BOEING COMMERCIAL JET

OVERHAUL MANUAL

TO: ALL HOLDERS OF CONTROL STAND STABILIZER TRIM JACK ASSEMBLY OVERHAUL MANUAL 27-44-02

REVISION NO. 2, DATED MAR 5/85

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 grease for lubricating Acme threads on screw to MIL-G-23827 to reflect current manufacturing usage						X							

CONTROL STAND STABILIZER TRIM JACK ASSEMBLY

27-44-02

BOEING P/N 6-63931

AIRLINE P/N

THIS SUBJECT APPLIES TO THE FOLLOWING BOEING AIRPLANE MODELS:

707 STRATOLINER	707 INTERCONTINENTAL	720	727	737
ALL	ALL	ALL	ALL	ALL

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

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

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
	27-44-02					
	T-1	May 15/69				
	T-2	BLANK				
*	LEP-1	Mar 5/85				
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	T/C-1	May 15/69				
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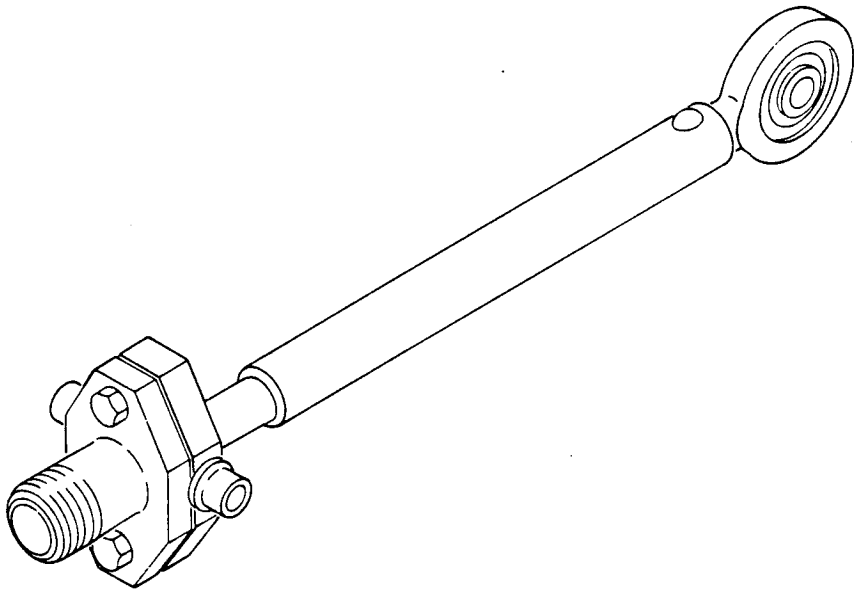
CONTROL STAND STABILIZER TRIM JACK ASSEMBLY

Boeing Part Number: 6-63931-1



Control Stand Stabilizer Trim Jack Assembly
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

(1) The control stand stabilizer trim jack assembly consists basically of a coupling, a trunnion assembly, a screw-type shaft (screw) and a threaded sleeve and rod end assembly (nut assembly).

B. Operation

(1) The control stand stabilizer trim jack assembly receives a rotary force through a flexible shaft from the forward trim mechanism drum. The jack assembly translates the rotary force to a linear motion and through a linkage mechansim repositions the stabilizer position indicator.

C. Leading Particulars

Length -- 8.50 inches (approximately)
Weight -- 0.60 pounds

2. DISASSEMBLY

A. Procedures (See figure 2.)

NOTE: Protect sintered bearings (13) from damage and from contacting foreign matter that will adhere to bearing surface.

(1) Remove nut assembly (1) from screw (16).

NOTE: Do not remove rivet (2) or rod end assembly (4) from nut (3) unless repair or replacement is required.

Do not remove bearing (6) from rod end (5) unless repair or replacement is required.

(2) Remove nuts (7), bolts (8), and coupling (9).

(3) Remove nut (10), washer (11), and trunnion assembly (12) from screw (16).

NOTE: Do not remove sintered bearings (13) or bearing (14) from trunnion (15) unless replacement is required.

3. CLEANING

A. General

(1) Wash all metal parts, except bearings, in clean solvent, Specification P-D-680, or equivalent.

(2) Remove stubborn accumulations of foreign matter using a stiff-bristle brush.

(3) Dry parts with clean, lint-free cloth or clean, moisture free air.

(4) For further information, refer to Subject 20-30-03, "General Cleaning Procedures."

B. Bearings

(1) Clean all bearings per "Cleaning and Relubricating Antifriction Bearings," Subject 20-30-01.

4. INSPECTION/CHECK

A. Visual Check (See figure 2.)

(1) Examine all metal parts for pits, scratches, cracks, corrosion, and damage. Use a strong light and 10-power magnification.

(2) Examine all threads and splines for evidence of burrs or damage.

(3) Check bearings (6 and 14) for roughness, binding and excessive radial or axial play.

(4) Check sintered bearings (13) for roughness, wear and cleanliness of bearing surface.

NOTE: Sintered bearings (13) should be protected from contact with foreign matter that could adhere to the bearing surface.

(5) Examine all bolts and bolt holes for excessive or eccentric wear.

(6) Check entire assembly for general condition of paint and finish.

5. REPAIR

A. Repair

(1) Remove corrosion and minor defects by polishing lightly with abrasive cloth, 220 grit or finer. Refinish as necessary for protection against corrosion.

(2) Repair minor defects in threaded areas with a small triangular file or thread chaser.

B. Refinish (See figure 2.)

NOTE: Refer to Subject 20-30-02 for stripping of protective finishes, and to Subject 20-41-01 for decoding of F and SRF finish symbols and their BAC equivalents.

(1) If plated or painted surfaces are worn or chipped, refinish the following parts as indicated:

(a) Nut (3) -- Apply F-1.20 on exterior surfaces only. Apply F-1.941 on interior surfaces only and coat with a light film of lubricant, MIL-G-21164.

(b) Rod End (5) -- Apply F-2.30 except omit primer on 0.406-inch diameter shaft and in 0.6248-inch diameter bore.

(c) Coupling (9) -- Apply F-2.30 except omit primer on threads.

(d) Trunnion (15) -- Apply F-2.30 except omit primer on 0.1900-inch outside diameter pivot studs and 0.8748-inch inside diameter center bore.

(e) Screw (16) -- Apply F-1.941 except exclude phosphate from 0.3745-inch diameter unthreaded area. Coat this surface with a light film of lubricant, MIL-G-21164.

C. Replacement (Fig. 2)

(1) Replace all parts found unserviceable or damaged beyond simple repair.

(2) Replace unserviceable rod end assembly (4) as follows:

(a) Drill out rivet (2) and remove rod end assembly (4) from nut (3).

(b) Position serviceable rod end assembly (4) in nut (3) so that vertical plane of bearing (6) and rivet holes in nut (3) align.

NOTE: Distance from center of bearing (6) bore to opposite end of nut (3) should measure 5.47 to 5.49 inches.

(c) Drill hole in rod end assembly (4) to match holes in nut (3).

(d) Install rivet (2) to secure rod end assembly (4) to nut (3).

(3) Replace defective bearing (6) as follows:

(a) Press out defective bearing (6) from rod end (5).

(b) Install serviceable bearing with grease, MIL-G-23827, per "Bearing Installation and Retention," Subject 20-50-03. Stake at 5 points equidistant between old stake marks. Use a staking tool with 0.094- to 0.100-inch spherical radius, and stake 0.017 to 0.023 inch deep.

NOTE: Staking circle and bearing bore must be concentric within 0.010 inch.

(c) Check bearing (6) for ease of rotation and alignment.

(4) Replace defective bearing (14) as follows:

(a) Press out defective bearing (14) and install serviceable bearing per "Bearing Installation and Retention," Subject 20-50-03.

(5) Replace defective sintered bearing (13) as follows:

(a) Remove defective bearing (13) and install serviceable bearing (13) per "Bearing Installation and Retention," Subject 20-50-03.

NOTE: Apply a light coat of oil, MIL-L-7870, on both surfaces prior to installation.

6. ASSEMBLY

A. Procedures (Fig. 2).

(1) Install screw (16) in trunnion assembly (12).

(2) Install washer (11) and nut (10).

(3) Bend tabs on washer (11) to secure nut (10).

NOTE: Tabs must be bent enough to prevent binding on coupling (9) when installed.

(4) Install coupling (9) on screw (16) and secure with bolts (8) and nuts (7).

(5) Lubricate acme threads on screw (16) with lubricant, MIL-G-23827, and install nut assembly (1) on screw (16).

NOTE: Nut assembly (1) must be adjusted after installation in the airplane. Attach tag stating "This assembly not adjusted, final adjustment to be made on airplane."

7. FITS AND CLEARANCES

A. None

8. TESTING

A. None

9. TROUBLE SHOOTING

A. None

10. STORAGE INSTRUCTIONS

A. Wrap assembly in vapor barrier paper and seal securely. Tag or mark assembly for identity.

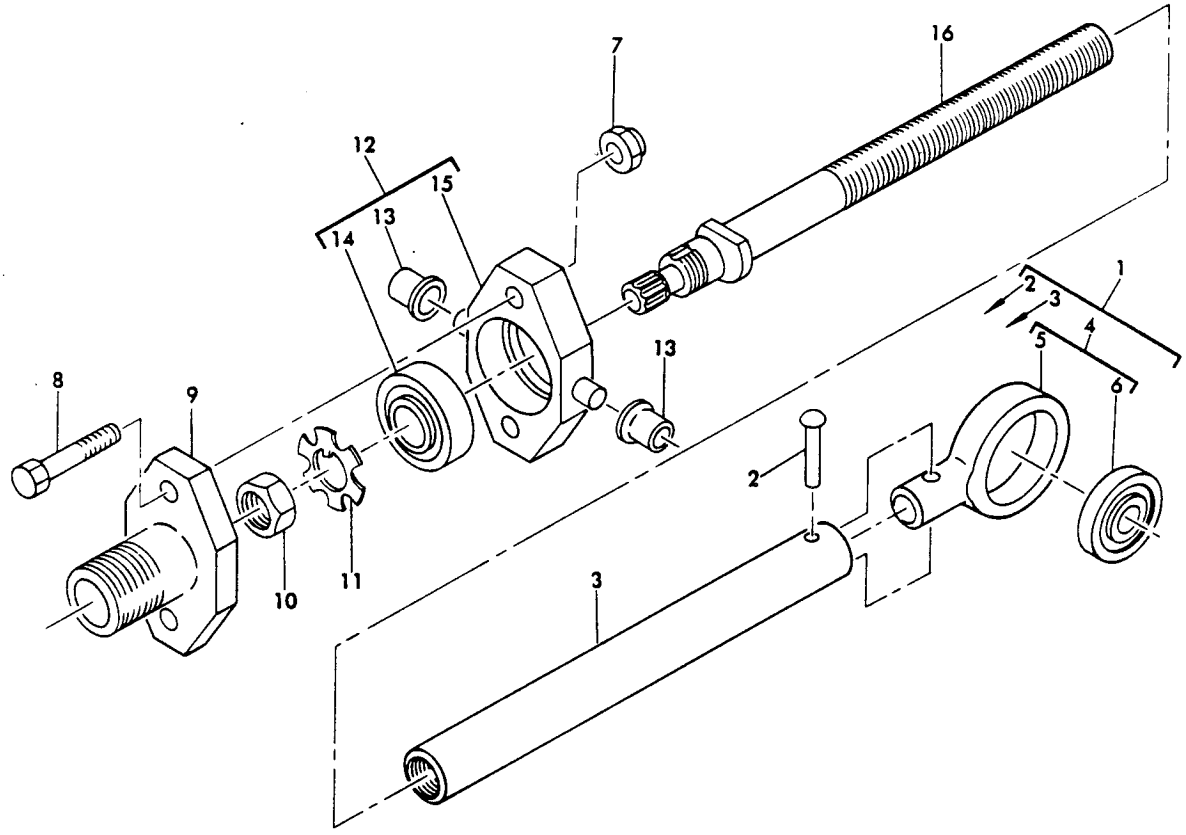
B. For further information, refer to "Temporary Protective Coatings," Subject 20-44-02.

11. SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

A. None

12. Illustrated Parts List

A. Exploded View



Control Stand Stabilizer Trim Jack Assembly
Figure 2

B. Group Assembly Parts List

	FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
R	2-	6-63931-1		CONTROL STAND STABILIZER TRIM JACK ASSEMBLY		
	1	6-63609-2		. NUT ASSEMBLY.		1
R	2	BACR15BB5D		. . RIVET (replaces MS20470D5). . . .		1
R	2	MS20470D5		. . RIVET (obsolete).		1
	3	6-63609-3		. . NUT		1
	4	3-86438		. . ROD END ASSEMBLY.		1
	5	3-86438-1		. . . ROD END		1
R	6	BACB10A682		. . . BEARING (replaces AN201-KP3A) .		1
R	6	AN201-KP3A		. . . BEARING (obsolete).		1
R	7	BACN10JC3		. NUT (replaces NAS679A3W).		2
R	7	NAS679A3W		. NUT (obsolete).		2
R	8	BACB30NE3-10		. BOLT (replaces NAS1303-10). . . .		2
R	8	NAS1303-10		. BOLT (obsolete)		2
	9	3-86441		. COUPLING.		1
	10	AN316-6R		. NUT		1
R	11	MS27111-3		. WASHER.		1
	12	3-86434		. TRUNNION ASSEMBLY		1
R	13	BACB10D6F		. . BEARING		2
R	14	BACB10A543		. . BEARING (replaces AN201KP6A). . .		1
R	14	AN201KP6A		. . BEARING (obsolete).		1
	15	3-86434-1		. . TRUNNION.		1
	16	6-61579-1		. SCREW		1