

BOEING
COMMERCIAL JET
OVERHAUL MANUAL

TO: ALL HOLDERS OF SWIVEL ASSEMBLY, HYDRAULIC, OVERHAUL MANUAL, 29-09-21

REVISION NO. 5, DATED JUN 1/94

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED										
	D & O	D / Assy	Cleaning	Inspect / Chk	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage
Revised IPL illustration for back up ring S30661-011											X

SWIVEL ASSEMBLY, HYDRAULIC

29-09-21

BOEING P/N 69-54784-1
69-69882-1 thru -6

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT

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
29-09-21					
T-1	Dec 5/91				
T-2	BLANK				
* LEP-1	Jun 1/94				
LEP-2	BLANK				
T/C-1	Jul 5/79				
T/C-2	BLANK				
1	Jun 5/90				
2	Jul 5/79				
* 3	Jun 1/94				
4	Jun 5/92				
5	Jun 5/92				
6	BLANK				

BOEING
COMMERCIAL JET
OVERHAUL MANUAL

TABLE OF CONTENTS

<u>Paragraph Title</u>	<u>Page</u>
Description and Operation	1
Disassembly*[1]	
Cleaning.*[1]	
Inspection/Check.	1
Repair.	1
Assembly.	1
Fits and Clearances*[2]	
Testing	2
Trouble Shooting.*[1]	
Storage Instructions.*[1]	
Special Tools, Fixtures, and Equipment.*[2]	
Illustrated Parts List.	3

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

*[2] Not applicable

BOEING
COMMERCIAL JET
OVERHAUL MANUAL

SWIVEL ASSEMBLY, HYDRAULIC

1. DESCRIPTION AND OPERATION

A. Description

- (1) The hydraulic swivel assembly consists of a housing, a fitting and various packings.

B. Operation

- (1) The hydraulic swivel assembly provides for connection of hydraulic lines. The fitting can be rotated within the housing while containing hydraulic system pressure.

C. Leading Particulars

Length -- 2 inches
Width -- 2 inches
Height -- 1 inch (69-54784)
 2 inches (69-69882)
Connections -- MS33514-6, style E (69-54784)
 MS33514-4, style E (69-69882)
Operating Medium -- BMS 3-11 hydraulic fluid

2. INSPECTION/CHECK

- A. Perform magnetic particle check on housing (10 IPL Fig. 1, 5 IPL Fig. 2) per 20-20-01.
- B. Perform penetrant check on fitting (15 IPL Fig. 1, 10 IPL Fig. 2) per 20-20-02.

3. REPAIR

A. Refinish

- (1) Housing (10 IPL Fig. 1, 5 IPL Fig. 2) -- Passivate (F-17.09).
- (2) Fitting (15 IPL Fig. 1, 10 IPL Fig. 2) -- No finish (F-25.01).

4. ASSEMBLY (Fig. 1 and 2)

- A. Lightly lubricate O-rings (40), fitting (15) and bore of housing (10) with BMS 3-11 hydraulic fluid prior to assembly per 20-50-06.
- B. Install lockwire (30, Fig. 1; 25, Fig. 2) through center of pin (25, Fig. 1; 20, Fig. 2) per 20-50-02.

BOEING
COMMERCIAL JET
OVERHAUL MANUAL

69-54784
69-69882

5. TESTING

A. Prepare for test.

- (1) Connect to test bench
 - (a) Check that bench contains BMS 3-11 hydraulic fluid at room temperature.
 - (b) Connect one port of swivel to bench.
- (2) Fill swivel with fluid to exhaust air.
- (3) Block other port of swivel.

B. Test for leakage.

- (1) Check that swivel rotates freely.
- (2) Apply 4500 psi for 2 minutes. There shall be no evidence of leakage.
- (3) Apply 5-15 psi for 5 minutes. There shall be no evidence of leakage.

C. Test rotation

- (1) Test with no hydraulic pressure.
 - (a) Check that pressure is zero.
 - (b) Measure torsion required to rotate swivel. Torsion resistance shall not exceed 5 inch-pounds.
- (2) Test with 3000-psi hydraulic pressure.
 - (a) Apply 3000-psi hydraulic pressure.
 - (b) Measure torsion required to rotate swivel. Torsion resistance shall not exceed 5 inch-pounds.

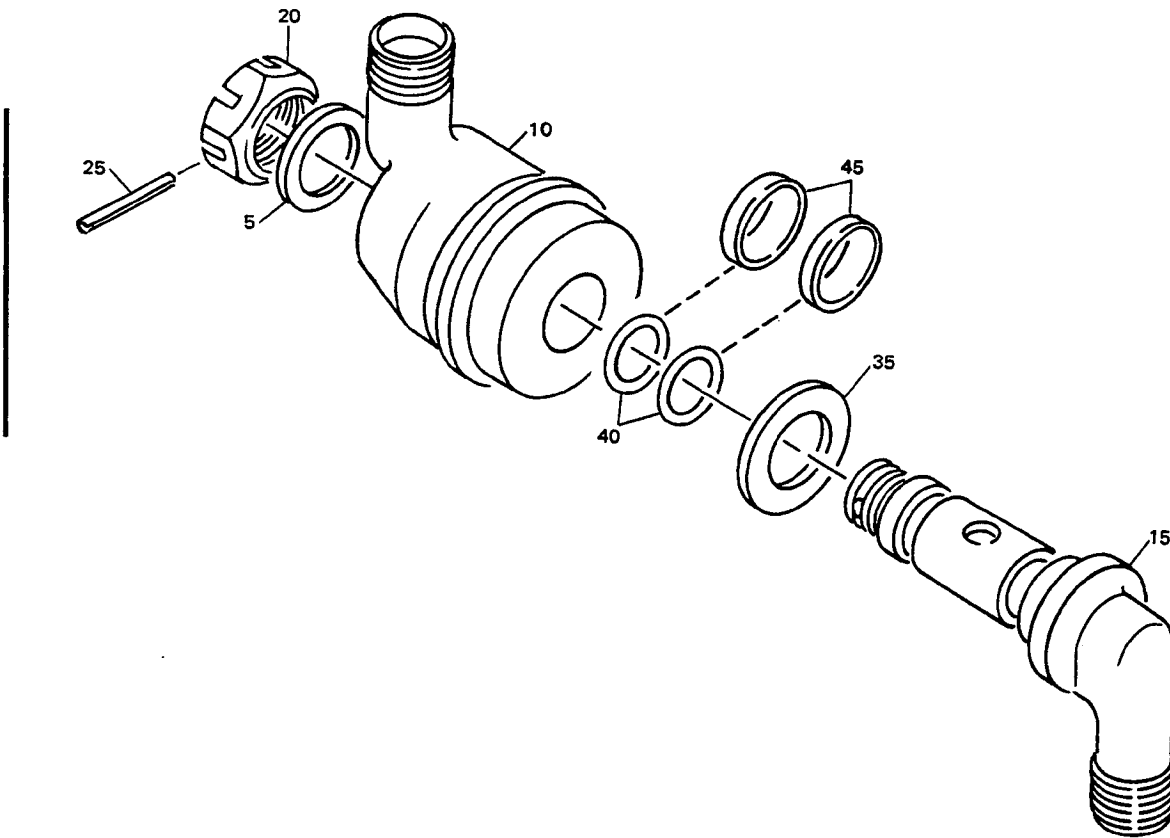
D. Post-Test Procedure

- (1) Allow some fluid to remain inside swivel.
- (2) Cap ports of swivel.

69-54784
69-69882

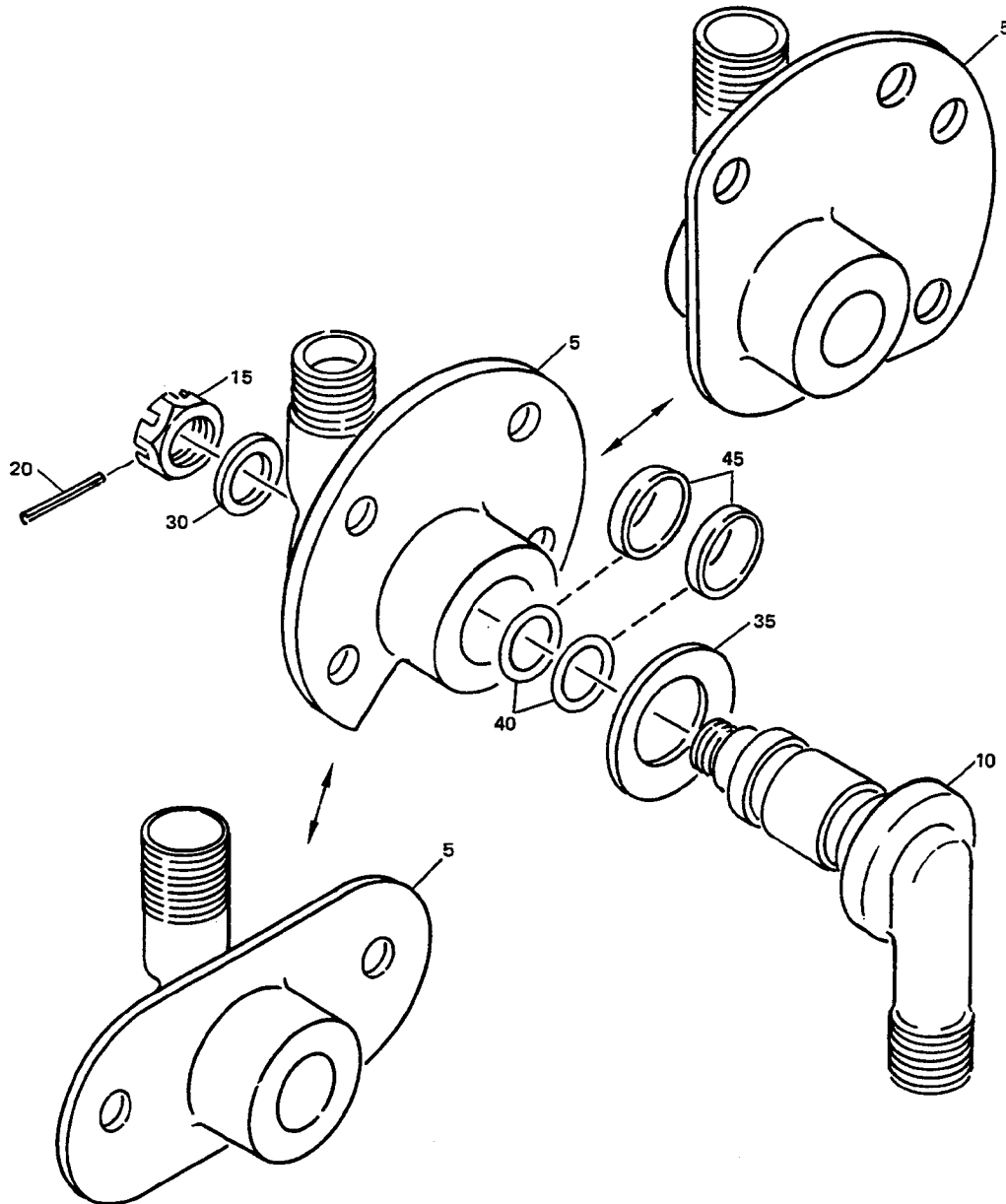
BOEING
COMMERCIAL JET
OVERHAUL MANUAL

6. ILLUSTRATED PARTS LIST



Swivel Assembly, 3/8 O.D.
Figure 1

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		
1											
1	69-54784-1										RF
5	69-54784-2										1
10	65-44724-1										1
15	65-44726-1										1
20	BACN10JD106										1
25	MS16562-204										1
30	MS20995NC32										AR
35	NAS1515L7L										1
40	NAS1611-011										2
45	S30661-011										2



Swivel Assembly, 1/4 O.D.
Figure 2

65-54786
65-69882



OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
2-					
1	69-69882-1		SWIVEL ASSY, 1/4 O.D.	A	RF
1	69-69882-2		SWIVEL ASSY, 1/4 O.D.	B	RF
1	69-69882-3		SWIVEL ASSY, 1/4 O.D.	C	RF
1	69-69882-4		SWIVEL ASSY, 1/4 O.D.	D	RF
1	69-69882-5		SWIVEL ASSY, 1/4 O.D.	E	RF
1	69-69882-6		SWIVEL ASSY, 1/4 O.D.	F	RF
5	65-44722-1		. HOUSING	A	1
5	65-44722-2		. HOUSING	B	1
5	65-44722-3		. HOUSING	C	1
5	65-44722-5		. HOUSING	D	1
5	65-44722-6		. HOUSING	E	1
5	65-44722-7		. HOUSING	F	1
10	65-44723-1		. FITTING		1
15	BACN10JD104		. NUT		1
20	MS16562-202		. PIN, SPRING		1
25	MS20995NC32		. LOCK WIRE		AR
30	NAS1515L5L		. WASHER, KEL-F		1
35	NAS1515L7L		. WASHER, KEL-F		1
40	NAS1611-011		. O-RING		2
45	S30661-011		. BACK-UP RING V97820		2
45	MS28782-6		DELETED		
45	TF873-011		. BACK-UP RING, V07128 (OPT TO S30661-011)		2

VENDORS

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