

SIDE-HINGED MAIN-DOOR FOLDING-FLAP ACTUATING CAM - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

1. General

- A. This section gives the procedures to remove and install the actuating cam of the folding flap of the side-hinged main door.
- B. The procedures in this section are given in the sequence below. The tasks identified with (◆) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
52-18-02-000-801-A	SIDE-HINGED MAIN-DOOR FOLDING-FLAP ACTUATING CAM - REMOVAL	AIRCRAFT WITH SIDE-HINGED MAIN DOOR
52-18-02-400-801-A	SIDE-HINGED MAIN-DOOR FOLDING-FLAP ACTUATING CAM - INSTALLATION	AIRCRAFT WITH SIDE-HINGED MAIN DOOR

TASK 52-18-02-000-801-A

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

2. SIDE-HINGED MAIN-DOOR FOLDING-FLAP ACTUATING CAM - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the actuating cam of the folding flap of the side-hinged main door.

B. References

REFERENCE	DESIGNATION
AMM SDS 52-18-00/1	
AMM TASK 25-23-04-000-801-A/400	MAIN-DOOR LINING PANEL - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
811		Side-hinged main door

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Work stand	To get access to the side-hinged main door	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Side-hinged main door

I. Preparation

SUBTASK 841-002-A

- (1) Open the side-hinged main door ([AMM SDS 52-18-00/1](#)).
- (2) Remove the lining panels of the side-hinged main door ([AMM TASK 25-23-04-000-801-A/400](#)).

J. Removal of the Actuating Cam (Figure 401)

SUBTASK 020-002-A

- (1) The internal actuating handle of the main door must be in the open position.

CAUTION: DO NOT CHANGE THE ADJUSTMENT OF THE RODS (23), (47), AND (54) WHILE YOU DO THIS TASK.

- (2) Remove the cotter pin (1), nut (2), washer (3), and bolt (24), and disconnect the rod (23) from the support of the structure (Ref.).
- (3) Remove the cotter pin (19), nut (20), washer (21), and bolt (5) from the bellcrank (4), and remove the rod (23).
- (4) Remove the cotter pin (16), nut (17), washer (18), and slowly loosen the bolt (6) to remove the spacer (22) and the bushing (8).
- (5) Remove the nut (10), washer (9), and bolt (12), and loosen the cam (7) from the shaft (11).
- (6) Remove three washers (15) and retainer ring (14) from the end of the shaft (11).
- (7) Remove the cotter pin (57), nut (56), washer (55), and bolt (25), and disconnect the rod (54) from the support of the door structure (Ref.).
- (8) Remove the cotter pin (29), nut (28), washer (27), and bolt (53) from the bellcrank (26), and remove the rod (54).
- (9) Remove the cotter pin (31), nut (30), washer (32), and slowly loosen the bolt (53) to remove the spacer (52) and the bushing (50).
- (10) Remove the cotter pin (44), nut (45), washer (46), and bolt (48) and disconnect the rod (47) from the cam (51).
- (11) Remove the nut (42), washer (43), and bolt (49), and loosen the cam (51) from the shaft (11).
- (12) Remove the spring (33) from the cam (35) and release the lever (38).
- (13) Remove the nut (37), washer (36), and bolt (34), and remove the cam (35).
- (14) Remove the cotter pin (44), nut (45), washer (46), and bolt (49) to disconnect the rod (47) from the cam (51).
- (15) Remove two washers (40) and (41), and retainer ring (39) from the end of the shaft (11).
- (16) Push the shaft (11) to the right side of the door.
- (17) Remove the shaft (11).
- (18) Remove the cams (7) and (51).

K. Removal of the Actuating Mechanism ([Figure 402](#))

SUBTASK 020-003-A

- (1) The internal actuating handle of the main door must be in the open position.

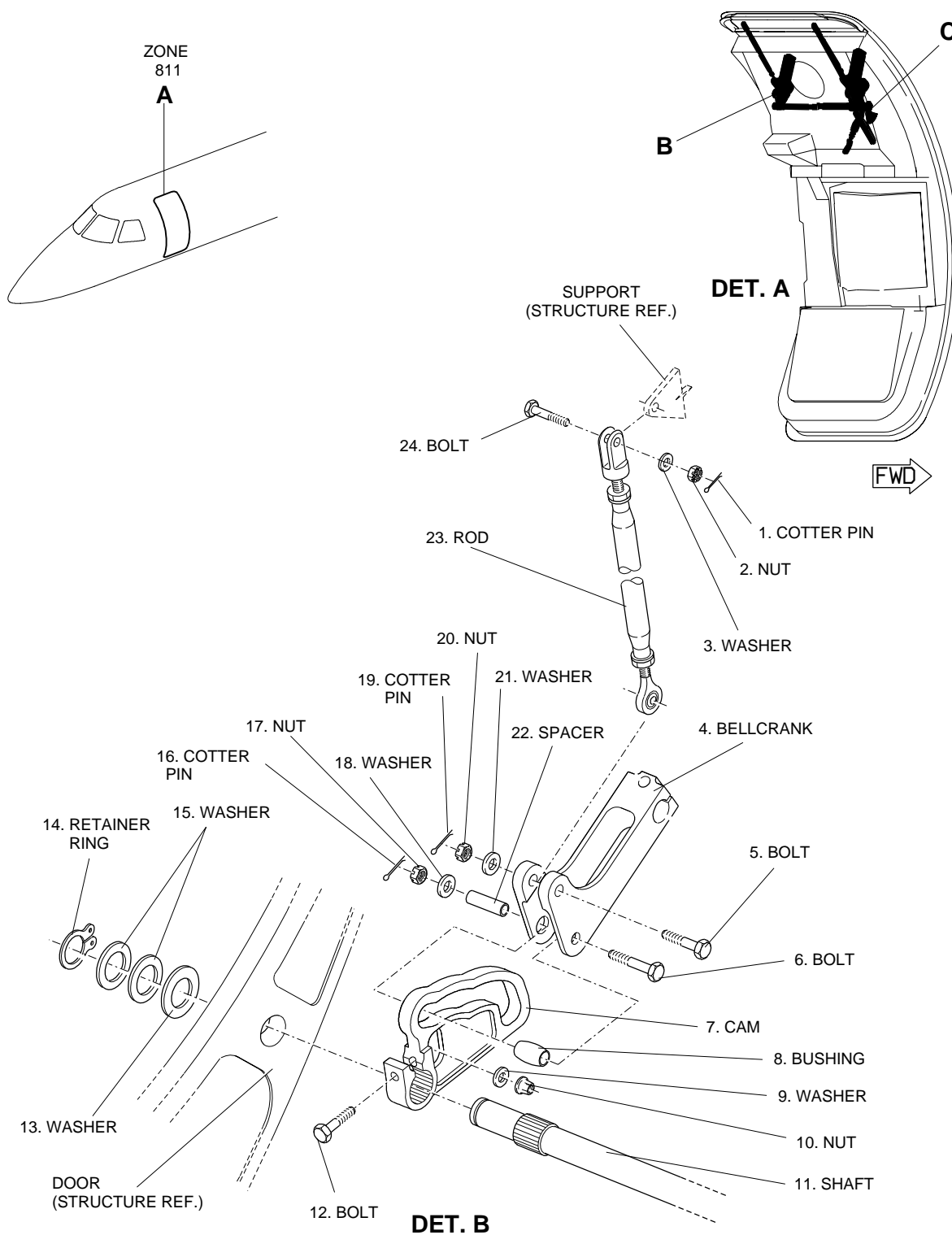
CAUTION: DO NOT CHANGE THE ADJUSTMENT OF THE RODS (11), (20), (29), (38), AND (50) WHILE YOU DO THIS TASK.

- (2) Remove the cotter pin (17), nut (18), washer (19), and bolt (21), to disconnect the rod (20) from the bellcrank (3).
- (3) Remove the nut (22), washer (23), and bolt (2), and loosen the bellcrank (3) from the shaft (1).
- (4) Remove the cotter pin (10), nut (9), washer (8), and bolt (12) to disconnect the rod assembly (11) from the bellcrank (13) and torque tube (Ref.).
- (5) Remove the nut (15), washer (14), and bolt (7), and loosen the bellcrank (13) from the shaft (1).
- (6) Remove the cotter pin (47), nut (48), washer (49), and bolt (51) to disconnect the rod (50) from the bellcrank (24).
- (7) Remove the nut (52), washer (53), and bolt (25), and loosen the bellcrank (23) from the shaft (1).
- (8) Remove the cotter pin (32), nut (31), washer (30), and bolt (28), and remove the rod (29) from the bellcrank (26).
- (9) Remove the nut (46), washer (45), and bolt (27), and loosen the bellcrank (26) from the shaft (1).
- (10) Remove the cotter pin (41), nut (40), washer (39), and bolt (37) to disconnect the rod (38) from the bellcrank (36).
- (11) Remove the nut (42), washer (43), and bolt (35), and remove the bellcrank (36) from the shaft (1).
- (12) Remove the retainer ring (44) from the end shaft (1).
- (13) Remove the washers (33) and (34) from the right side and washers (4), (6), and (16), and spacer (5) from the left side of the door.
- (14) Remove the shaft (1) and bellcranks (3), (24) and (26).

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Actuating Cam Folding Flap - Removal/Installation

Figure 401 - Sheet 1

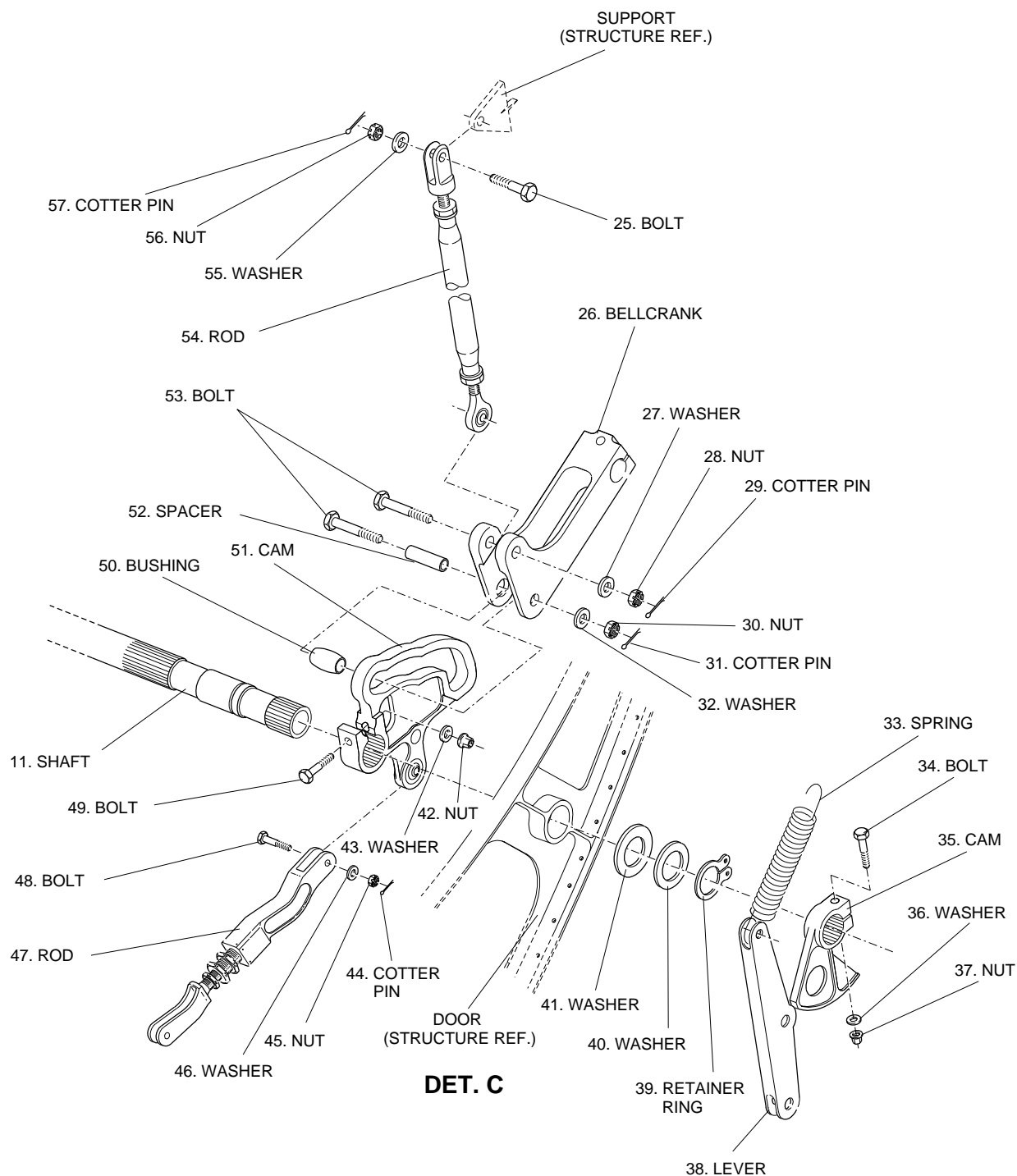


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EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Actuating Cam Folding Flap - Removal/Installation

Figure 401 - Sheet 2

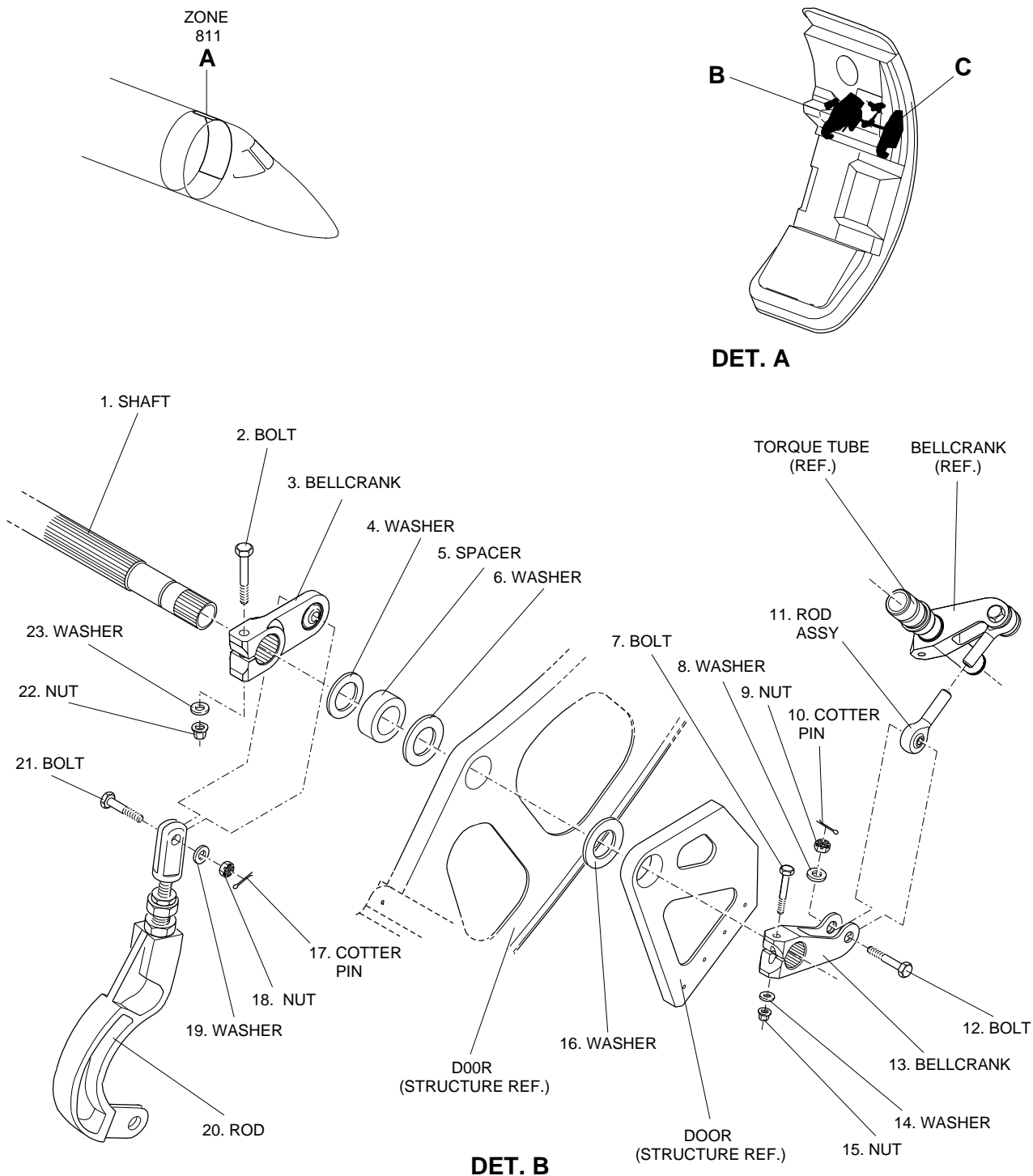


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EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Actuating Mechanism Folding Flap - Removal/Installation

Figure 402 - Sheet 1

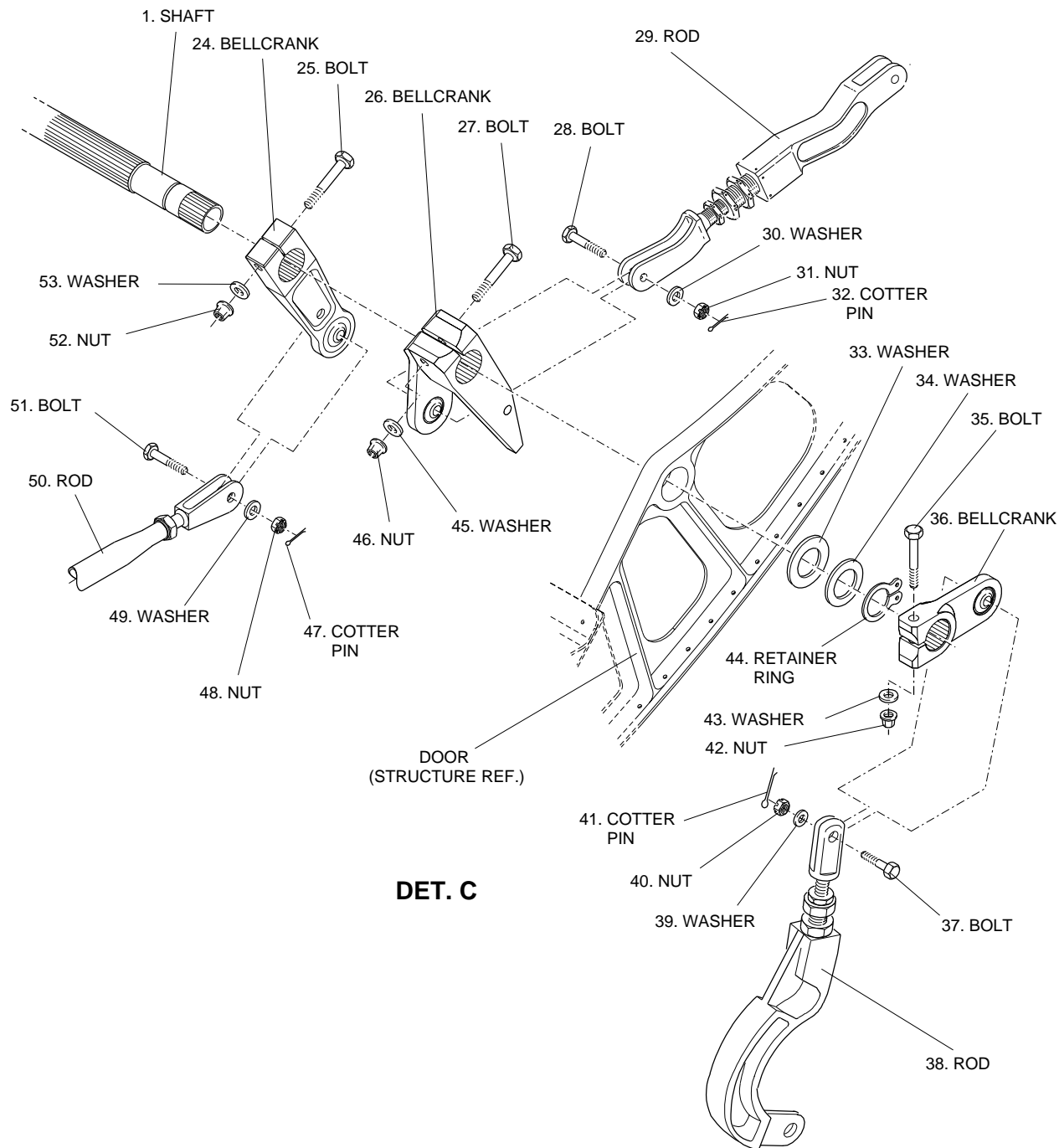


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EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Actuating Mechanism Folding Flap - Removal/Installation

Figure 402 - Sheet 2



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TASK 52-18-02-400-801-A

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

3. SIDE-HINGED MAIN-DOOR FOLDING-FLAP ACTUATING CAM - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the actuating cam of the folding flap of the side-hinged main door.

B. References

REFERENCE	DESIGNATION
AMM SDS 52-18-00/1	
AMM TASK 25-23-04-400-801-A/400	MAIN-DOOR LINING PANEL - INSTALLATION
AMM TASK 52-18-00-820-801-A/500	MAIN-DOOR INTERNAL ACTUATING HANDLE - TEST

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
811		Side-hinged main door

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Work stand	To get access to the side-hinged main door	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Side-hinged main door
1	Helps the other technician	Side-hinged main door

I. Installation of the Actuating Cam (Figure 401)

SUBTASK 420-002-A

- (1) The internal actuating handle of the main door must be in the open position.

CAUTION: DO NOT CHANGE THE ADJUSTMENT OF THE RODS (23), (47), AND (54) WHILE YOU DO THIS TASK.

- (2) Put the cams (7) and (51) on the shaft (11) in the door structure.
- (3) Put the washers (15) and (13), and washers (40) and (41), on the end shaft (11).
- (4) Install the retainer rings (14) and (39).
- (5) Put the cam (35) on the end of the shaft (11).
- (6) Install the bolt (34), washer (36), and nut (37) to attach the cam (35) to the shaft (11).
- (7) Install the spring (33) to attach the lever (38) on the cam (35) and in the support of the door structure.
- (8) Install the bolt (12), washer (9), and nut (10) to attach the cam (7) to the shaft (11).
- (9) Install the bolt (49), washer (43), and nut (42) to attach the cam (51) to the shaft (11).
- (10) Install the bolt (48), washer (46), nut (45), and cotter pin (44), to attach the rod (47) to the cam (51).
- (11) Insert the spacer (22) into the bushing (8) and install the bushing (8) in the cam (7).
- (12) Install the bolt (6), washer (18), nut (17) and cotter pin (16) to attach the cam (7) to the bellcrank (4).
- (13) Put the end rod (23) in the bellcrank (4).
- (14) Install the bolt (5), washer (21), nut (20), and cotter pin (19) to attach the rod (23) and the bellcrank (4).
- (15) Put the end rod (23) in the support structure (Ref.).
- (16) Install the bolt (24), washer (3), nut (2) and cotter pin (1) to attach the rod (23) to support structure (Ref.).
- (17) Insert the spacer (52) into the bushing (50) and install the bushing (50) in the cam (51).
- (18) Install the bolt (53), washer (32), nut (30) and cotter pin (31) to attach the cam (51) to the bellcrank (26).
- (19) Put the end rod (54) in the bellcrank (26).
- (20) Install the bolt (53), washer (27), nut (28), and cotter pin (29) to attach the rod (54) and the bellcrank (26).
- (21) Put the end rod (54) in the support structure (Ref.).
- (22) Install the bolt (25), washer (55), nut (56) and cotter pin (57) to attach the rod (54) to the support structure (Ref.).

J. Installation of the Actuating Mechanism (Figure 402)

SUBTASK 420-003-A

- (1) The internal actuating handle of the main door must be in the open position.

CAUTION: DO NOT CHANGE THE ADJUSTMENT OF THE RODS (11), (20), (29), (38), AND (50) WHILE YOU DO THIS TASK.

- (2) Put the bellcranks (24), (26) and (3), and (13), and spacer (6) and washers (4) and (6), and (16) on the shaft (1).
- (3) Put the washers (33) and (34), and retainer ring (44) on the end shaft (1).
- (4) Put the shaft (1) in the door structure.
- (5) Install the washers (33) and (34) and retainer ring (44) to attach the end shaft (1).
- (6) Install the bolt (37), washer (39), nut (40), and cotter pin (41) to attach the rod (38) to the bellcrank (36).
- (7) Install the bolt (35), washer (43), and nut (42) of the bellcrank (36) to attach the shaft (1).
- (8) Install the bolt (27), washer (45), and nut (46) of the bellcrank (26) to attach the shaft (1).
- (9) Install the bolt (28), washer (30), nut (31) and cotter pin (32) to attach the rod (29) to the bellcrank (26).
- (10) Install the bolt (25), washer (53), and nut (52) of the bellcrank (24) to attach the shaft (1).
- (11) Install the bolt (51), washer (49), nut (48) and cotter pin (47) to attach the rod (50) to the bellcrank (24).
- (12) Install the bolt (2), and washer (23) and nut (22) of the bellcrank to attach the shaft (1).
- (13) Install the bolt (21), washer (19), nut (18), and cotter pin (17) to attach the rod (20) to the bellcrank (3).
- (14) Install the bolt (7), washer (14) and nut (15) of the bellcrank (13) to attach the shaft (1).
- (15) Install the bolt (12), washer (8), nut (9), and cotter pin (10) to attach the rod assembly (11) to the bellcrank (13).

K. Follow-on

SUBTASK 842-002-A

- (1) Do an operational check of the side-hinged main door mechanism ([AMM TASK 52-18-00-820-801-A/500](#)).
- (2) Install the lining panels of the side-hinged main door ([AMM TASK 25-23-04-400-801-A/400](#)).
- (3) Close the side-hinged main door ([AMM SDS 52-18-00/1](#)).

