

TO: ALL HOLDERS OF FAT LIP NOSE COWL ASSEMBLY OVERHAUL MANUAL, 71-13-02

REVISION NO. 19, DATED NOV 1/02

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Inspect / Check	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage	I P L	L / Overhaul
Updated Fig. 2, Item 220 part number and vendor code												X	

NOSE COWL ASSEMBLY, FAT LIP

71-13-02

BOEING P/N 65-85378-1, -2, -101, -102, -281 thru -284, -311 thru -316,
 -359, -360, -363, -364, -383 thru -388, -391 thru -398
 65-86025-9, -10

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
30-1010R2		PRR 32771	Jan 5/79
71-1045		PRR 32731-1	Jan 5/79
71-1046		PRR 32731-2	Jan 5/79
		PRR 32932	Jul 5/79
		PRR 33048	Jan 5/82
		PRR 33175	Mar 5/84
		PRR 33519	Jun 5/84
		PRR 33800-6	Dec 5/85
		MC 3461-45K	Dec 5/85
71-1140			Dec 5/86
71-1256		MC 5460MK3003	Jun 5/91
71-1221		MC 5460MK3003	Dec 5/91
71-1253		MC 5460MK3003	Dec 5/91
71-1131		MC 3461-38K	Mar 5/92
71-1131		MC 3461-39K	Mar 5/92
71-1111			Dec 5/93

LIST OF EFFECTIVE PAGES

* Indicates pages revised, added or deleted in latest revision
 F Indicates foldout pages - print one side only

PAGE	DATE	PAGE	DATE	PAGE	DATE
71-13-02					
T-1	Dec 5/93				
T-2	BLANK				
* LEP-1	Nov 1/02				
LEP-2	BLANK				
T/C-1	Jan 5/82				
T/C-2	BLANK				
1	Jul 5/81				
2	Jul 1/01				
2A	Jul 1/01				
2B	Jul 1/01				
2C	Jul 1/01				
2D	BLANK				
3	Jan 5/82				
4	Jul 1/01				
4A	Jun 5/84				
4B	BLANK				
5	Mar 1/99				
6	Jul 5/77				
7	Jul 5/77				
8	BLANK				
8A	Jul 5/80				
8B	Jul 5/80				
9	Dec 5/93				
10	Mar 5/92				
* 11	Nov 1/02				
12	Mar 5/92				
13	Mar 5/92				
14	Mar 5/92				
15	Mar 5/92				
* 16	Nov 1/02				

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

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*[1] Special instructions not required. Use standard industry practices.



NOSE COWL ASSY, FAT LIP

1. Description and Operation (Fig. 2)

- A. The nose cowl consists of two hold open rod assemblies, anti-icing duct, two latch brackets, anti-icing mixing chamber, porous metal or polyimide inlet liner panels, and vortex dissipator boom.
- B. When installed, the vortex boom discharges engine bleed air through nozzles forward and below the cowl inlet to prevent foreign object ingestion. Engine bleed air is discharged into the mixing chamber, mixed with ambient air, and distributed around the forward edge of the cowl inlet through holes in the anti-icing duct. The metal or acoustic panels aid in dissipating engine inlet noise.
- C. Leading Particulars (Approximate)

- Length -- 41 inches
- Width -- 50 inches
- Height -- 57 inches
- Weight -- 160 pounds

2. Disassembly

- A. Basic structure of nose cowl is joined by rivets or lockbolts. Disassemble using standard industry practices to make repairs or replace parts.
- B. Remove lip skin (515) only if required to replace it due to hail or other damage, or to repair or replace TAI duct assy (400, 405) or structure.
 - (1) If lip skin is to be reinstalled, index mark with tape or other means to aid in alignment.

CAUTION: PREVENT METALLIC SHIPS OR DEBRIS CAUSED BY DRILLING TO CONTACT OR BECOME INBEDDED IN THE ACOUSTICAL PANEL. ANY SUCH CONTACT WILL RESULT IN RAPID CORROSION OF THE ACOUSTICAL PANEL.

- (2) Remove rivets (520 or 525).
- (3) If lip skin is to be replaced, make templates of heavy, 0.015-0.03 inch thick, clear plastic sheet (acrylic, mylar, or equivalent). Positively locate templates by means of tape and index marks on cowl skins and templates. Transfer locations of rivet holes accurately to templates.
- (4) Remove lip skin.
- (5) Remove TAI duct assy, if required.

- C. Remove acoustic panel (75, 95) only if required to repair damage.

CAUTION: PREVENT METALLIC CHIPS OR DEBRIS CAUSED BY DRILLING TO CONTACT OR BECOME INBEDDED IN THE ACOUSTICAL PANEL. Any such contact will result in rapid corrosion of the acoustical panel.

- (1) Remove rivets (520, 525) securing acoustic panel leading edge to nose inlet cowl skin.
- (2) Place indexing marks on engine attach ring flange and nose inlet cowl flange to ensure correct realignment. Remove bolts from engine attach ring and separate attach ring and acoustic panel from the nose inlet cowl.

CAUTION: PREVENT METALLIC CHIPS OR DEBRIS CAUSED BY DRILLING TO CONTACT OR BECOME INBEDDED IN THE ACOUSTICAL PANEL. ANY SUCH CONTACT WILL RESULT IN RAPID CORROSION OF THE ACOUSTICAL PANEL.

- (3) Place index mark on engine attach ring forward flange at acoustic panel longitudinal splices. Remove rivets attaching acoustic panel to engine attach ring forward flange.

3. Cleaning

A. Materials

NOTE: Equivalent substitutes may be used.

- (1) Solvent -- BMS 11-7 (SOPM 20-30-03)

- B. Except as detailed in par. B and C, clean nose cowl parts using procedures in SOPM 20-30-03 and standard industry practices.

CAUTION: USE OF ALKALINE CLEANERS, SOLVENTS, AND ABRASIVES WILL CAUSE DAMAGE TO POLYIMIDE PANELS.

- C. Polyimide acoustic panels (75, 95) -- Fresh-water spray or steam clean only.

- D. Areas to which aerodynamic sealant will be applied shall be cleaned as follows:

- (1) Remove oil, grease, and dirt using standard practice.
- (2) Clean with solvent, BMS 11-7 or methyl ethyl ketone. Avoid use of excessive solvent.
- (3) Remove excess solvent by clean air blast.
- (4) Use clean cloth dampened with solvent for final cleaning.

4. Repair (Fig. 2)

A. Materials

NOTE: Equivalent substitutes may be used.

- (1) Primer - BMS 10-11, Type 1 (SOPM 20-60-02)
- (2) Paint - BMS 10-60, Type 2 (SOPM 20-60-02)

B. Repair minor defects using standard industry practices.

- (1) Refer to Structural Repair Manual 54-10 for repair of sheet metal structural items and to 51-40-11 for repair of polyimide acoustic panel.
- (2) For repair of acoustic panel (95) refer to Rohr Industries Inc., Repair Manual, 54-30-01.

C. Aluminum Thermal Anti Ice duct repair (65-59686-24).

(1) Hole repair

- (a) Clean area to be repaired and remove damaged duct material.
- (b) Fabricate a repair plug from 0.063 inch 5052-0 aluminum sheet and form to match the contour of the duct.
- (c) Fusion weld the repair plug per BAC5975, Class B. Use filler wire 4043 per QQ-R-566.
- (d) Grind welds flush.
- (e) Penetrant inspect the weld per SOPM 20-20-02.
- (f) Drill 0.242-0.252 inch and 0.261-0.271 inch holes as required.
- (g) Chemically treat welded area per MIL-C-5541,

(2) Replacement of duct section

- (a) Remove damaged section of duct.

NOTE: Insure the cut ends of the duct are square and free of burrs.

- (b) Fabricate a duct replacement section from 0.050 inch 5052-0 seamless aluminum tubing or 0.049 inch 3003-H14 seamless aluminum tubing.

- (c) Fusion weld the duct replacement section per BAC 5975, Class B. Use filler wire 4043 per QQ-R-566.
- (d) Grind welds flush.
- (e) Penetrant inspect the weld per SOPM 20-20-02.
- (f) Drill 0.242-0.252 inch and 0.261-0.271 inch hole as required.
- (g) Chemically treat welded area per MIL-C-5541.

D. Refinish

NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes and to SOPM 20-41-01 for explanation of F and SRF finish codes.

- (1) Rod end (155) -- Cadmium plate F-1.20. Material: 17-4PH CRES per AMS 5355, 140-160 ksi.
- (2) Rod end (185) -- Cadmium plate F-1.20. Material: 17-4PH CRES per AMS 5643, 180-220 ksi.
- (3) Tube (140) -- Alodize per SRF-2.901 followed by primer, BMS 10-11 Type 1, and enamel per SRF-14.9264 (SRF-14.9623 optional) 0.008-0.012 thick to area shown in Fig. 401. Material: Alum alloy.
- (4) Tube assy (475, 480) -- Chromic acid anodize per SRF-2.115 followed by primer, BMS 10-11, Type 1. Material: Alum alloy.
- (5) Rub strip area -- Alodize or chromic acid anodize per SRF-2.30 followed by teflon coating per SRF-14.9625. Material: Alum alloy.
- (6) Apply aerodynamic smoothing sealant per SOPM 20-50-11.
- (7) Acoustic panel (65-85380-1, -11, item 75)
 - (a) Remove contaminants by manual sanding using 150 grit, or finer, abrasive paper. Remove sanding residue by wiping with clean cloth saturated with methyl ethyl ketone or equivalent.
 - (b) Optional method -- steam clean per standard practices and dry thoroughly.

CAUTION: APPLICATION OF COATING OTHER THAN BMS 10-60, TYPE 2, WILL DEGRADE THE PANEL ACOUSTICAL PROPERTIES.

- (c) Apply 0.7-1.2 mils equivalent dry film thickness of BMS 10-60, Type 2, flat black polyurethane paint. Do not prime or apply static conditioner, pin hole filler, surfacer or BMS 10-21 conductive coating.

E. Replacement

- (1) Bushing (195) -- Install per SOPM 20-50-03 using staking tool ST922C-5. After staking, machine bushing ID 0.312-0.316 inch.
- (2) Rod ends (155, 185) -- (Fig. 1).
- (3) Rod assembly components (160 thru 180) -- Assemble per Fig. 1 using portable swaging tool Model AT520C, AT520D or AT520JK.
- (4) Vortex dissipator (315, 320) -- Install coverplate (365) gasket (390) and bolts (330) when vortex dissipator installation is removed.
- (5) Lip skin (515) -- Chromic acid anodize, Type 1 or sulfuric acid anodize, Type 2 (F-17.05) all over. Interior only apply one coat BMS 10-11, Type 1 primer (F-20.02). Material: Al alloy
- (6) If lip skin (515) or acoustic panel (75, 95) is removed, it is recommended that lip station 5.75 bulkhead and other parts be replaced with stronger parts per SB 71-1045 or 71-1046.

5. Assembly**A. Materials**

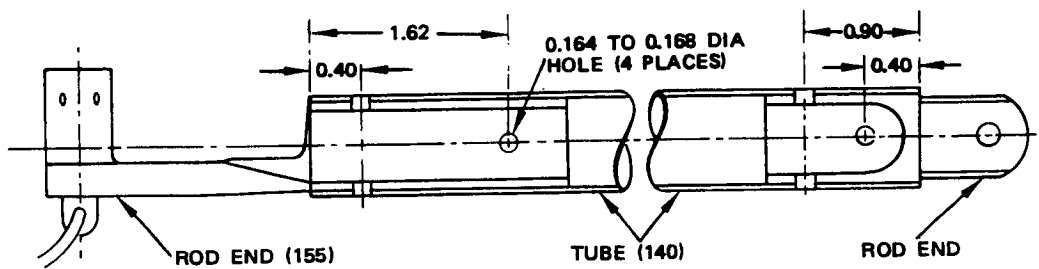
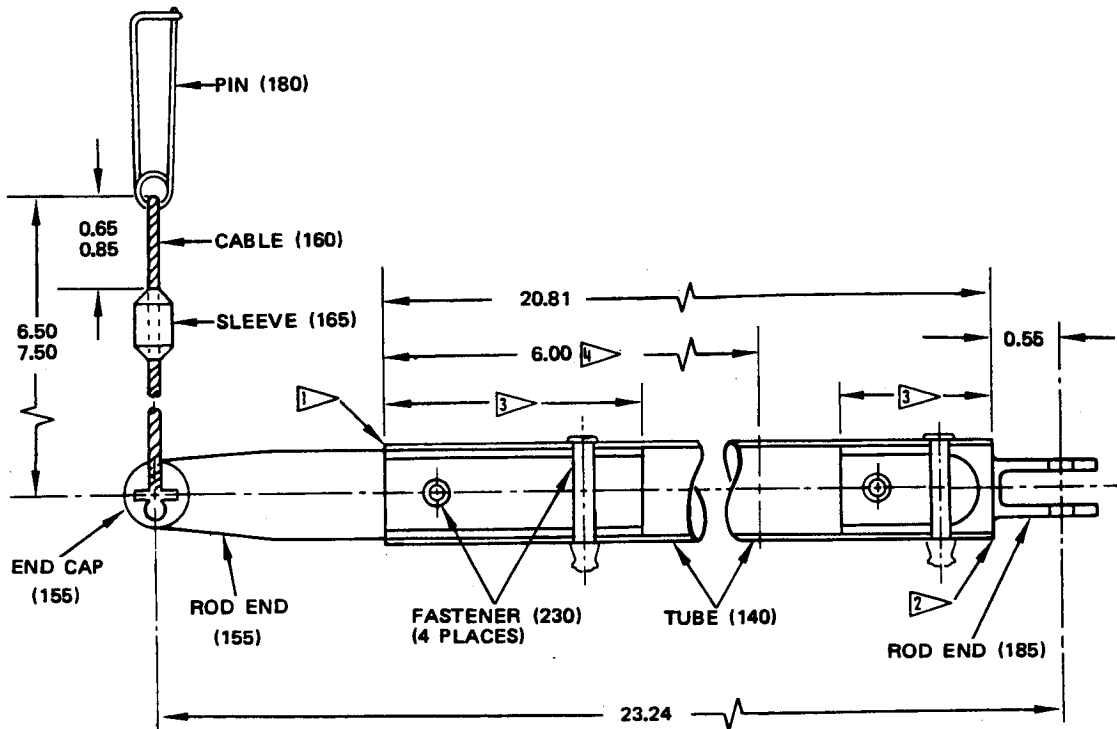
- (1) Aerodynamic Filler -- BMS 5-79, Class B (SOPM 20-60-04)
- (2) Adhesive Primer -- BMS 5-89 (SOPM 20-41-02)

B. Install acoustic panel:

- (1) Perform trial installation of acoustic panel (75, 95) and engine attach ring in the nose inlet cowl to ensure 0.06 +0.00-0.02 inch gap at fore and aft edges of acoustic panel.

CAUTION: PREVENT METALLIC CHIPS OR DEBRIS CAUSED BY DRILLING TO CONTACT OR BECOME IMBEDDED IN THE ACOUSTICAL PANEL. ANY SUCH CONTACT WILL RESULT IN REPID CORROSION OF THE ACOUSTICAL PANEL.

- (2) Assemble acoustic panel to engine attach ring, aligning splices in acoustic panel with engine attach ring index marks. Maintain 0.06 ±0.02 in. gap between acoustic panel and engine attach ring. Drill holes in aft lip of acoustic panel to match holes in engine attach ring. Install using BACR15BA6D-8 rivets.



ROD ASSEMBLY

NOTE: ALL DIMENSIONS SHOWN IN INCHES

- 1 SIZE TUBE 0.656 - 0.666 I.D. X 2.38 - 2.42
- 2 SIZE TUBE 0.656 - 0.666 I.D. X 1.48 - 1.52
- 3 APPLY BMS 10-11, TYPE 1 PRIMER TO FAYING SURFACES OF ROD ENDS (155) AND (185) AND TUBE (140)
- 4 APPLY SRF 14.9624 (SRF - 14.9623 OPTIONAL)

CAUTION: PREVENT METALLIC CHIPS OR DEBRIS CAUSED BY DRILLING TO CONTACT OR BECOME IMBEDDED IN THE ACOUSTIC PANEL. ANY SUCH CONTACT WILL RESULT IN RAPID CORROSION OF THE ACOUSTIC PANEL.

- (3) Install acoustic panel and engine attach ring assembly in nose inlet cowl (515). Align index marks on engine attach ring with index marks on nose inlet cowl flange. Install bolts, nuts and washers (10, 15, 20, 25). Torque nuts to 130-180 pound-inches.
- (4) Ensure that 0.06 ± 0.02 inch gap exists between acoustic panel and nose inlet cowl. Drill 0.205-inch holes in forward lip of acoustic panel to match holes in nose inlet skin. Install rivets (520, 525).
- (5) Fill 0.06-inch gaps between acoustic panel and nose inlet cowl with aerodynamic filler, BMS 5-79, Class B.

C. Install TAI duct assy (400, 405) using clamps (410), if removed.

D. Locate lip skin (515) on structure:

- (1) If lip skin is being reinstalled, align original holes using marks applied before disassembly. If new lip Sta. 5.75 bulkhead has been installed, drill holes in bulkhead flanges to match lip skin.
- (2) If new lip skin is installed on bulkhead, use templates made before disassembly, indexed to marks on cowl skins, to locate holes on new parts. Drill and countersink holes.
- (3) Install blind rivets (525).

E. If shims are required to maintain contour, fabricate, finish, and install shims conforming to the following description.

- (1) Material - 2024-T3 clad aluminum sheet, QQ-A-250/5.
- (2) Thickness - 0.032 inch maximum.
- (3) Width - not to exceed width of frame flange.
- (4) Length - as required but not to exceed 35% of the developed length of flange affected.

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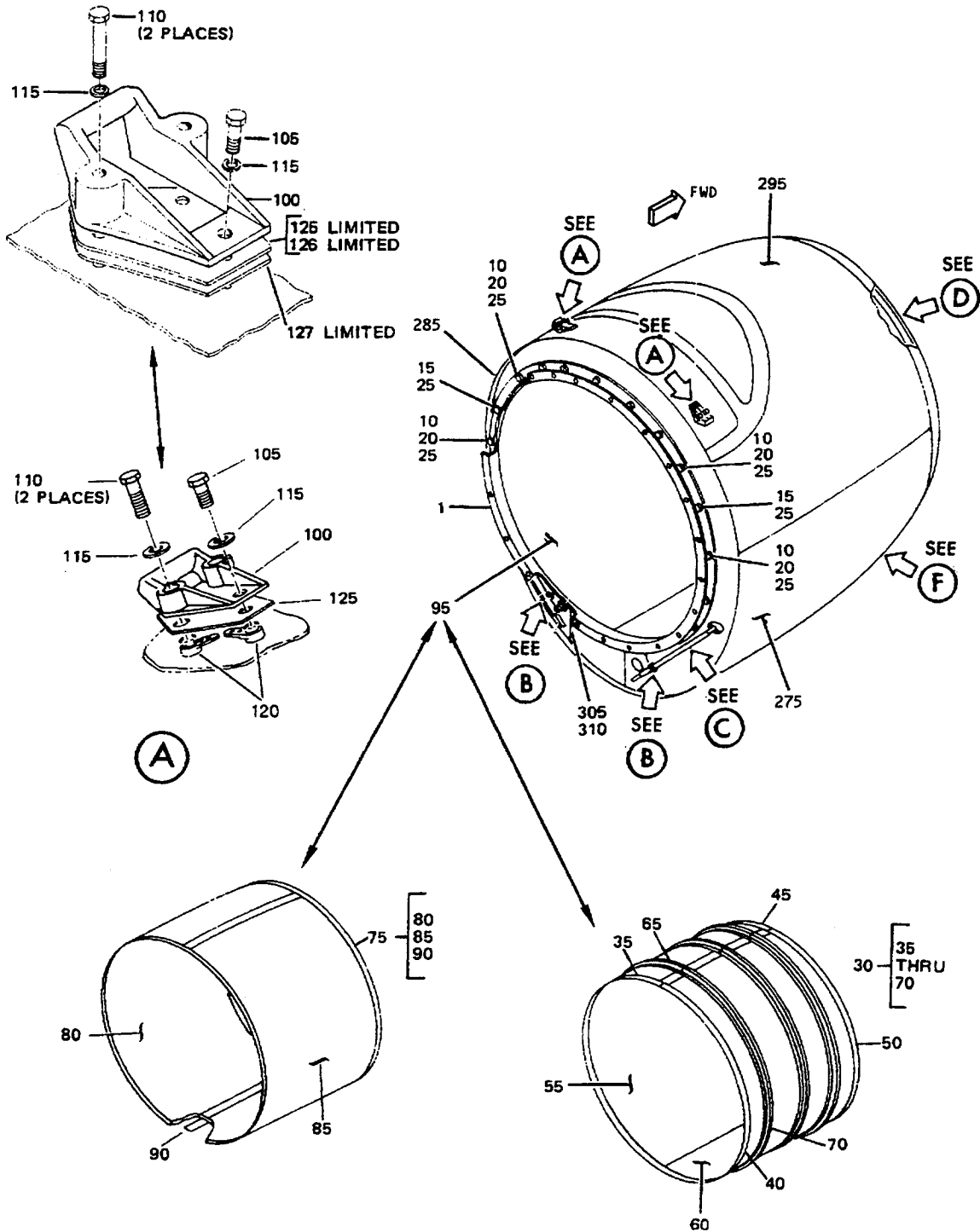
- (5) Contour - form and taper as required.
- (6) Finish - (F-20.26) Apply BMS 5-89 corrosion resistant bondable primer per 20-41-02 prior to handling.
- (7) Gap - end gap between shims not to exceed 0.06 inch.

6. Special Tools, Fixtures, and Equipment

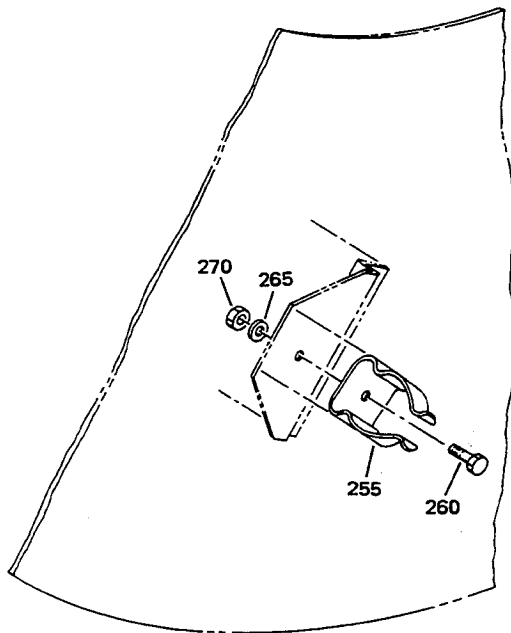
NOTE: Equivalent tools may be used.

- A. Staking Tool -- ST922C-5 (Ref 20-50-03)

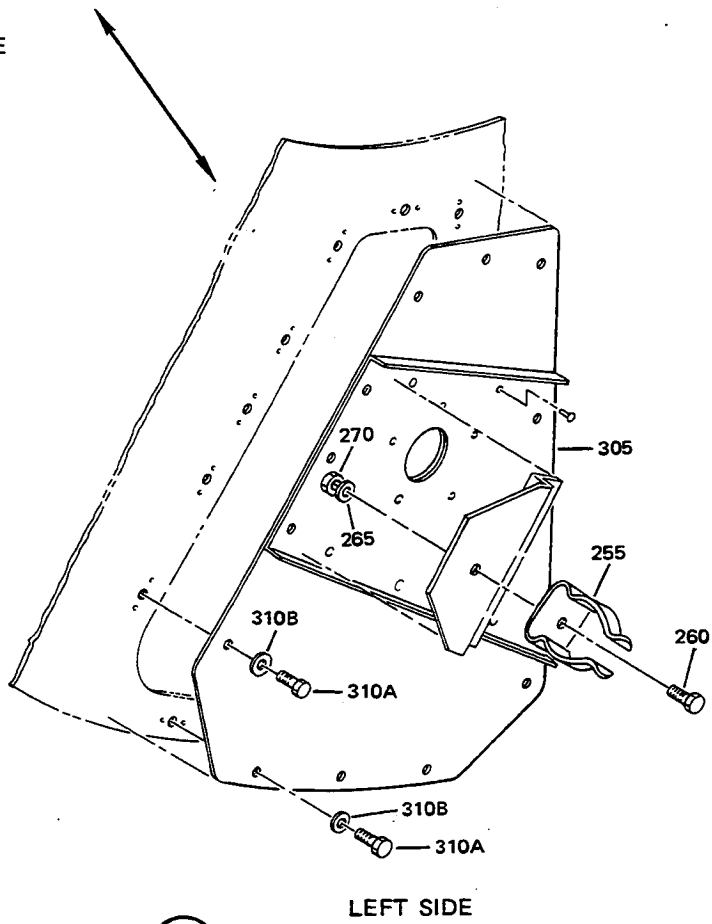
7. ILLUSTRATED PARTS LIST



Nose Cowl Assembly Fat Lip
Figure 2 (Sheet 1)



RIGHT SIDE

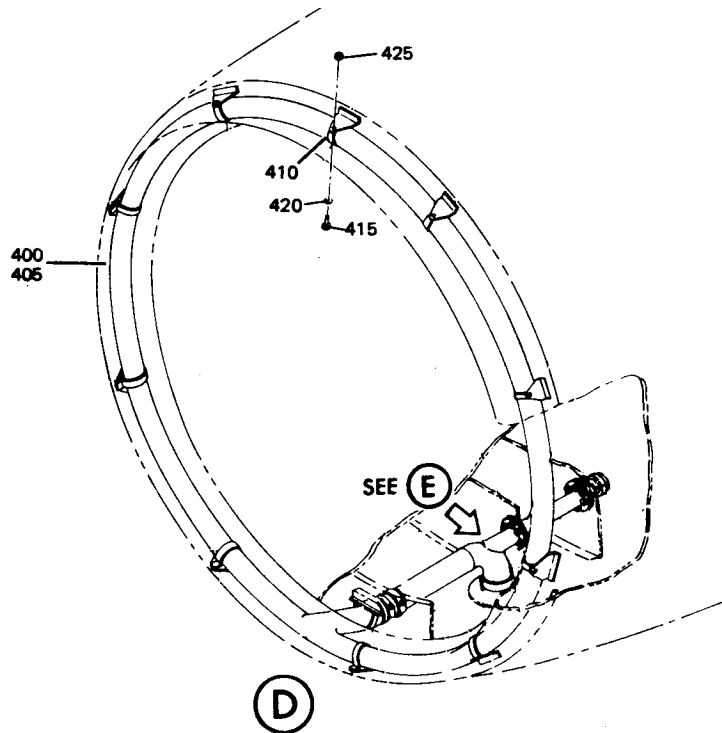
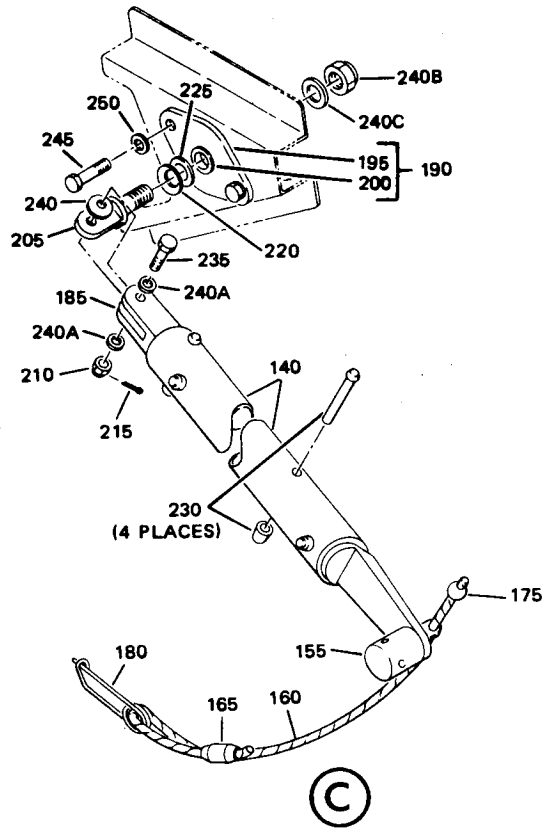


LEFT SIDE

B

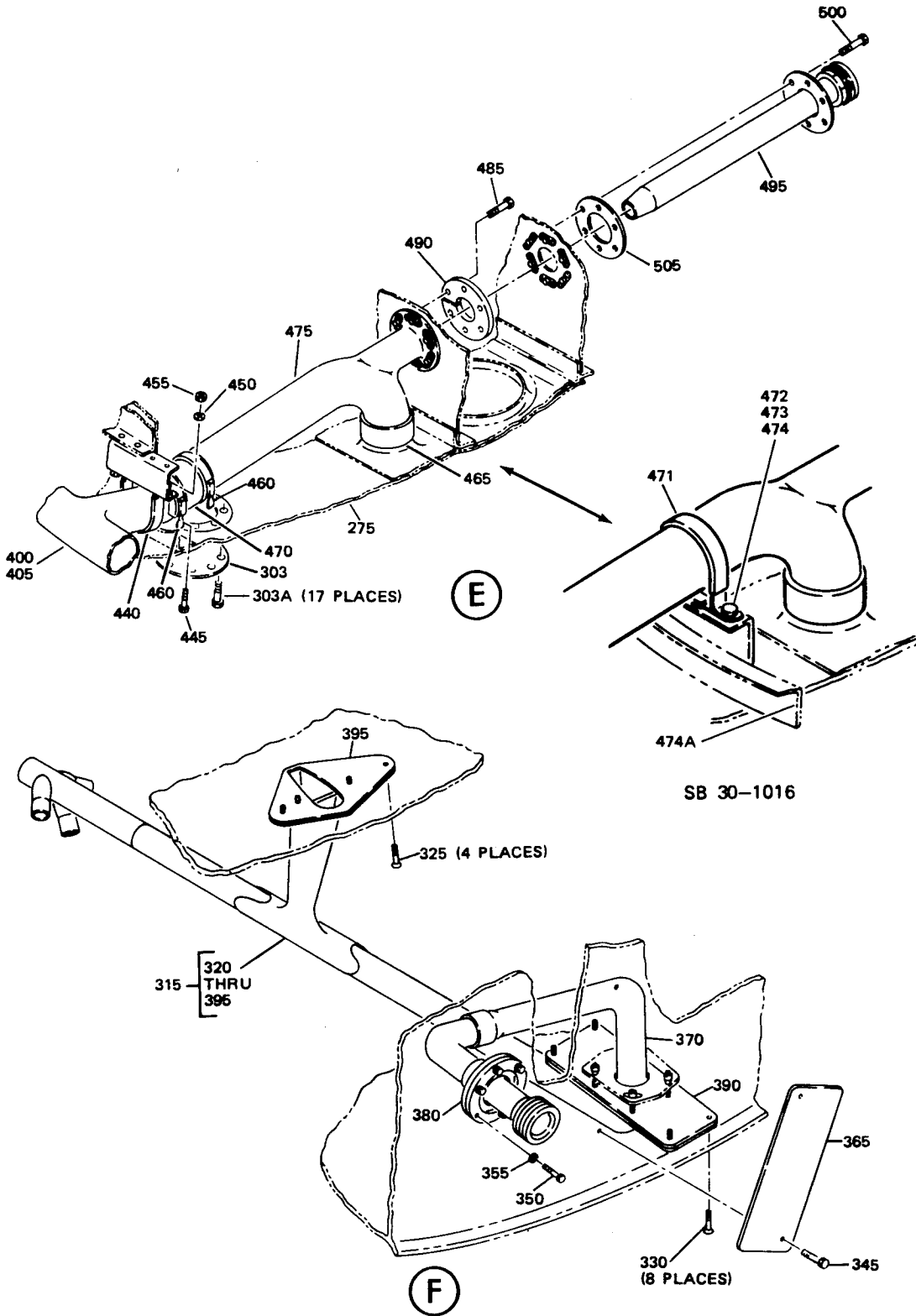
Nose Cowl Assembly Fat Lip
Figure 2 (Sheet 2)

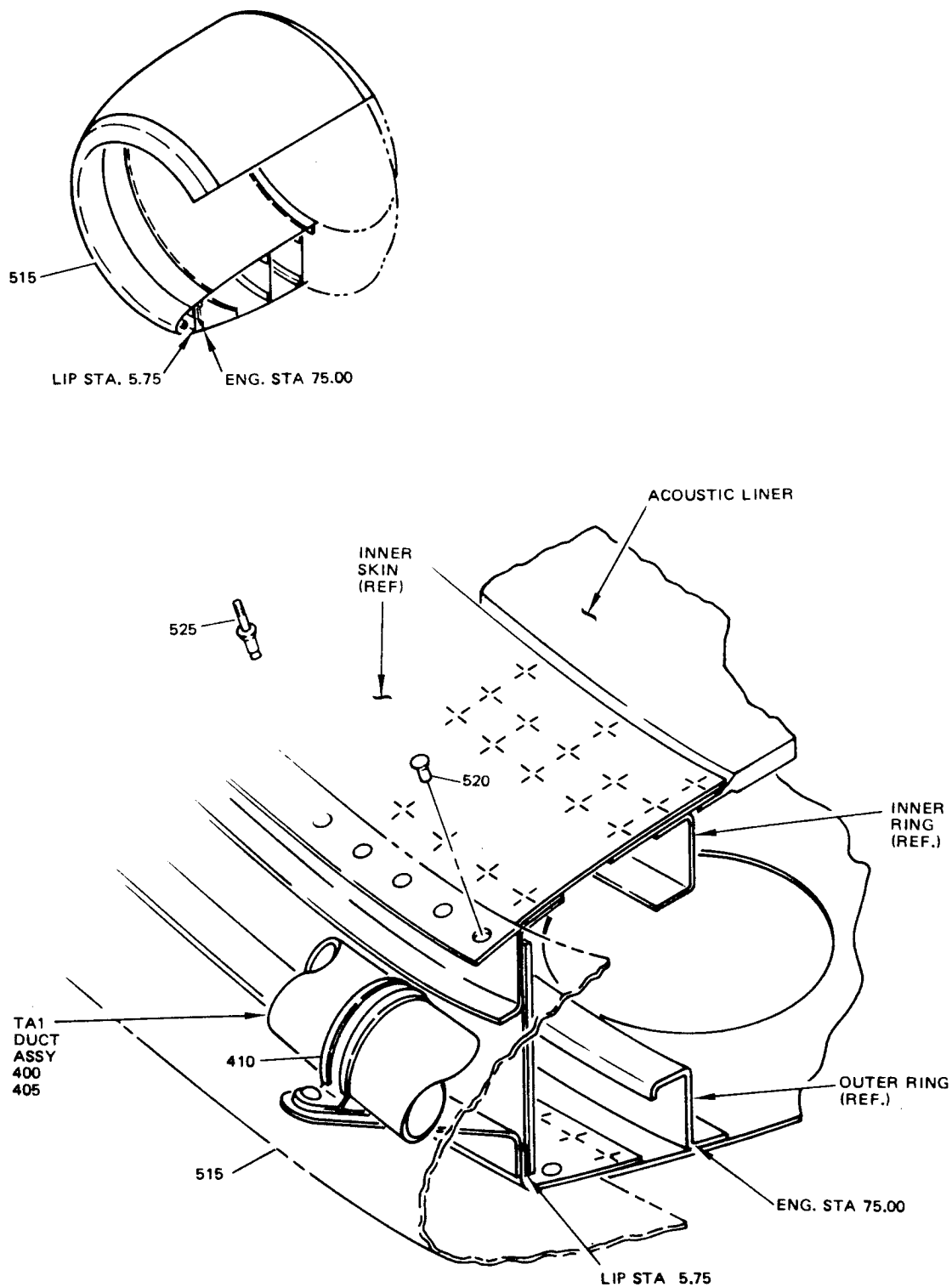
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Nose Cowl Assembly Lip
Figure 2 (Sheet 3)

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Nose Cowl Assembly Fat Lip
 Figure 2 (Sheet 5)

OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-	65-85378-1		COWL ASSY, NOSE FAT LIP, NONACOUSTIC (PRE SB 71-1256)							A	RF
	65-85378-101		COWL ASSY, NOSE FAT LIP, ACOUSTIC (PRE SB 71-1131)							B	RF
	65-85378-311		COWL ASSY, NOSE FAT LIP, ACOUSTIC							C	RF
	65-85378-2		COWL ASSY, NOSE FAT LIP, NONACOUSTIC (PRE SB 71-1256)							D	RF
	65-85378-102		COWL ASSY, NOSE FAT LIP, ACOUSTIC (PRE SB 71-1131)							E	RF
	65-85378-312		COWL ASSY, NOSE FAT LIP, ACOUSTIC							F	RF
	65-85378-315		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1046, 71-1256) * [2]							G	RF
	65-85378-316		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1046, 71-1256) * [2]							H	RF
	65-85378-359		COWL ASSY, NOSE FAT LIP, NONACOUSTIC VARIABLE (POST SB 71-1045)(PRE SB 71-1256)							I	RF
	65-85378-360		COWL ASSY, NOSE FAT LIP, NONACOUSTIC VARIABLE (POST SB 71-1045)(PRE SB 71-1256)							J	RF
	65-85378-383		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256) * [2]							K	RF
	65-85378-384		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256) * [2]							L	RF
	65-85378-387		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256, 71-1111) * [2]							M	RF
	65-85378-388		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256, 71-1111) * [2]							N	RF
	65-85378-395		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256) * [2]							O	RF
	65-85378-396		COWL ASSY, NOSE FAT LIP, ACOUSTIC BASIC (POST SB 71-1256) * [2]							P	RF
	65-85378-281		SPARES ASSY, NOSE COWL, LH NONACOUSTIC							Q	RF
	65-85378-282		SPARES ASSY, NOSE COWL, RH NONACOUSTIC							R	RF
	65-85378-283		SPARES ASSY, NOSE COWL, LH ACOUSTIC							S	RF
	65-85378-284		SPARES ASSY, NOSE COWL, RH ACOUSTIC							T	RF
65-85378-313		SPARES ASSY, NOSE COWL, LH ACOUSTIC							U	RF	
65-85378-314		SPARES ASSY, NOSE COWL, RH ACOUSTIC							V	RF	
65-85378-363		SPARES ASSY, NOSE COWL, LH ACOUSTIC							W	RF	
65-85378-364		SPARES ASSY, NOSE COWL, RH ACOUSTIC							X	RF	

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-	65-85378-385		SPARES ASSY, NOSE COWL, LH ACOUSTIC							Y	RF
	65-85378-386		SPARES ASSY, NOSE COWL, RH ACOUSTIC							Z	RF
	65-85378-391		COWL ASSY, NOSE FAT LIP, LH NON-ACOUSTIC							BA	RF
	65-85378-392		COWL ASSY, NOSE FAT LIP, RH NONACOUSTIC							CA	RF
	65-85378-393		SPARES ASSY, NOSE COWL, LH ACOUSTIC							DA	RF
	65-85378-394		SPARES ASSY, NOSE COWL, RH ACOUSTIC							EA	RF
	65-85378-397		SPARES ASSY, NOSE COWL, LH ACOUSTIC (POST SB 71-1140)							FA	RF
	65-85378-398		SPARES ASSY, NOSE COWL, RH ACOUSTIC (POST SB 71-1140)							GA	RF
	65-86025-9		COWL ASSY, NOSE FAT LIP, ACOUSTIC (POST SB 71-1131)							HA	RF
	65-86025-10		COWL ASSY, NOSE FAT LIP, ACOUSTIC (POST SB 71-1131)							IA	RF
1	65-85378-293		. RING, ATTACHMENT LH							ABCGI KMOQS UWY BA DA FA HA	1
-5	65-85378-294		. RING, ATTACHMENT RH							DEFHJ NPRTV XZ CA EA GA IA	1
10	BACB30NE5-5		. BOLT								23
15	BACB30NE5-6		. BOLT								2
20	AN960D516		. WASHER								23
25	BACN10GW5		. NUT								25
30	65-85381-1		. PANEL ASSY, LINER NONACOUSTIC							ADQR	1
30	65-85381-20		. PANEL ASSY, LINER NONACOUSTIC							IJ BA CA	1
35	65-85381-10		. . RING HALF								1
40	65-85381-11		. . RING HALF								1
45	65-85381-12		. . RING HALF								1
50	65-85381-13		. . RING HALF								1
55	65-85381-2		. . PANEL								1
60	65-85381-3		. . PANEL								1
65	65-85381-4		. . FRAME								1
70	65-85381-5		. . FRAME								1
75	65-85380-1		. PANEL ASSY, ACOUSTIC (PRE SB 71-1131)							BEST HA IA	1
75	65-85380-11		. PANEL ASSY, ACOUSTIC (REPLS 65-85381-1)							BEST HA IA	1

- ITEM NOT ILLUSTRATED

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-80	65-85380-2		.	.							1
80	65-85380-12		.	.							1
85	65-85380-3		.	.							1
85	65-85380-13		.	.							1
90	65-85380-5		.	.							1
95	10-61900-3		.							CFGHUV WX	1
95	10-61900-4		.							KLMNYZ DA EA	1
95	10-61900-6		.							OP FA GA HA IA	1
100	65-79484-3		.							G-P W-GA	2
100	65-79484-1		.								2
105	BACB30NE3-5		.								2
110	BACB30NE3-15		.								2
115	AN960C10L		.								3
120	BACN10KB3F		.								4
125	BACS40M35-40		.								2
126	BACS40R21C25F		.							G-P W-GA	2
127	BACS40R21D25F		.							G-P W-GA	2
130	65-55748-3		.								2
135	65-46695-9		.	.							2
140	65-46695-8		.	.	.						1
150	65-46695-10		.	.	.						1
155	66-5563-4		.	.	.	.					1
160	BACC13G208-090CA		.	.	.	.					1
165	28-1C		.	.	.	.					1
-170	BACT14A4		.	.	.	.					1
175	BACT14B2		.	.	.	.					1
180	NUMBER 2		.	.	.	.					1
185	63-2892-2		.	.	.	.					1
190	66-16151-2		.	.	.	.					1
195	BACB28B5-260		.	.	.	.					1
200	66-16151-3		.	.	.	.					1
205	66-23351-3		.	.	.	.					1
210	BACN10JD4		.	.	.	.					1
215	MS24665-151						1
220	3502-18-04-4102						1

- PARTS NOT ILLUSTRATED *[1] LIMITED USE

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-											
225	AN960C516L		.	.	.	W	A	S	H		1
230	HL18PB5-12		.	.	.	F	A	S	T	E	4
235	NAS1104-7DW		.	.	.	B	O	L	T		1
240	5804-36-2		.	.	.	W	A	S	H		1
240A	AN960-416L		.	.	.	W	A	S	H		2
240B	NAS679A4W		.	.	.	N	U	T			1
240C	AN960C416L		.	.	.	W	A	S	H		1
			ATTACHING PARTS								
245	BACB30NE3-3		.	.	B	O	L	T		(	2
250	AN960D10		.	.	W	A	S	H		)	2
			-----*								
255	66-8350		.	.	C	L	I	P			2
			ATTACHING PARTS								
260	BACB30NE3-3		.	B	O	L	T				2
65	AN960PD10		.	W	A	S	H				2
270	BACN10JC3		.	N	U	T					2
			-----*								
275	65-85378-3		.	C	O	W	L	,	I	N	1
											ABCQSU
											HA
275	65-85378-367		.	C	O	W	L	,	I	N	1
											GIKWY
275	65-85378-389		.	C	O	W	L	,	I	N	1
											MO BA
											DA FA
-280	65-85378-4		.	C	O	W	L	,	I	N	1
											DEFHJL
											RTVXZ
											IA
-280	65-85378-390		.	C	O	W	L	,	I	N	1
											NP CA
											EA GA
285	65-85378-5		.	C	O	W	L	,	O	U	1
											ABCGIK
											MOQS UW
											Y BA
											DA FA
											HA
-290	65-85378-6		.	C	O	W	L	,	O	U	1
											DEFRTV
											IA
-290	65-85378-368		.	C	O	W	L	,	O	U	1
											HJLN PX
											Z CA
											EA GA
295	65-85378-7		.	C	O	W	L	,	U	P	1
											ABCGIK
											MOQS UW
											Y BA
											DA FA
											HA

- PARTS NOT ILLUSTRATED *[1] LIMITED USE

65-85378
65-86025



OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2- -300	65-85378-8		. COWL, UPPER SKIN							DEFHJL NPRTVX Z CA EA GA IA	1
303	65-85378-365		. PLATE (POST SB 71-1045, -1046)							G-P W-GA	1
303A	BACB30LU3		. BOLT (POST SB 71-1045, -1046)							G-P W-GA	17
305	65-85378-211		. PANEL ASSY								1
310	65-85378-207		. . PANEL ATTACHING PARTS								1
310A	BACB30NE3-4		. BOLT								13
310B	AN960PD10		. WASHER								13
			-----*-----								
315	65-77432-213		. DISSIPATOR INSTL, VORTEX BOOM							ABCGIK MOQSUW Y BA DA FA HA	1
320	65-77432-214		. DISSIPATOR INSTL, VORTEX BOOM							DEFHJL NPRTVX Z CA EA GA IA	1
325	BACB30LR3-7		. . BOLT								4
330	BACB30LR3-4		. . BOLT								8
335	65-77432-215		. . BOOM ASSY							ABCGIK MOQSUW Y BA DA FA HA	1
340	65-77432-216		. . BOOM ASSY							DEFHJL NPRTVX Z CA EA GA IA	1
345	NAS6603-2		. . BOLT								2
350	BACB30LM3C-3		. . BOLT								6
355	AN960-10		. . WASHER								6
365	65-77432-212		. . PLATE								1

- PARTS NOT ILLUSTRATED

OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-370	65-77432-171		.	.	TUBE	ASSY				ABCGIK MOQSUW Y BA DA FA HA	1
-375	65-77432-181		.	.	TUBE	ASSY				DEFHJL NPRTVW Z CA EA GA IA	1
380	65-77432-195		.	.	GASKET						1
390	65-77432-196		.	.	GASKET						1
395	65-77432-211		.	.	GASKET						1
400	65-59686-18		.		DUCT	ASSY, THERMAL A/I				ABCQSU HA	1
400	65-59686-24		.		DUCT	ASSY, THERMAL A/I (POST SB 71-1045, -1046)				HJLNPX Z CA EA GA	1
405	65-59686-19		.		DUCT	ASSY, THERMAL A/I				DEFRTV IA	1
405	65-59686-25		.		DUCT	ASSY, THERMAL A/I (POST SB 71-1045, -1046)				GIKMOW Y BA DA FA	1
410	BACC10EP32		.	.	CLAMP	ATTACHING PARTS					10
415	BACS12CK3U9		.	.	SCREW						10
420	AN960C10L		.	.	WASHER						10
425	BACN10JC3C		.	.	NUT						10
430	65-85367-19		.		MIXING	CHAMBER, TAI (SB 30-1010 R2)				GIKMOW Y BA DA FA	1
430	65-85367-1		.		MIXING	CHAMBER, TAI				ABCQSU HA	1
-435	65-85367-20		.		MIXING	CHAMBER, TAI (SB 30-1010 R2)				HJLNPX Z CA EA GA	1
-435	65-85367-2		.		MIXING	CHAMBER, TAI				DEFRTV IA	1
440	69-62732-1		.	.	CLAMP	ASSY ATTACHING PARTS					1
445	BACB30LM3-3		.	.	BOLT						2
450	AN960XC10L		.	.	WASHER						2
455	BACN10GW3A		.	.	NUT						2

- PARTS NOT ILLUSTRATED

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-460	69-70156-1		.	.	CLAMP (REPLS AN737TW82 PER SB 30-1010 R2)						2
460	AN737TW82		.	.	CLAMP						2
465	710043-2.25-4		.	.	SLEEVE, V70628						1
470	69-70158-1		.	.	SLEEVE (REPLS 710043-2.25-10 PER SB 30-1010 R2)						1
470	710043-2.25-10		.	.	SLEEVE, V70628						1
471	TA4C67H36AC		.	.	CLAMP (SB 30-1010 R2)						1
			.	.	ATTACHING PARTS						
472	BACB30LM-3-3		.	.	BOLT						2
473	AN960XC10L		.	.	WASHER						2
474	BACN10GW3A		.	.	NUT						2
					*-----						
474A	65-85367-21		.	.	ANGLE (SB 30-1010 R2)						1
-474B	65-85367-22		.	.	ANGLE (SB 30-1010 R2)						1
			.	.	ATTACHING PARTS						
-474C	BACR15BB6D		.	.	RIVET						4
					*-----						
475	65-85367-3		.	.	TUBE ASSY					ABCGIK MOQSUW Y BA DA FA HA	1
-480	65-85367-4		.	.	TUBE ASSY					DEFHJL NPRTVX Z CA EA GA IA	1
485	BACB30LM3-6		.	.	BOLT						6
490	65-85367-12		.	.	SEAL						1
495	65-85367-5		.	.	NOZZLE ASSY						1
500	BACB30LM3-3		.	.	BOLT						6
505	69-50826-4		.	.	GASKET						1
-510	MS27253-1		.	.	PLATE, IDENT.						1
515	65-85378-15		.	.	SKIN, LIP					ABCGIK MOQSUW Y BA DA FA HA	1
515	65-85378-16		.	.	SKIN, LIP (OPP)					DEFHLN PRTVXZ CA EA GA IA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
2-			ATTACHING PARTS								
520	BACR15BA5D		. RIVET								280
520	BACR15BA6D9		. RIVET (POST SB 71-1131)							HA IA	140
525	NAS1399D5-3		. RIVET, BLIND (REPLS BACR15BA5D PER SB 71-1045/46)								280
525	NAS1739E5-3		. RIVET, BLIND (OPT, PREF)								280
525	NAS1399D6-5		. RIVET, BLIND (REPLS BACR15BA5D PER SB 71-1131)							HA IA	140

- PARTS NOT ILLUSTRATED

*[1] LIMITED USE

*[2] (POST SB 71-1221, 71-1253) FOR PRE SB CONFIGURATION, SEE OHM 71-13-01 TOP ASSEMBLY 65-60529-767, -768

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