

OVERHAUL MANUAL

TO: ALL HOLDERS OF CENTER WING TANK SUMP DRAIN ASSEMBLY OVERHAUL MANUAL,
 28-12-11

REVISION NO. 5, DATED MAR 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	I P L	L / Overhaul
Changed jumper part number												X	

CENTER WING TANK SUMP DRAIN ASSEMBLY

28-12-11

| BOEING P/N 65-65382-8, -9, -11, -12, -14, -16, -19

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 10594	Sep 10/72
		PRR 30500-26	Sep 10/72
		PRR 3211-3	Sep 10/72
		PRR 33581	Mar 5/85
28-1051			Jun 5/85
28-1071		PRR 34365	Sep 5/88

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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
28-12-11					
T-1	Sep 5/88				
T-2	BLANK				
* LEP-1	Mar 5/90				
LEP-2	BLANK				
T/C-1	Sep 10/72				
T/C-2	BLANK				
1	Mar 5/85				
2	Sep 10/72				
3	Sep 5/88				
4	Sep 10/72				
* 5	Mar 5/90				
6	BLANK				

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CENTER WING TANK SUMP DRAIN ASSEMBLY1. DESCRIPTION AND OPERATION

A. Description

- (1) The sump drain assembly is a spring-loaded mechanical unit which provides remote operation of a flapper type fuel tank valve. Electrical bonding provisions are included in the assembly.

B. Operation

- (1) The sump drain extends through the fuselage keel beam between the bottom of the wing center section fuel tank and lower skin of the fuselage. Springs at both ends maintain pressure to position drain in closed position. Manually applied upward pressure overcomes spring force, opening valve, and allows drainage of accumulated moisture and trapped fuel.

C. Leading Particulars

Length -- 17.63 inches, 19.13 inches and 19.94 inches
Diameter -- 1.8 inches (approximate maximum)
Weight -- 1.38 pounds

NOTE: Special instructions for Disassembly, Cleaning, Fits and Clearances, Testing, Trouble Shooting, Storage Instructions, and Special Tools, Fixtures, and Equipment are not required. Standard aircraft shop practices are sufficient for overhaul of this component. Functional testing of the sump drain system is accomplished after installation in the airplane.

2. INSPECTION/CHECK

NOTE: Use standard shop procedures for examination and check of parts except for springs as follows:

A. Check compression spring (13)

- (1) At test length of 1.80 inches load must be 13.77 to 16.83 pounds.
- (2) At test length of 2.50 inches load must be 10.80 to 13.2 pounds.

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B. Check torsion spring (25) by winding in direction which reduces spring diameter and checking torque force at following angular deflections from free position:

- (1) At test angular deflection of 390 degrees torque force must be 5.49 to 6.71 pound-inches.
- (2) At test angular deflection of 460 degrees torque force must be 6.48 to 7.92 pound-inches.

3. REPAIR

NOTE: Use standard shop procedures for repair and replacement of parts.

A. Refinish

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

- (1) If plated or painted surfaces are worn or chipped, refinish parts as indicated below.
 - (a) Retainer (11) -- Apply F-8.07 all over.
 - (b) Springs (13 and 25) -- Apply SRF-1.92 all over.
 - (c) Plunger (21) -- Apply F-8.07 all over.
 - (d) Shaft (23) -- Apply SRF-2.30 all over.
 - (e) Outlet (29) and sleeve (31) -- Apply dry film lubricant (BMS 3-3, type 1) to mating surfaces.

4. ASSEMBLY (See figure 2.)

CAUTION: OUTLET (29) AND SLEEVE (31) HAVE DRY FILM LUBRICATED BEARING SURFACES WHICH MUST BE KEPT CLEAN, AND PROTECTED FROM DAMAGE DURING ASSEMBLY.

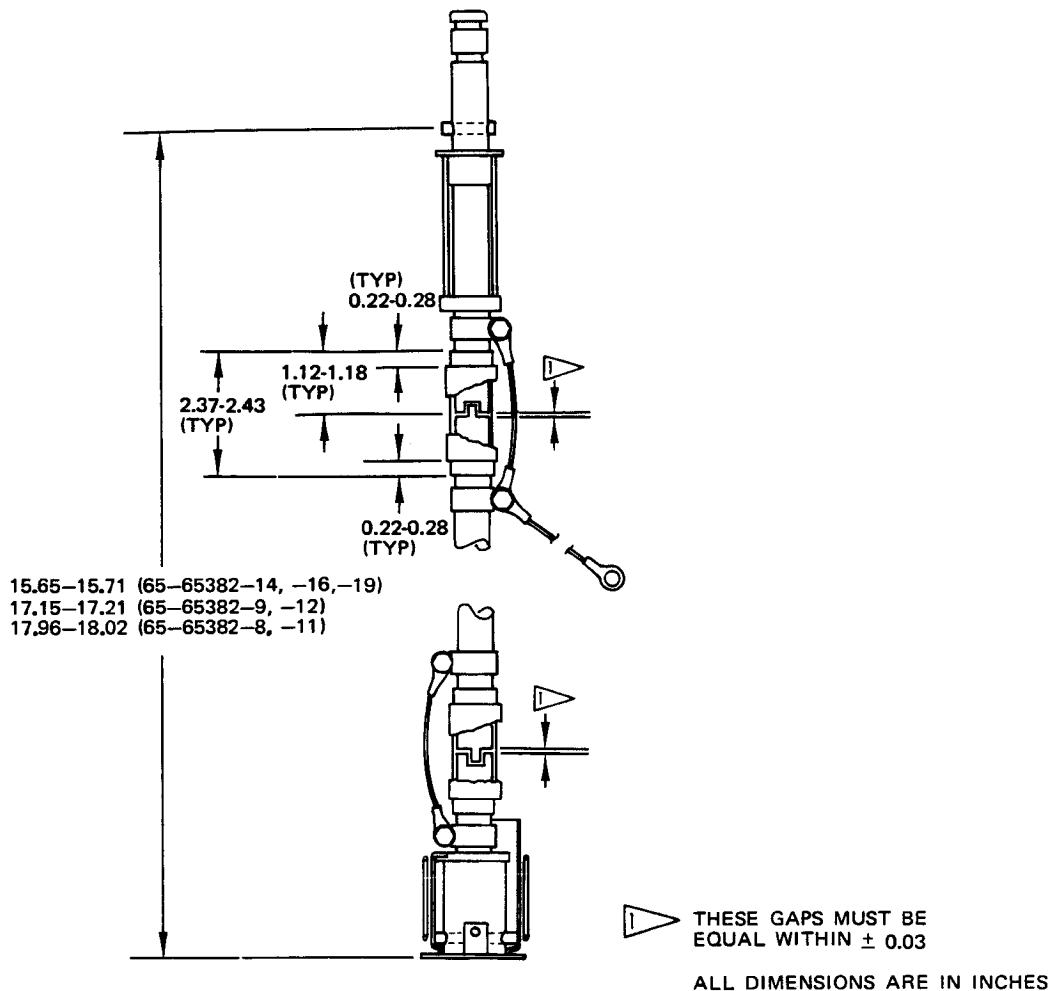
- A. Slip compression spring (13) over top end of plunger (21) and twist past pin until spring is between shoulder and pin on plunger.
- B. Push retainer (11) over end of plunger, past pin, and turn so that slot in retainer is 90 degrees to pin on plunger.
- C. Slide outlet (29) into sleeve (31) from the top.

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- D. Insert pin (27) through access hole in side of sleeve. Center pin in outlet so that pin ends do not contact inner surface of sleeve.
- E. Slide torsion spring (25) down over top of sleeve. Insert lower end of spring through retaining clip on base of sleeve and bend end of spring as required to retain spring.
- F. Wind top end of spring around sleeve to approximately 300 degrees from free position. Wind in the direction which reduces spring diameter. Insert top end of spring through small hole in end of arm on outlet. Bend end of spring as required to retain spring.

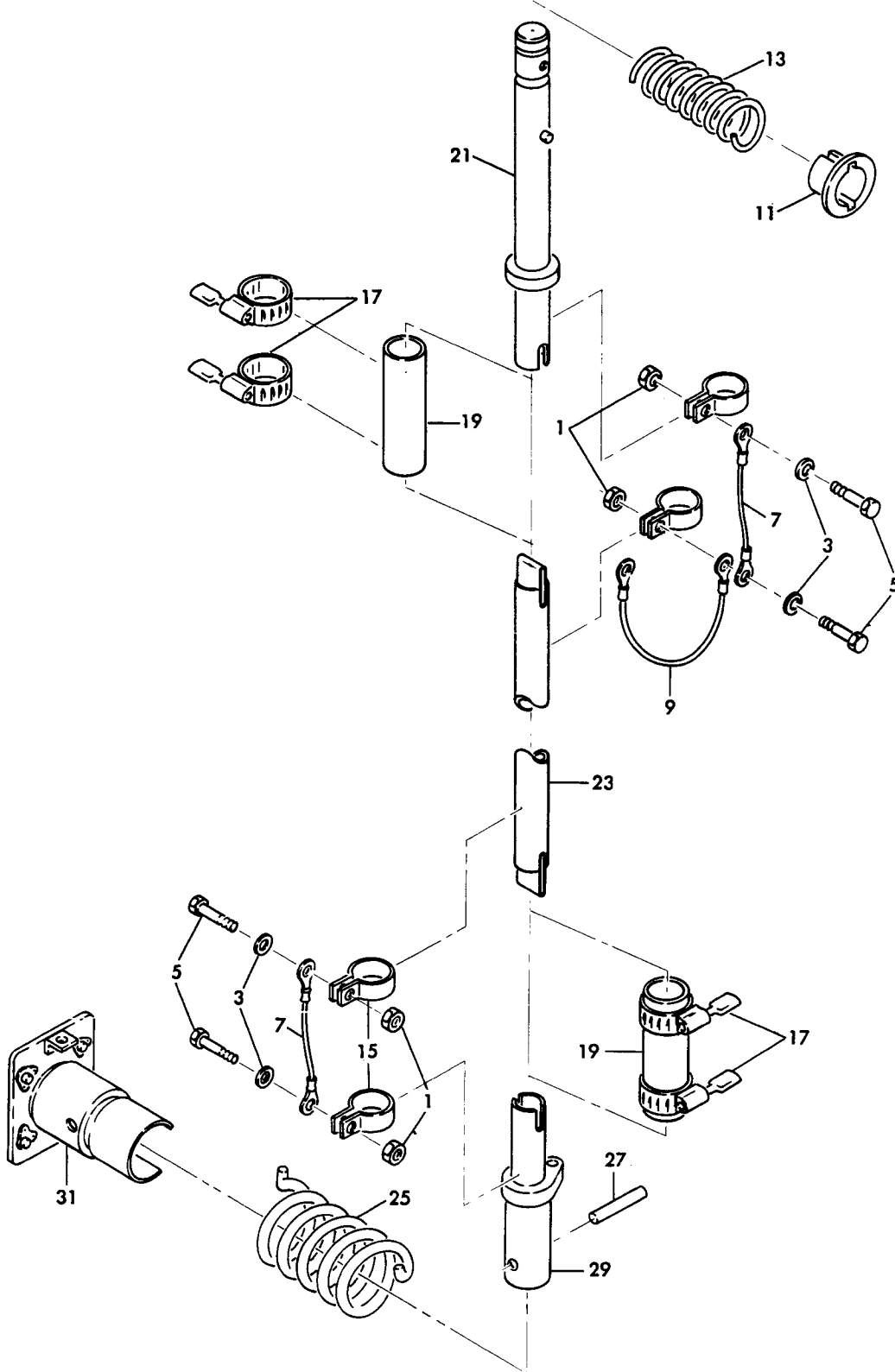
CAUTION: SPRING MUST HOLD ARM OF OUTLET AGAINST EDGE OF SLEEVE, AND PROVIDE POSITIVE RETURN TO THIS POSITION AFTER OUTLET IS ROTATED AGAINST SPRING ACTION.

- G. Assemble shaft (23), plunger (21), and outlet (29) with hoses (19) and clamps (17). Adjust gap and length dimensions as shown in figure 1.
- H. Install jumpers (7 and 9) with clamps (15), screws (5), washers (3) and nuts (1).



Sump Drain Assembly Dimensions
 Figure 1

5. ILLUSTRATED PARTS LIST



Sump Drain Assembly
Figure 2

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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		
2-	65-65382-8		DRAIN ASSY, CENTER WING TANK SUMP							A	RF
	65-65382-9		DRAIN ASSY, CENTER WING TANK SUMP							B	RF
	65-65382-11		DRAIN ASSY, CENTER WING TANK SUMP (POST SB 28-1011)							C	RF
	65-65382-12		DRAIN ASSY, CENTER WING TANK SUMP (POST SB 28-1011)							D	RF
	65-65382-14		DRAIN ASSY, CENTER WING TANK SUMP							E	RF
	65-65382-16		DRAIN ASSY, CENTER WING TANK SUMP (POST SB 28-1051)							F	RF
	65-65382-19		DRAIN ASSY, CENTER WING TANK SUMP (POST SB 28-1071)							G	RF
1	NAS679A3W		. NUT							A-E	4
1	MS21042L3		. NUT							FG	4
3	AN960D10L		. WASHER								4
5	BACS12CB3-7		. SCREW							A-E	4
5	NAS1801-3-7		. SCREW							FG	4
7	MS25083-2BB3		. JUMPER							A-E	2
7	BACJ40A20-3		. JUMPER							FG	2
9	MS25083-2BB4		. JUMPER							A-E	1
9	BACJ40A20-7		. JUMPER							FG	1
11	69-58876-1		. RETAINER (POST SB 28-1011)							C-G	1
13	69-52873-3		. SPRING, COMPRESSION							A-F	1
13	69-52873-5		. SPRING, COMPRESSION							G	1
15	AN735D10		. CLAMP								4
17	AN737TW34		. CLAMP								4
19	65-65382-5		. HOSE								2
21	69-52957-1		. PLUNGER, ASSY								1
23	69-52850-1		. SHAFT							AC	1
23	69-52850-2		. SHAFT							BD	1
23	69-52850-5		. SHAFT							EFG	1
25	69-52873-1		. SPRING, TORSION								1
27	MS39086-255		. PIN								1
29	69-52851-1		. OUTLET								1
31	69-52836-3		. SLEEVE ASSY							AB	1
31	69-52836-5		. SLEEVE ASSY							CDE	1
31	69-52836-7		. SLEEVE ASSY							FG	1