assemblies (283D, 285F) at the splice joint.

1) Drill holes undersize, initially, from the outside using the holes in the splice plate (321, 323, 325) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).
2) Attach the splice plates (321, 323, 325) to the existing panel assembly with temporary bolts or equivalent.
3) Drill the remaining holes for bolts (311, 313, 315).

(b) For thin panel assemblies (283D, 285F0 installed adjacent to thick panel assemblies (257 thru 257B, 283, 283A, 285 thru 285B) at the splice joints (Service Bulletin 737-71-1311).

1) Install the filler blocks (322, 324, 326) on the panel assembly (283D, 285F).

NOTE: The filler blocks (322, 324, 326) can be installed at this time or when the panel assemblies are installed permanently.

a) Reactivate the adhesive, A01037 on the panel assembly (283D, 285F) by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.
b) Install the filler blocks (322, 324, 326) flush with the edge of the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.
c) Clamp the filler blocks (322, 324, 326) in place.
d) Fillet seal between the filler blocks and the panel assembly with sealant, A00247.

2) Temporarily install the triangular-shaped hard shim created in ASSEMBLY, Paragraph 2.B.(11)(b)3)a) between the splice plate (321, 323, 325) and the panel assembly 257, 283, 285).

NOTE: Potting compound or a hard shim created in ASSEMBLY, Paragraph 2.B.(11)(b)3)a) may be installed in the triangular void between the panel assembly (257, 283, 285) and the splice plate (321, 323, 325). If using potting compound, do not install at this time.

3) Temporarily install shim required to eliminate the gap between the panel assembly (257, 283, 285) and/or the filler block (322, 324, 326) and the aft end of the splice plate (321, 323, 325).

NOTE: Shim under the area from the aft end of the splice plate to the bend in the splice plate. Maximum shim thickness is 0.10 inch.

a) Manufacture the shim.
<1> Manufacture the shim as necessary to fill the triangular void using shim stock 2024 or 7075 aluminum.
<2> Apply one coat primer, C00259 to shim as shown in SOPM 20-41-02 before installation.
b) Make sure the shim is flush with the edge of the panel assembly.

4) Drill holes undersize, initially, from the outside using the holes in the splice plate (321, 323, 325) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).
5) Attach the splice plates (321, 323, 325) to the existing panel assembly with temporary bolts.
6) Drill the remaining holes for bolt (311, 313, 315).

(c) For thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) installed adjacent to thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) at the splice joints.

1) Drill holes undersize, initially, from the outside using the holes in the splice plate (321A, 323A, 325A) as a guide, then drill full-size holes (0.250-0.254 inch diameter) from the inside for temporary bolts (311, 313, 315).

2) Attach the splice plates (321A, 323A, 325A) to the existing panel assembly with temporary bolts.

3) Drill the remaining holes for bolts (311, 313, 315).

(13) Countersink all holes on the inside surface of the panel assembly.

(14) Refinish all machined and scratched areas of the panel assembly, except inner surfaces, with primer, C00259 (F-20.02).

(15) Refinish countersink areas and all machined and scratched areas of the panel assembly with primer, C50048 (SRF-14.963).

(16) Clean all faying surfaces between the panel assembly (257, 283, 285), bulkhead assembly (5), and the attach ring assembly (327).

CAUTION: IF LIQUID SHIM IS TO BE USED, APPLY PARTING AGENT TO THE APPLICABLE FAYING SURFACES OF THE PANEL ASSEMBLY AND THE ATTACH RING ASSEMBLY.

(17) Permanently install the panel assembly (257, 283, 285).

(a) Shim the gap between the bulkhead assembly (5) and the panel assembly (257, 283, 285) using shims (201, 203), liquid shim, or both.

1) Apply one coat primer, C00259 to shims (201, 203).

2) If using shims (201, 203), install shims (201, 203) with wet sealant, A00247.

3) If using liquid shim, apply a bead of liquid shim to the panel assembly (257, 283, 285). Upon installation, inject liquid shim, as necessary, if voids occur and remove any excess.

(b) Install the panel assembly (257, 283, 285).

(c) Install the bolts (191, 193, 195, 197) in the two forward lines of bolt holes with wet sealant, A00247. If using liquid shim, install bolts before the liquid shim sets up.

NOTE: Install bolts (191, 193, 195, 197) insequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly dows not move then the bolts are installed and gaps between the panel assemblies are maintained.

(d) Shim the gap between the attach ring assembly (5) and the panel assembly (257, 283, 285) using shims (211), liquid shim, or both.

1) Apply one coat primer, C00259 to shims (211).

2) If using shims (211), install shims (211) with wet sealant, A00247.

3) If using liquid shim, apply a bead of liquid shim to the panel assembly (257, 283, 285). Upon installation, inject liquid shim, as necessary, if voids occur and remove any excess.

(e) Install the bolts (205, 207) in the attach ring line of bolt holes with wet sealant, A00247. If using liquid shim, install bolts before the liquid shim sets-up.

NOTE: Install bolts (205, 207) in sequence from the middle of the panel assembly symmetrically toward the outside edges so that the panel assembly does not move when the bolts are installed and gaps between tha panel assemblies are maintained.

(f) Install the splice plates (321, 323, 325).

1) For thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) installed adjacent to thick panel assemblies (257 thru 257C, 283 thru 283B, 285 thru 285C) or thin panel assemblies (283D, 285F) at the splice joint.

a) Apply parting agent to the outer surface of the panel assembly (257 thru 257C, 283 thru 283B, 285 thru 285C) and let dry.

b) Apply sealant, A00247 to the splices.

c) Install the splices (321, 323, 325).

CAUTION: INSTALL AND TIGHTEN BOLTS (311, 313, 315) AS SOON AS POSSIBLE AFTER THE ADHESIVE IS APPLIED TO THE FILLER BLOCKS AND/OR THE TRIANGULAR SHIMS. CLAMP THE FILLER BLOCK AND TRIANGULAR SHIM (IF APPLICABLE) TIGHTLY TO THE PANEL ASSEMBLY AND ENSURE PROPER ADHESION OF THE EPOXY ADHESIVE.

d) Install the bolts (311, 313, 315), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

2) For thin panel assemblies (283D, 285F) installed adjacent to thick panel assemblies (257 thru 257B, 283, 283A, 285 thru 285B) at the splice joints (Service Bulletin 737-71-1311).

a) Install the filler blocks (322, 324, 326) on the panel assembly (283D, 285F).

<1> Reactivate the adhesive, A01037 on the panel assembly (283D, 285F) by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.

<2> Install the filler blocks (322, 324, 326) flush with the edge of the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.

<3> Fillet seal the sealant, A00247.

b) Fill the triangular void between the panel assembly and the splice plate.

NOTE: The triangular void can be filled with either BMS 5-28, type 25 potting compound or a hard shim fabricated in ASSEMBLY, Paragraph 2.B.(11)(b)3)a).

<1> If using potting compound, fill the void with BMS 5-28, type 25 potting compound.

<2> Reactivate the adhesive, A01037 on the panel assembly (283D, 285F) where the triangular shim will be installed by wiping with Series 97 solvent, B01017 as shown in SOPM 20-50-14.

<3> If using hard shim, apply one coat primer, C00259 to shim.

<4> Bond the hard shim to the panel assembly with adhesive, A00253 as shown in SOPM 20-50-12.

c) Shim the gap between the panel assembly (257, 283, 285) and/or the triangular shim and the aft end of the splice plates (321, 323, 325).

<1> Apply one coat of primer, C00259 to shim manufactured in ASSEMBLY, Paragraph 2.B.(11)(b)3)a).

<2> Install the shim with adhesive, A00253 as shown in SOPM 20-50-12.

d) Apply parting agent to the outer surface of the filler block (322, 324, 326) and triangular shim (if applicable) and let dry.

e) Apply sealant, A00247 to the splices.

f) Install the splices (321, 323, 325).

g) Install the bolts (311, 313, 315), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

3) For thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) installed adjacent to thin panel assemblies (257D, 257E, 283C, 283D, 283E, 285D thru 285G) at the splice joints.

a) Apply parting agent to the outer surface of the panel assembly (257, 283, 285) and let dry.

b) Apply sealant, A00247 to the splices.

c) Install the splices (321A, 323A, 325A).

d) Install the bolts (311, 313, 315), fillers (319), and collars (317) with wet sealant, A00247 and fillet seal the collars. Make sure the sealant, A00247 is under the bolt heads.

(g) Fillet seal between the outer surface of the panel assembly (257, 283, 285) and the bulkhead assembly (5), the attach ring assembly (327), and the splice plates (321, 323, 325) with sealant, A00247.

(h) Fill the entire length of gaps between panel assemblies (257, 283, 285) with sealant, A00247 to a depth of 0.25 - 0.50 inch. Maintain aerosmoothness where applicable.

D. Install pan assembly (225, 249, 275, 303) and clip assembly (233, 241, 267, 295).

NOTE: The use of the repair fixture, C71016, (ASSEMBLY, Figure 703) is recommended when performing this procedure.

(1) Install pan assembly and brace assembly onto post assembly of repair fixture.

(2) Locate holes for bolts (215, 217, 259, 261, 287, 289). Remove pan assembly from bracket assembly of Repair Fixture, C71016 (ASSEMBLY, Figure 703).

CAUTION: HOLES MUST BE PERPENDICULAR TO INNER SURFACE OF PANELS (257, 285) OR BOLTS (215, 217, 259, 261, 287, 289) WILL NOT INSTALL PROPERLY.

(3) Delaminate shims (221, 223, 265, 293) as required to bring within limits shown in ASSEMBLY, Figure 702.

(4) Drill full-size holes (0.2490-0.2505 inch diameter) for bolts (215, 217, 259, 261, 287, 289).

(5) Temporarily install enough bolts (215, 217, 259, 261, 287, 289) to hold pan assembly in-place. Mark outline of pan assembly cutout and location of nutplates on potted area of panel (257, 285) behind pan assembly . Remove pan assembly.

(6) Trim panel (257, 285) to match cutout in pan assembly using marks as a guide.

(7) Counterbore (0.5 inch diameter) to a depth of 0.25 inch potted area of panel (257, 285) at location of nutplates (253, 279, 307, 329) using marks as a guide.

(8) Apply primer, C00259 to trimmed areas and counterbores.

(9) Install bolts (215, 217, 259, 261, 287, 289) with sealant, BMS 5-79 (sealant, A00247 optional).

(10) Fillet seal collars (219, 263, 291) with sealant, BMS 5-79 (sealant, A00247 optional).

E. Install TAI spray ring (150).

(1) Install radius fillers (157, 159, 161) with tangent point contacting tangent point of support brackets (163 thru 187).

(2) Install fasteners (151, 153) with Desoto high-temperature primer.

(3) Install clamps (147, 149) with bolts (139), washers (141, 143) and nuts (145).

(4) Install nutplates (111) with rivets (109).

(5) Install shims (107).

(a) Delaminate as required to eliminate gap and apply one coat primer, C00803.

(6) Install bolts (97, 99, 101) with primer, C00803.

(7) Install shims (90) at locations recorded during disassembly.

(a) Delaminate to thickness recorded during disassembly and apply one coat primer, C00259.

(b) Install with sealant, BMS 5-79 (sealant, A00247 optional).

(8) Install bolts (81, 83, 85) with sealant, BMS 5-79 (sealant, A00247 optional). Do not install bolts (85) common to louver (347).

CAUTION: IF THE REPAIR FIXTURE, C71016 WAS USED DURING DISASSEMBLY, THE V-GROOVE OF OUTER CHORD OF BULKHEAD ASSEMBLY (5) SHOULD REMAIN SECURED WITH V-GROOVE ALIGNMENT PINS AND SLIDES ON REPAIR FIXTURE, C71016 WHEN INSTALLING SKIN (129, 131, 133, 135) OR WARPAGE OF V-GROOVE CHORD MAY RESULT.

(9) Install louver (347) per ASSEMBLY, Paragraph 2.G..

F. Install skin (129, 131, 133, 135).

NOTE: Skins are replaced one at a time.

(1) General information

(a) Rivets (105, 113) after installation must be within 0.000-0.005 inch above surface of skins with no shaving allowed.

(b) Rivets (105A, 113A) can be installed high and shaved to within 0.000-0.003 inch above skin surface.

(c) All other external fasteners must lie within -0.010 to +0.002 inch above skin surface.

CAUTION: SKIN (129, 131, 133, 135) MUST BE SEATED FLUSH ON SUPPORTING STRUCTURE OR DISTORTION OF INLET ASSEMBLY (1) MAY RESULT. TRIM SKIN (129, 131, 133, 135) ONLY AS REQUIRED, EXCESSIVE TRIMMING MAY DAMAGE SKIN (129, 131, 133, 135).

(2) Position skin being replaced on inlet assembly (1). Check gaps around louver (347) if skin (133) is being replaced by placing louver (347) on structure. Slight trimming of skin may be necessary, trim only as required to seat flush.

(3) Drill full-size holes for rivets (113).

(4) Drill full-size holes (0.279-0.291 inch diameter) through skin for nutplates (111).

(5) Install nutplates (111) with rivets (109) through lip assembly (93) bulkhead only.

(6) Drill full-size holes for bolts (97, 99, 101, 102) in skin using holes in structure as a guide.

(7) Drill full-size holes (0.190-0.194 inch diameter) for bolts (81, 83, 85) in skin using holes in structure as a guide.

(8) Drill full-size holes (0.187 inch diameter) at rivet (115) locations using old skin as a guide.

(9) Remove and trim new skin using old skin as a template to meet aerosmoothness requirements of ASSEMBLY, Figure 701.

(10) Install nutplates (BACN10JB3CM) and 0.032 inch thick aluminum spacers (NAS463XDD10M) on splices (117, 119, 121, 123) at rivet (115) locations.

NOTE: Access to buck rivets (115) is prevented by lip assembly (91) bulkhead when skin (129, 131, 133, 135) is installed, therefore bolts and nutplates are installed in their place when repairing.

(11) Replace skin on structure.

(12) Install bolts (NAS1581C3R3P) at rivet (115) locations.

(13) Install rivets (113) with Desoto high temperature primer primer, C00803.

(14) Install shims (107).

(a) Delaminate as required to eliminate gap and apply one coat Desoto high temperature primer primer, C00803.

(15) Install bolts (97, 99, 101) with Desoto high temperature primer primer, C00803.

(16) Install shims (90) at locations recorded during disassembly.

(a) Delaminate to thickness recorded during disassembly and apply one coat primer, C00259.

(b) Install with sealant, BMS 5-79 (sealant, A00247 optional).

(17) Install bolts (81, 83, 85) with sealant, BMS 5-79 (sealant, A00247 optional). Do not install bolts (85) common to louver (347).

(18) Install louver (347) per ASSEMBLY, Paragraph 2.G..

G. Install louver (347).

(1) Position louver in skin (133) cut out to meet aerosmoothness requirements of ASSEMBLY, Figure 701.

(2) Install shims (341).

(a) Delaminate as required to bring lower surface flush with skin (133) within aerosmoothness requirements of ASSEMBLY, Figure 701. Apply one coat primer, C00259 to shims (341) after delamination.

(b) Install with wet sealant, BMS 5-79 (sealant, A00247 optional).

(3) Drill full-size holes (0.190-0.194 inch diameter) for bolts (85, 102, 337), if required, using existing holes as a guide.

(4) Drill full-size hole (0.279-0.291 inch diameter) for nutplate (345), if required.

(5) Install bolts (85, 102, 237) with sealant, BMS 5-79 (sealant, A00247 optional).

(6) Install nutplate (345) and rivet (343) with sealant, A00160; omit sealant, A00160 from threads.

H. Install web assemblies (61, 63, 65, 71).

(1) Install nutplates (27, 29, 31, 33, 69, 95) and attaching rivets with sealant, A00160.

(2) Fay surface seal with sealant, A00160 omit sealant, A00160 from threads.

(3) Install bolts (19, 21, 73, 75, 77, 79) and rivets (43) with sealant, A00160; omit sealant, A00160 from threads.

(4) Install shim (41).

(a) Delaminate as required to eliminate gap. Maximum thickness 0.04 inch. Apply Desoto high temperature primer primer, C00803 after delamination.

(5) Install bolts (35) with sealant, A00160; omit sealant, A00160 from threads.

I. Install block assembly (7).

(1) Install bolts (9) with sealant, A00160; omit sealant, A00160 from threads.

J. Install fitting assembly (369).

(1) Install seal (189).

(2) Fay surface seal with sealant, A00160.

(3) Install bolts (367) with sealant, A00160 under heads.

(4) Fillet seal with sealant, A00160.

K. Fillet seal around web assemblies (61, 63, 65, 71) and any other points where TAI air can leak past aft bulkhead with sealant, A00160.

L. Bond seals (363, 365) to seal (359, 361) using adhesive, A50057 per SOPM 20-50-12.

M. Apply sealant, BMS 5-79 (sealant, A00247 optional) for aerosmoothness per SOPM 20-50-11 to the following gaps:

(1) Between panels (257, 283, 285). Fill to a depth of 0.25-0.50 inch.

(2) Between skins (129, 131, 133, 135) and panels (129, 131, 133, 135).

(3) Between skins (129, 131, 133, 135).

N. Trim aft end of panels (257, 283, 285) flush with aft surface of attach ring assembly (327).

O. Apply sealant, A00247 to aft end of panels (257, 283, 285) and gap between panels (257, 283, 285) and attach ring assembly (327). Smooth sealant, A00247 flush with attach ring assembly (327).

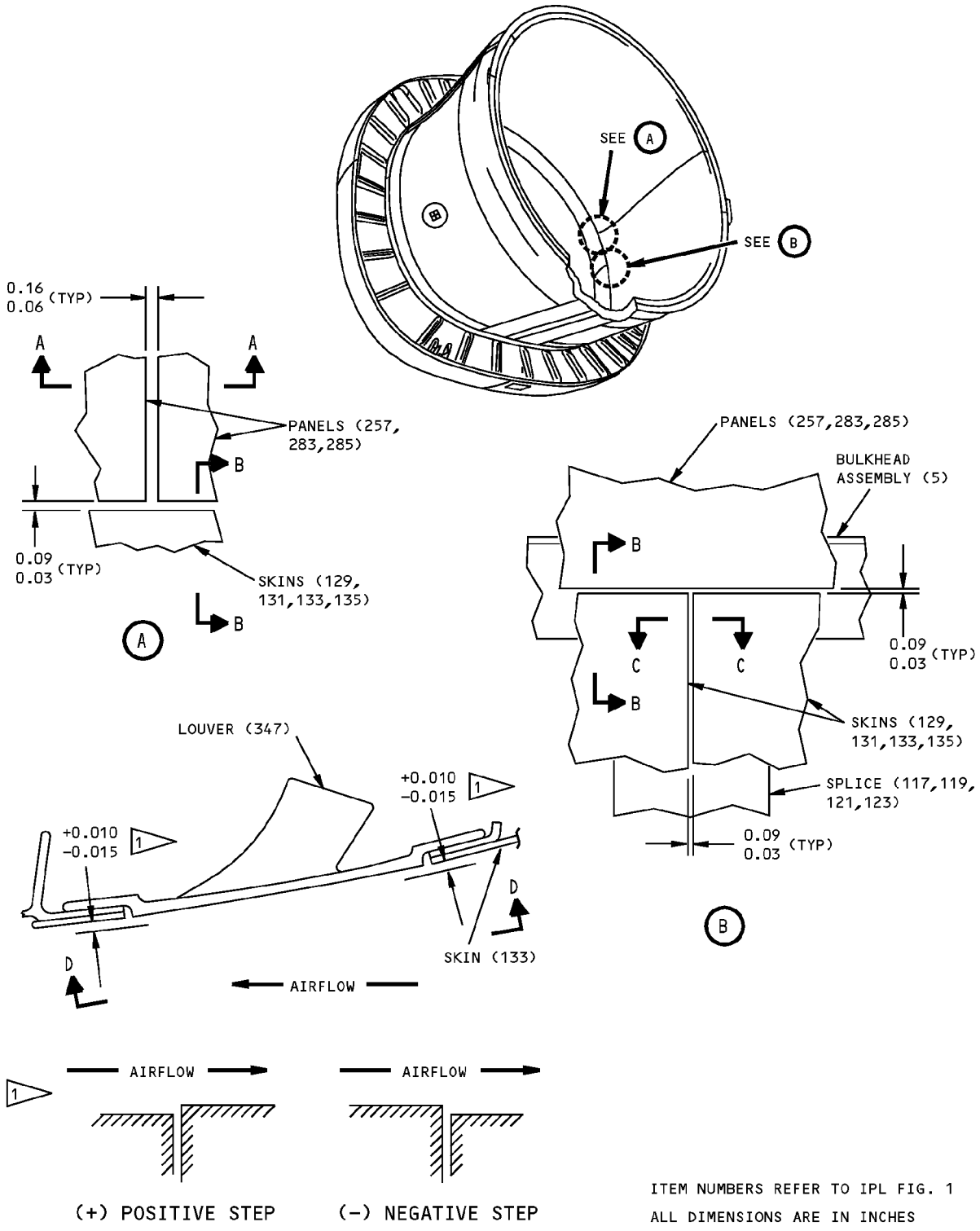
P. Touch up fillet seals, outer surface of panels (257, 283, 285), and attach ring assembly (327) with primer, C00259.

Q. Touch up inner surface of panels (257, 283, 285) and bolt (191, 193, 195, 197, 205, 207, 311, 313, 315) heads per REPAIR 3-1.

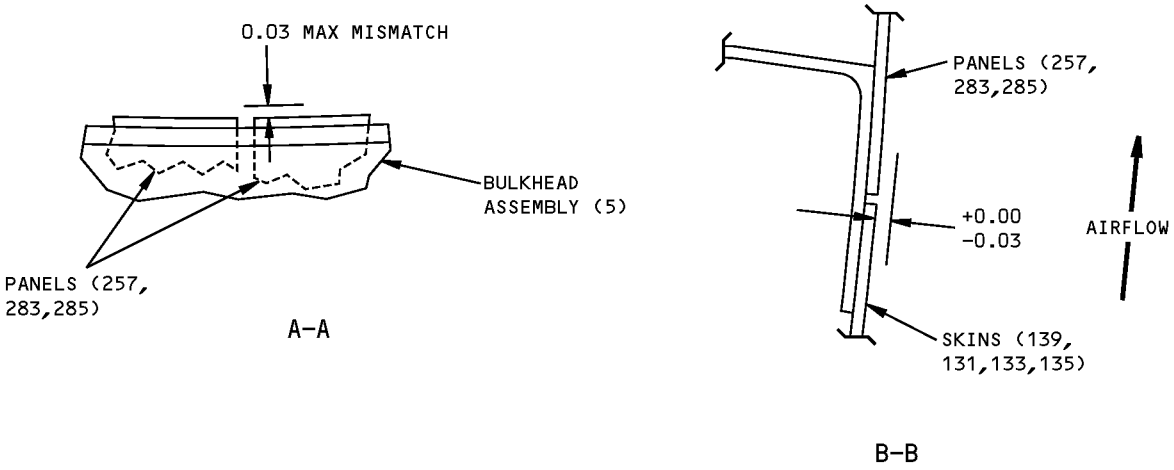
R. Touch up V-groove chord of bulkhead assembly (5) per REPAIR 2-1.

S. Install rubstrips (72) as shown in REPAIR 2-1.

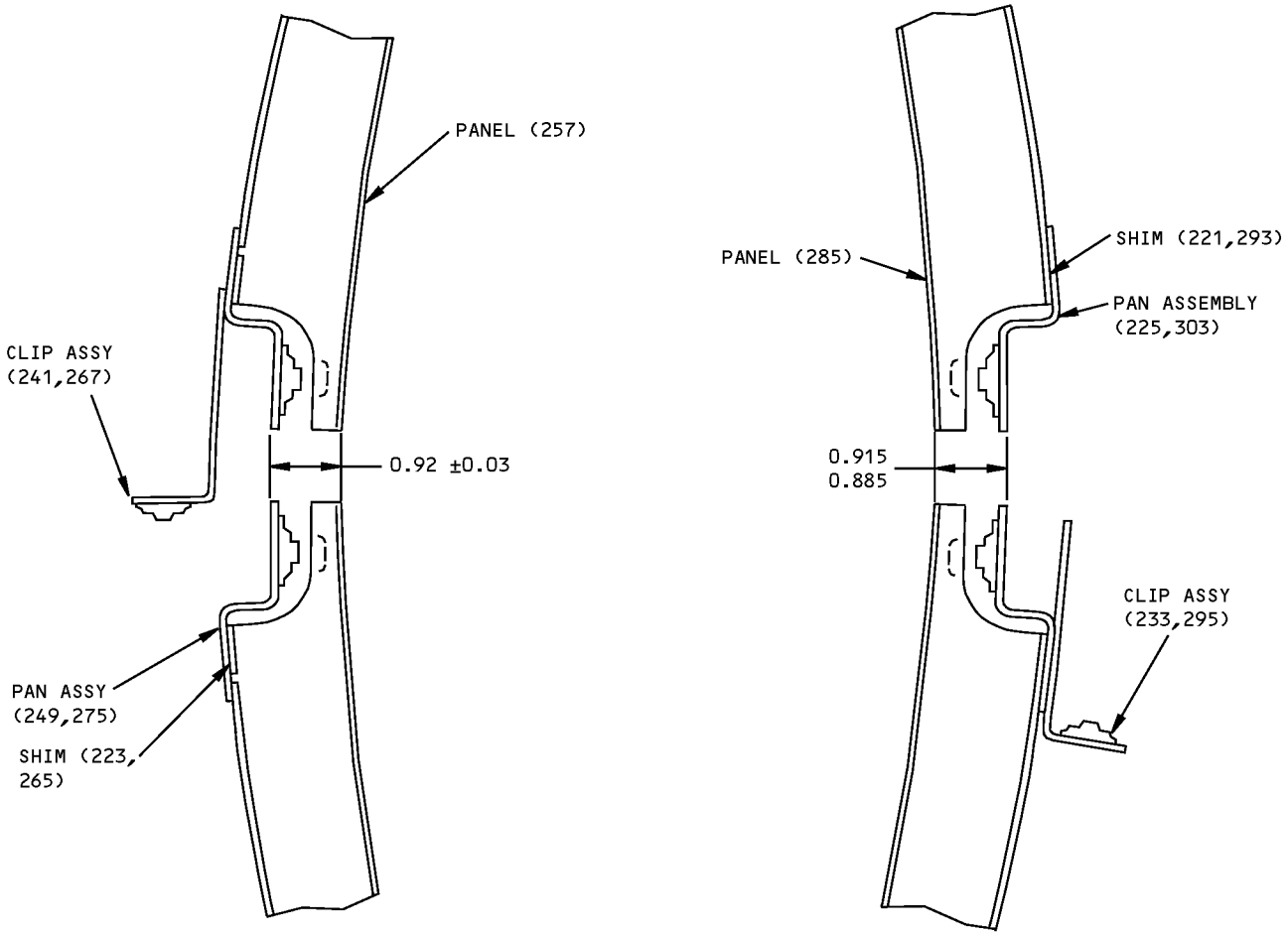
T. Prepare and store inlet assembly (1) in accordance with standard industry practices.



Aerosmoothness Requirements
Figure 701 (Sheet 1 of 2)

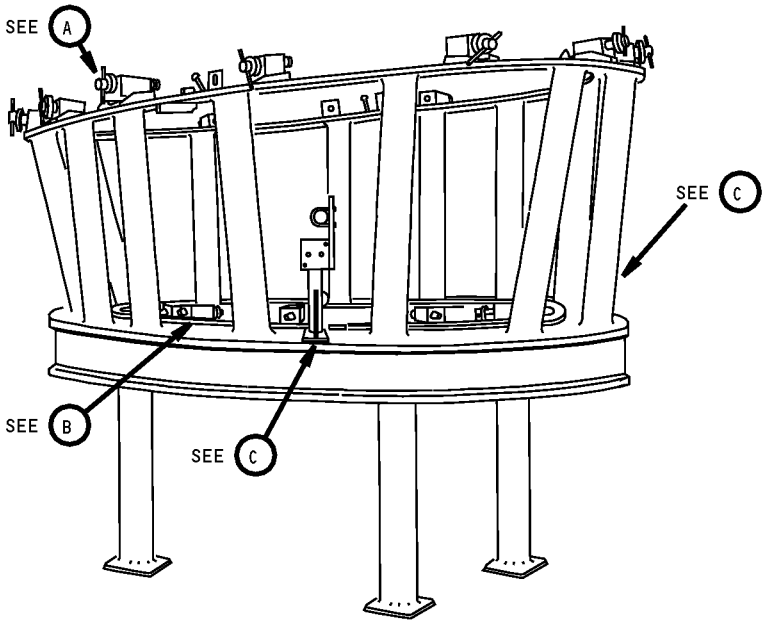


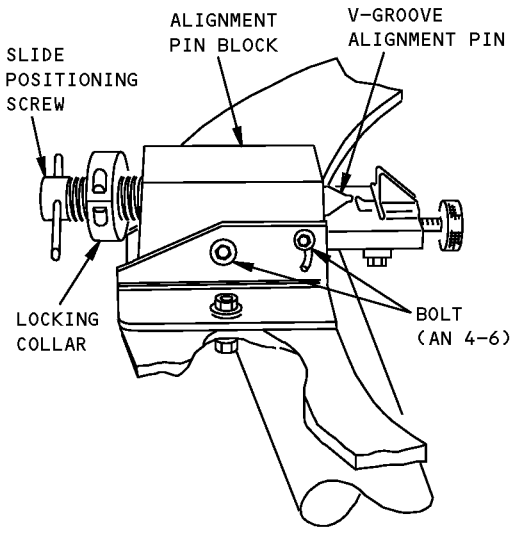
Aerosmoothness Requirements
Figure 701 (Sheet 2 of 2)



ALL DIMENSIONS ARE IN INCHES

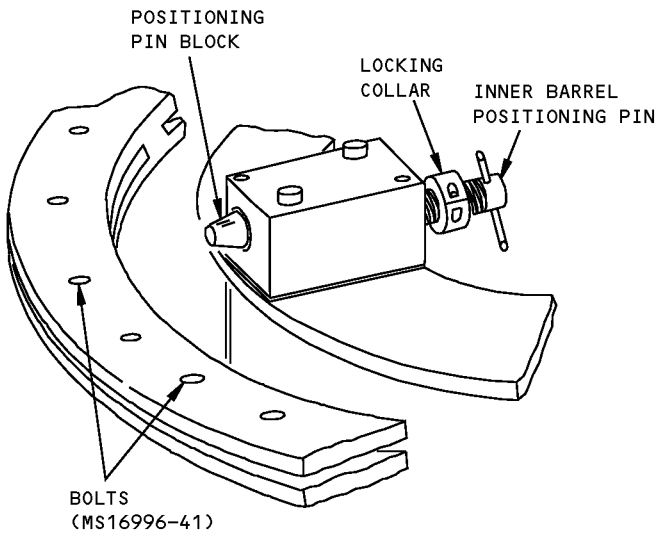
Pan and Clip Assembly Installation
Figure 702





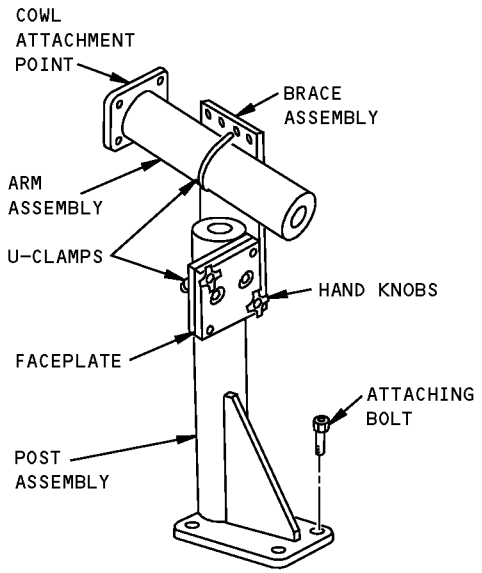
CLAMP ASSEMBLY
C71016-4

A



INNER BARREL POSITIONER
C71016-5

B



LOCATOR ASSEMBLY
C71016-6,-7

C

C71016 Inlet Repair Fixture
Figure 703

BOEING®

COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

(NOT APPLICABLE)

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

1. General

A. This section lists the special tools, fixtures, and equipment necessary for maintenance.

NOTE: Equivalent substitutes may be used.

Special Tools

Reference	Description	Part Number	Supplier
SPL-5407	Repair Fixture - Inlet Assembly, CFM56-3	C71016-1	81205

Tool Supplier Information

CAGE Code	Supplier Name	Supplier Address
81205	THE BOEING COMPANY	17930 INTERNATIONAL BLVD. SOUTH SEATAC, WA 98188-4321 Telephone: 206-662-6650 Facsimile: 206-662-7145

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
14711	AVICA INC MEGGITT AEROSPACE 1915 VOYAGER AVE SIMI VALLEY, CALIFORNIA 93063 FORMERLY GENERAL CONNECTORS; FORMERLY IN SIMI VALLEY, CA
50632	KAMATICS CORP SUB OF KAMAN CORP 1335 BLUE HILLS ROAD BLOOMFIELD, CONNECTICUT 06002-1304

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
301A1080-5		1	1H	RF
301A1080-6		1	1I	RF
301A1080-7		1	1J	RF
314A1010-10		1	1B	RF
314A1010-11		1	1C	RF
314A1010-12		1	1D	RF
314A1010-13		1	1E	RF
314A1010-14		1	1F	RF
314A1010-15		1	1G	RF
314A1010-16		1	1K	RF
314A1010-2		1	1	RF
314A1010-3		1	359	1
314A1010-4		1	361	1
314A1010-5		1	355	1
314A1010-6		1	357	1
314A1010-7		1	363	2
314A1010-8		1	365	2
314A1010-9		1	1A	RF
314A1011-101		1	285	1
314A1011-106		1	257	1
314A1011-111		1	213	1
314A1011-112		1	213D	1
314A1011-113		1	257C	1
314A1011-114		1	285C	1
314A1011-115		1	283B	1
314A1011-4		1	257B	1
314A1011-47		1	213C	1
314A1011-48		1	285B	1
314A1011-49		1	283A	1
314A1011-5		1	321	1
314A1011-58		1	213B	1
314A1011-59		1	213A	1
314A1011-6		1	323	1
314A1011-61		1	285A	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
314A1011-64		1	225	1
		1	303	1
314A1011-65		1	231	1
		1	309	1
314A1011-66		1	233	1
		1	295	1
314A1011-67		1	239	1
		1	301	1
314A1011-7		1	325	1
314A1011-74		1	221	2
		1	292	1
314A1011-75		1	257A	1
314A1011-78		1	249	1
		1	275	1
314A1011-79		1	255	1
		1	281	1
314A1011-8		1	319	9
314A1011-80		1	241	1
		1	267	1
		1	285F	1
314A1011-81		1	247	1
		1	273	1
314A1011-95		1	223	1
		1	265	1
314A1011-96		1	283	1
314A1013-1		1	5B	1
314A1013-2		1	61	1
314A1013-3		1	63	1
314A1013-4		1	65	1
314A1013-5		1	71	1
314A1013-55		1	53	2
314A1013-57		1	62G	1
314A1013-59		1	62S	1
314A1013-61		1	45	2
314A1013-65		1	62B	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
314A1013-66		1	62I	1
314A1013-70		1	5	1
		1	5C	1
314A1013-71		1	47	2
314A1013-74		1	65A	1
314A1013-75		1	5A	1
314A1013-76		1	5D	1
314A1013-77		1	62	1
314A1013-78		1	62Z	1
314A1013-79		1	62N	1
314A1013-82		1	62X	1
314A1013-83		1	5E	1
		1	5F	1
314A1013-86		1	5G	1
		1	5H	1
314A1014-11		1	327	1
314A1014-12		1	335	1
314A1014-2		1	335A	1
314A1014-5		1	333	1
314A1014-8		1	327A	1
314A1015-1		1	369	1
314A1016-1		1	347	1
314A1017-1		1	150	1
314A1020-1		1	91	1
314A1020-3		1	129	1
314A1020-39		1	119	1
314A1020-4		1	131	1
314A1020-40		1	121A	1
314A1020-41		1	123	1
314A1020-42		1	117	1
314A1020-5		1	135	1
314A1020-6		1	133	1
314A1020-61		1	163	1
314A1020-62		1	165	1
314A1020-63		1	167	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
314A1020-64		1	169	1
314A1020-65		1	171	1
314A1020-66		1	173	1
314A1020-67		1	175	1
314A1020-68		1	177	1
314A1020-69		1	179	1
314A1020-70		1	181	1
314A1020-71		1	183	1
314A1020-72		1	157	8
314A1020-73		1	159	3
314A1020-74		1	161	2
314A1020-75		1	185	1
314A1020-76		1	187	1
314A1020-78		1	125	2
314A1020-79		1	127	2
314A1020-80		1	91A	1
314A1020-81		1	129A	1
314A1020-82		1	131A	1
314A1020-83		1	135A	1
314A1020-84		1	133A	1
314A1020-85		1	91B	1
314A1021-1		1	7	1
314A1021-2		1	17	1
314A1031-1		1	213E	1
314A1031-105		1	295B	1
314A1031-106		1	301B	1
314A1031-2		1	285D	1
314A1031-21		1	326	1
314A1031-3		1	283C	1
314A1031-34		1	303A	1
314A1031-35		1	309A	1
314A1031-36		1	295A	1
314A1031-37		1	301A	1
314A1031-38		1	275A	1
314A1031-39		1	281A	1

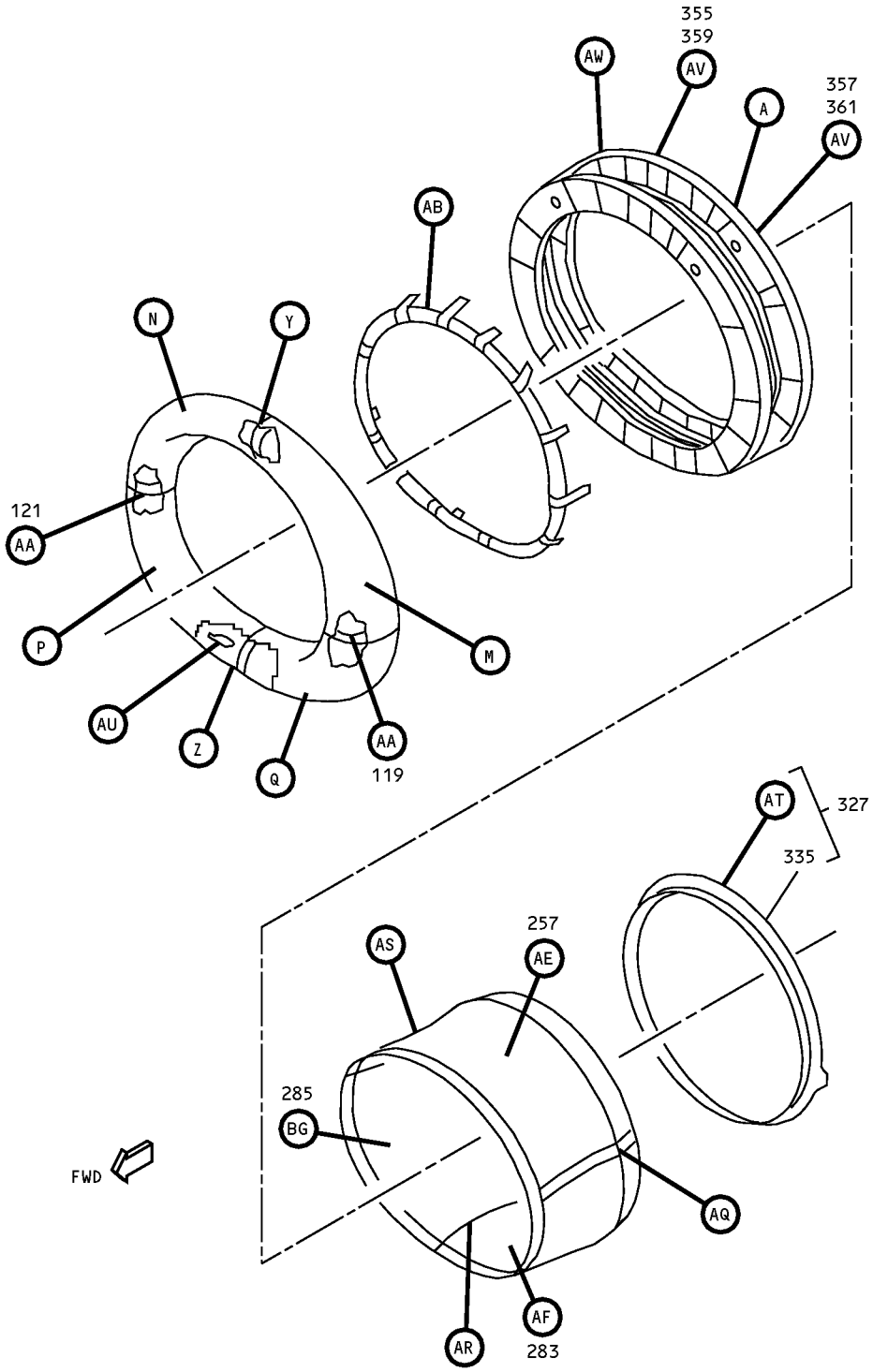
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
314A1031-4		1	257D	1
314A1031-40		1	267A	1
314A1031-41		1	273A	1
314A1031-5		1	323A	1
314A1031-6		1	325A	1
		1	325B	1
314A1031-7		1	321A	1
314A1031-71		1	213F	1
314A1031-72		1	285E	1
314A1031-73		1	303B	1
314A1031-74		1	293A	1
		1	309B	1
314A1031-75		1	257E	1
314A1031-76		1	281B	1
314A1031-77		1	275B	1
314A1031-78		1	213G	1
314A1031-79		1	283D	1
		1	283E	1
314A1031-80		1	285G	1
314A1031-82		1	322	1
314A1031-83		1	324	1
35A452-101		1	369A	1
460-275		1	189	1
AN960C10		1	143	22
AN960C10L		1	141	26
AN960PD6L		1	351	4
BACB28X6C029		1	59	2
BACB28X7F045		1	15	1
BACB28X7F075		1	13	1
BACB30MS3K3		1	35	4
BACB30NM3S1		1	79	8
BACB30NM3S2		1	19	185
		1	62U	9
		1	75	20
		1	367	6

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB30NM3S3		1	77	2
BACB30NM3S4		1	21	96
		1	62P	16
		1	73	8
BACB30NMBS4		1	22	4
BACB30NT3K3		1	139	26
BACB30NW6K		1	329	3
BACB30NW6K3		1	87	129
		1	97	228
		1	191	104
BACB30NW6K4		1	81	146
		1	99	40
		1	337	8
BACB30NW6K5		1	83	26
		1	101	24
		1	193	12
BACB30NW6K6		1	85	12
		1	102	4
BACB30NW6K8		1	49	2
BACB30NX6K20		1	9	2
BACB30NX6K3		1	62K	7
BACB30NX6K4		1	62D	7
		1	151	26
BACB30NX6K8		1	153	26
BACB30NY8K19		1	259A	7
		1	287A	6
BACB30NY8K20		1	261A	2
		1	289A	2
BACB30NY8K28		1	215	13
		1	259	7
		1	287	6
BACB30NY8K29		1	217	4
		1	261	2
		1	289	2
BACB30NZ6K27		1	195	106

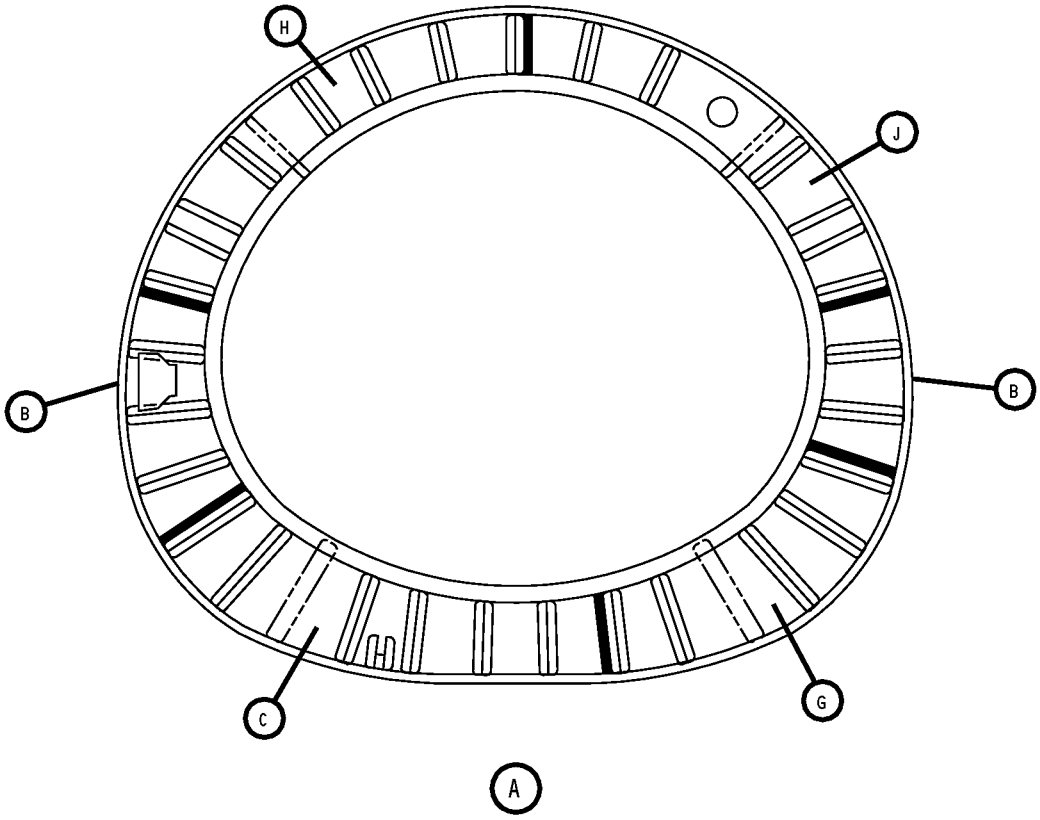
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB30NZ6K28		1	197	8
BACB30NZ8K14		1	205	69
BACB30NZ8K16		1	207	6
		1	315A	6
		1	315C	4
BACB30NZ8K17		1	315	6
BACB30NZ8K18		1	315B	6
		1	315D	4
BACB30NZ8K19		1	311B	80
		1	311D	AR
		1	313B	6
BACB30NZ8K20		1	313A	6
		1	313C	6
BACB30NZ8K21		1	313	6
BACB30NZ8K25		1	311A	80
		1	311C	AR
BACB30NZ8K26		1	311	80
BACC30AG8		1	317	92
BACC30M6		1	51	2
		1	89	313
		1	103	296
		1	199	230
		1	331	3
		1	339	8
BACC30M8		1	209	75
		1	219	17
		1	263	9
		1	291	8
BACC30X6SW		1	11	2
		1	62E	7
		1	62L	7
		1	155	52
BACN10JC06CD		1	353	4
BACN10JC3C		1	145	26
BACN10JC3CD		1	39	4

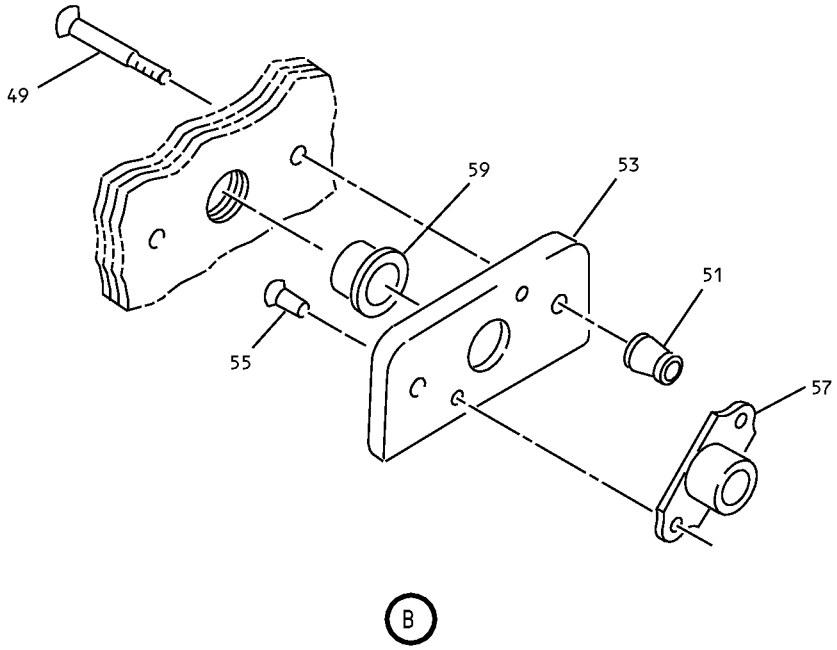
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACN10JR3CFD		1	27	164
		1	29	52
		1	69	6
BACN10JR3CFM		1	33	25
BACN10JR3CM		1	95	36
BACN10JR3F		1	237	1
		1	245	1
		1	271	1
		1	299	1
BACN10JR3FM		1	62V	9
BACN10JR4F		1	229	4
		1	253	4
		1	279	4
		1	307	4
BACN10JR6CFD		1	57	2
BACN10KA4ACM		1	111	5
		1	345	1
BACN10KB3CFD		1	31	44
		1	62Q	16
BACR15BA3AD		1	93	72
		1	109	10
		1	343	2
BACR15BA3KE		1	23	512
BACR15BA4KE		1	55	4
BACR15BA5D		1	43	4
BACR15BA6KE		1	105A	18
		1	113A	56
		1	115A	152
BACR15CE3KE		1	25	58
		1	67	12
BACR15CE6KE		1	105	18
		1	113	56
		1	115	152
BACR15FT6KEC		1	62W	9
BACS12ER06K8		1	349	4

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACS40R09B93F		1	90	20
		1	201	20
BACS40R10B30F		1	107	4
BACS40R10C148F		1	203	12
BACS40R11F70F		1	341	2
BACS40R12C56F		1	41	2
BACS40R15C79F		1	211	24
BACW10BN3AP		1	37	4
KWS100011		1	72	5
MS20427M3		1	227	8
		1	235	2
		1	243	2
		1	251	8
		1	269	2
		1	277	8
		1	297	2
		1	305	8
NAS1716C31M		1	147	11
NAS1716C32M		1	149	2

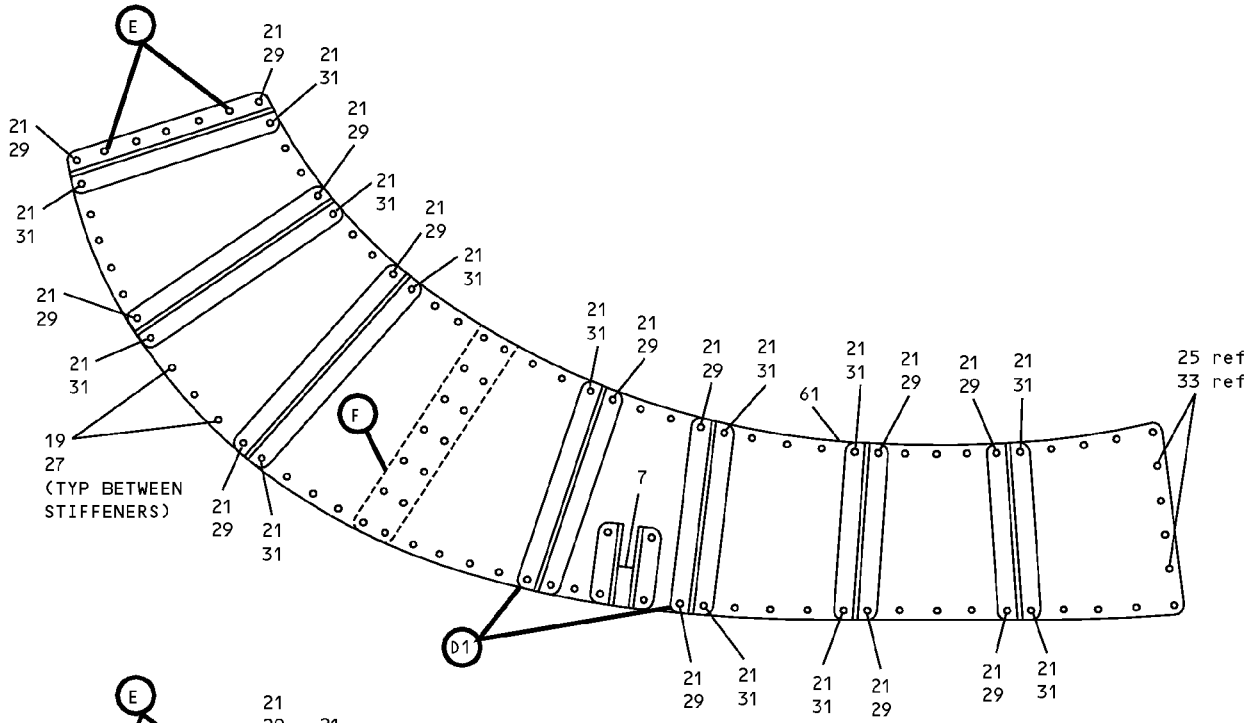


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 1 of 30)



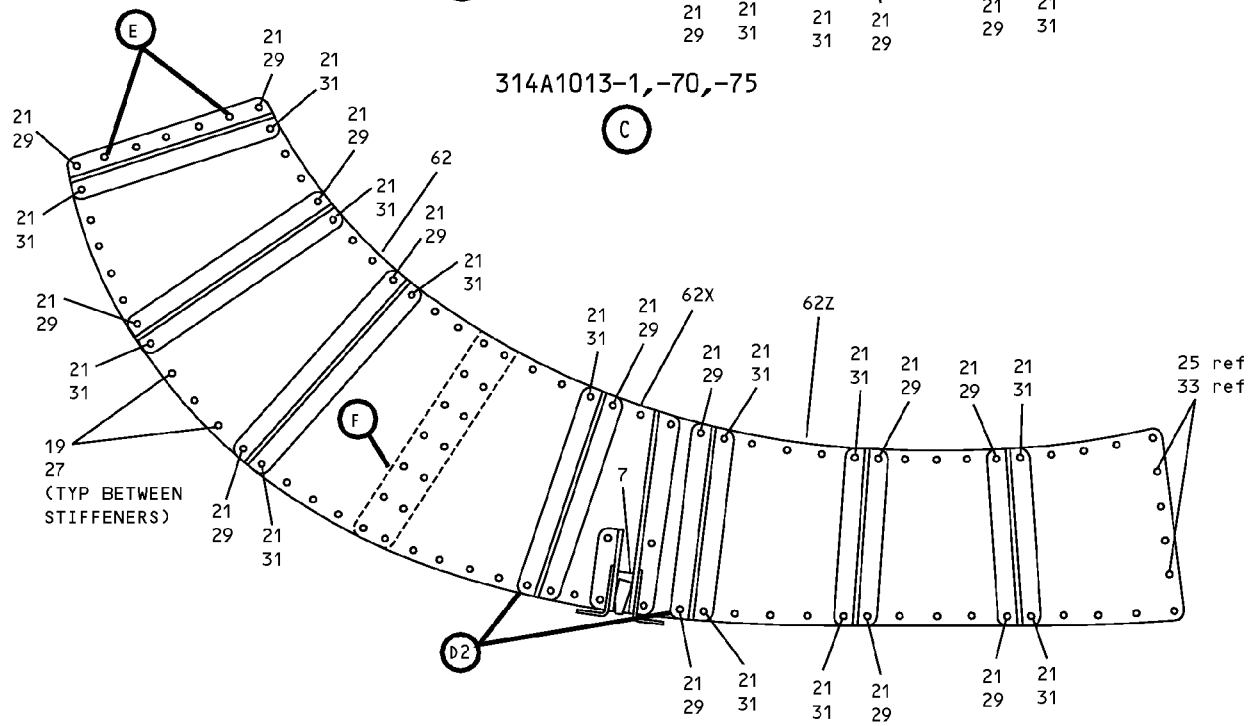


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 2 of 30)



314A1013-1,-70,-75

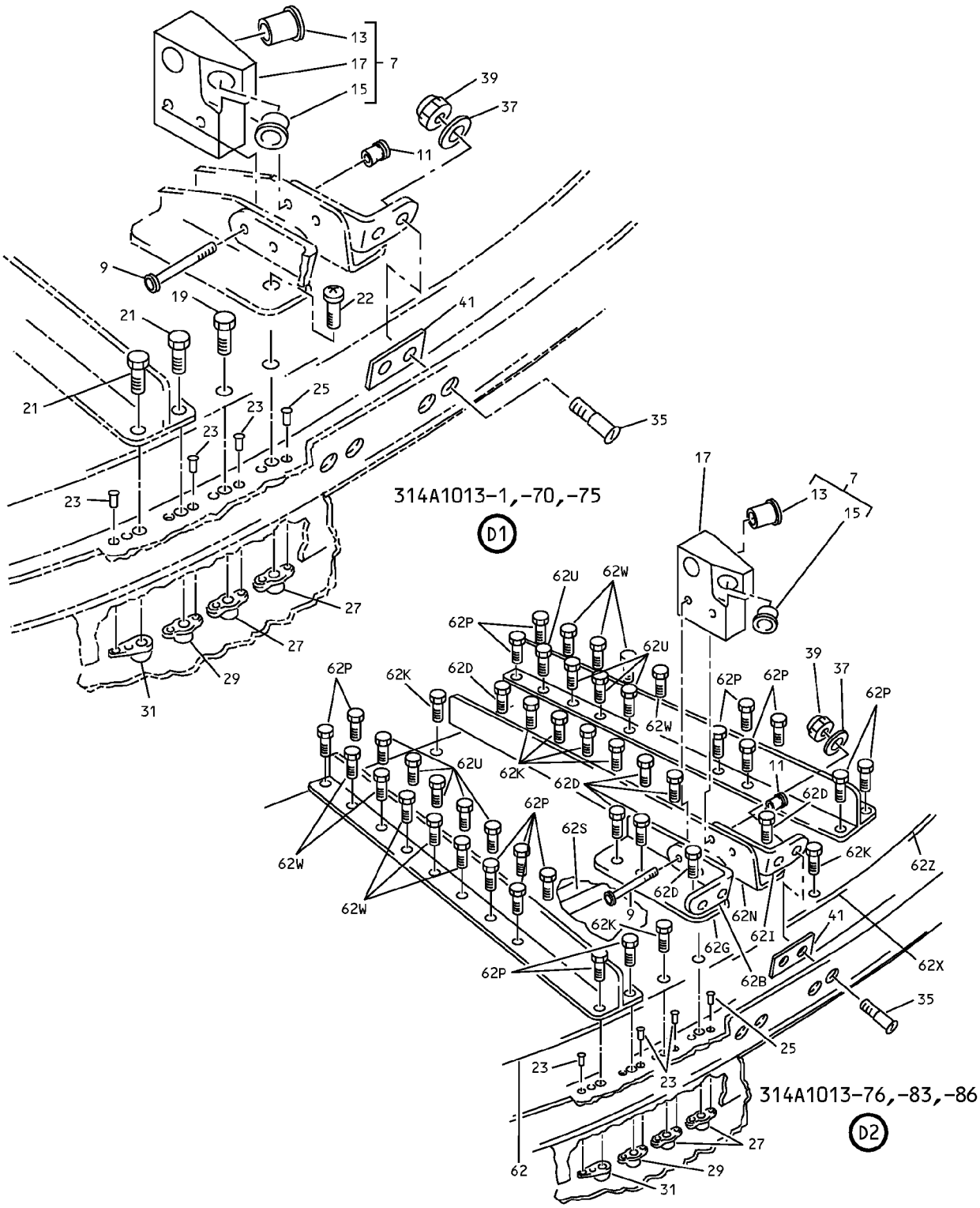
C



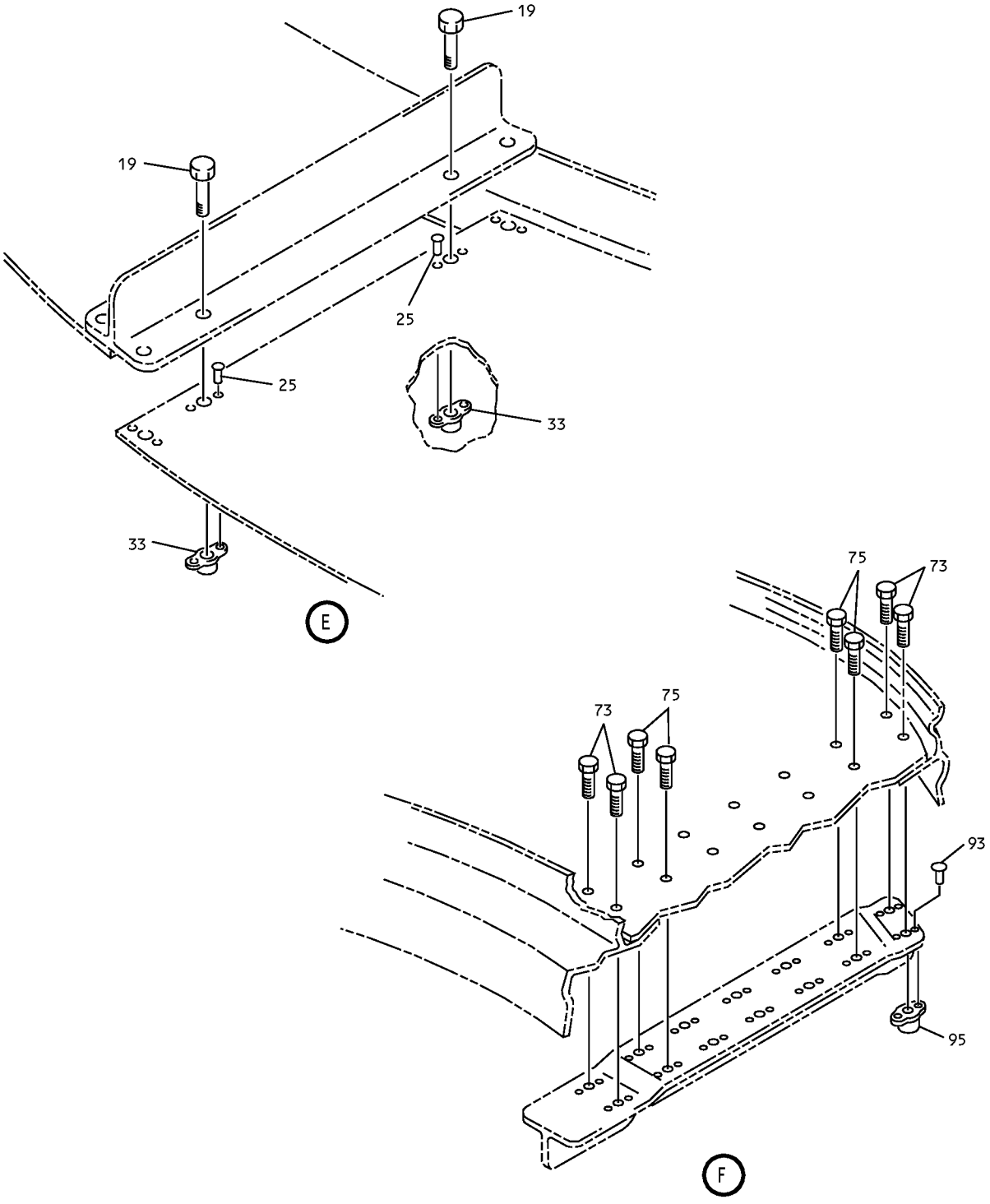
314A1010-76,-83,-86

C

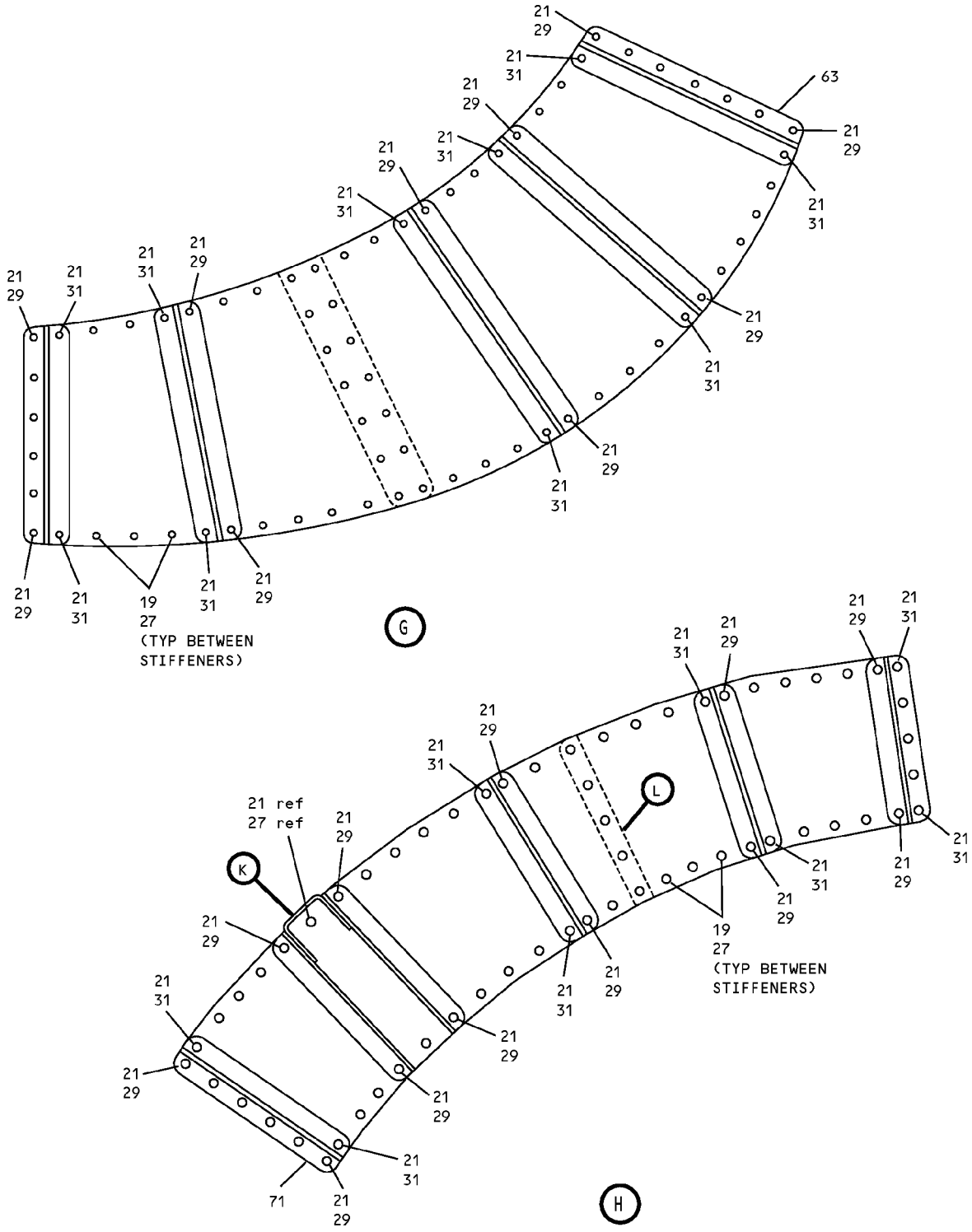
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 3 of 30)



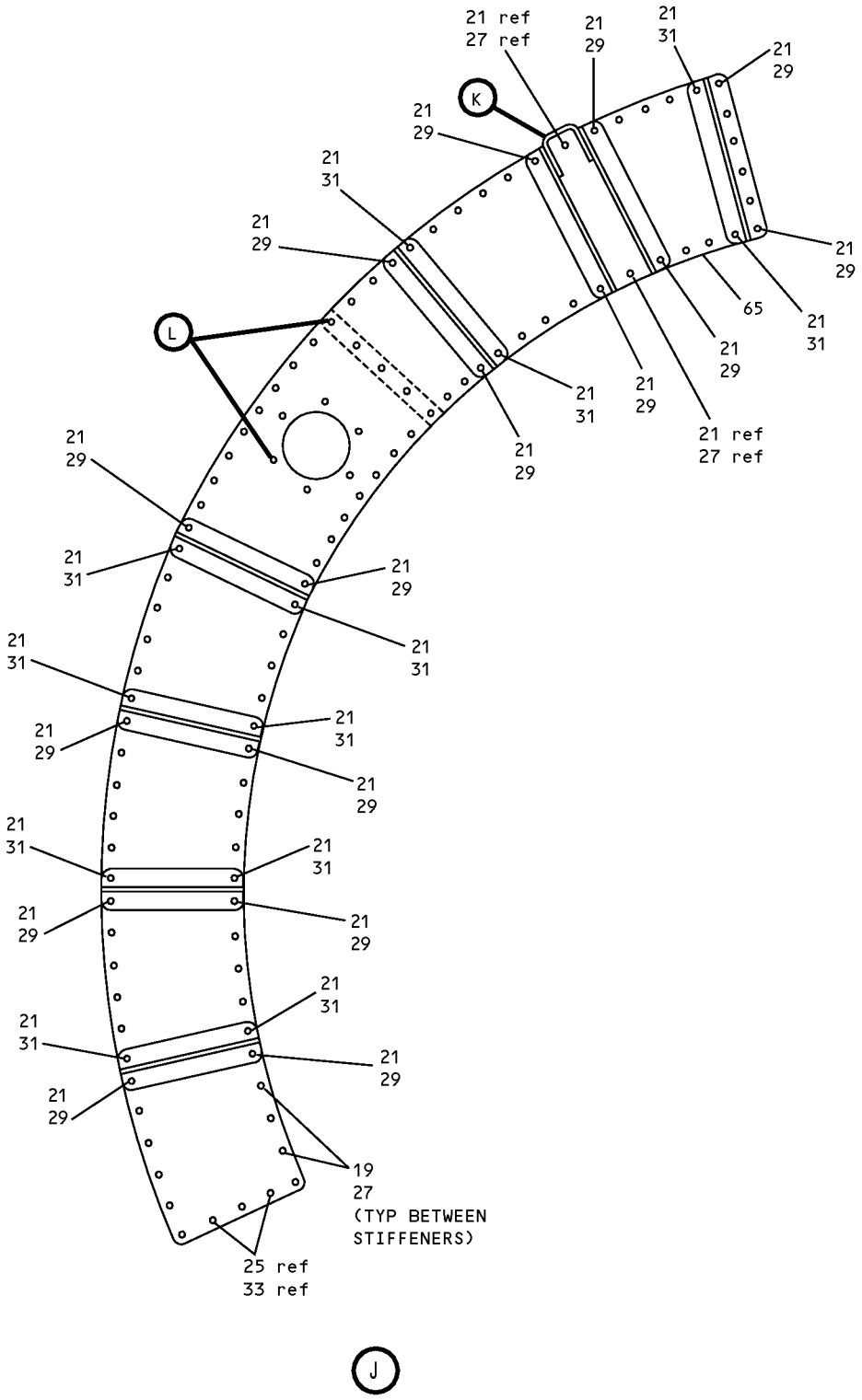
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 4 of 30)



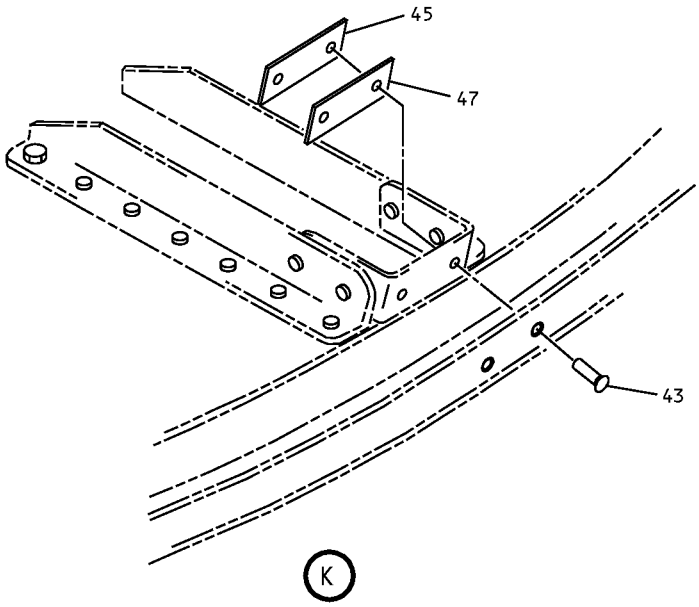
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 5 of 30)

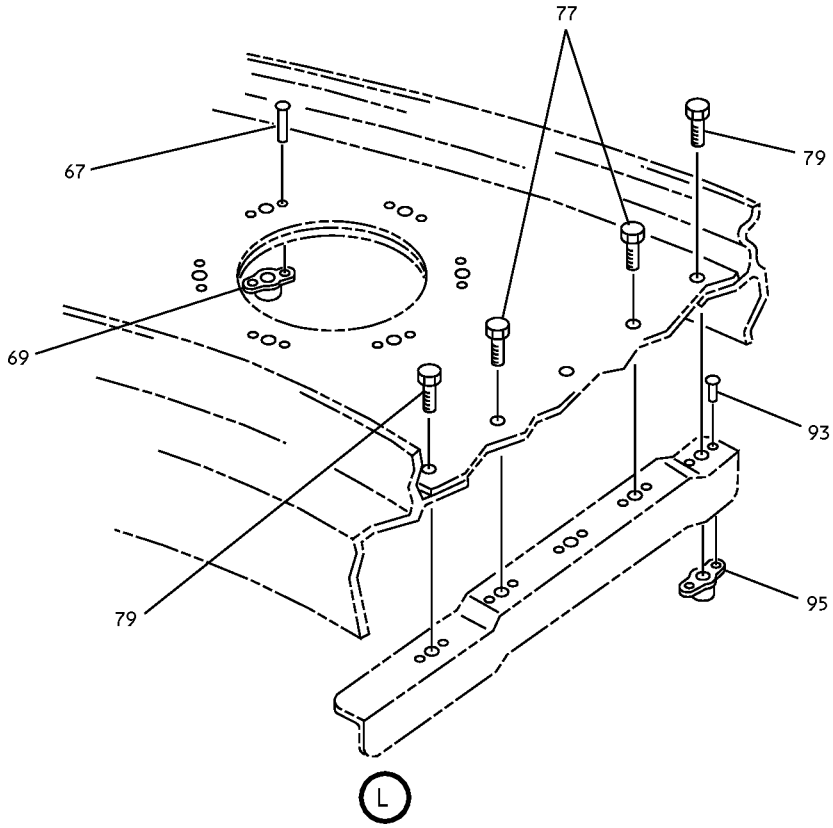


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 6 of 30)

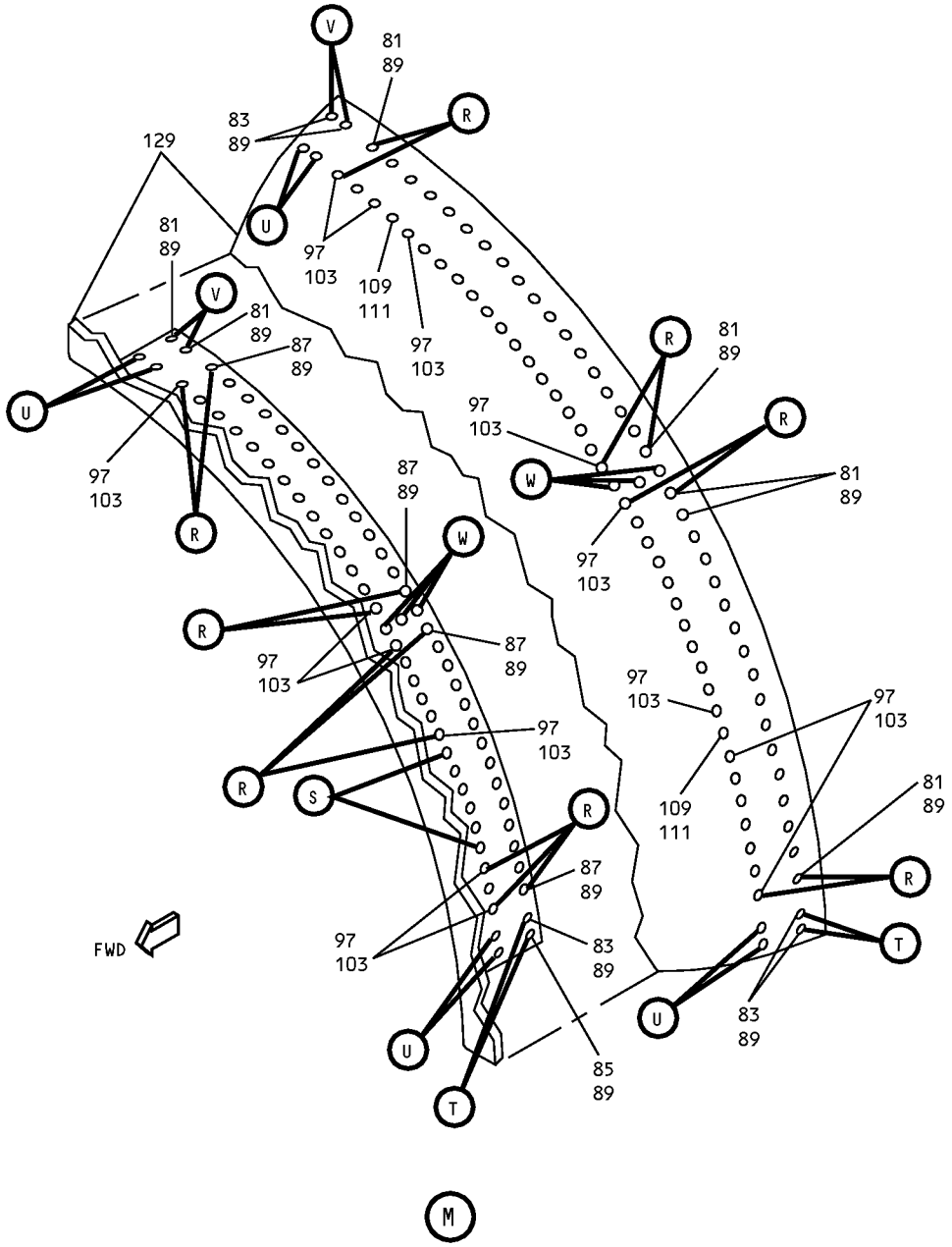


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 7 of 30)

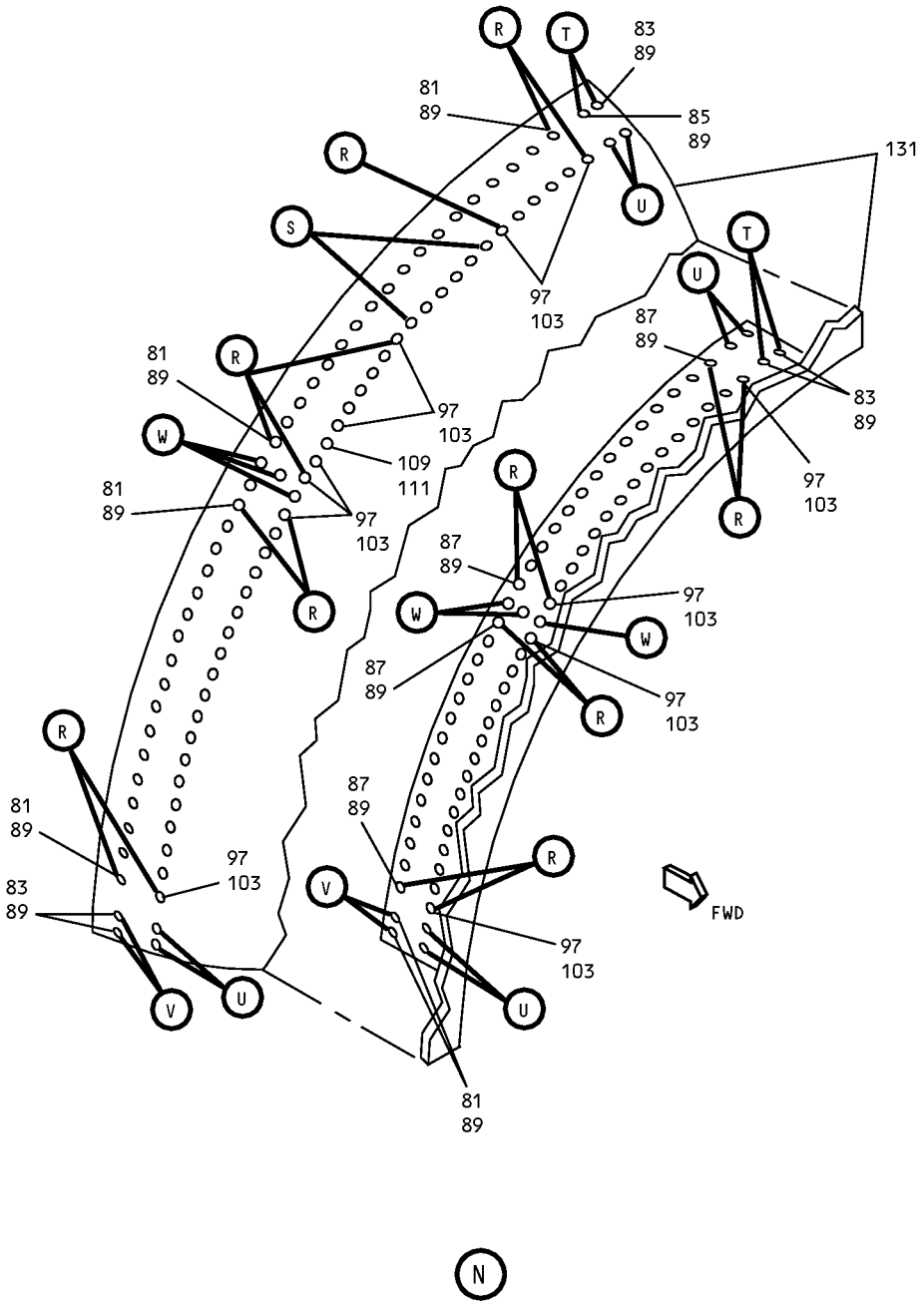




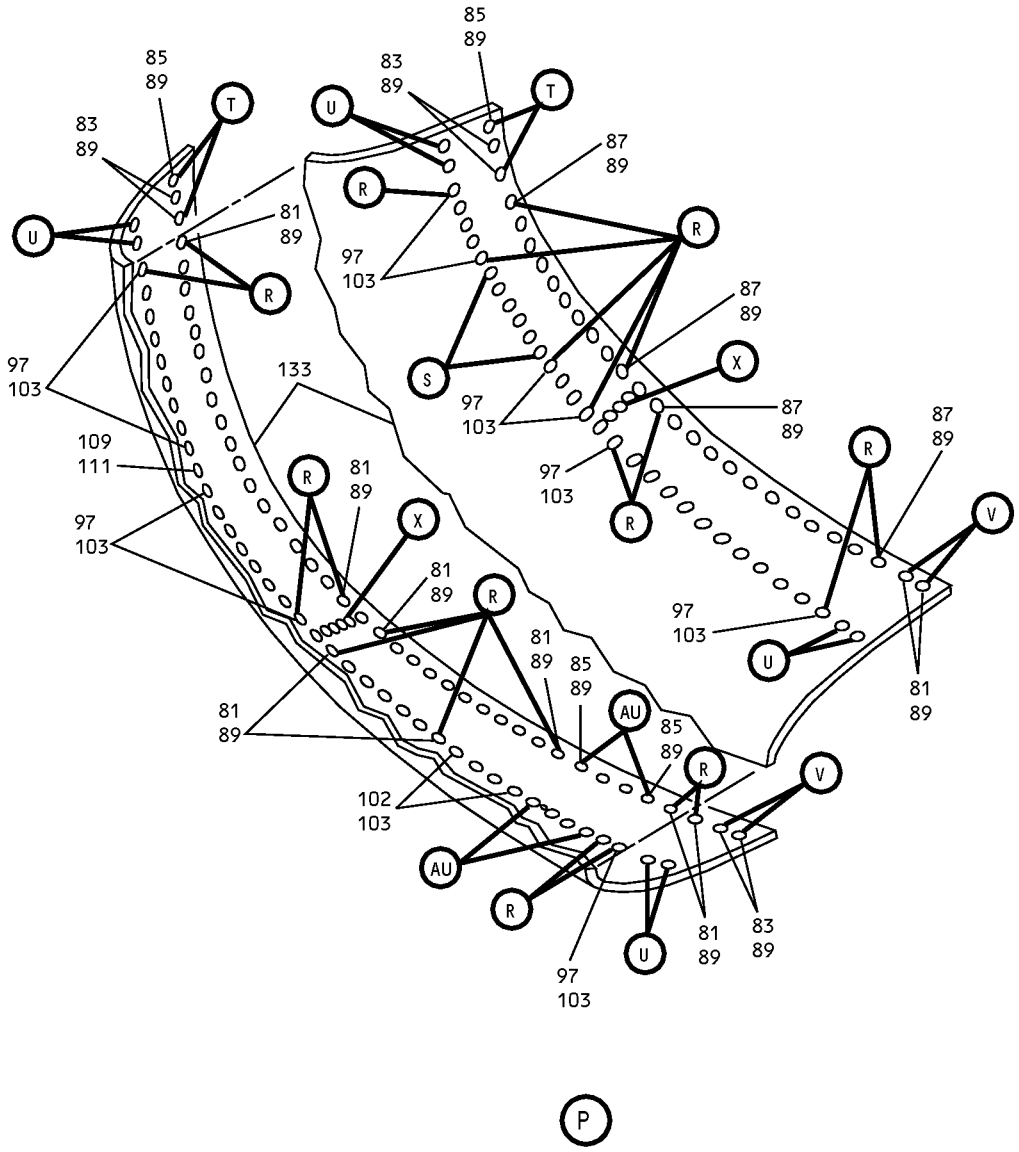
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 8 of 30)



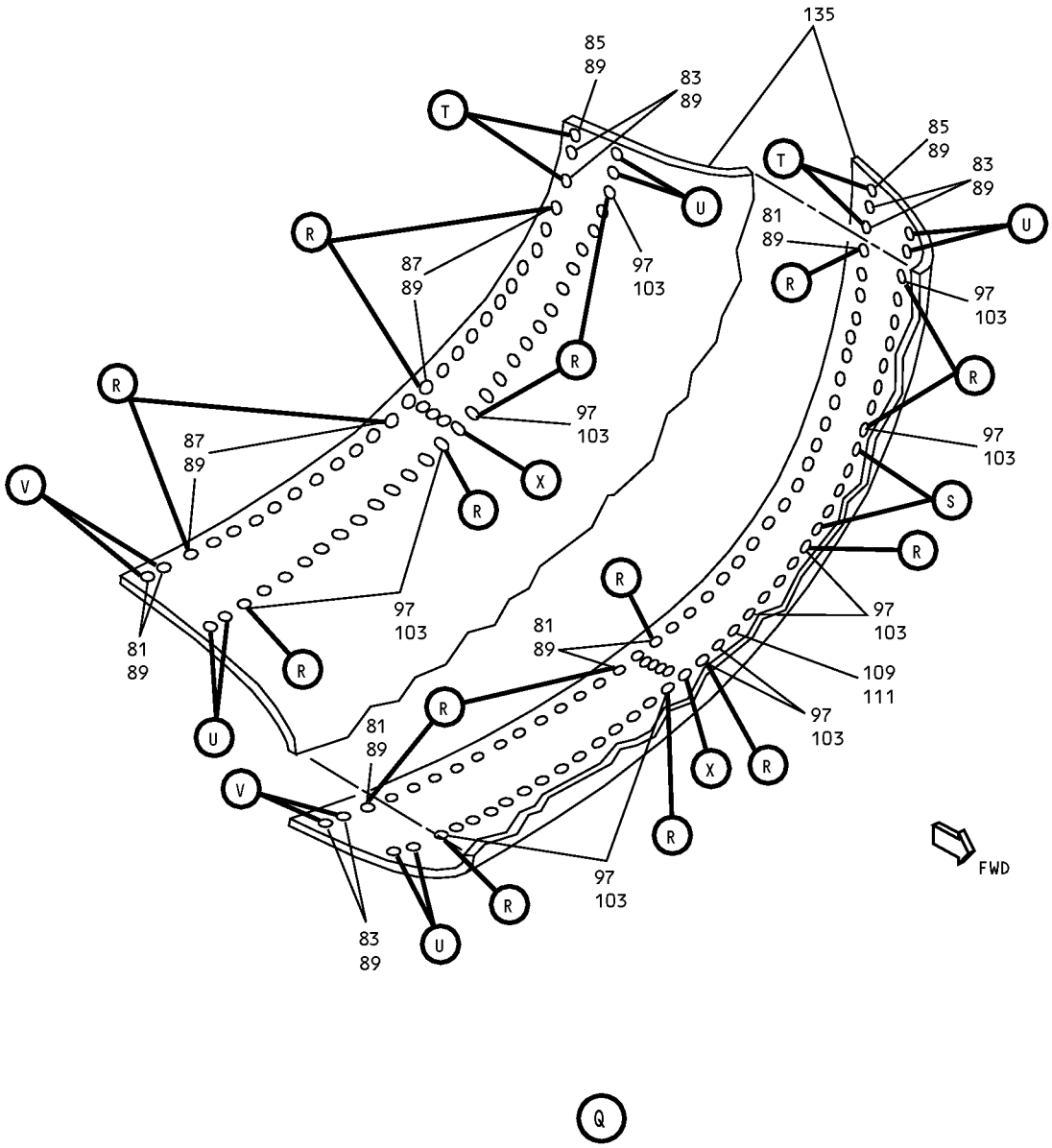
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 9 of 30)



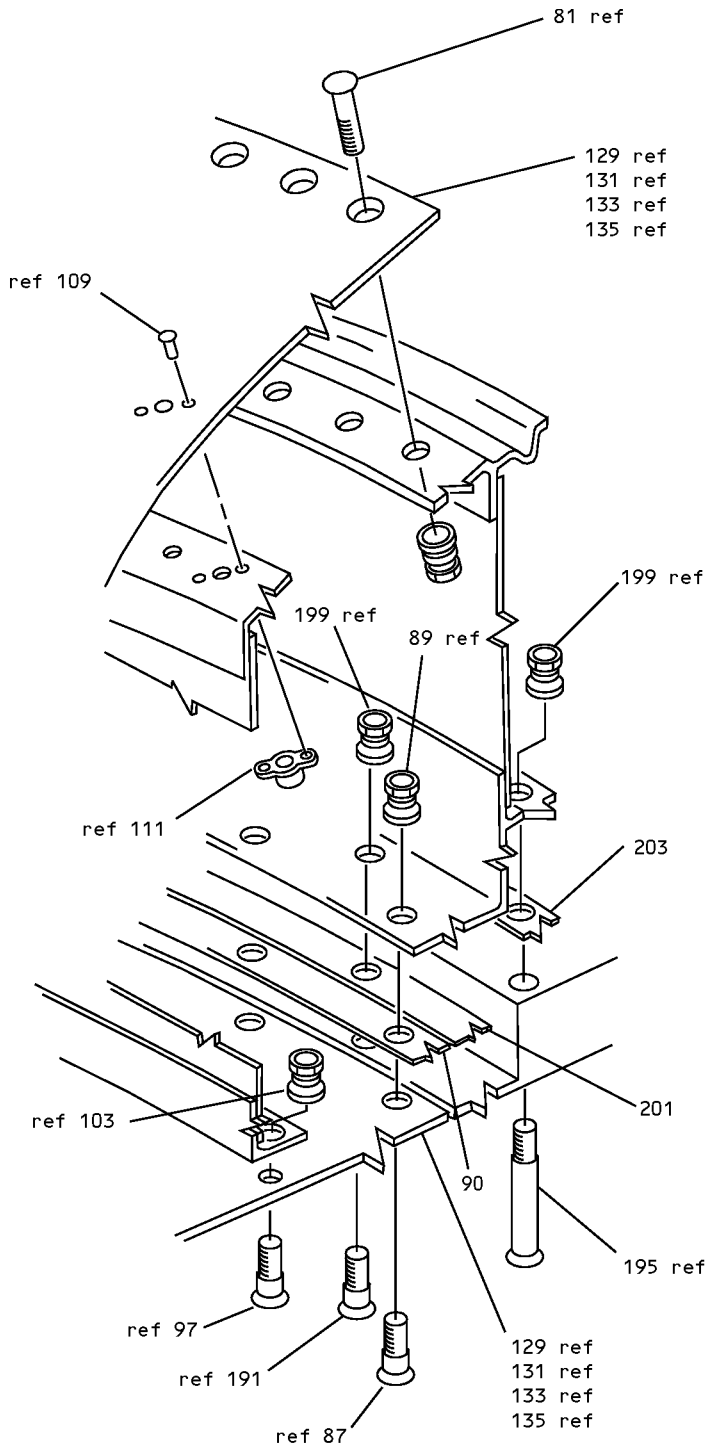
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 10 of 30)



Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 11 of 30)

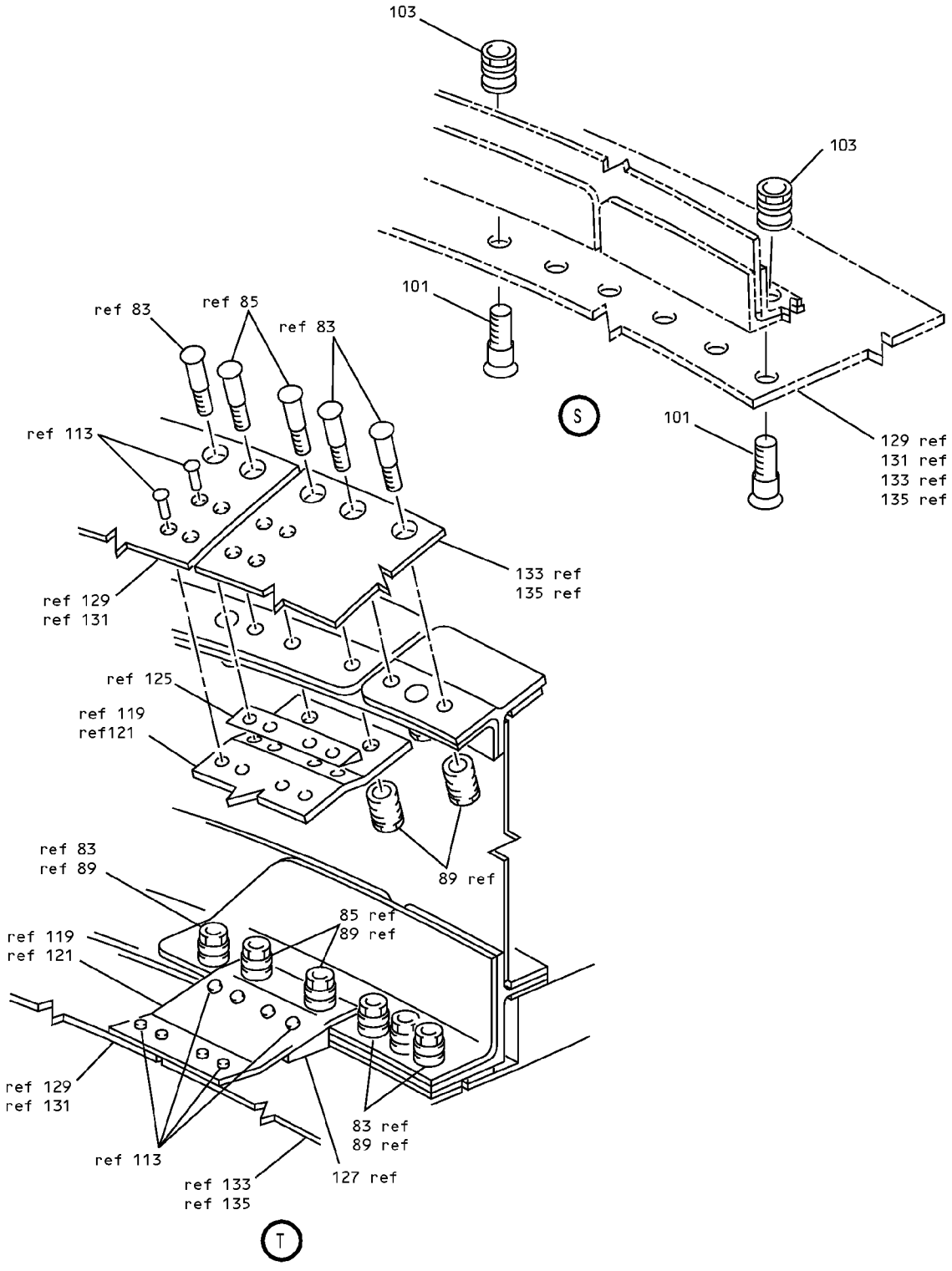


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 12 of 30)

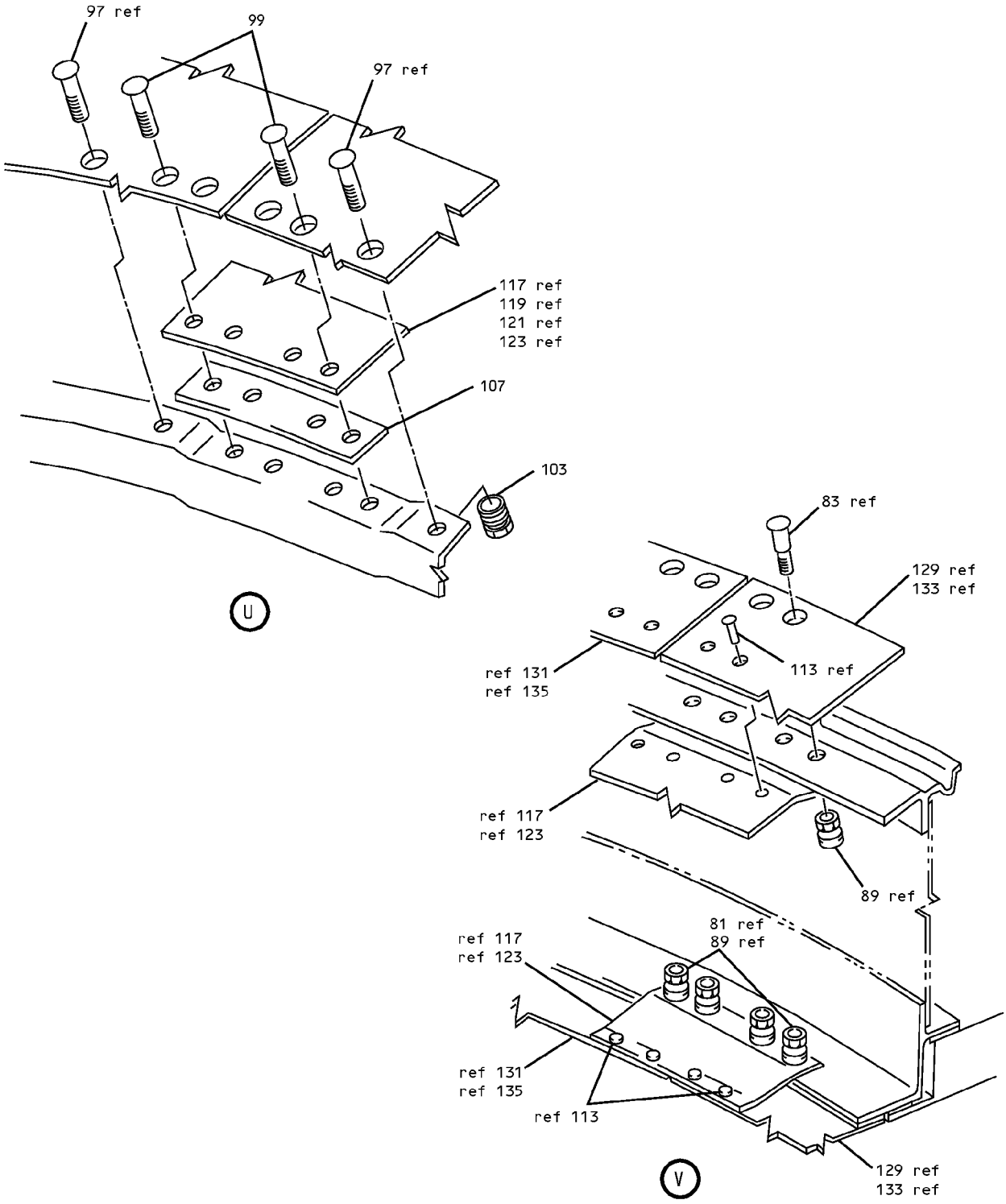


R

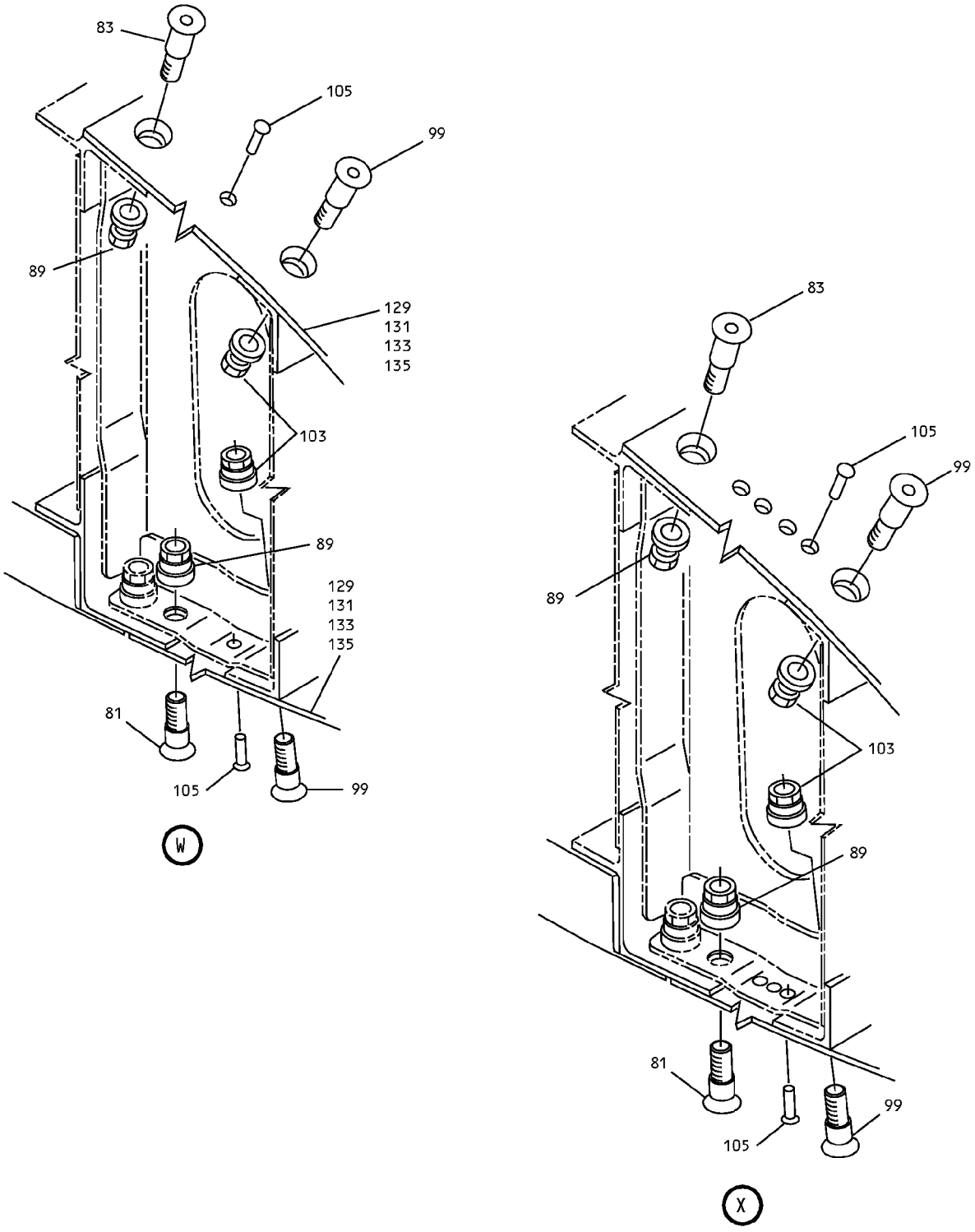
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 13 of 30)



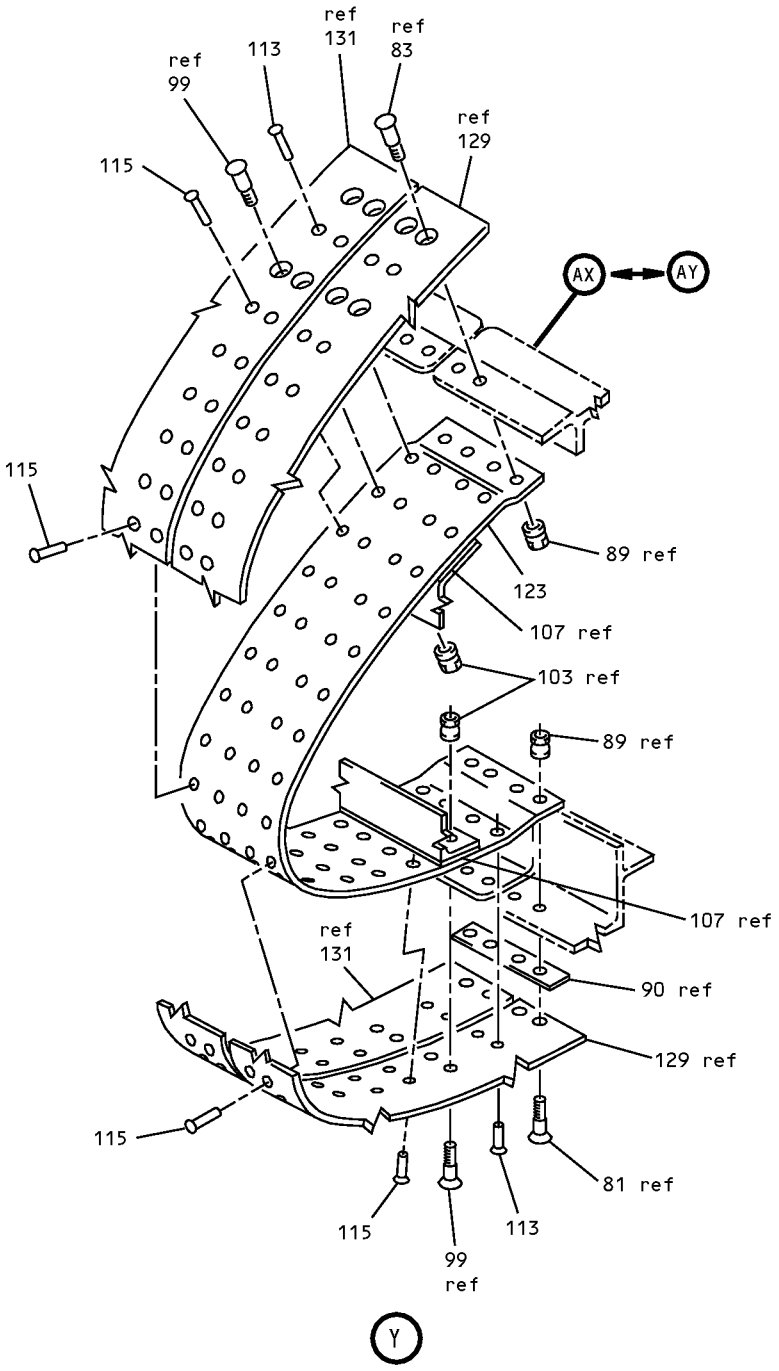
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 14 of 30)



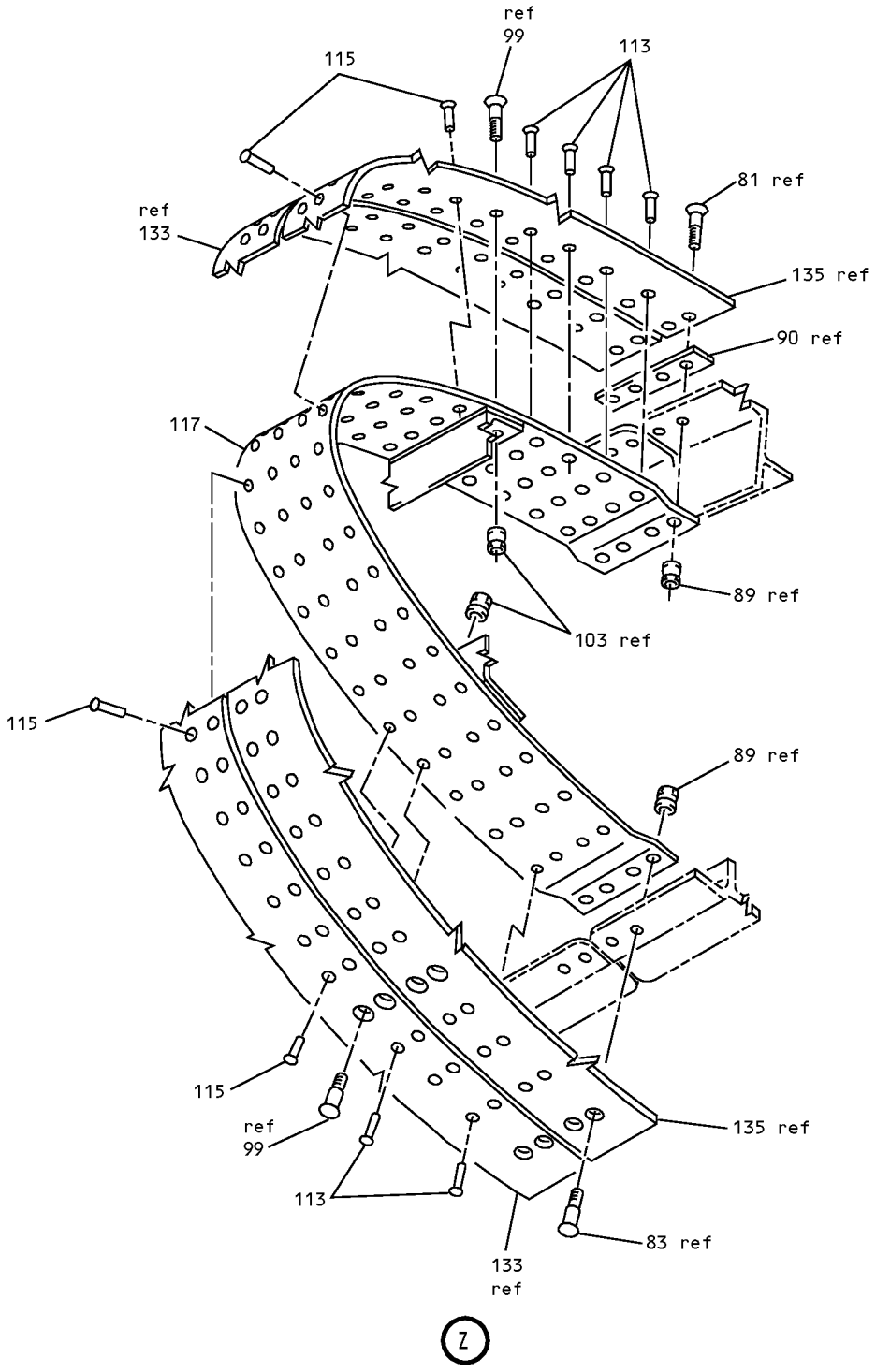
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 15 of 30)



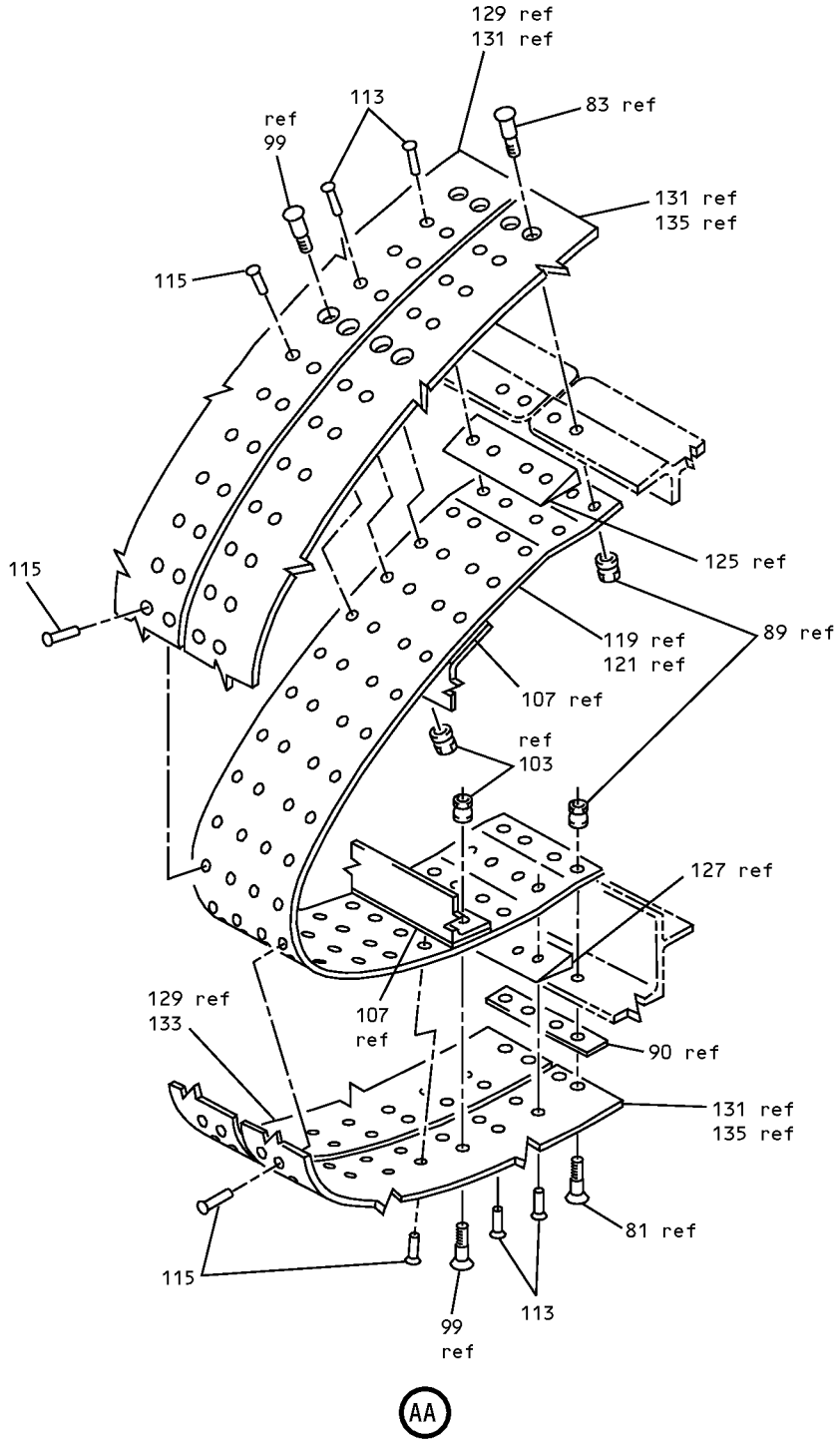
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 16 of 30)



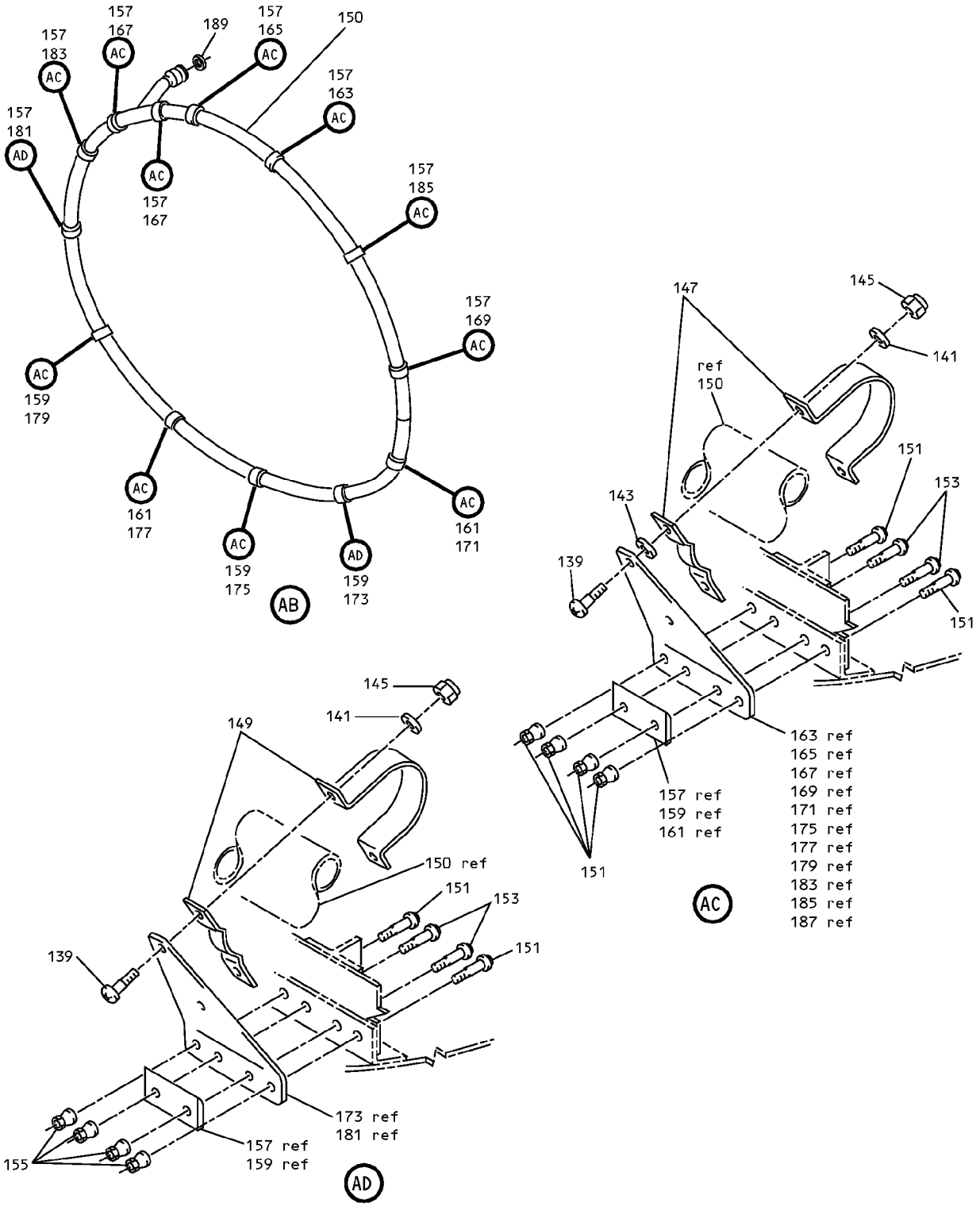
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 17 of 30)



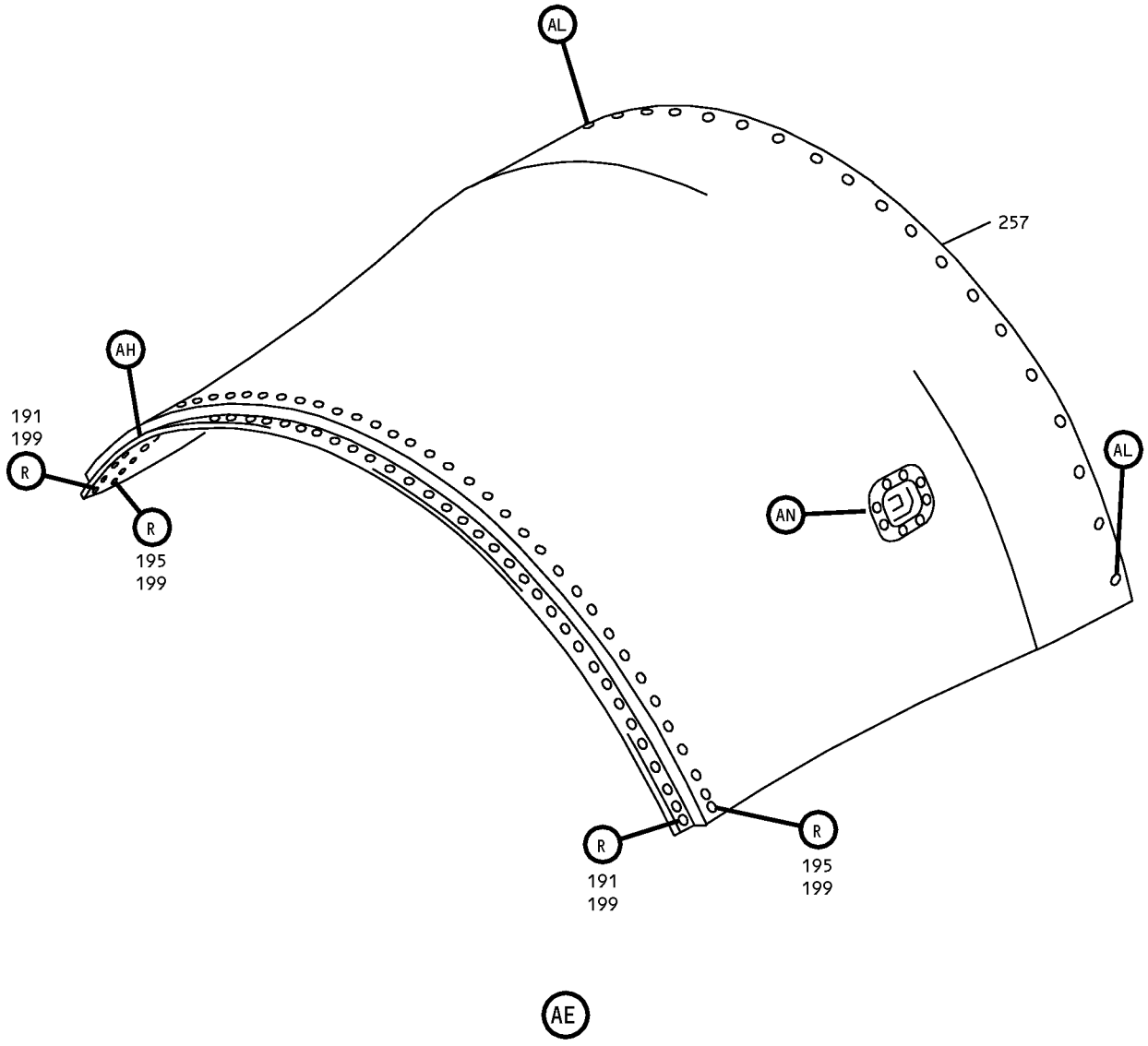
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 18 of 30)



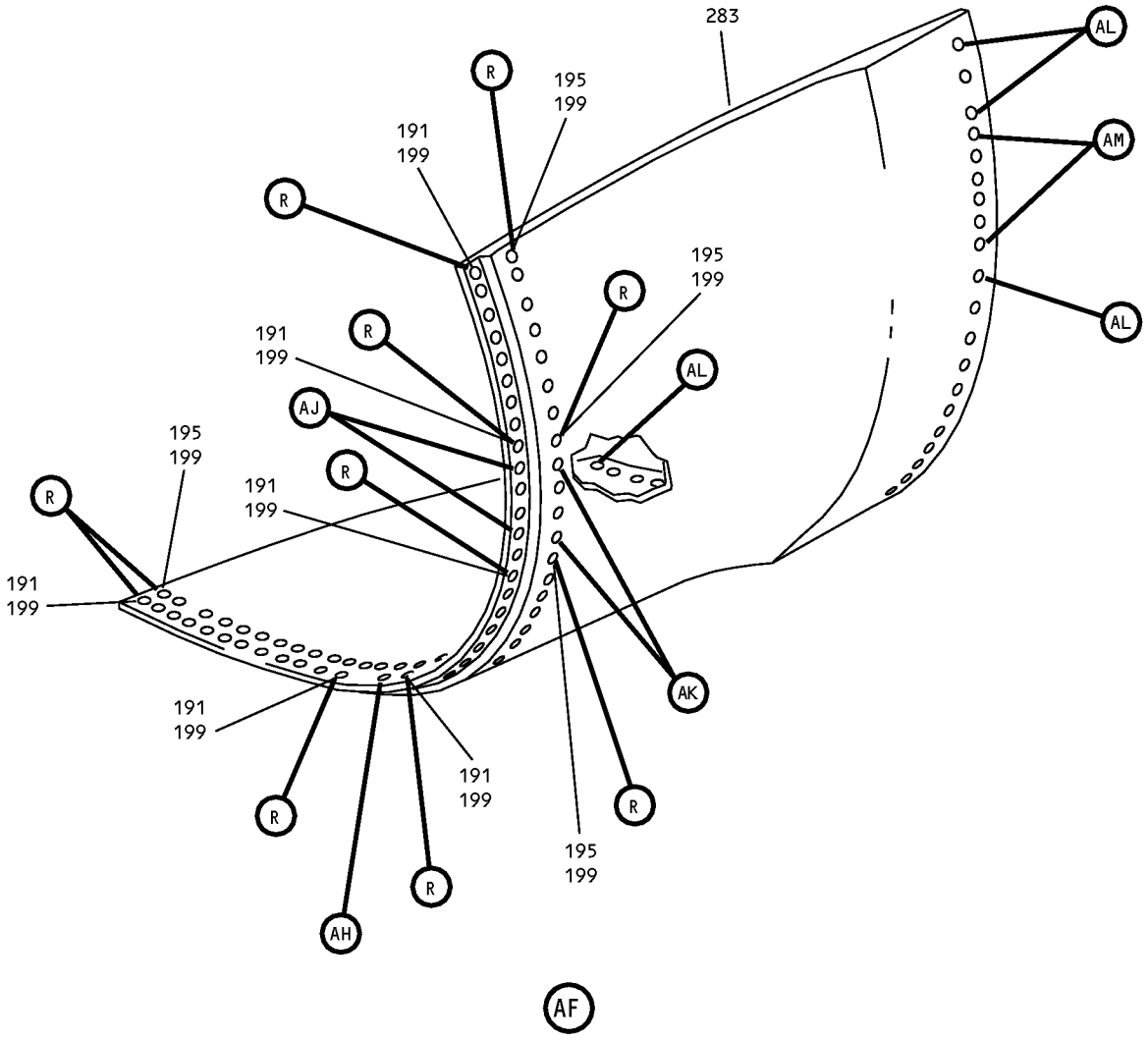
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 19 of 30)



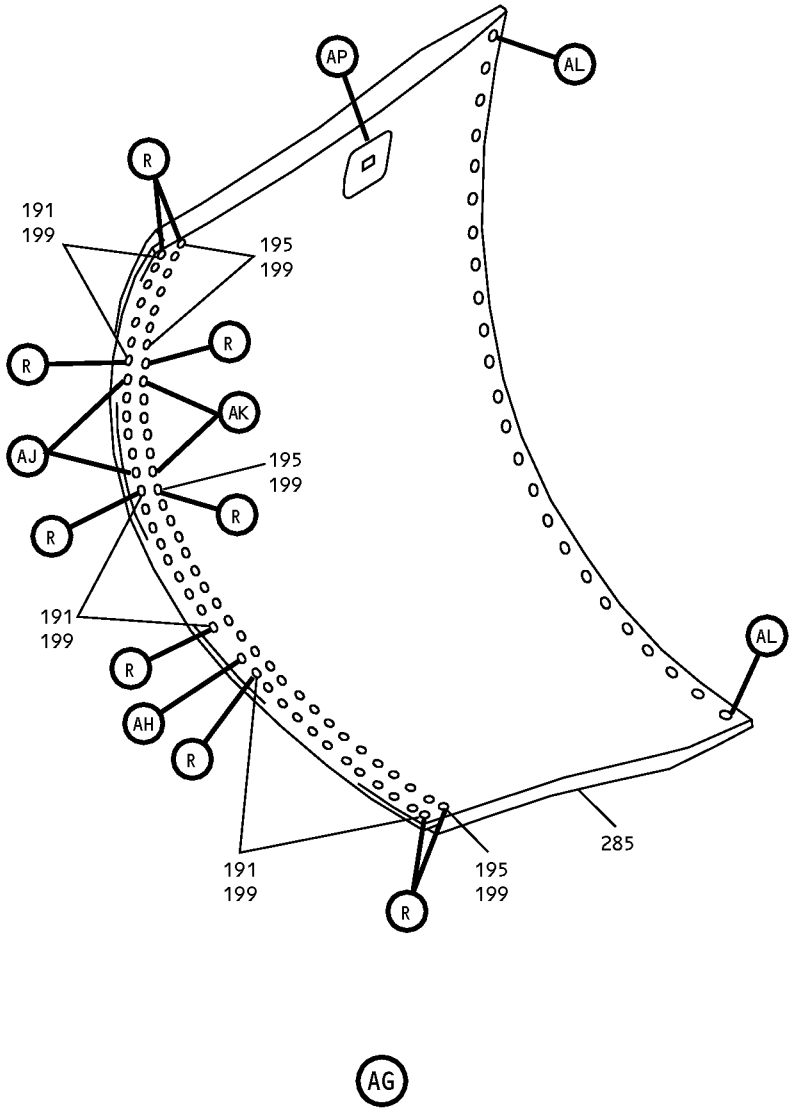
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 20 of 30)



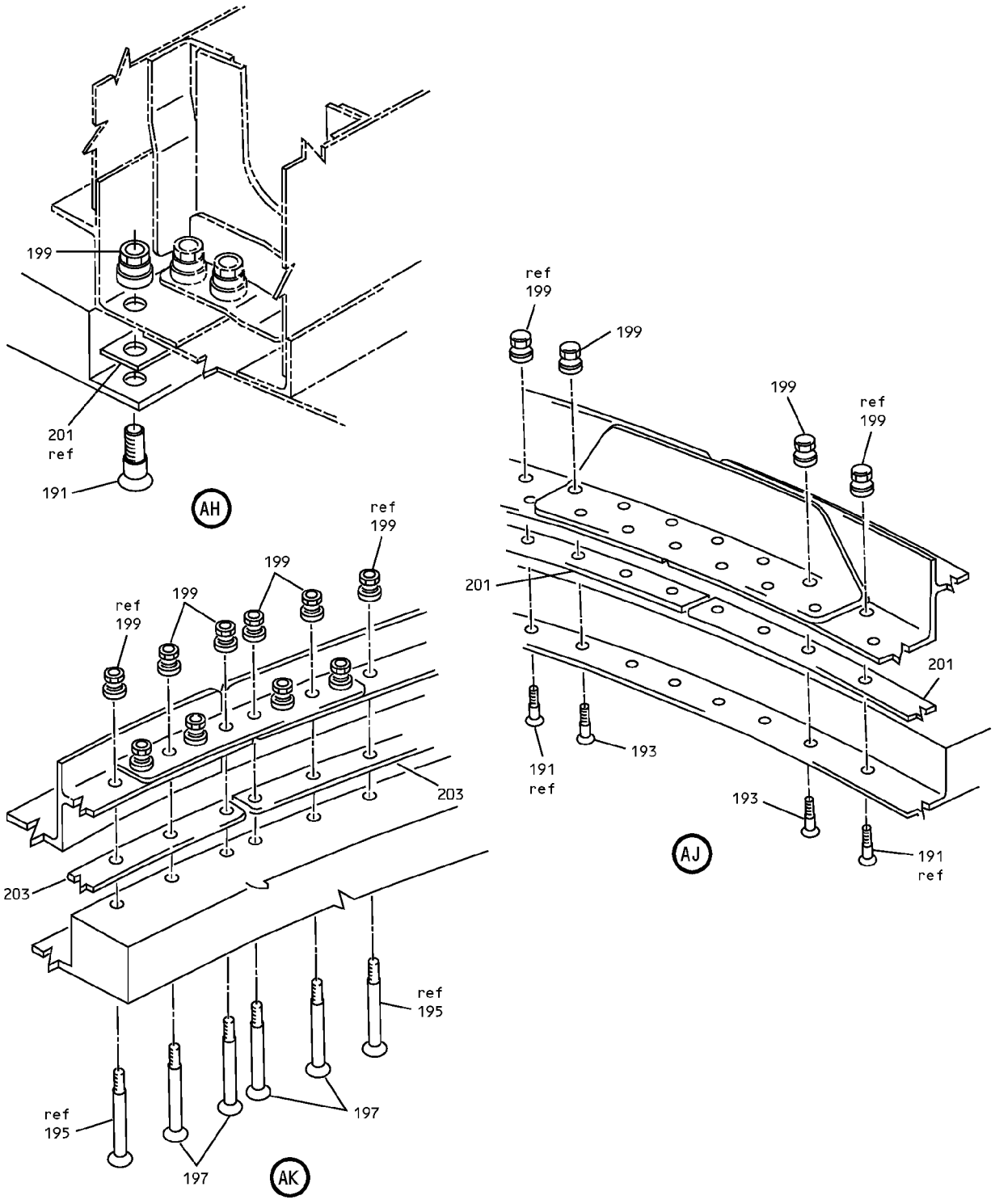
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 21 of 30)



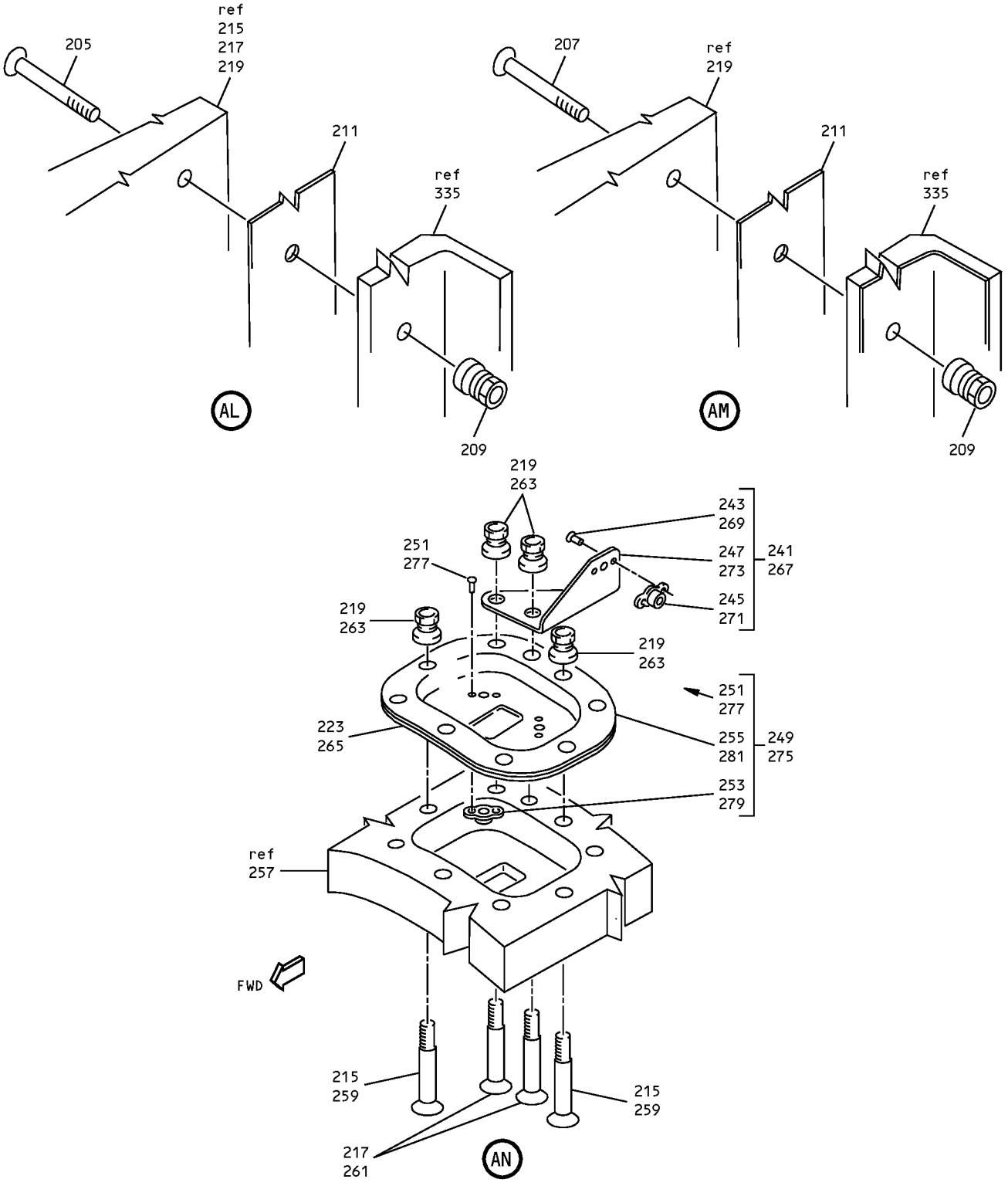
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 22 of 30)



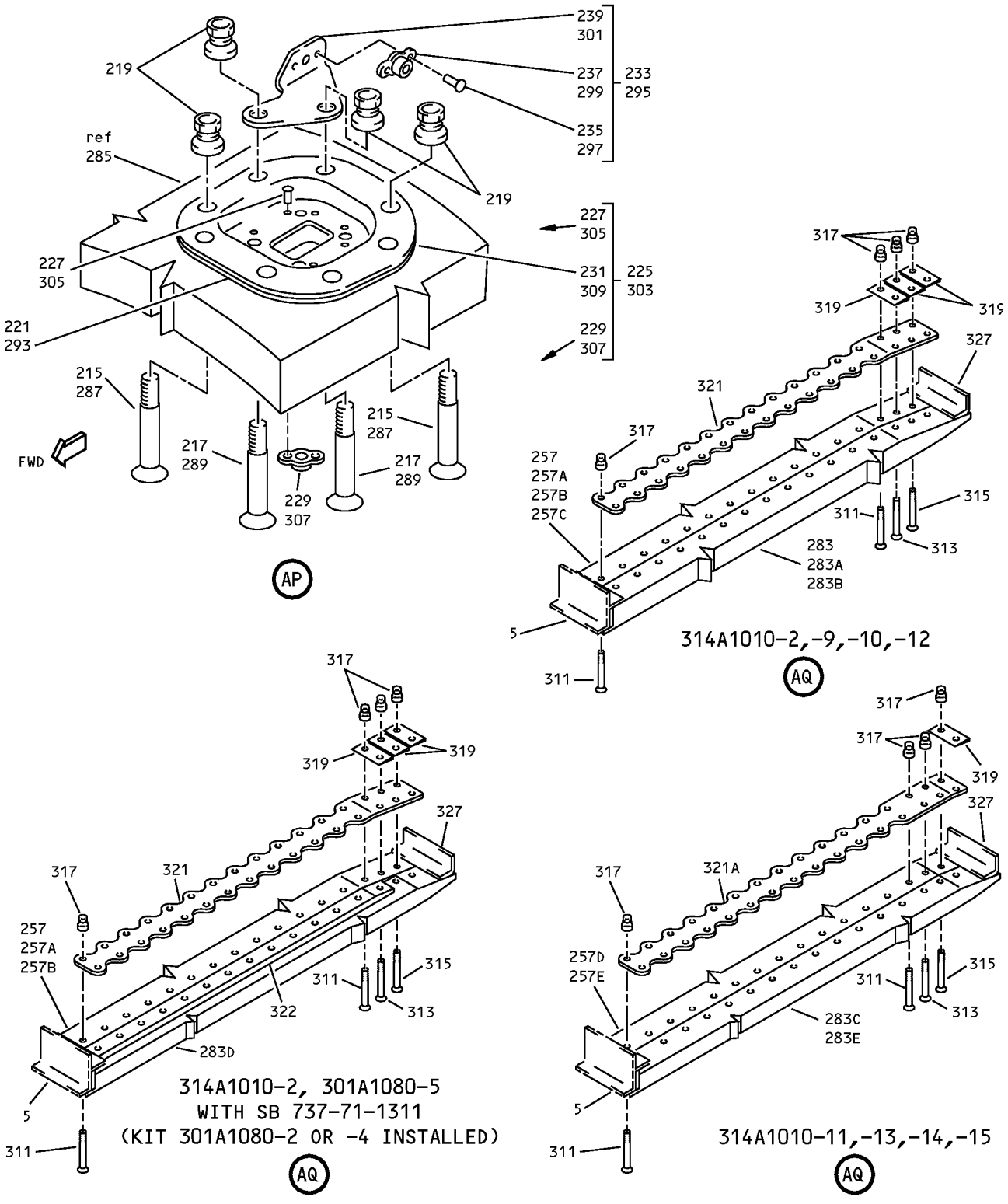
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 23 of 30)



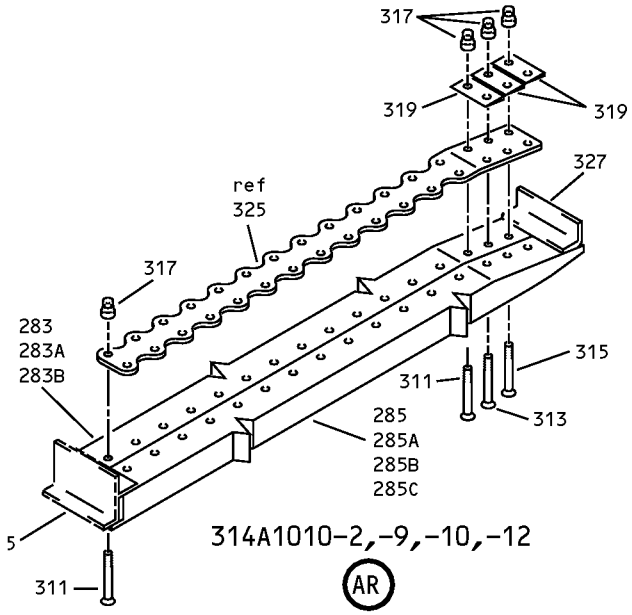
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 24 of 30)

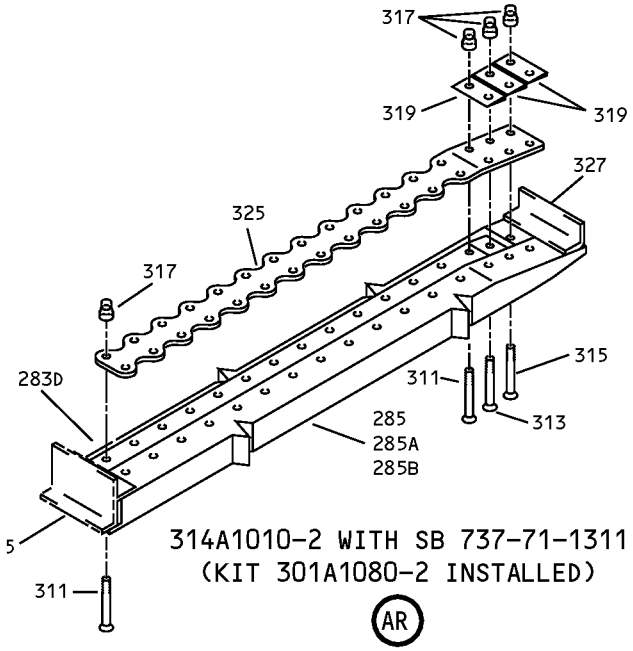


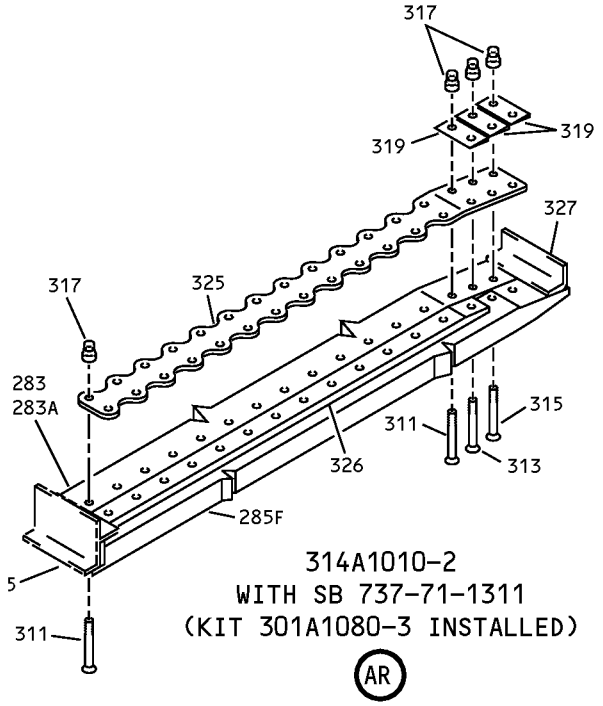
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 25 of 30)

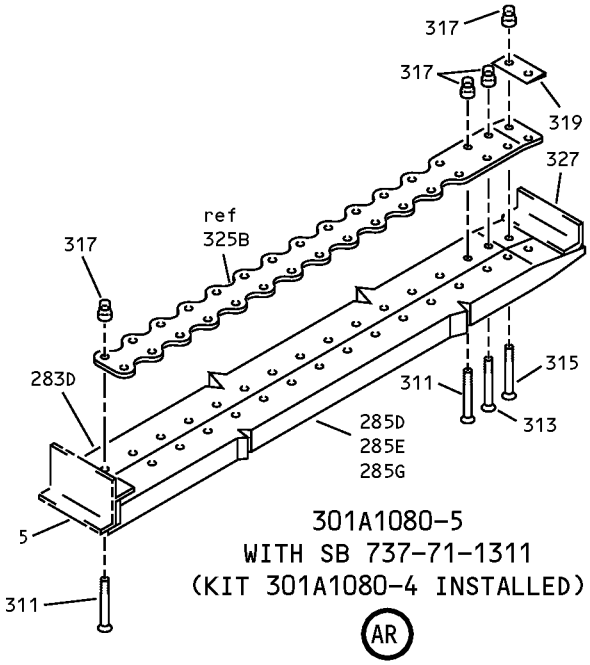


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 26 of 30)

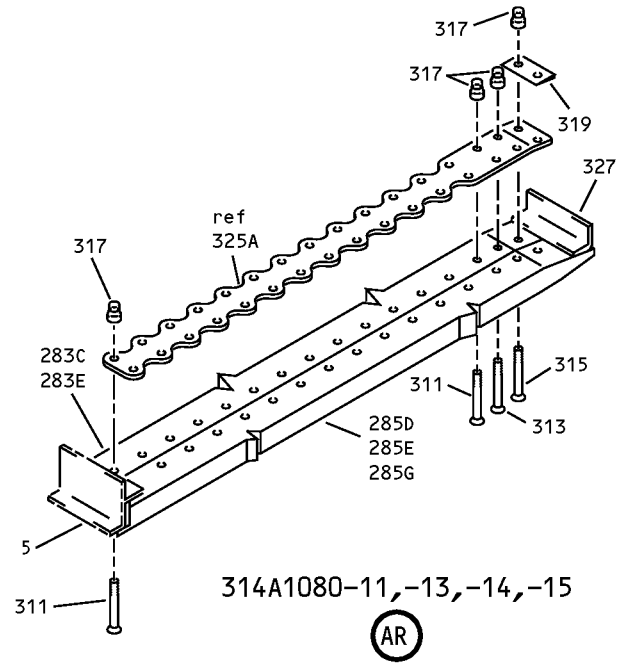


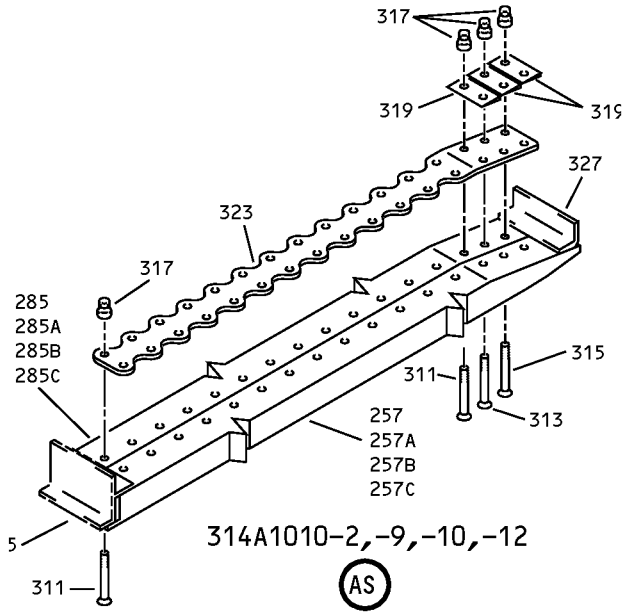


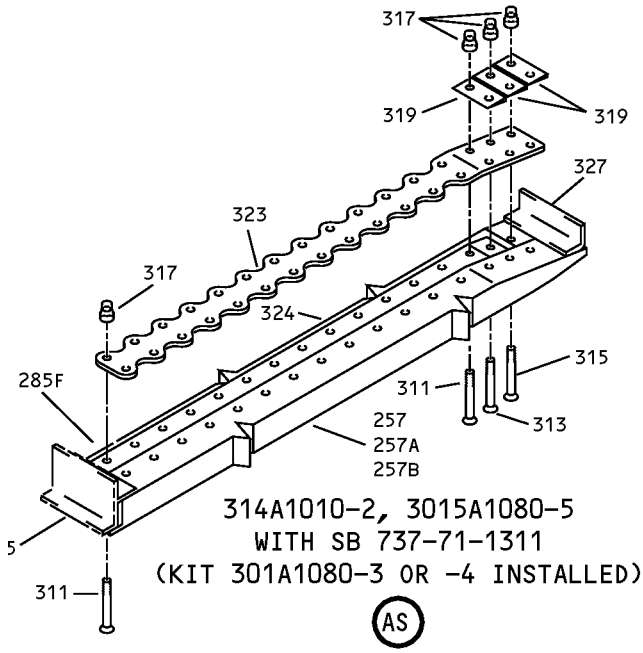


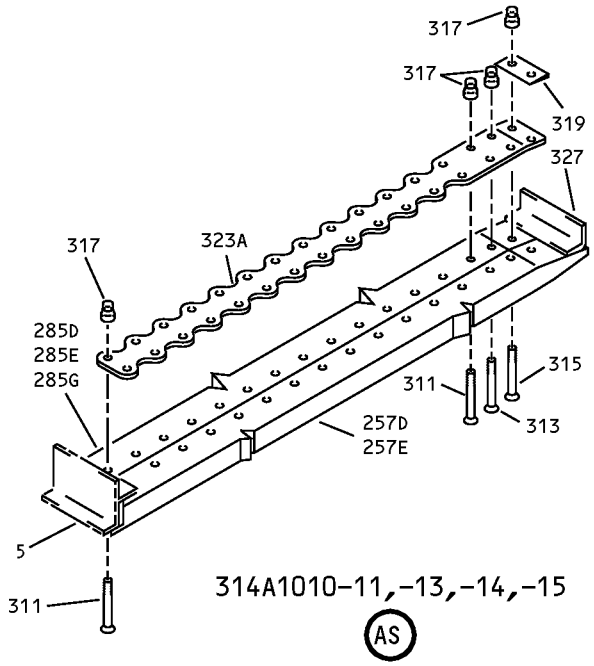


Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 27 of 30)

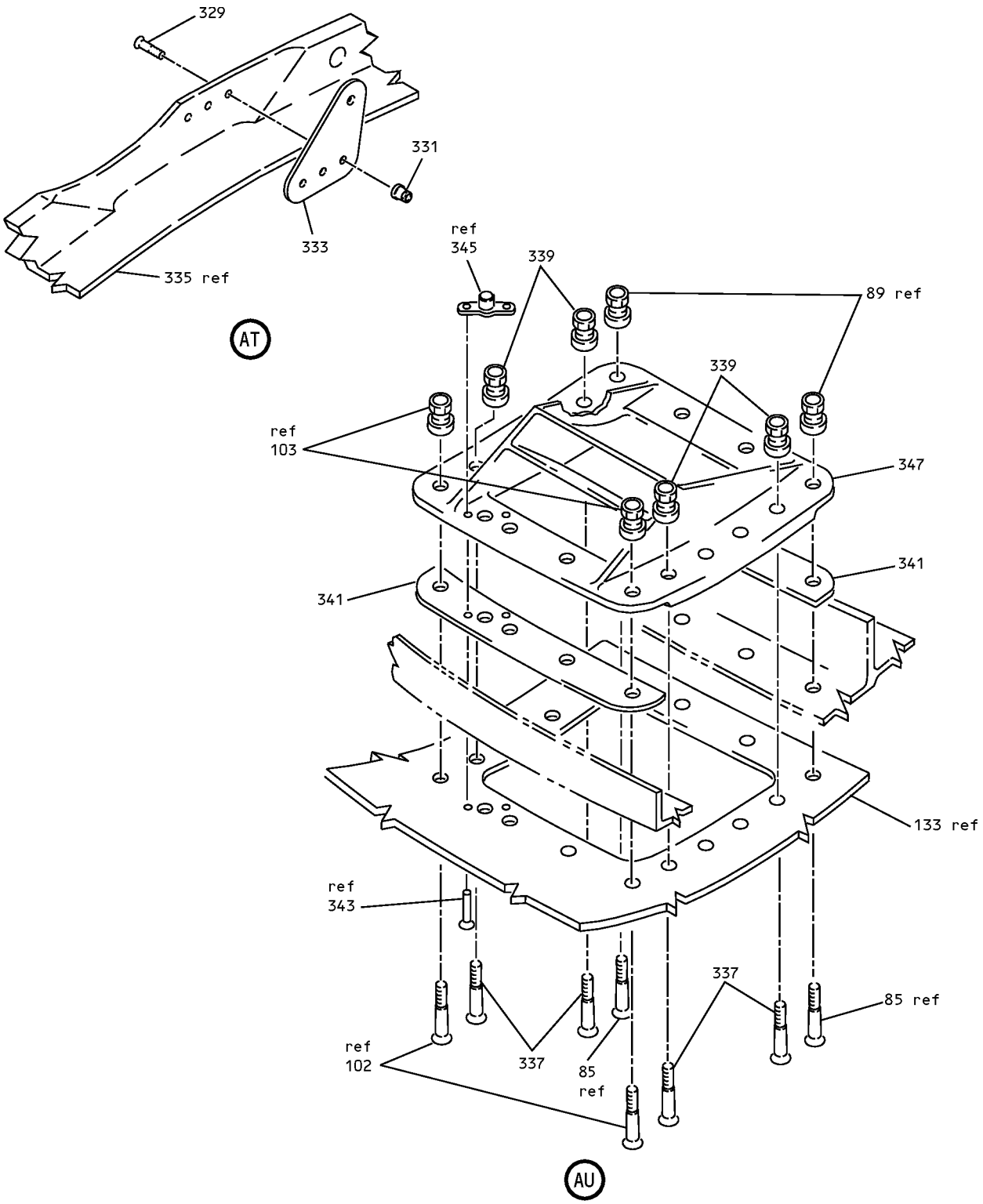




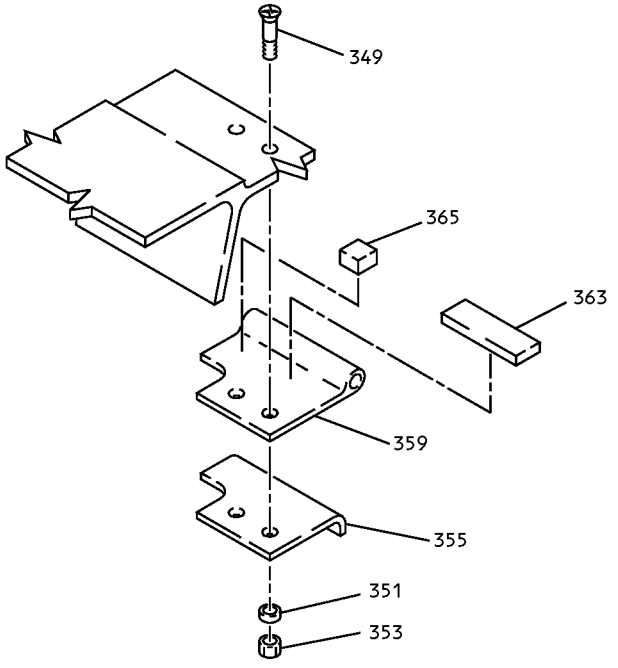




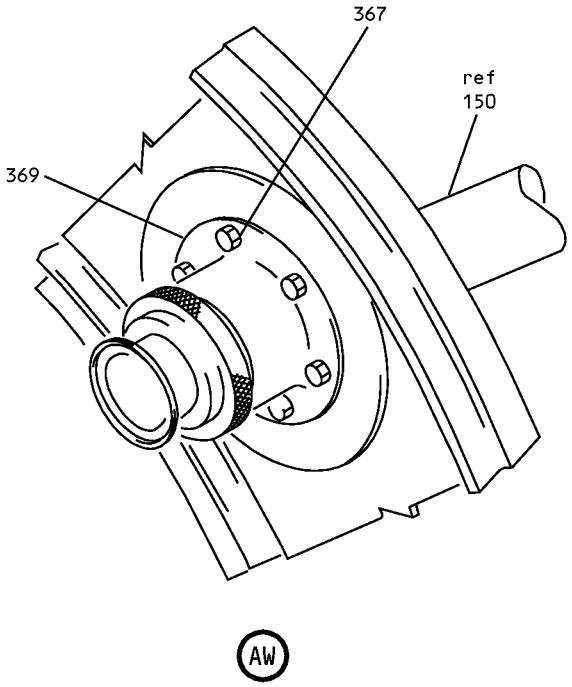
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 28 of 30)

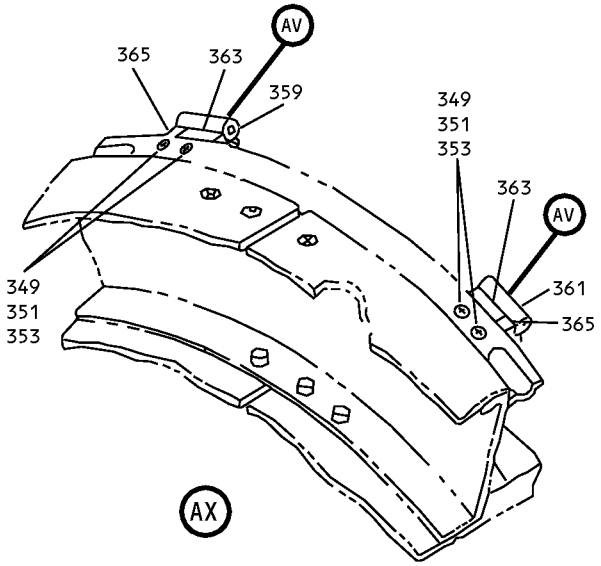


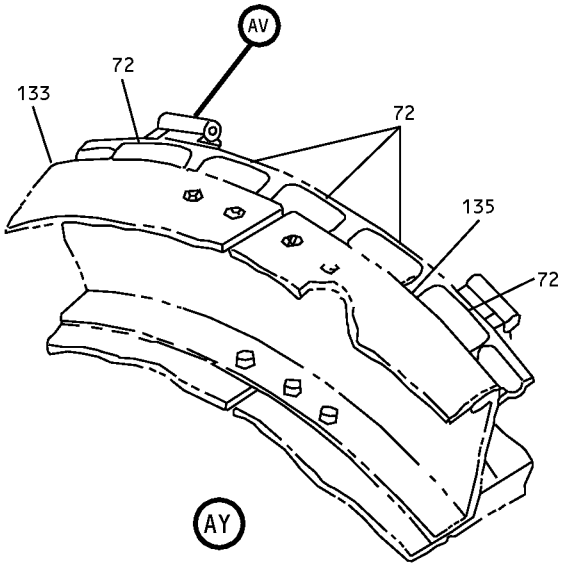
Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 29 of 30)



LEFT SIDE SHOWN
(RIGHT SIDE OPPOSITE)







Inlet Assembly - CFM 56-3
IPL Figure 1 (Sheet 30 of 30)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1	314A1010-2		COWL ASSY-CFM 56-3 INLET (PRE SB 737-71-1311)	A	RF
–1A	314A1010-9		COWL ASSY-CFM 56-3 INLET	B	RF
–1B	314A1010-10		COWL ASSY-CFM 56-3 INLET	C	RF
–1C	314A1010-11		COWL ASSY-CFM 56-3 INLET	D	RF
–1D	314A1010-12		COWL ASSY-CFM 56-3 INLET	E	RF
–1E	314A1010-13		COWL ASSY-CFM 56-3 INLET	F	RF
–1F	314A1010-14		COWL ASSY-CFM 56-3 INLET	G	RF
–1G	314A1010-15		COWL ASSY-CFM 56-3 INLET	H	RF
–1H	301A1080-5		COWL ASSY-CFM 56-3 INLET (POST SB 737-71-1311)	I	RF
–1I	301A1080-6		COWL ASSY-CFM 56-3 INLET (POST SB 737-71-1311)	J	RF
–1J	301A1080-7		COWL ASSY-CFM 56-3 INLET (POST SB 737-71-1311)	K	RF
–1K	314A1010-16		COWL ASSY-CFM 56-3 INLET	L	RF
–5	314A1013-70		. BULKHEAD ASSY	B	1
–5A	314A1013-75		. BULKHEAD ASSY (OPT ITEM 5D)		1
–5B	314A1013-1		. BULKHEAD ASSY (LIMITED USAGE)	A	1
–5C	314A1013-70		. BULKHEAD ASSY (LIMITED USAGE)	A	1
–5D	314A1013-76		. BULKHEAD ASSY (OPT ITEM 5A)	C	1
–5E	314A1013-83		. BULKHEAD ASSY	D-G	1
–5F	314A1013-83		. BULKHEAD ASSY (LIMITED USAGE)	H	1
–5G	314A1013-86		. BULKHEAD ASSY (LIMITED USAGE)	H	1
–5H	314A1013-86		. BULKHEAD ASSY	L	1
7	314A1021-1		. . BLOCK ASSY		1
			ATTACHING PARTS		
9	BACB30NX6K20		. . BOLT		2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
11	BACC30X6SW		. . COLLAR		2
			- - - - - - - * - - - - - - -		
13	BACB28X7F075		. . . BUSHING		1
15	BACB28X7F045		. . . BUSHING		1
17	314A1021-2		. . . BLOCK		1
19	BACB30NM3S2		. . BOLT		185
21	BACB30NM3S4		. . BOLT		96
22	BACB30NMBS4		. . BOLT		4
23	BACR15BA3KE		. . RIVET (SIZE DETERMINED ON INST)		512
25	BACR15CE3KE		. . RIVET (SIZE DETERMINED ON INST)		58
27	BACN10JR3CFD		. . NUTPLATE		164
29	BACN10JR3CFD		. . NUTPLATE		52
31	BACN10KB3CFD		. . NUTPLATE		44
33	BACN10JR3CFM		. . NUTPLATE		25
35	BACB30MS3K3		. . BOLT		4
37	BACW10BN3AP		. . WASHER		4
39	BACN10JC3CD		. . NUT		4
41	BACS40R12C56F		. . SHIM		2
43	BACR15BA5D		. . RIVET (SIZE DETERMINED ON INST)		4
45	314A1013-61		. . PLATE, STRIKER		2
47	314A1013-71		. . FILLER		2
49	BACB30NW6K8		. . BOLT		2
51	BACC30M6		. . COLLAR		2
53	314A1013-55		. . SPACER HOIST		2
55	BACR15BA4KE		. . RIVET (SIZE DETERMINED ON INST)		4
57	BACN10JR6CFD		. . NUTPLATE		2
59	BACB28X6C029		. . BUSHING		2
61	314A1013-2		. . WEB ASSY (USED ON ITEMS 5 THRU 5C)		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–					
62	314A1013-77		. . WEB ASSY (USED ON ITEMS 5D, 5E)		1
62B	314A1013-65		. . CLIP (USED ON ITEMS 5D, 5E)		1
62D	BACB30NX6K4		. . BOLT (USED ON ITEMS 5D, 5E)		7
–62E	BACC30X6SW		. . COLLAR (USED ON ITEMS 5D, 5E) (USED WITH ITEM 62D)		7
62G	314A1013-57		. . ANGLE (USED ON ITEMS 5D, 5E)		1
62I	314A1013-66		. . CLIP (USED ON ITEMS 5D, 5E)		1
62K	BACB30NX6K3		. . BOLT (USED ON ITEMS 5D, 5E)		7
–62L	BACC30X6SW		. . COLLAR (USED ON ITEMS 5D, 5E) (USED WITH ITEM 62K)		7
62N	314A1013-79		. . ANGLE (USED ON ITEMS 5D, 5E)		1
62P	BACB30NM3S4		. . BOLT (USED ON ITEMS 5D, 5E)		16
–62Q	BACN10KB3CFD		. . NUT (USED ON ITEMS 5D, 5E) (USED WITH ITEM 62P)		16
62S	314A1013-59		. . TEE (USED ON ITEMS 5D, 5E)		1
62U	BACB30NM3S2		. . BOLT (USED ON ITEMS 5D, 5E)		9
–62V	BACN10JR3FM		. . NUT (USED ON ITEMS 5D, 5E) (USED WITH ITEM 62U)		9
62W	BACR15FT6KEC		. . RIVET (USED ON ITEMS 5D, 5E)		9
62X	314A1013-82		. . WEB (USED ON ITEMS 5D, 5E)		1
62Z	314A1013-78		. . WEB ASSY (USED ON ITEMS 5D, 5E)		1
63	314A1013-3		. . WEB ASSY		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–					
65	314A1013-4		. . WEB ASSY (USED ON ITEMS 5, 5B, 5C)		1
–65A	314A1013-74		. . WEB ASSY (USED ON ITEMS 5A, 5D, 5E)		1
67	BACR15CE3KE		. . . RIVET (SIZE DETERMINED ON INST)		12
69	BACN10JR3CFD		. . . NUTPLATE		6
71	314A1013-5		. . WEB ASSY		1
72	KWS100011		. . RUBSTRIP (V50632) (USED ON ITEM 5G, 5H) (POST SB 737-71-1336)		5
73	BACB30NM3S4		. BOLT		8
75	BACB30NM3S2		. BOLT		20
77	BACB30NM3S3		. BOLT		2
79	BACB30NM3S1		. BOLT		8
81	BACB30NW6K4		. BOLT		146
83	BACB30NW6K5		. BOLT		26
85	BACB30NW6K6		. BOLT		12
87	BACB30NW6K3		. BOLT		129
89	BACC30M6		. COLLAR		313
90	BACS40R09B93F		. SHIM		20
91	314A1020-1		. LIP ASSY-ENGINE INLET	A-F, H-K	1
–91A	314A1020-80		. LIP ASSY-ENGINE INLET	G	1
–91B	314A1020-85		. LIP ASSY-ENGINE INLET	L	1
93	BACR15BA3AD		. . RIVET (SIZE DETERMINED ON INST)		72
95	BACN10JR3CM		. . NUTPLATE		36
97	BACB30NW6K3		. . BOLT		228
99	BACB30NW6K4		. . BOLT		40
101	BACB30NW6K5		. . BOLT		24
102	BACB30NW6K6		. . BOLT		4
103	BACC30M6		. . COLLAR		296

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
105	BACR15CE6KE		. . RIVET (OPT ITEM 105A) (SIZE DETERMINED ON INST)		18
–105A	BACR15BA6KE		. . RIVET (OPT ITEM 105) (SIZE DETERMINED ON INST)		18
107	BACS40R10B30F		. . SHIM		4
109	BACR15BA3AD		. . RIVET (SIZE DETERMINED ON INST)		10
111	BACN10KA4ACM		. . NUTPLATE		5
113	BACR15CE6KE		. . RIVET (OPT ITEM 113A) (SIZE DETERMINED ON INST)		56
–113A	BACR15BA6KE		. . RIVET (OPT ITEM 113) (SIZE DETERMINED ON INST)		56
115	BACR15CE6KE		. . RIVET (OPT ITEM 115A) (SIZE DETERMINED ON INST)		152
–115A	BACR15BA6KE		. . RIVET (OPT ITEM 115) (SIZE DETERMINED ON INST)		152
117	314A1020-42		. . SPLICE		1
119	314A1020-39		. . SPLICE		1
121	314A1013-40		DELETED		
121A	314A1020-40		. . SPLICE		1
123	314A1020-41		. . SPLICE		1
125	314A1020-78		. . SPACER		2
127	314A1020-79		. . SPACER		2
129	314A1020-3		. . SKIN-UPPER (USED ON ITEM 91)		1
–129A	314A1020-81		. . SKIN-UPPER (USED ON ITEM 91A)		1
131	314A1020-4		. . SKIN-UPPER (USED ON ITEM 91)		1
–131A	314A1020-82		. . SKIN-UPPER (USED ON ITEM 91A)		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–					
133	314A1020-6		. . SKIN-UPPER (USED ON ITEM 91)		1
–133A	314A1020-84		. . SKIN-LOWER (USED ON ITEM 91A)		1
135	314A1020-5		. . SKIN-UPPER (USED ON ITEM 91)		1
–135A	314A1020-83		. . SKIN-LOWER (USED ON ITEM 91A)		1
–137	314A1017-1		DELETED		
139	BACB30NT3K3		. . BOLT		26
141	AN960C10L		. . WASHER		26
143	AN960C10		. . WASHER		22
145	BACN10JC3C		. . NUT		26
147	NAS1716C31M		. . CLAMP		11
149	NAS1716C32M		. . CLAMP		2
150	314A1017-1		. . SPRAY RING, TAI		1
151	BACB30NX6K4		. . BOLT		26
153	BACB30NX6K8		. . BOLT		26
155	BACC30X6SW		. . COLLAR		52
157	314A1020-72		. . RADIUS FILLER		8
159	314A1020-73		. . RADIUS FILLER		3
161	314A1020-74		. . RADIUS FILLER		2
163	314A1020-61		. . SUPPORT BRACKET		1
165	314A1020-62		. . SUPPORT BRACKET		1
167	314A1020-63		. . SUPPORT BRACKET		1
169	314A1020-64		. . SUPPORT BRACKET		1
171	314A1020-65		. . SUPPORT BRACKET		1
173	314A1020-66		. . SUPPORT BRACKET		1
175	314A1020-67		. . SUPPORT BRACKET		1
177	314A1020-68		. . SUPPORT BRACKET		1
179	314A1020-69		. . SUPPORT BRACKET		1
181	314A1020-70		. . SUPPORT BRACKET		1
183	314A1020-71		. . SUPPORT BRACKET		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	314A1020-75		. . SUPPORT BRACKET		1
187	314A1020-76		. . SUPPORT BRACKET		1
189	460-275		. PERI-SEAL- (V14711)		1
191	BACB30NW6K3		. BOLT		104
193	BACB30NW6K5		. BOLT		12
195	BACB30NZ6K27		. BOLT		106
197	BACB30NZ6K28		. BOLT		8
199	BACC30M6		. COLLAR		230
201	BACS40R09B93F		. SHIM		20
203	BACS40R10C148F		. SHIM		12
205	BACB30NZ8K14		. BOLT		69
207	BACB30NZ8K16		. BOLT		6
209	BACC30M8		. COLLAR		75
211	BACS40R15C79F		. SHIM		24
213	314A1011-111		. PANEL ASSY-INLET (LIMITED USAGE) (OPT ITEM 213A, 213B)	A	1
213A	314A1011-59		. PANEL ASSY-INLET (LIMITED USAGE) (OPT ITEM 213)	A	1
–213B	314A1011-58		. PANEL ASSY-INLET (REWORK) (LIMITED USAGE) (OPT ITEM 213)	A	1
213C	314A1011-47		. PANEL ASSY-INLET (LIMITED USAGE)	A	1
213D	314A1011-112		. PANEL ASSY-INLET	B, C, E	1
213E	314A1031-1		. PANEL ASSY-INLET	D, G	1
213F	314A1031-71		. PANEL ASSY-INLET	F	1
213G	314A1031-78		. PANEL ASSY-INLET	H, L	1
215	BACB30NY8K28		. . BOLT (USED ON ITEM 213B)		13
217	BACB30NY8K29		. . BOLT (USED ON ITEM 213B)		4

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
219	BACC30M8		. . COLLAR (USED ON ITEM 213B)		17
221	314A1011-74		. . SHIM-LAMINATED (USED ON ITEM 213B)		2
223	314A1011-95		. . SHIM-LAMINATED (USED ON ITEM 213B)		1
225	314A1011-64		. . PAN ASSY (USED ON ITEM 213B)		1
227	MS20427M3		. . . RIVET (SIZE DETERMINED ON INST)		8
229	BACN10JR4F		. . . NUTPLATE		4
231	314A1011-65		. . . PAN		1
233	314A1011-66		. . CLIP ASSY (USED ON ITEM 213B)		1
235	MS20427M3		. . . RIVET (SIZE DETERMINED ON INST)		2
237	BACN10JR3F		. . . NUTPLATE		1
239	314A1011-67		. . . CLIP		1
241	314A1011-80		. . CLIP ASSY (USED ON ITEM 213B)		1
243	MS20427M3		. . . RIVET (SIZE DETERMINED ON INST)		2
245	BACN10JR3F		. . . NUTPLATE		1
247	314A1011-81		. . . CLIP		1
249	314A1011-78		. . PAN ASSY (USED ON ITEM 213B)		1
251	MS20427M3		. . . RIVET (SIZE DETERMINED ON INST)		8
253	BACN10JR4F		. . . NUTPLATE		4
255	314A1011-79		. . . PAN		1
257	314A1011-106		. . PANEL ASSY-UPPER (USED ON ITEM 213)		1
257A	314A1011-75		. . PANEL ASSY-UPPER (USED ON ITEM 213A)		1
–257B	314A1011-4		. . PANEL ASSY-UPPER (USED ON ITEMS 213C)		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–					
257C	314A1011-113		. . PANEL ASSY-UPPER (USED ON ITEM 213D)		1
–257D	314A1031-4		. . PANEL ASSY-UPPER (USED ON ITEM 213E)		1
–257E	314A1031-75		. . PANEL ASSY-UPPER (USED ON ITEM 213F, 213G)		1
259	BACB30NY8K28		. . . BOLT (USED ON ITEMS 257, 257A, 257C)		7
259A	BACB30NY8K19		. . . BOLT, HI-LOK (USED ON ITEM 257D, 257E)		7
261	BACB30NY8K29		. . . BOLT (USED ON ITEMS 257, 257A, 257C)		2
261A	BACB30NY8K20		. . . BOLT, HI-LOK (USED ON ITEM 257D, 257E)		2
263	BACC30M8		. . . COLLAR (USED ON ITEMS 257, 257A, 257C, 257D, 257E)		9
265	314A1011-95		. . . SHIM-LAMINATED (USED ON ITEMS 257, 257A, 257C, 257D, 257E)		1
–265A	314A1031-95		DELETED		
267	314A1011-80		. . . CLIP ASSY (USED ON ITEMS 257, 257A, 257C)		
267A	314A1031-40		. . . CLIP ASSY (USED ON ITEM 257D, 257E)		1
269	MS20427M3		. . . . RIVET (SIZE DETERMINED ON INST)		2
271	BACN10JR3F		. . . . NUTPLATE		1
273	314A1011-81		. . . . CLIP (USED ON ITEM 267)		1
273A	314A1031-41		. . . . CLIP (USED ON ITEM 267A)		1
275	314A1011-78		. . . PAN ASSY (USED ON ITEMS 257, 257A, 257C)		1
275A	314A1031-38		. . . PAN ASSY (USED ON ITEM 257D)		1
–275B	314A1031-77		. . . PAN ASSY (USED ON ITEMS 257E)		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–					
277	MS20427M3		. . . . RIVET (SIZE DETERMINED ON INST)		8
279	BACN10JR4F		. . . . NUTPLATE		4
281	314A1011-79		. . . . PAN (USED ON ITEM 275)		1
281A	314A1031-39		. . . . PAN (USED ON ITEM 275A)		1
–281B	314A1031-76		. . . . PAN (USED ON ITEM 275B)		1
283	314A1011-96		. . PANEL ASSY (LH) (USED ON ITEM 213) (PRE SB 737-71-1311)	A	1
283A	314A1011-49		. . PANEL ASSY (LH) (USED ON ITEMS 213A, 213C) (PRE SB 737-71-1311)	A	1
–283B	314A1011-115		. . PANEL ASSY (LH) (USED ON ITEM 213D)	B, C	1
–283C	314A1031-3		. . PANEL ASSY (LH) (USED ON ITEM 213E, 213F)	D	1
–283D	314A1031-79		. . PANEL ASSY (LH) (USED ON ITEMS 213 THRU 213C) (POST SB 737-71-1311)		1
–283E	314A1031-79		. . PANEL ASSY (LH) (USED ON ITEM 213G)		1
285	314A1011-101		. . PANEL ASSY (RH) (USED ON ITEM 213) (PRE SB 737-31-1311)	A	1
–285A	314A1011-61		. . PANEL ASSY (RH) (USED ON ITEM 213A) (PRE SB 737-31-1311)	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–					
–285B	314A1011-48		. . PANEL ASSY (RH) (USED ON ITEM 213C) (PRE SB 737-71-1311)	A	1
–285C	314A1011-114		. . PANEL ASSY (RH) (USED ON ITEM 213D)	B, C	1
–285D	314A1031-2		. . PANEL ASSY (RH) (USED ON ITEM 213E)	D	1
285E	314A1031-72		. . PANEL ASSY (RH) (USED ON ITEM 213F)		1
285F	314A1011-80		. . PANEL ASSY (RH) (USED ON ITEMS 213 THRU 213C) (POST SB 737-71-1311)		1
285G	314A1031-80		. . PANEL ASSY (RH) (USED ON ITEM 213G)		1
287	BACB30NY8K28		. . . BOLT (USED ON ITEMS 285, 285A, 285C)		6
287A	BACB30NY8K19		. . . BOLT, HI-LOK (USED ON ITEM 285D, 285E, 285F, 285G)		6
289	BACB30NY8K29		. . . BOLT (USED ON ITEMS 285, 285A, 285C)		2
289A	BACB30NY8K20		. . . BOLT, HI-LOK (USED ON ITEMS 285D, 285E, 285F, 285G)		2
291	BACC30M8		. . . COLLAR (USED ON ITEMS 285, 285A, 285C, 285D, 285E, 285F, 285G)		8
292	314A1011-74		. . . SHIM-LAMINATED (USED ON ITEMS 285, 285A, 285C)		1
–293	314A1011-74		DELETED		
293A	314A1031-74		. . . SHIM-LAMINATED (USED ON ITEMS 285D, 285E, 285F, 285G)		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–					
295	314A1011-66		. . . CLIP ASSY (USED ON ITEMS 285, 285A, 285C)		1
295A	314A1031-36		. . . CLIP ASSY (USED ON ITEM 285D)		1
–295B	314A1031-105		. . . CLIP ASSY (USED ON ITEMS 285E, 285F, 285G)		1
297	MS20427M3		. . . . RIVET (SIZE DETERMINED ON INST)		2
299	BACN10JR3F		. . . . NUTPLATE		1
301	314A1011-67		. . . . CLIP (USED ON ITEM 295)		1
301A	314A1031-37		. . . . CLIP (USED ON ITEM 295A)		1
301B	314A1031-106		. . . . CLIP (USED ON ITEM 295B)		1
303	314A1011-64		. . . PAN ASSY (USED ON ITEMS 285, 285A, 285C)		1
303A	314A1031-34		. . . PAN ASSY (USED ON ITEM 285D)		1
303B	314A1031-73		. . . PAN ASSY (USED ON ITEMS 285E, 285F, 285G)		1
305	MS20427M3		. . . . RIVET (SIZE DETERMINED ON INST)		8
307	BACN10JR4F		. . . . NUTPLATE		4
309	314A1011-65		. . . . PAN (USED ON ITEM 303)		1
309A	314A1031-35		. . . . PAN (USED ON ITEM 303A)		1
309B	314A1031-74		. . . . PAN (USED ON ITEM 303B)		1
311	BACB30NZ8K26		. . BOLT (USED ON ITEMS 213, 213D)		80
–311A	BACB30NZ8K25		. . BOLT (USED ON ITEMS 213A, 213C)		80
–311B	BACB30NZ8K19		. . BOLT (USED ON ITEMS 213E THRU 213G)		80

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–311C	BACB30NZ8K25		. . BOLT (POST SB 737-71-1311) (USED ON ITEMS 1I, 1J)		AR
–311D	BACB30NZ8K19		. . BOLT (POST SB 737-71-1311) (USED ON ITEM 1H) (USED WITH ITEM 325A)		AR
313	BACB30NZ8K21		. . BOLT (USED ON ITEMS 213, 213D)		6
–313A	BACB30NZ8K20		. . BOLT (USED ON ITEMS 213A, 213C)		6
–313B	BACB30NZ8K19		. . BOLT (USED ON ITEMS 213E THRU 213G)		6
–313C	BACB30NZ8K20		. . BOLT (POST SB 737-71-1311)		6
315	BACB30NZ8K17		. . BOLT (USED ON ITEMS 213, 213D)		6
–315A	BACB30NZ8K16		. . BOLT (USED ON ITEMS 213A, 213C)		6
–315B	BACB30NZ8K18		. . BOLT (USED ON ITEMS 213E THRU 213G)		6
–315C	BACB30NZ8K16		. . BOLT (POST SB 737-71-1311)		4
–315D	BACB30NZ8K18		. . BOLT (POST SB 737-71-1311) (USED ON ITEM 1H) (USED WITH ITEM 325)		
317	BACC30AG8		. . COLLAR		92
319	314A1011-8		. . FILLER		9
321	314A1011-5		. . SPLICE PLATE (USED ON ITEMS 213 THRU 213D)		1
321A	314A1031-7		. . SPLICE PLATE (USED ON ITEMS 213E THRU 213G)		1
322	314A1031-82		. . FILLER BLOCK (POST SB 737-71-1311) (USED WITH ITEM 321)		1
323	314A1011-6		. . SPLICE PLATE (USED ON ITEMS 213 THRU 213D)		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–					
323A	314A1031-5		. . SPLICE PLATE (USED ON ITEMS 213E THRU 213G)		1
324	314A1031-83		. . FILLER BLOCK (POST SB 737-71-1311) (USED WITH ITEM 323)		1
325	314A1011-7		. . SPLICE PLATE (USED ON ITEMS 213 THRU 213D)		1
325A	314A1031-6		. . SPLICE PLATE (USED ON ITEMS 213E THRU 213G)		1
325B	314A1031-6		. . SPLICE PLATE (POST SB 737-71-1311) (USED WITH ITEMS 283D, 285F)		1
326	314A1031-21		. . FILLER BLOCK (POST SB 737-71-1311) (USED WITH ITEM 325)		1
327	314A1014-11		. ATTACH RING ASSEMBLY (OPT ITEM 327A)		1
–327A	314A1014-8		. ATTACH RING ASSEMBLY		1
329	BACB30NW6K		. . BOLT (SIZE DETERMINED ON INST)		3
331	BACC30M6		. . COLLAR		3
333	314A1014-5		. . HOIST PLATE		1
335	314A1014-12		. . RING (USED ON ITEM 327)		1
–335A	314A1014-2		. . RING (USED ON ITEM 327A)		1
337	BACB30NW6K4		. BOLT		8
339	BACC30M6		. COLLAR		8
341	BACS40R11F70F		. SHIM		2
343	BACR15BA3AD		. RIVET (SIZE DETERMINED ON INST)		2
345	BACN10KA4ACM		. NUTPLATE		1
347	314A1016-1		. LOUVER-EXIT, TAI SYSTEM		1
349	BACS12ER06K8		. SCREW		4
351	AN960PD6L		. WASHER		4
353	BACN10JC06CD		. NUT		4

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
355	314A1010-5		. RETAINER-SEAL		1
–357	314A1010-6		. RETAINER-SEAL		1
359	314A1010-3		. SEAL-BULB		1
–361	314A1010-4		. SEAL-BULB		1
363	314A1010-7		. SEAL		2
365	314A1010-8		. SEAL		2
367	BACB30NM3S2		. BOLT		6
369	314A1015-1		. FITTING ASSEMBLY-TAI (OPT ITEM 369A)		1
–369A	35A452-101		. FITTING ASSEMBLY-TAI (V14711)		1

–Item not Illustrated