

AFT AIRSTAIR ENTRY DOOR ASSEMBLY

52-16-02

BOEING P/N 65-51530-2, -216

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

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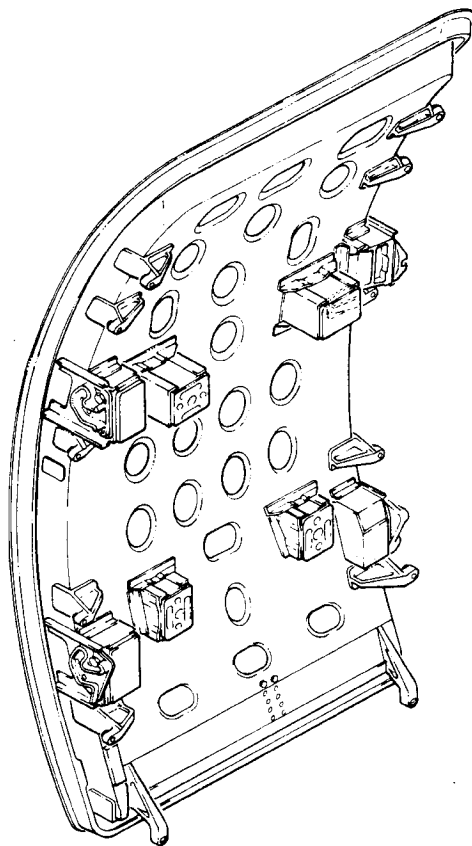
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Boeing Part Numbers 65-51530-2 and -216



Aft Airstair Entry Door Assembly
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

- (1) The aft airstair entry door is an outward opening plug-type door of aluminum structure with outer and inner skins, internal webs, and stiffeners. Cam fittings provide a means of positioning the door and adjustable stops serve to transmit pressurization loads to the airplane fuselage.

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B. Operation

- (1) The aft airstair entry door attaches to the upper segment of the aft airstairs and is deployed upward, inward, and then outward by unlatching the door and actuating the airstairs drive mechanism.

C. Leading Particulars

Thickness -- 5.0 inches (approximately)
Width -- 40.0 inches (approximately)
Height -- 82.0 inches (approximately)
Weight -- 124.0 pounds (approximately)

2. DISASSEMBLY

A. General

- (1) Place door on a nonmarring surface or in a suitable support fixture to protect exterior surface from dents or scratches. For further information, refer to "Temporary Protective Coatings," Subject 20-44-02.

B. Disassemble Door (See figure 2)

- (1) Remove screws (1, 2, 3, and 4) and roller cam fittings (5, 6, 7, and 8).

NOTE: Do not disassemble items (9 through 16) unless repair or replacement is necessary.

- (2) Remove bolts (17), washers (18), and fitting assemblies (19).

NOTE: Do not disassemble items (20 through 72) unless repair or replacement is necessary.

3. CLEANING

- A. Wash and rinse all parts in dry cleaning solvent, Specification P-D-680.
- B. Dry parts with a clean, lint-free cloth, or moisture-free compressed air.

NOTE: For further information, refer to "General Cleaning Procedures." Subject 20-30-03.

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4. INSPECTION/CHECK

A. Visual Check

- (1) Examine all metal parts for pits, scratches, cracks, corrosion, and damage. Use a strong light and 10-power magnification.
- (2) Examine entire basic assembly for loose fasteners, corrosion, damage, and general condition of paint and finish.

B. Special Check (See figure 2)

- (1) If visual examination discloses any evidence of defects in any of listed parts, perform following checks:
 - (a) Penetrant Check -- Items (19, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, and 57).
 - (b) Magnetic Particle Check -- Items (5, 6, 7, and 8), Material is CRES INVESTMENT casting 17-4PH per AMS 5355, heat-treated to 180 to 200 ksi; and items (25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, and 58).

5. REPAIR

A. Repair

- (1) Repair of parts should be limited to those items that can be restored to serviceable condition using simple tools and procedures.
- (2) Remove minor scratches, nicks, pitting, and superficial corrosion by polishing lightly with 220 grit or finer abrasive cloth.
- (3) Clean up minor defects in threaded areas with a thread chaser or small triangular file.

B. Refinish

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 parts listed below as indicated. (See figure 2)
 - (a) Roller Cam Fittings (5, 6, 7, and 8) -- Apply F-8.07 all over followed by Fl.1926 on serrated surface only.
 - (b) Serrated Plates (9, 10, 11, and 12) and Fitting Assemblies (19) -- Apply SRF-2.19 all over except omit primer on serrations.
 - (c) Fittings (24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, and 57) and Shim (67) -- Apply SRF-2.30 all over.

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- (d) Serrated Plate (6) -- Apply SRF-2.30 all over except omit primer on serrations.
- (e) Bushings (25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, and 58) -- Apply F-1.1929 all over.

C. Replacement (See figure 2)

- (1) Replace all parts found unserviceable or damaged beyond simple repair.
- (2) If replacement of any part installed with rivets or lockbolts is required, remove fasteners using standard shop procedures and replace part using new fasteners of same type and size as those removed.
- (3) If it is necessary to replace stop fitting bushings (25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, or 58), press or drill out old bushing and reinstall new one with wet primer, EMS 10-11, Type 1. Flare bushing to chamfer of fitting bore.
- (4) If nameplate (71) or Metal-Cal (72) needs replacement, install new part per Subject 20-50-05.

D. Materials (as shown, or equivalent)

- (1) Primer EMS 10-11, Type 1.
- (2) Abrasive cloth, 220 grit or finer.

6. ASSEMBLY

A. General

- (1) Refer to "Bolt and Nut Installation," Subject 20-50-01, for general assembly procedures.

B. Install fitting assemblies (19) using bolts (17) and washers (18).

C. Install roller cam fittings (5, 6, 7, and 8) using screws (1, 2, 3, and 4).

7. FITS AND CLEARANCES

A. None.

8. TESTING

A. None.

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9. TROUBLE SHOOTING

A. None

10. STORAGE INSTRUCTIONS

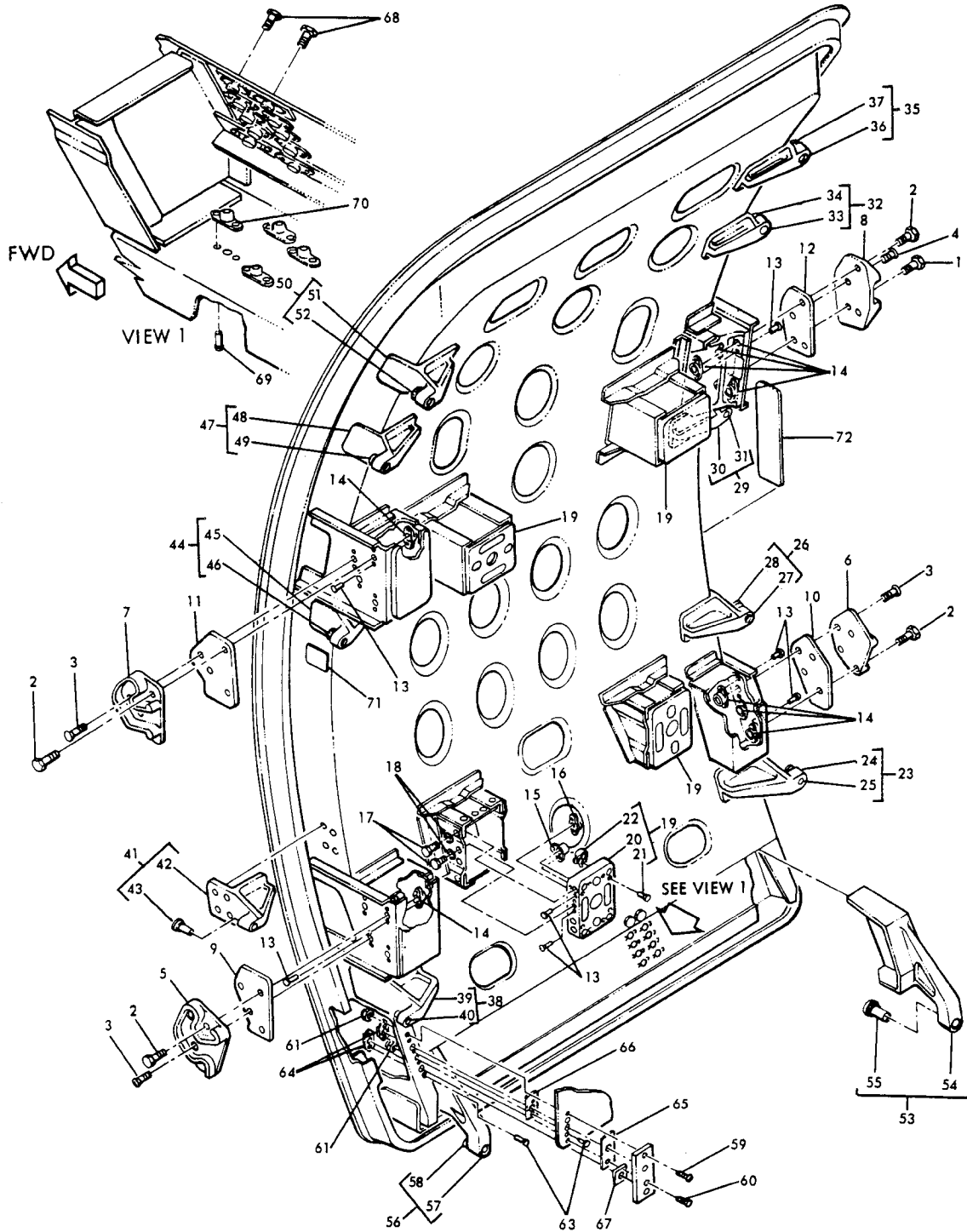
- A. Provide a protective cover to prevent damage to exterior skin of door assembly.
- B. Wrap door assembly in vapor barrier paper and tag with assembly number and overhaul date.
- C. Enclose door assembly in a suitable structure to prevent damage while being handled and in storage.
- D. For further 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



Aft Airstair Entry Door 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- | 65-51530-2 | | AFT AIRSTAIR ENTRY DOOR ASSY | | | | | | | A | Ref |
| | 65-51530-216 | | AFT AIRSTAIR ENTRY DOOR ASSY | | | | | | | B | Ref |
| 1 | NAS1304-10 | | . SCREW | | | | | | | | 1 |
| 2 | NAS1304-11 | | . SCREW | | | | | | | | 8 |
| 3 | BAC30FL4-8 | | . SCREW | | | | | | | | 6 |
| 4 | BAC30FL4-10 | | . SCREW | | | | | | | | 1 |
| 5 | 65-59660-1 | | . ROLLER CAM FITTING, Lower aft | | | | | | | | 1 |
| 6 | 65-59661-1 | | . ROLLER CAM FITTING, Lower forward | | | | | | | | 1 |
| 7 | 65-59662-1 | | . ROLLER CAM FITTING, Upper aft | | | | | | | | 1 |
| 8 | 65-59663-1 | | . ROLLER CAM FITTING, Upper forward | | | | | | | | 1 |
| 9 | 65-59688-2 | | . SERRATED PLATE, Lower aft | | | | | | | | 1 |
| 10 | 65-59688-1 | | . SERRATED PLATE, Lower forward | | | | | | | | 1 |
| 11 | 65-60534-2 | | . SERRATED PLATE, Upper aft | | | | | | | | 1 |
| 12 | 65-60534-1 | | . SERRATED PLATE, Upper forward | | | | | | | | 1 |
| 13 | MS20426D3 | | . RIVET | | | | | | | | 160 |
| 14 | LHA3385 | | . NUTPLATE, V72762 | | | | | | | | 16 |
| 15 | NAS698A3 | | . NUTPLATE | | | | | | | | 32 |
| 16 | NAS697A3 | | . NUTPLATE | | | | | | | | 32 |
| 17 | NAS1103-4 | | . BOLT | | | | | | | | 64 |
| 18 | AN960D10L | | . WASHER | | | | | | | | 64 |
| 19 | 69-48713-1 | | . FITTING ASSY | | | | | | | | 4 |
| 20 | 69-48713-2 | | . . FITTING | | | | | | | | 1 |
| 21 | MS20426D3 | | . . RIVET | | | | | | | | 8 |
| 22 | NAS698A4 | | . . NUTPLATE | | | | | | | | 4 |
| 23 | 65-53751-1 | | . FITTING ASSY, No. 1 fwd stop | | | | | | | A | 1 |
| 23 | 65-53751-4 | | . FITTING ASSY, No. 1 fwd stop (replaces 65-53751-1) | | | | | | | | 1 |
| 24 | 65-53751-2 | | . . FITTING (used on 65-53751-1) | | | | | | | | 1 |
| 24 | 65-53751-5 | | . . FITTING (used on 65-53751-4) | | | | | | | | 1 |
| 25 | 69-41720-1 | | . . BUSHING | | | | | | | | 1 |
| 26 | 65-53752-1 | | . FITTING ASSY, No. 2 fwd stop | | | | | | | A | 1 |
| 26 | 65-53752-4 | | . FITTING ASSY, No. 2 fwd stop (replaces 65-53752-1) | | | | | | | | 1 |
| 27 | 65-53752-2 | | . . FITTING (used on 65-53752-1) | | | | | | | | 1 |
| 27 | 65-53752-5 | | . . FITTING (used on 65-53752-4) | | | | | | | | 1 |
| 28 | 69-41720-1 | | . . BUSHING | | | | | | | | 1 |
| 29 | 65-53753-1 | | . FITTING ASSY, No. 3 fwd stop | | | | | | | A | 1 |
| 29 | 65-53753-4 | | . FITTING ASSY, No. 3 fwd stop (replaces 65-53753-1) | | | | | | | | 1 |

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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- | | | | | | | | | | | |
| 30 | 65-53753-2 | | | | | | | | | | 1 |
| 30 | 65-53753-5 | | | | | | | | | | 1 |
| 31 | 69-41720-1 | | | | | | | | | | 1 |
| 32 | 65-53754-1 | | | | | | | | A | | 1 |
| 32 | 65-53754-4 | | | | | | | | | | 1 |
| 33 | 65-53754-2 | | | | | | | | | | 1 |
| 33 | 65-53754-5 | | | | | | | | | | 1 |
| 34 | 66-12688-1 | | | | | | | | | | 1 |
| 35 | 65-53755-1 | | | | | | | | A | | 1 |
| 35 | 65-53755-4 | | | | | | | | | | 1 |
| 36 | 65-53755-2 | | | | | | | | | | 1 |
| 36 | 65-53755-5 | | | | | | | | | | 1 |
| 37 | 66-12688-1 | | | | | | | | | | 1 |
| 38 | 65-53756-1 | | | | | | | | A | | 1 |
| 38 | 65-53756-4 | | | | | | | | | | 1 |
| 39 | 65-53756-2 | | | | | | | | | | 1 |
| 39 | 65-53756-5 | | | | | | | | | | 1 |
| 40 | 66-12688-1 | | | | | | | | | | 1 |
| 41 | 65-53757-1 | | | | | | | | A | | 1 |
| 41 | 65-53757-4 | | | | | | | | | | 1 |
| 42 | 65-53757-2 | | | | | | | | | | 1 |
| 42 | 65-53757-5 | | | | | | | | | | 1 |
| 43 | 66-12688-1 | | | | | | | | | | 1 |
| 44 | 65-53758-1 | | | | | | | | A | | 1 |
| 44 | 65-53758-4 | | | | | | | | | | 1 |
| 45 | 65-53758-2 | | | | | | | | | | 1 |
| 45 | 65-53758-5 | | | | | | | | | | 1 |
| 46 | 66-12688-1 | | | | | | | | | | 1 |
| 47 | 65-53759-1 | | | | | | | | A | | 1 |
| 47 | 65-53759-4 | | | | | | | | | | 1 |

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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- | | | | | | | | | | | |
| 48 | 64-53759-2 | | . | . | FITTING (used on 65-53759-1) | | | | | | 1 |
| 48 | 65-53759-5 | | . | . | FITTING (used on 65-53759-4) | | | | | | 1 |
| 49 | 66-12688-1 | | . | . | BUSHING | | | | | | 1 |
| 50 | 65-53760-1 | | . | | FITTING ASSY, No. 5 aft stop | | | | A | | 1 |
| 50 | 65-53760-4 | | . | | FITTING ASSY, No. 5 aft stop (replaces 65-53760-1) | | | | | | 1 |
| 51 | 65-53760-2 | | . | . | FITTING (used on 65-53760-1) | | | | | | 1 |
| 51 | 65-53760-5 | | . | . | FITTING (used on 65-53760-4) | | | | | | 1 |
| 52 | 65-53568-1 | | . | | FITTING ASSY, Threshold fwd stop | | | | A | | 1 |
| 53 | 65-53568-4 | | . | | FITTING ASSY, Threshold fwd stop (replaces 65-53568-1) | | | | | | 1 |
| 54 | 65-53568-2 | | . | . | FITTING (used on 65-53568-1) | | | | | | 1 |
| 54 | 65-53568-5 | | . | . | FITTING (used on 65-53568-4) | | | | | | 1 |
| 55 | 69-41720-2 | | . | . | BUSHING | | | | | | 1 |
| 56 | 65-53569-1 | | . | | FITTING ASSY, Threshold aft stop | | | | A | | 1 |
| 56 | 65-53569-4 | | . | | FITTING ASSY, Threshold aft stop (replaces 65-53569-1) | | | | | | 1 |
| 57 | 65-53569-2 | | . | . | FITTING (used on 65-53569-1) | | | | | | 1 |
| 57 | 65-53569-5 | | . | . | FITTING (used on 65-53569-4) | | | | | | 1 |
| 58 | 69-41720-2 | | . | . | BUSHING | | | | | | 1 |
| 59 | BACB30FM6-6 | | . | | BOLT, Shear | | | | | | 1 |
| 60 | BACB30FN6-6 | | . | | BOLT, Shear | | | | | | 1 |
| 61 | BACC30M6 | | . | | COLLAR | | | | | | 2 |
| 62 | 69-48794-1 | | . | | PLATE, Serrated | | | | | | 1 |
| 63 | MS20470D3 | | . | | RIVET | | | | | | 4 |
| 64 | NAS686A4 | | . | | NUTPLATE | | | | | | 2 |
| 65 | BACS40A16-32 | | . | | SHIM | | | | | | AR |
| 66 | BACS40A16-23 | | . | | SHIM | | | | | | AR |
| 67 | 90-9195-21 | | . | | SHIM, Tapered | | | | | | 1 |
| 68 | NAS1303-3 | | . | | BOLT | | | | | | 2 |
| 69 | MS20426D3 | | . | | RIVET | | | | | | 28 |
| 70 | NAS686A3 | | . | | NUTPLATE | | | | | | 14 |
| 71 | MS27253F1 | | . | | NAMEPLATE | | | | | | 1 |
| 72 | BAC27DBY90 | | . | | MARKER | | | | | | 1 |

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VENDORS

V72762

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