AFT LAVATORY SERVICE UNIT ASSEMBLY

25-46-02

BOEING P/N 65-53521-1, -2, -3, AND -4

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30402	Nov 15/67
		PRR 31634-1	Mar 10/70

LIST OF EFFECTIVE PAGES

* Indicates pages revised, added or deleted in latest revision

F Indicates foldout pages - print one side only

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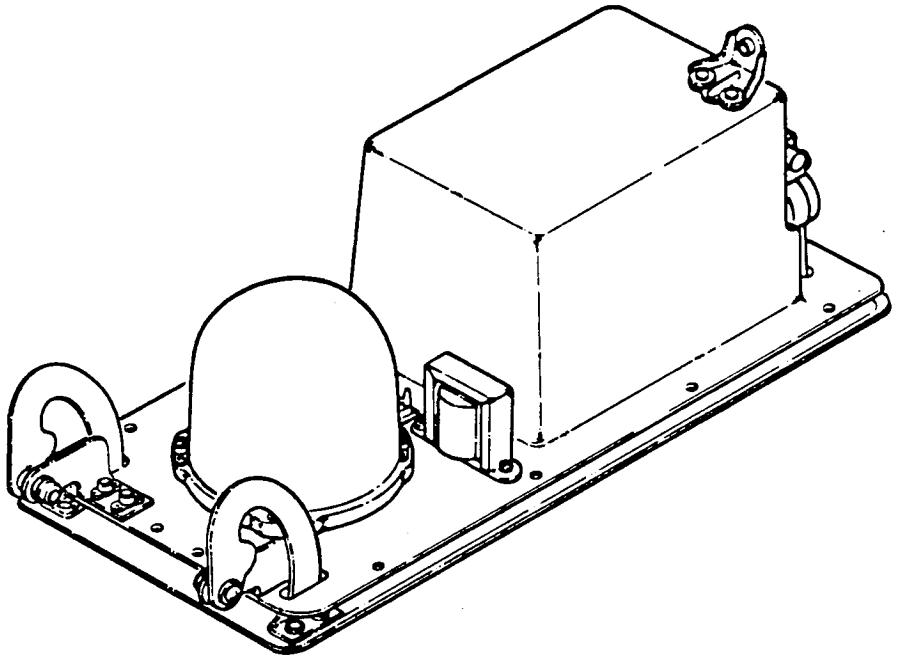
Boeing Part Numbers: 65-53521-1 through -4



Aft Lavatory Service Unit Assembly
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

(1) The aft lavatory service unit assembly is located in the aft lowered ceiling above the aft lavatory compartment. The service unit houses a passenger address loudspeaker and two oro-nasal type oxygen masks. The masks are automatically presented for use upon opening of the service unit door.

B. Operation

(1) The oxygen service unit door opens automatically whenever the passenger oxygen system is actuated. Provisions are also provided for opening of the door. The loudspeaker housed in the service unit is part of the passenger address system.

C. Leading Particulars

Height -- 5.0 inches (approximately)
Length - 17.0 inches (approximately)
Width -- 7.0 inches (approximately)
Weight -- 3.5 pounds (approximately)

2. DISASSEMBLY

A. Remove nuts (1, figure 3), screws (2), washers (3), and spacers (4).

B. Remove nylon nuts (5), hinges (6 and 7), and shims (8).

C. Remove nylon nuts (9) and hook plate (10) from door assembly (11).

NOTE: Do not remove studs (13) from door (12) unless repair or replacement is necessary.

D. Remove screws (14 and 15) and latch-valve manifold assembly (16).

NOTE: Refer to applicable manufacturer's overhaul instructions for latch-valve manifold assembly (16).

E. Remove screws (17) and bracket assemblies (18 and 19).

F. Remove screws (24), seal assembly (25), and speaker (28). Disconnect wiring from speaker.

NOTE: Do not separate seal (27) from support ring (26) unless replacement is necessary.

G. Disconnect wiring from terminal strip (34).

H. Remove nuts (29), screws (30), and transformer (31).

I. Remove nuts (32), screws (33), and terminal strip (34).

J. Remove grommet (35).

NOTE: Do not disassemble box assembly (36) unless repair or replacement is necessary.

3. CLEANING

A. Wash and rinse hinges (6 and 7, figure 3) and brackets (20 and 21) in solvent, Specification P-D-680, or equivalent. Refer to "General Cleaning Procedures," Subject 20-30-03.

B. Clean latch-valve manifold assembly (16) per manufacturer's instructions.

C. Wash all non-metallic parts except speaker (28), transformer (31), and terminal strip (34) with a mild soap and water solution.

D. Dry all parts with clean, lint-free cloth or with clean, moisture-free compressed air.

4. INSPECTION/CHECK

A. Visually examine all parts for evidence of cracks, burrs, corrosion, or excessive wear.

NOTE: Visual examination of wiring, electrical components, and solder connections shall be accomplished with a minimum of 5-power magnification unless otherwise specified.

B. Check all metal parts for bending, denting, or other damage which may interfere with mating of associated parts.

C. Visually examine all threaded parts for cross-threading or stripping.

D. Check door finish for scratches, blisters, or flaking.

E. Examine speaker (28, figure 3) for punctures or cracks in speaker cone.

5. REPAIR

A. Repair

(1) Minor scratches, nicks, and corrosion may be polished out of metal parts with abrasive cloth, 220 grit or finer. Refinish polished areas as required for corrosion protection.

(2) Repair minor defects in threaded parts with triangular file or thread chaser.

(3) Repair fiberglass parts as necessary using standard methods.

B. Refinish (See figure 3.)

(1) If plated or painted surfaces are worn or chipped, refinish items as indicated in following list.

NOTE: Refer to "Stripping of Protective Finishes," Subject 20-30-02, and to Subject 20-41-01 for decoding of F and SRF finish symbols and their BAC equivalents.

(a) Hinges (6 and 7) -- Apply SRF-2.30 all over.

(b) Door (12) -- Apply SRF-2.30 all over.

(c) Brackets (20 and 21) -- Apply SRF-2.30 all over.

C. Replacement (See figure 3.)

(1) Replace seal (27), if necessary, by bonding as follows:

(a) Clean faying surface of support ring (26) and brush on coat of Dow Corning A-4014 Primer. Air dry for 30 minutes.

(b) Thoroughly blend 100 parts by weight of A-4000 adhesive with 4.5 parts by weight of A-4000 catalyst in an open container. Apply uniform coat of blended adhesive (0.010 to 0.015 inches thick) to both faying surfaces. Air dry at temperature of 70°F (minimum) until tacky.

NOTE: Dow Corning A-4014 Primer, A-4000 Catalyst, and A-4000 Adhesive may be obtained from Dow Corning Corporation, South Saginaw Road, Midland, Michigan 48641.

(c) Join surfaces and cure at temperature of 70°F (minimum) for 24 hours before stressing bond.

(2) Replace grommet (35) if necessary.

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

6. ASSEMBLY

A. Insert grommet (35, figure 3) in box (41).

B. Install terminal strip (34) with screws (33) and nuts (32).

C. Install transformer (31) with screws (30) and nuts (29).

D. Connect wiring to terminal strip (34) per figure 2.

E. Attach speaker wiring and install speaker (28), seal assembly (25), and secure with screws (24).

F. Install bracket assemblies (18 and 19) with screws (17).

G. Install latch-valve manifold assembly (16) with screws (14 and 15).

H. Install hook plate (10) and secure with nylon nuts (9).

I. Install shims (8) and hinges (6 and 7) with nylon nuts (5).

J. Connect door assembly (11) to box assembly (36) with spacers (4), washers (3), screws (2), and nuts (1).

7. FITS AND CLEARANCES

A. None.

8. TESTING

A. Test Equipment

(1) Variable frequency audio source.

(2) Audio power meter GR583-A or equivalent.

(3) Matching transformer and/or audio amplifier.

B. Preparation for Test

(1) Connect variable frequency audio source to appropriate matching transformer and/or audio amplifier and to pins 1 and 2 of terminal strip T251. See figure 2. Connect power meter to monitor output of variable frequency audio source.

C. Functional Test

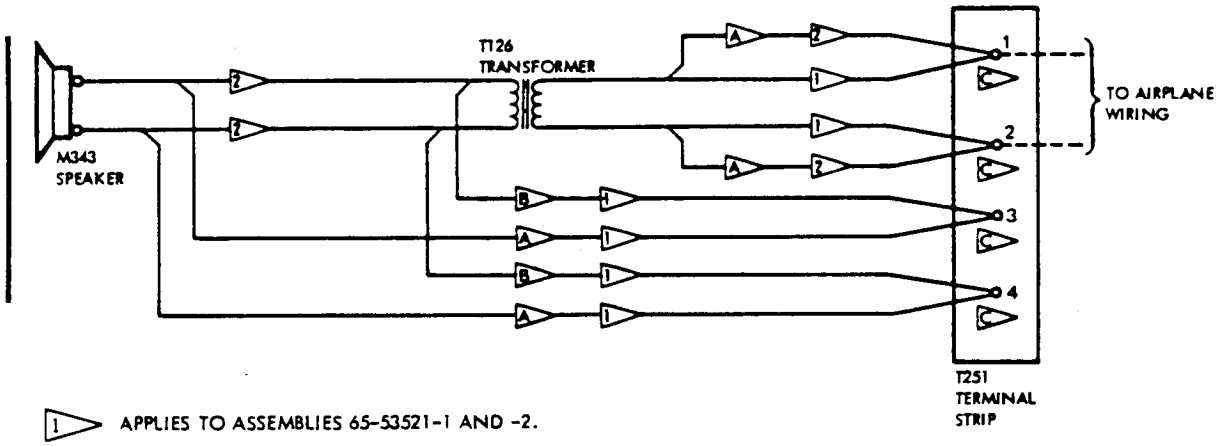
(1) Apply signal to pins 1 and 2 of terminal strip T251 which is comfortably audible. Do not exceed 2 watts audio power.

(2) Vary frequency between 300 Hz and 10,000 Hz; there should be no audible distortion.

(3) At 500 Hz, apply 2 watts audio power; there should be no audible distortion.

(4) Check continuity per figure 2.

(5) With door (12, figure 3) closed, actuate manual release pin on latch-valve manifold assembly (16) and check for satisfactory door operation.



Schematic Diagram
Figure 2

9. TROUBLE SHOOTING

A. None.

10. STORAGE INSTRUCTIONS

A. Wrap assembly in vapor barrier paper and tape securely. Tag with overhaul date.

B. Protect unit from mishandling by using suitable structure or packing.

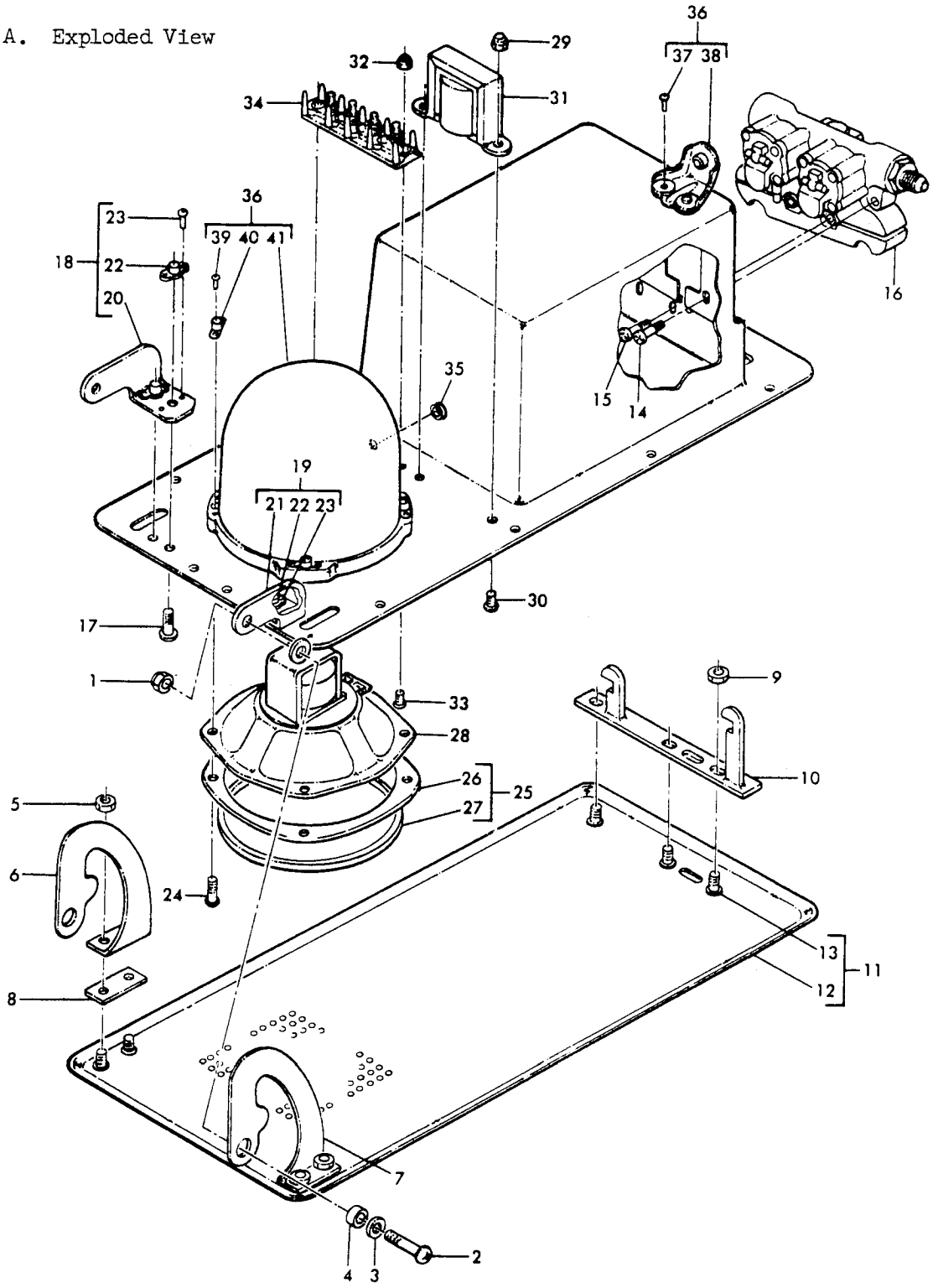
C. Refer to "Temporary Protective Coatings," Subject 20-44-02, for further information.

11. SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

A. None.

12. ILLUSTRATED PARTS LIST

A. Exploded View



Aft Lavatory Service Unit Assembly
Figure 3

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
3-	65-53521-1		AFT LAVATORY SERVICE UNIT ASSEMBLY		
	65-53521-2		AFT LAVATORY SERVICE UNIT ASSEMBLY		
	65-53521-3		AFT LAVATORY SERVICE UNIT ASSEMBLY		
	65-53521-4		AFT LAVATORY SERVICE UNIT ASSEMBLY		
1	BACN10JC3		. NUT (replaces NAS679A3W).		2
2	NAS603-9P		. SCREW, Machine.		2
3	BACW10P193G		. WASHER.		4
4	66-15702-1		. SPACER.		2
5	BACN10MG8		. NUT, Nylon.		4
6	66-15699-1		. HINGE		1
7	66-15699-2		. HINGE		1
8	BACS40R10D11		. SHIM (replaces BACS40C12-20). . . .		2
9	BACN10MG8		. NUT, Nylon.		3
10	66-15700-2		. HOOK PLATE.		1
11	65-53522-1		. DOOR ASSEMBLY		1
12	65-53522-2		. . DOOR.		1
13	BACS21AQ6A3M		. . STUD.		7
14	NAS603-20P		. SCREW, Machine.		2
15	NAS603-16P		. SCREW, Machine.		2
16	115012		. MANIFOLD ASSEMBLY, Latch-valve, V16827 (Boeing 10-60732-1) (refer to applicable overhaul manual). .	ac	1
16	115012-01		. MANIFOLD ASSEMBLY, Latch-valve, V16827 (Boeing 10-60732-2) (refer to applicable overhaul manual). .	bd	1
17	NAS602-8P		. SCREW, Machine.		4
18	66-15701-1		. BRACKET ASSEMBLY.		1
19	66-15701-2		. BRACKET ASSEMBLY.		1
20	66-15701-3		. . BRACKET (used on 66-15701-1). . .		1
21	66-15701-4		. . BRACKET (used on 66-15701-2). . .		1
22	MS20426D3		. . RIVET		4
23	BACN10JR08		. . NUT PLATE (replaces NAS680A08). .		2
24	NAS602-20P		. SCREW		4
25	66-16857-1		. SEAL ASSEMBLY		1
26	66-16857-2		. . SUPPORT RING.		1
27	66-16857-4		. . SEAL.		1
28	V5C115		. SPEAKER ASSEMBLY, V80331 (limited usage on 65-53521-3 and -4) (V5C134 optional on 65-53521-3 and -4)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-28	V5C134		. SPEAKER ASSEMBLY, V80331 (limited usage) (V5C115 optional)	cd	1
29	BACN10JC06		. NUT (replaces NAS679A06W)		2
30	NAS601-8P		. SCREW		2
31	24S48V		. TRANSFORMER, V96256	ab	1
31	T57272		. TRANSFORMER, V96256	cd	1
32	BACN10JC04		. NUT (replaces NAS679A04W)		2
33	NAS600-8P		. SCREW, Machine		2
34	MS27212-1-4		. TERMINAL STRIP		1
35	BACG20C1		. GROMMET		1
36	65-21919-3		. BOX ASSEMBLY		1
37	MS20470A4		. . RIVET		2
38	BACN10MK3-85		. . NUTPLATE, Angle		1
39	MS20426A3		. . RIVET		8
40	BACN10JR08		. . NUTPLATE (replaces NAS680A08)		4
41	65-21919-4		. . BOX		1

a used on 65-53521-1
b used on 65-53521-2
c used on 65-53521-3
d used on 65-53521-4

VENDOR CODE

Code	Name and Address
V16827	Puritan Equipment, Inc. 1703 McGee Kansas City, Missouri 64108
V80331	Utah-American Corp. 1124 East Franklin Street Huntington, Indiana 46750
V96256	Thordarson-Meissner Mt. Carmel, Illinois 62863

Reference Designation Index (See Schematic Diagram)		
Reference Designation	Part Number	Item No.
M343	V5C115	28
M343	V5C134	28
T126	24S48V	31
T126	T57272	31
T251	MS27212-1-4	34