

# FORWARD ENGINE MOUNT SUPPORT ASSEMBLY

## 57-40-12

BOEING P/N 69-37865-21 thru -30

### AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
54-1005			Dec 25/75

**BOEING**   
**COMMERCIAL JET**  
**OVERHAUL MANUAL**

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* Indicates pages revised, added or deleted in latest revision					
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\*[1] Special instructions not required. Use standard industry practices.

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FORWARD ENGINE MOUNT SUPPORT ASSEMBLY

1. DESCRIPTION AND OPERATION

A. The forward engine mount support assembly consists of bushings and a fitting. The assembly transfers the engine load to the wing structure.

B. Leading Particulars

Width -- 4 inches (approx)  
Length -- 5 inches (approx)  
Height -- 3 inches (approx)  
Weight -- 2 pounds (approx)

2. INSPECTION/CHECK (Fig. 3)

A. Perform penetrant examination per 20-20-02 of bushing (5) and fitting (10).

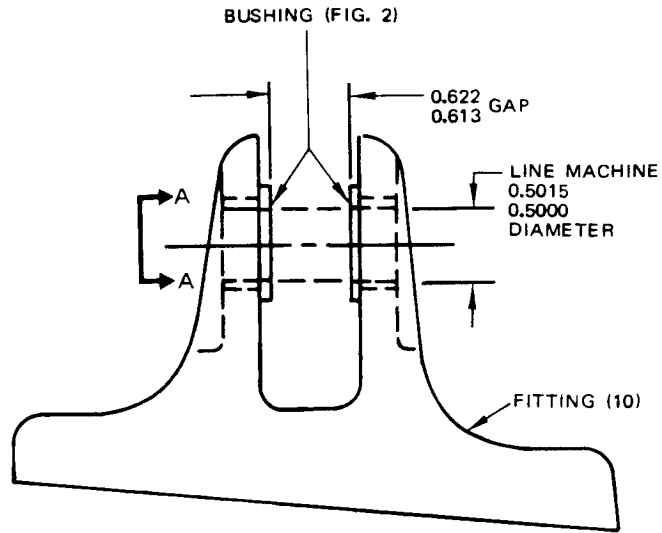
3. REPAIR (Fig. 3)

A. Materials

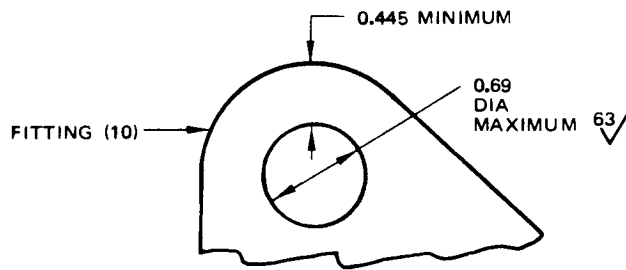
- (1) Primer -- BMS 10-11, type 1 (Ref 20-60-02)
- (2) Coating, black -- B-2000, Andrew Brown Co., P.O. Box 22066, Los Angeles, California 90022

B. Repair

- (1) Fitting (10) bushing holes.
  - (a) Line machine holes oversize, as required, to remove defects. Do not exceed limits shown on Fig. 1.
  - (b) Manufacture oversize bushings per Fig. 2.
  - (c) Install bushings, with wet primer in fitting holes, using shrink-fit method per 20-50-03.
  - (d) Check that gap between bushing collars is within tolerance indicated on Fig. 1.
  - (e) Line machine bushings to dimension shown on Fig. 1.



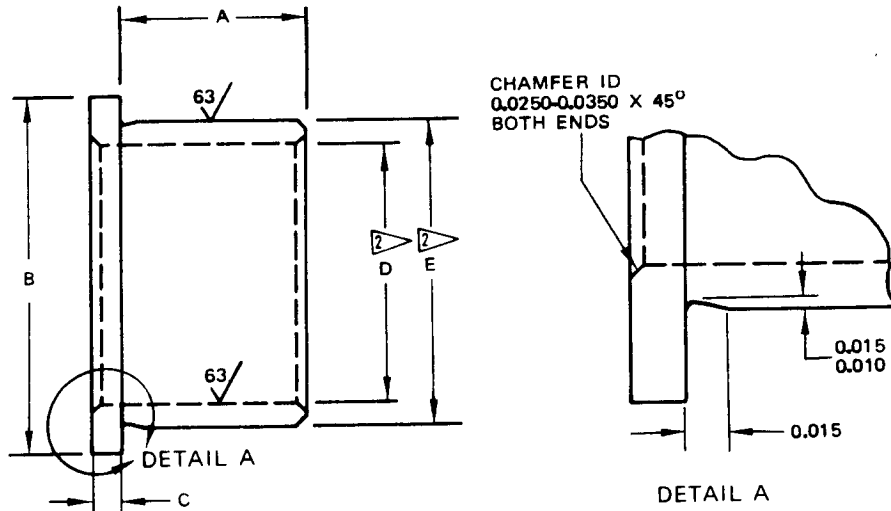
NOTE: ALL DIMENSIONS IN INCHES



FITTING MATERIAL: 6AL-4V  
TITANIUM





A-A

Fitting Rework and Bushing Installation  
Figure 1




125/ALL SURFACES EXCEPT AS NOTED

MATERIAL: CRES 17-4PH PER AMS 5643  
HEAT TREAT: 180-200 KSI  
NOTE: ALL DIMENSIONS IN INCHES

BUSHING TO BE REPLACED	-A-	-B-	-C-	-D-	-E-
69-37867-34	0.230 0.225	0.760 0.740	0.090 0.085	0.4910 0.4895	
69-37867-44	0.230 0.225	1.04 1.02	0.090 0.085	0.4910 0.4895	
69-37867-51	0.230 0.225	1.04 1.02	0.090 0.085	0.4910 0.4895	
69-37867-52	0.230 0.225	1.04 1.02	0.0535 0.0515	0.4910 0.4895	

 INTERFERENCE FIT WITH  
OVERSIZE HOLE 0.0014  
0.0010

 ID AND OD TO BE PARALLEL AND  
CONCENTRIC WITHIN 0.003 TIR

Oversize Bushing Manufacture  
Figure 2

C. Refinish

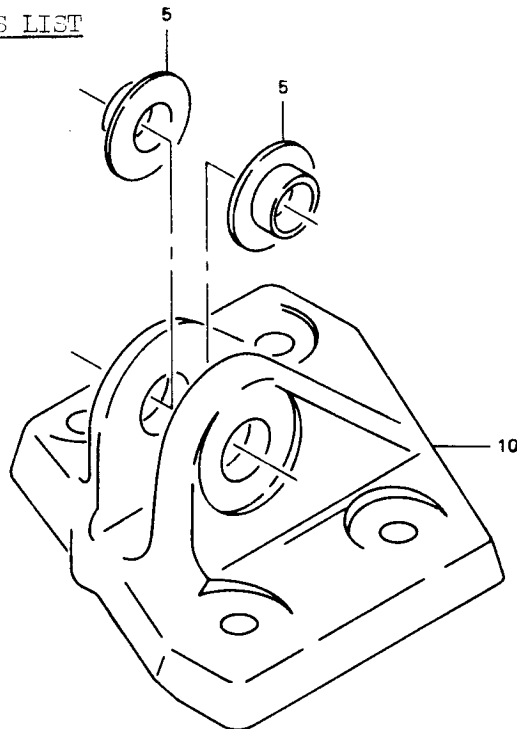
NOTE: Refer to 20-30-02 for stripping of protective finishes and to 20-41-01 for explanation of F and SRF finish codes.

- (1) Bushing (5, 69-37867-34, -44) -- Cadmium plate with post-plate chromate treatment (F-11929). Material: CRES 17-4PH, 180-200 ksi.
- (2) Fitting (10) -- Apply phosphate-fluoride treatment followed by application of B-2000 black coating (SRF-14.87). No finish in holes. Material: 6AL-4V Titanium Alloy.

D. Replacement

- (1) Bushings (5)
  - (a) If necessary to replace bushings (5) in fitting (10) install bushings with wet primer in fitting holes, using shrink-fit method per 20-50-03.
  - (b) Check that gap between bushing collars is within tolerance indicated on Fig. 1.
  - (c) Line machine bushings to 0.5000-0.5015-inch diameter. Maintain 63-microinch finish.

4. ILLUSTRATED PARTS LIST



Forward Engine Mount Support Assembly  
Figure 3

69-37865  
DASH NUMBERS LIMITED

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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		
3-											
1	69-37865-21									A	RF
1	69-37865-22									B	RF
1	69-37865-23									C	RF
1	69-37865-24									D	RF
1	69-37865-25									E	RF
1	69-37865-26									F	RF
1	69-37865-27									G	RF
1	69-37865-28									H	RF
1	69-37865-29									I	RF
1	69-37865-30									J	RF
5	69-37867-34									A-D	2
5	69-37867-44									EF	2
5	69-37867-52									G-J	2
5	69-37867-51									G-J	2
10	69-37865-11									A	1
10	69-37865-12									B	1
10	69-37865-15									CEG	1
10	69-37865-16									DFH	1
10	69-37865-31									I	1
10	69-37865-32									J	1