



BOEING
OVERHAUL MANUAL

TO: ALL HOLDERS OF FORWARD ENGINE SUPPORT LINK 57-40-11

REVISION NO. 6 DATED NOV 1/98

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / A s s y	C l e a n i n g	I n s p / C h k	R e p a i r	A s s y	F / C	T e s t	T / S h o o t i n g	S / T o o l s	S t o r a g e	I P L	L / O v e r h a u l
Incorporated SB 54-1009R1				X	X		X					X	



FORWARD ENGINE SUPPORT LINK ASSEMBLY

57-40-11

BOEING P/N 69-37856-1, -5, -6, -8

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
54-1009 54-1009R1		PRR 32791	Jan 5/79 Nov 1/98

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
57-40-11					
* T-1	Nov 1/98				
T-2	BLANK				
* LEP-1	Nov 1/98				
LEP-2	BLANK				
T/C-1	Jul 5/79				
T/C-2	BLANK				
1	Jul 5/83				
2	Jul 5/79				
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4	Jul 5/79				
* 5	Nov 1/98				
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*[1] Special instructions not required. Use standard industry practices.

OVERHAUL MANUAL**1. DESCRIPTION AND OPERATION****A. Description**

- (1) The engine support link assy consists of a link, bushings and washers.

B. Operation

- (1) The engine support link assy transfers the power plant load to the wing structure and allows forward and lateral expansion.

C. Leading Particulars

Width -- 2 inches (approx)
Length -- 2 inches (approx)
Height -- 4 inches (approx)
Weight -- 2 pounds (approx)

2. INSPECTION/CHECK

- A. Perform magnetic particle examination per 20-20-01, class A critical on link (5).

- B. Refer to fits and clearances (Fig. 2) for wear limits.

3. REPAIR**A. Refinish**

- (1) Link (5) -- Cadmium-titanium alloy plate (F-1.181) and apply one coat of BMS 10-11, type 1 primer (SRF-12.205) all over except no primer in bushing holes.

B. Replacement

- (1) Bushings (10 and 15) -- Apply BMS 10-11, type 1, primer to OD of bushings and install per 20-50-03. Machine bushings after installation as follows:

(a) Bushings (10) -- Line machine to 0.6250-0.6265-inch diameter. Machine, if necessary, bushing faces to obtain a clearance between faces of 0.628-0.633 inch.

(b) Bushings (15) -- Line machine to 0.8175-0.8190-inch diameter concentric within 0.0005 inch.

- (2) Washers (20) -- Bond washers to inside ends of bushings (15) after bushing installation per 20-50-12, type 38. Machine, if necessary, washer faces to obtain a clearance between faces of 0.723-0.745 inch. Optional Method: Machine bushing (15) shoulders, cad plate, and bond washers (20) to maintain dimension.



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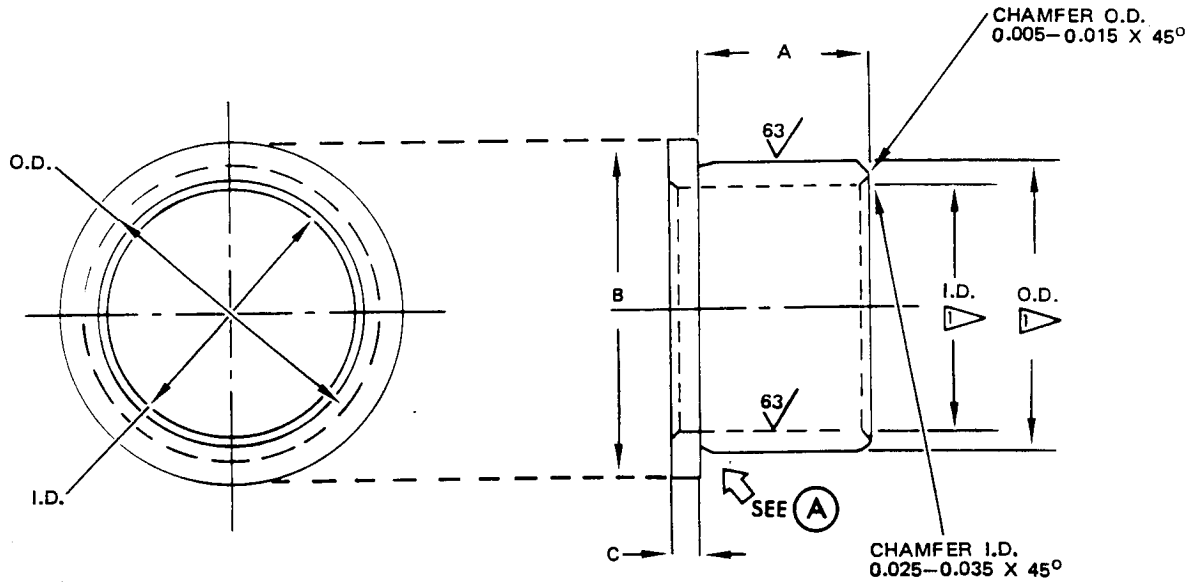
69-37856

C. Repair worn or corroded holes in link (5).

- (1) Line machine worn 0.9975/0.9985 inch dia. holes minimum amount to clean up. Maximum diameter 1.0080 before plating. Maintain 63 micro-inch surface finish.
- (2) Cadmium plate and bake per 20-42-02. Line machine holes as required to limit maximum plating thickness to 0.0008 inch, 63 micro-inch surface finish.
- (3) Line machine worn 0.8120/0.8130 inch dia. holes minimum amount to clean up. Maximum diameter 0.8320 inch. Maintain 63 micro-inch surface finish.
- (4) Refinish link per REPAIR par. A.
- (5) Fabricate repair bushings per Fig. 1.
- (6) Install and machine bushings per REPAIR par. B.

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REPLACES 69-37867	I.D.	O.D.	A	B	C
-32	0.600- 0.615		0.290	1.00	0.090
-36 -49	0.785- 0.795		0.460	1.10	0.050

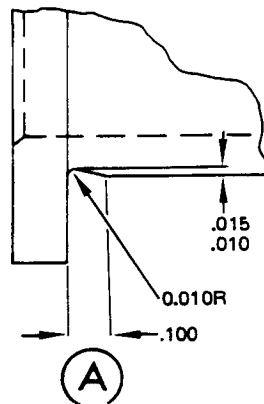


125/ ALL SURFACES EXCEPT AS NOTED

ALL DIMENSIONS TO BE MET AFTER PLATING
UNLESS OTHERWISE NOTED

ALL DIMENSIONS IN INCHES

MATERIAL: 17-4 PH
CRES PER AMS 5643
HT 180-200 KSI
MAGNETIC PARTICLE
INSPECT PER 20-20-01
CAD PLATE PER 20-42-05
TYPE II, CLASS 2

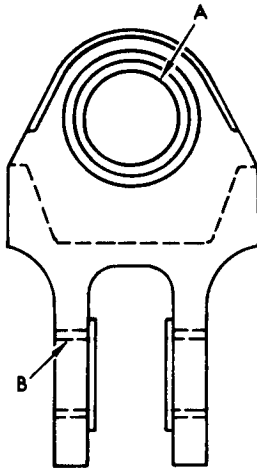


 I.D. AND O.D. TO BE PARALLEL AND CONCENTRIC
WITHIN .003 TOTAL INDICATOR READING

 CHOOSE DIAMETER TO PROVIDE
INTERFERENCE FIT OF
0.0006 TO 0.0022 IN MACHINED BORE

Repair Bushing Details
Figure 1

4. FITS AND CLEARANCES



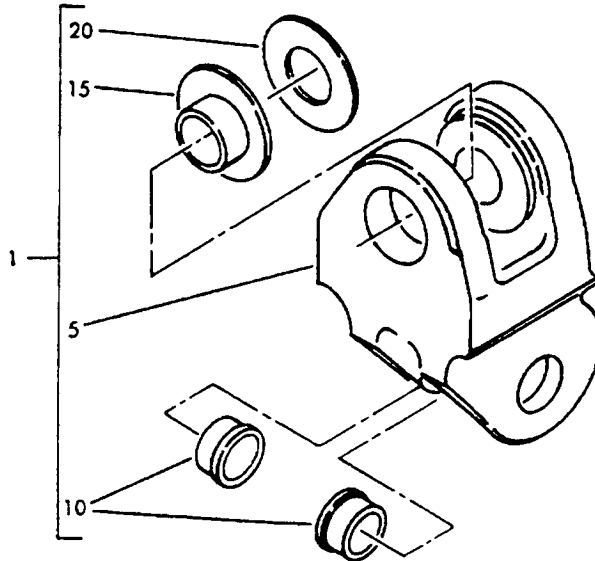
		Design Dimensions				Service Wear Limits		
Ref Letter Fig.	Mating Item No. Fig.	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID (15)	0.8175	0.8190	0.0010	0.0035	0.8140	0.8200	0.0060
	OD [1]	0.8155	0.8165					
B	ID (10)	0.6250	0.6265	0.0010	0.0035	0.6190	0.6300	0.0060
	OD [2]	0.6230	0.6240					

[1] Bolt 69-44995-1, -2 part of Fwd Engine Spt (LH) Bracket Instl (Reference only)

[2] Bolt NAS1310-23 part of Fwd Engine Mount Instl (Reference only)

Fits and Clearances
 Figure 2

5. ILLUSTRATED PARTS LIST



Forward Engine Support Link Assembly
Figure 3

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		
3-											
1	69-37856-1									A	RF
1	69-37856-5									B	RF
1	69-37856-6									C	RF
1	69-37856-8									D	RF
5	69-37856-3									AB	1
5	69-37856-7									C	1
5	69-37856-9									D	1
10	69-37867-32										2
15	69-37867-36									A	2
15	69-37867-49									BCD	2
20	69-44934-1										2