

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

TO: ALL HOLDERS OF HOIST FITTING ASSEMBLY, 57-27-01

REVISION NO. 3, DATED DEC 5/90

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Insp / Chk	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage	IPL	L / Overhaul
Changed acceptable limit of required force to fully depress keeper in trouble shooting section to allow lower required force of 12.6 pounds									X				

HOIST FITTING ASSEMBLY

57-27-01

BOEING P/N 65-69584-1, -2, -3, 4
69-36355-1, -2, -3, -4, -5, -6, -501

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
57-1005			Jul 5/82
57-1117			Jul 5/82
		PRR 30352-2	Jul 5/82
57-1117 R2			Mar 5/84
		PRR 33296	Mar 5/86

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

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
57-27-01					
T-1	Mar 5/86				
T-2	BLANK				
* LEP-1	Dec 5/90				
LEP-2	BLANK				
T/C-1	Mar 5/84				
T/C-2	BLANK				
1	Mar 5/86				
2	Mar 5/86				
3	Mar 5/86				
4	Mar 5/84				
5	Mar 5/86				
6	Mar 5/84				
7	Mar 5/84				
8	Mar 5/86				
9	Mar 5/84				
* 10	Dec 5/90				
11	Mar 5/86				
12	Mar 5/84				
13	Mar 5/84				
14	BLANK				



OVERHAUL MANUAL

TABLE OF CONTENTS

<u>Paragraph Title</u>	<u>Page</u>
Description and Operation	1
Disassembly	1
Cleaning.	None
Inspection/Check.	2
Repair.	2
Assembly.	7
Fits and Clearances	None
Testing	None
Trouble Shooting.	10
Storage Instructions.	None
Special Tools, Fixtures, and Equipment.	None
Illustrated Parts List.	10

OVERHAUL MANUAL

HOIST FITTING ASSEMBLY

1. DESCRIPTION AND OPERATION

A. The hoist fitting assemblies are composed of housings, sockets, spring pins, and springs. When mounted on the wing spars they are used to lift the engines; when mounted in the cargo compartment they are used to hold the cargo barrier nets.

B. Leading Particulars (approx)

Height -- 4.0 inches
Diameter -- 2.0 inches
Weight -- 3 pounds

2. DISASSEMBLY

A. Disassemble hoist fitting (1, Fig. 8) using the following steps.

(1) Remove spring pins (15 and 20).

(2) Unscrew socket (25) and remove keeper (30) and spring (35).

NOTE: Spring (35) is loaded with approx 14 pounds compression force.

(3) Remove spring pins (10) and retainer (40).

B. Disassemble hoist fitting (1, Fig. 9) using the following steps.

(1) Remove spring pin (5).

(2) Unscrew socket (10) and remove keeper (15) and spring (20).

NOTE: Spring (20) is loaded with approx 14 pounds compression force.

OVERHAUL MANUAL

3. INSPECTION/CHECK

- A. Check all parts for obvious defects in accordance with standard industry practices.
- B. Magnetic particle check per 20-20-01 -- fittings (45, Fig. 8 and 25, Fig. 9) and sockets (25, Fig. 5 and 10, Fig. 9)
- C. Check springs (35, Fig. 8 and 20, Fig. 9) for load limits per Fig. 1.

Item No.	Test Length (inches)	Allowable Load Limit (pounds)
35, Fig. 5	.37	12.6-15.4
20, Fig. 6	.39 - .49	12.6

Compression Spring Data
Figure 1

4. REPAIR

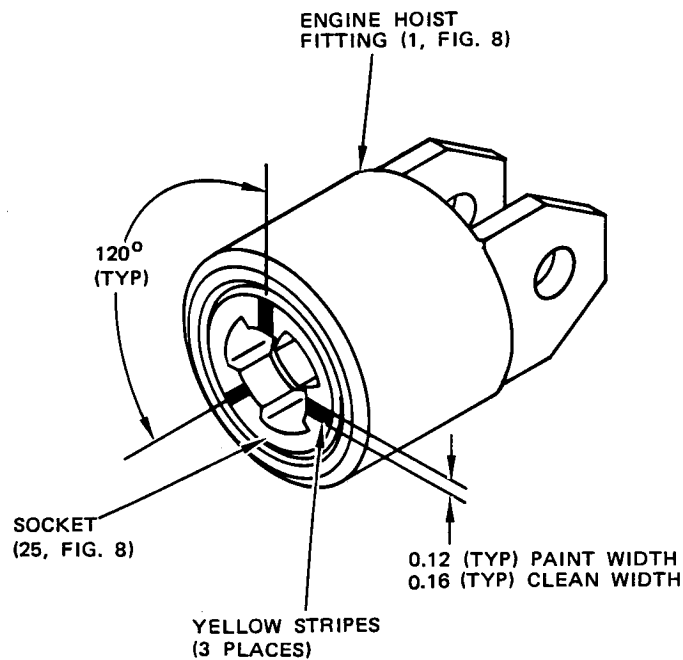
A. Refinish

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) If plated or painted surfaces are worn or chipped, refinish the following parts as indicated:
 - (a) Keepers (30, Fig. 8 and 15, Fig. 9), and fittings (45, Fig. 8 and 25, Fig. 9) -- Apply F-17.09 all over.
 - (b) Spring (35, Fig. 8) -- Apply SRF-1.92 all over. Material: Music wire.
 - (c) Spring (20, Fig. 9) -- Apply SRF-12.205 all over. Material: Music wire.
 - (d) Sockets (25, Fig. 8; P/N 69-36354-2 and 10, Fig. 9) -- Passivate per 20-30-03 (F-8.07) all over.

OVERHAUL MANUAL

- (2) If socket (25, Fig. 8; P/N 69-36354-3) requires application of index marks, clean and refinish as follows:
- (a) Abrasive clean per 20-30-03 three places 0.16 inch wide strip by grit blasting, flat end rotary stone, or 180 grit silicone carbide abrasive paper as shown in Fig. 2.
 - (b) Apply 0.12 inch wide stripes of BMS 10-11, type 1 yellow primer using two coats to a thickness of 0.0008-0.0016 inch (F-20.09). Stripes to align with socket lug centers and extend radially as shown in Fig. 2.



ALL DIMENSIONS ARE IN INCHES

Index marks Application
Figure 2

OVERHAUL MANUAL**B. Replacement**

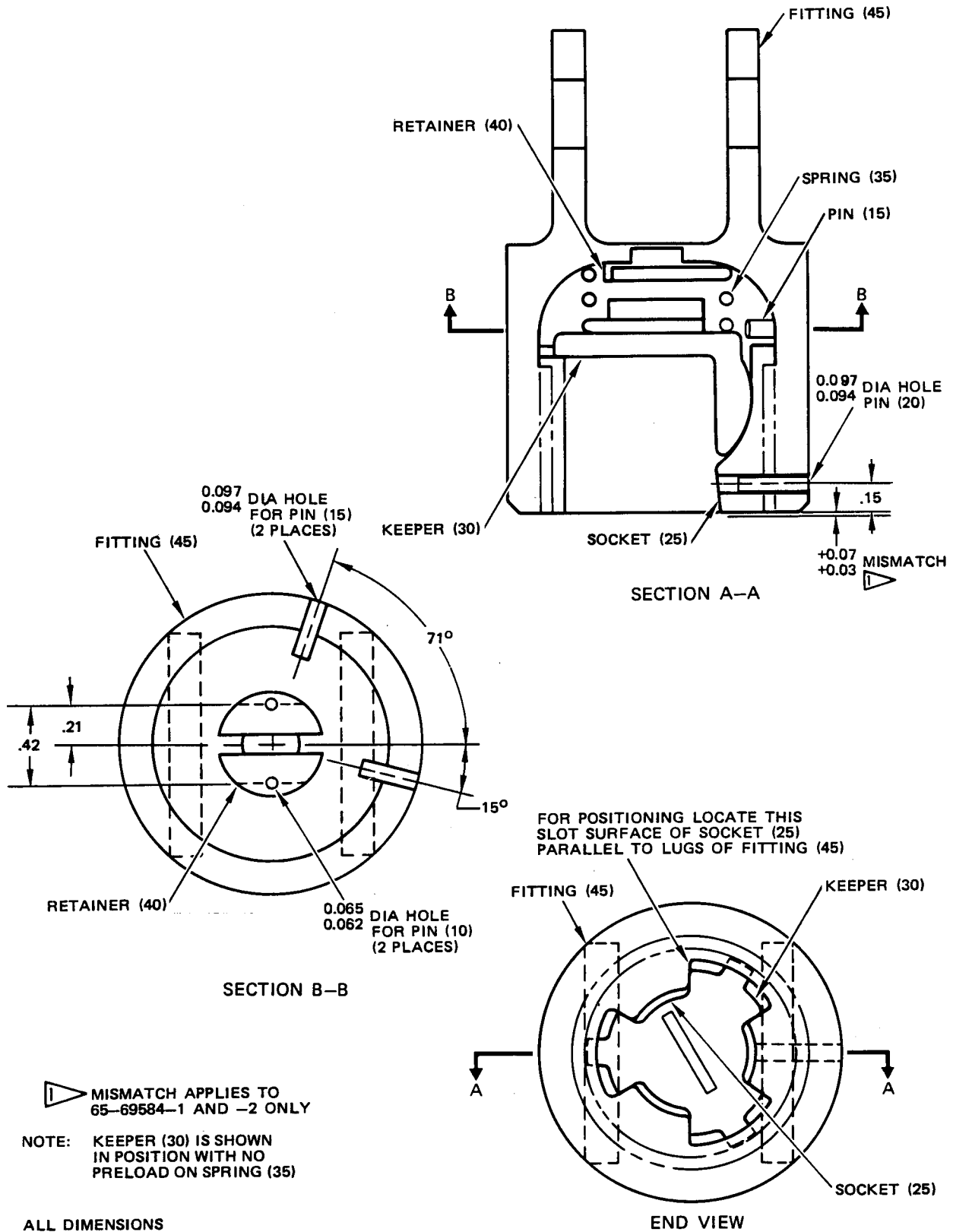
- (1) If replacement of parts belonging to fitting assembly (1, Fig. 8) is required, new holes for spring pins may be drilled as follows.
 - (a) Drill .062-.065 inch dia holes for pins (10) as shown in Fig. 3, View B-B.
 - (b) Drill .094-.097 inch dia holes for pins (15) as shown in Fig. 3, View B-B.
 - (c) Drill .094-.097 inch dia hole for pin (20) as follows:
 - 1) Temporarily install one pin (15) in hole located by the 71-degree dimension in Fig. 3, View B-B.
 - 2) Screw socket (25) into fitting (45) until socket is in firm contact with pin (15).
 - 3) Unscrew socket (25) the minimum required distance to position socket as shown in end view of Fig. 3.
 - 4) Drill hole through housing and socket (View A-A, Fig. 3), then remove socket and spring pin.
- (2) If replacement of socket (10, Fig. 9) and/or fitting (25, Fig. 9) is required drill holes for spring pin (5, Fig. 9) as shown in Fig. 4.

C. Materials

NOTE: Equivalent substitutes may be used.

- (1) Primer -- BMS 10-11, type 1
- (2) Primer -- MIL-P-8585, color Y

OVERHAUL MANUAL



▽ MISMATCH APPLIES TO
65-69584-1 AND -2 ONLY

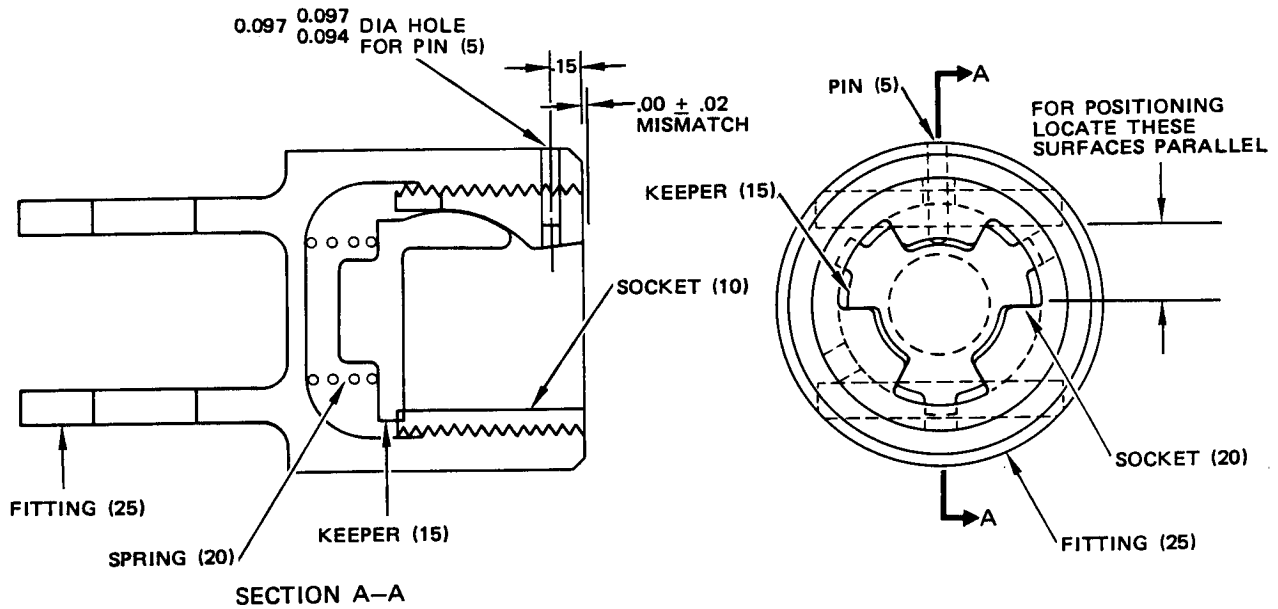
NOTE: KEEPER (30) IS SHOWN
IN POSITION WITH NO
PRELOAD ON SPRING (35)

ALL DIMENSIONS
ARE IN INCHES

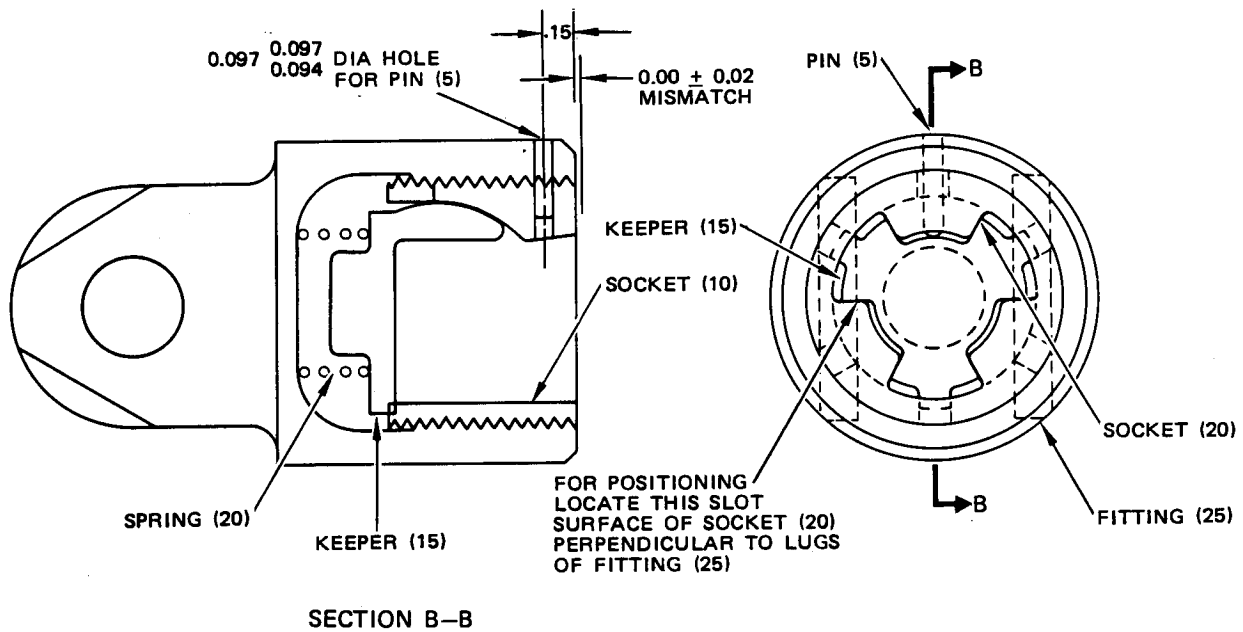
65-69584-1, -2, -3, -4

Fitting Assembly Repair
Figure 3

OVERHAUL MANUAL



69-36355-1, -6, -501



ALL DIMENSIONS
ARE IN INCHES

69-36355-2, -3, -4, -5

OVERHAUL MANUAL

5. ASSEMBLY

A. Assemble fitting assembly (1, Fig. 8)

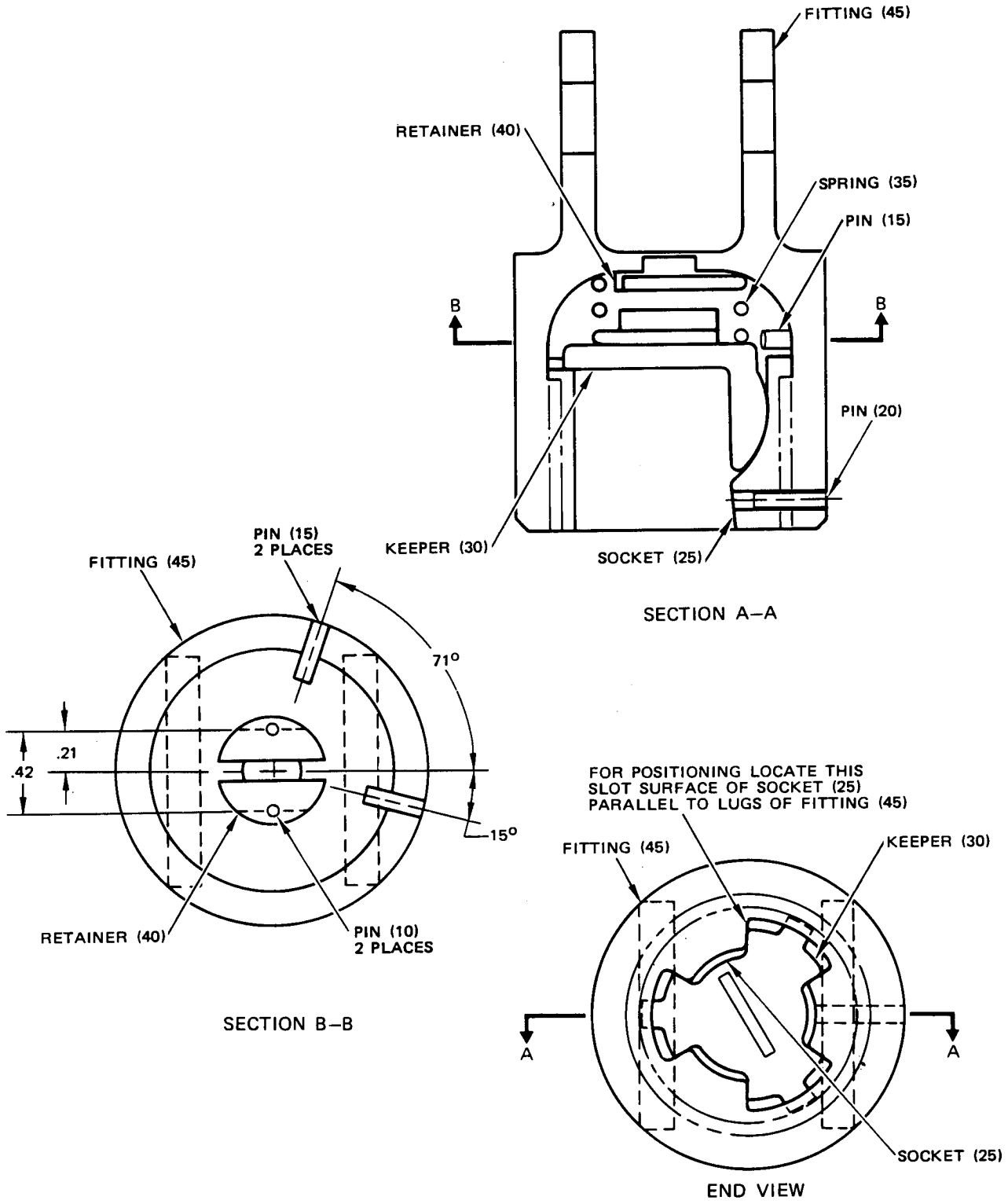
- (1) Install retainer (40) using pins (10).
- (2) Install spring (35), keeper (30), socket (25), and pins (20).
- (3) With fitting assembly (1, Fig. 8) completely assembled except for the two spring pins (15), preload spring (35) as follows.
 - (a) Start with keeper (30) in position shown in Fig. 5, end view.
 - (b) Rotate keeper (30) 60 degrees counterclockwise as viewed from open end of fitting assembly.
 - (c) Hold keeper (30) in this position and install pins (15).
 - (d) Rotate keeper (30) 60 degrees further in the counterclockwise direction until lugs on keeper engage and retain keeper in unlocked position.

NOTE: Once pins (15) are installed, ensure that keeper (30) can be rotated no more than 60 degrees in either direction.

B. Assemble fitting assembly (1, Fig. 9).

- (1) Install spring (20), keeper (15), socket (10), and pin (5) as shown in Fig. 6.

OVERHAUL MANUAL



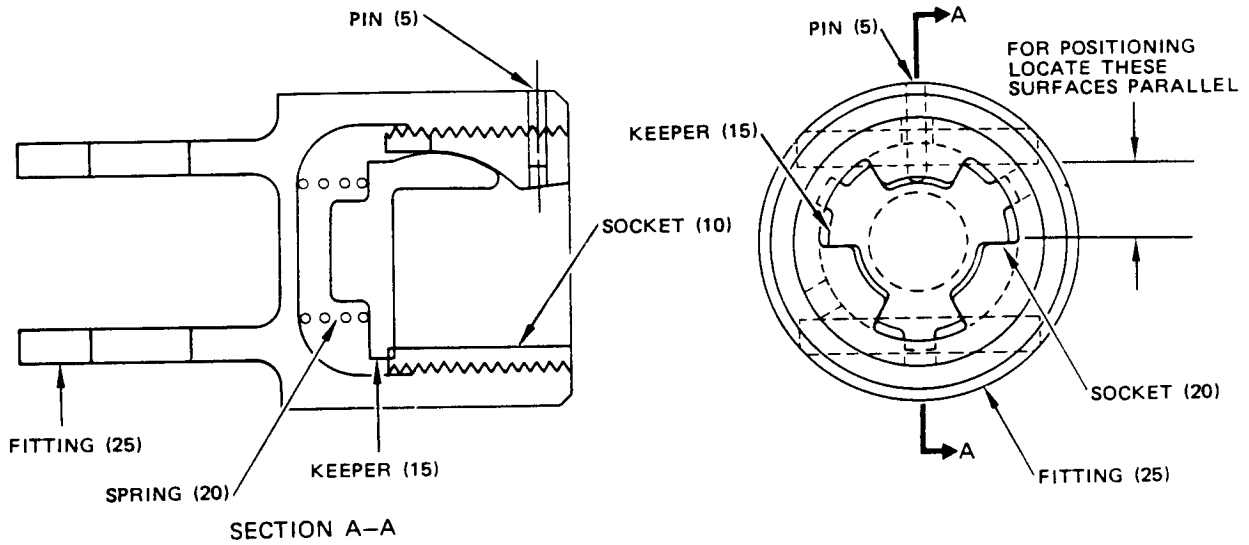
NOTE: KEEPER (30) IS SHOWN
IN POSITION WITH NO PRELOAD
ON SPRING (35)

65-69584-1, -2, -3, -4

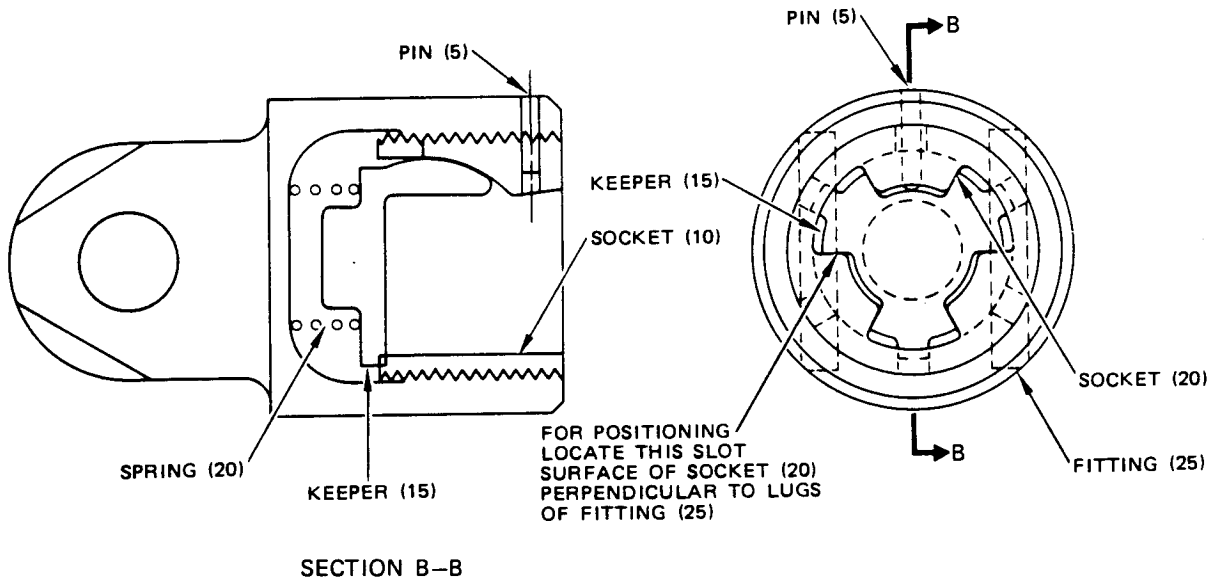
Fitting Assembly
Figure 5

65-69584
69-36355

OVERHAUL MANUAL



69-36355-1, -6, -501



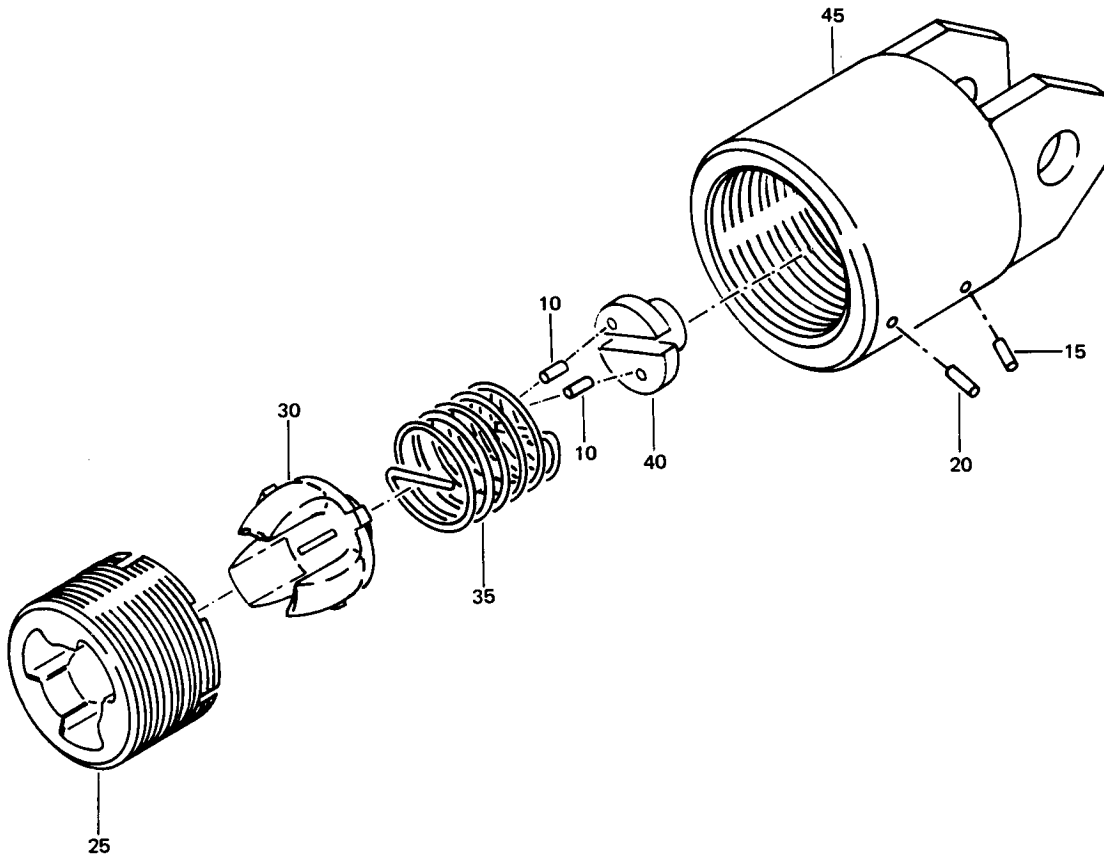
69-36355-2, -3, -4, -5

6. TROUBLE SHOOTING

<u>TROUBLE</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
Less than 12.6 lb force is required to fully depress keeper (30, Fig. 8; 15, Fig. 9) to the end of its travel	Defective spring (35, Fig. 8; 20, Fig. 9)	Replace spring
Keeper (30, Fig. 8) is able to rotate more than 60 degrees in same direction	Defective pins (15, Fig. 8)	Replace pins

Trouble Shooting Table
Figure 7

7. ILLUSTRATED PARTS LIST

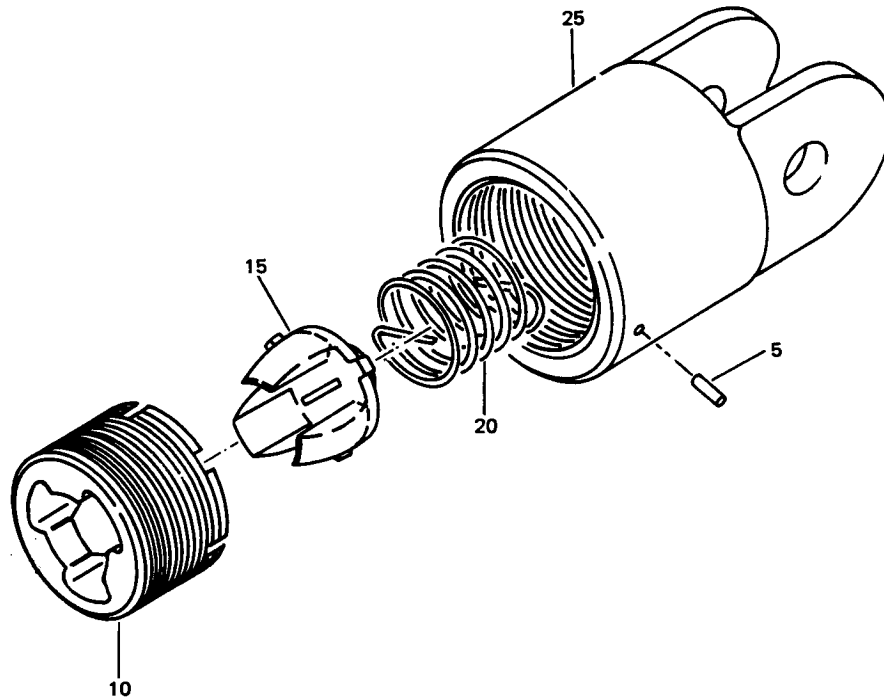


Engine Hoist Fitting Assembly
Figure 8

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		
8-1	65-69584-1		FITTING ASSY, ENGINE HOIST (PRE SB 57-1117)							A	RF
1	65-69584-2		FITTING ASSY, ENGINE HOIST							B	RF
1	65-69584-3		FITTING ASSY, ENGINE HOIST (POST SB 57-1117)							C	RF
1	65-69584-4		FITTING ASSY, ENGINE HOIST (POST SB 57-1117)							K	RF
5	69-36355-1		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							D	RF
5	69-36355-2		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							E	RF
5	69-36355-3		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							F	RF
5	69-36355-4		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							G	RF
5	69-36355-5		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							H	RF
5	69-36355-501		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							I	RF
5	69-36355-6		FITTING ASSY, CARGO BARRIER NET (FOR DETAILS SEE FIG. 3)							J	RF
10	MS16562-1		. SPRING PIN							AB	2
10	MS16562-189		. SPRING PIN							CK	2
15	MS16562-22		. SPRING PIN							AB	2
15	MS16562-210		. SPRING PIN							CK	2
20	MS16562-23		. SPRING PIN							AB	1
20	MS16562-211		. SPRING PIN							CK	1
25	69-36354-2		. SOCKET							ABC	1
25	69-36354-3		. SOCKET (POST SB 57-1117)							K	1
30	69-36439-2		. KEEPER (OPT TO 69-36439-3)							AB	1
30	69-36439-3		. KEEPER (OPT TO 69-36439-2)							ABCK	1
35	69-55466-1		. SPRING							ABCK	1
40	69-55467-1		. RETAINER							ABCK	1
45	69-36353-4		. FITTING (OPT TO 69-36353-6)							A	1
45	69-36353-6		. FITTING (OPT TO 69-36353-4)							ABC	1

OVERHAUL MANUAL



Cargo Barrier Net Fitting Assembly
Figure 9

Mar 5/84

65-69584
69-36355



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		
9-											
1	69-36355-1									D	RF
1	69-36355-2									E	RF
1	69-36355-3									F	RF
1	69-36355-4									G	RF
1	69-36355-5									H	RF
1	69-36355-6									I	
1	69-36355-501									J	RF
5	MS16562-23									D-J	1
10	69-36354-1									D-J	1
15	69-36439-1									D-J	1
15	69-36439-2									D-J	1
20	MS24585C502									D-J	1
25	69-36353-1									DE	
25	69-36353-2									FJ	
25	69-36353-3									G	
25	69-36353-5									I	
25	69-36353-6									H	