

MAIN-DOOR INTERCONNECTING RODS - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

1. General

- A. This section gives the procedures to remove and install the interconnecting rods of the main door locking and actuating mechanism.
- B. Interconnecting rod I connects the external-actuating-handle torque tube to the intermediate torque tube.
- C. Interconnecting rod II connects the intermediate torque tube to the internal-actuating-handle torque tube.
- D. Interconnecting rod III connects the lock box torque tube to the internal-actuating-handle torque tube. There are two rods III.
- E. Interconnecting rod IV connects the internal-actuating-handle torque tube to the folding-flap torque tube.
- F. Interconnecting rod V connects the folding-flap torque tube to the door structure.
- G. 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 |
|--------------------|---|-------------------------------|
| 52-11-08-000-801-A | MAIN-DOOR INTERCONNECTING RODS - REMOVAL | AIRCRAFT WITH AIR-STAIRS DOOR |
| 52-11-08-400-801-A | MAIN-DOOR INTERCONNECTING RODS - INSTALLATION | AIRCRAFT WITH AIR-STAIRS DOOR |

TASK 52-11-08-000-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

2. MAIN-DOOR INTERCONNECTING RODS - REMOVAL

A. General

- (1) This task gives the procedures to remove the interconnecting rods of the main-door locking and actuating mechanism.
- (2) These rods can be removed independently of each other.

B. References

| REFERENCE | DESIGNATION |
|---|---|
| AMM TASK 25-23-04-000-801-A/400 | MAIN-DOOR LINING PANEL - REMOVAL |
| AMM TASK 52-00-00-910-801-A/200 | MAIN-DOOR - SUPPORTING |
| AMM TASK 52-10-02-000-801-A/400 | MAIN-DOOR STEP-TREAD LINING PANEL - REMOVAL |

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---|----------------------|-----|
| Commercially available | Rig pins (8 mm in diameter and 60, 250, and 500 mm in length) | To rig the mechanism | |

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 | Main door |

I. Preparation

SUBTASK 841-002-A

- (1) Open the main door and support it with a bench ([AMM TASK 52-00-00-910-801-A/200](#)).
- (2) Remove the main-door lining panels ([AMM TASK 25-23-04-000-801-A/400](#)).
- (3) Remove the tread lining panel of the main-door fifth step ([AMM TASK 52-10-02-000-801-A/400](#)) only to remove interconnecting rod V.

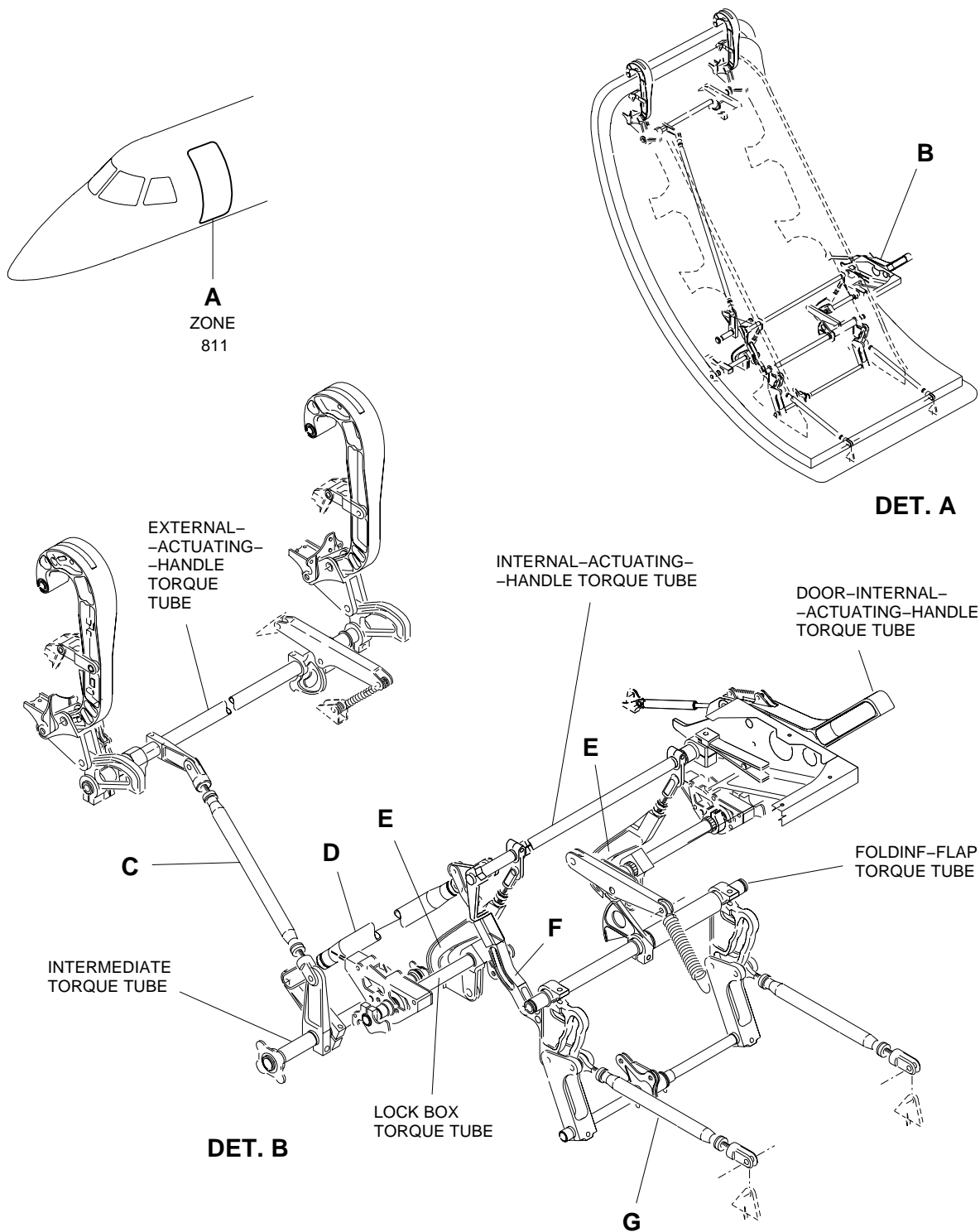
J. Removal (Figure 401) (Figure 402) (Figure 403) (Figure 404)

SUBTASK 020-002-A

- (1) Remove interconnecting rod I (Figure 401, DET. C) as follows:
 - (a) Put the door internal actuating handle in the locked position.
 - (b) Remove the cotter pin (1), nut (2), washer (3), and bolt (4).
 - (c) Remove the cotter pin (9), nut (8), washer (7), and bolt (6).
 - (d) Discard the cotter pins.
 - (e) Remove interconnecting rod I (5).
- (2) Remove interconnecting rod II (Figure 401, DET. D) as follows:
 - (a) Remove the cotter pin (1), nut (2), washer (3), and bolt (4) (Figure 401, DET. C).
 - (b) Put the door internal actuating handle in the locked position.
 - (c) Install the rig pins (Position A in Figure 402 and Position B in Figure 403 or Figure 404, as applicable).
 - (d) Remove the cotter pin (10), nut (11), washer (12), and bolt (13).
 - (e) Remove the cotter pin (18), nut (17), washer (16), and bolt (15).
 - (f) Discard the cotter pins.
 - (g) Remove interconnecting rod II (14).
- (3) Remove interconnecting rod III (Figure 401, DET. E) as follows:
 - (a) Put the door internal actuating handle in the locked position.
 - (b) Install the rig pin (Position B in Figure 403 or Figure 404, as applicable).
 - (c) Remove the cotter pin (22), nut (21), washer (20), and bolt (19).
 - (d) Remove the cotter pin (27), nut (26), washer (25), and bolt (24).
 - (e) Discard the cotter pins.
 - (f) Remove interconnecting rod III (23).
- (4) Remove interconnecting rod IV (Figure 401, DET. F) as follows:
 - (a) Put the door internal actuating handle in the locked position.
 - (b) Install the rig pins (Position B and C in Figure 403 or Figure 404, as applicable).
 - (c) Remove the cotter pin (32), nut (33), washer (34), and bolt (35).
 - (d) Remove the cotter pin (28), nut (29), washer (30), and bolt (31).
 - (e) Discard the cotter pins.

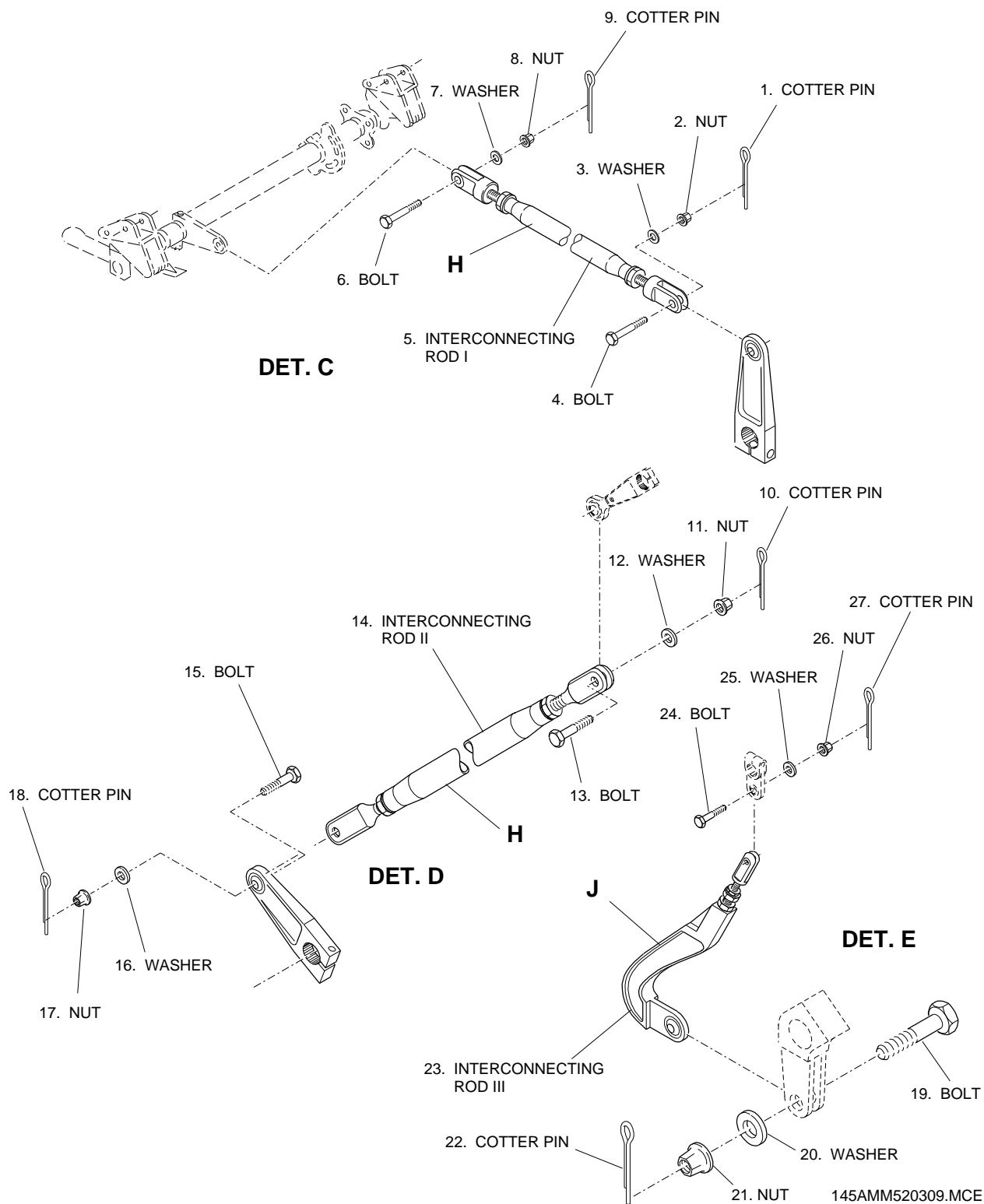
- (f) Remove interconnecting rod IV (36).
- (5) Remove interconnecting rod V ([Figure 401](#), DET. G) as follows:
 - (a) Put the door internal actuating handle in the locked position.
 - (b) Install the rig pin (Position C of [Figure 403](#) or [Figure 404](#), as applicable).
 - (c) Remove the cotter pin (48), nut (47), washer (46), and bolt (40).
 - (d) Remove the cotter pin (45), nut (44), washer (43), and bolt (42).
 - (e) Discard the cotter pins.
 - (f) Remove interconnecting rod V (41).

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR
Main-Door Interconnecting Rods - Removal/Installation
Figure 401 - Sheet 1

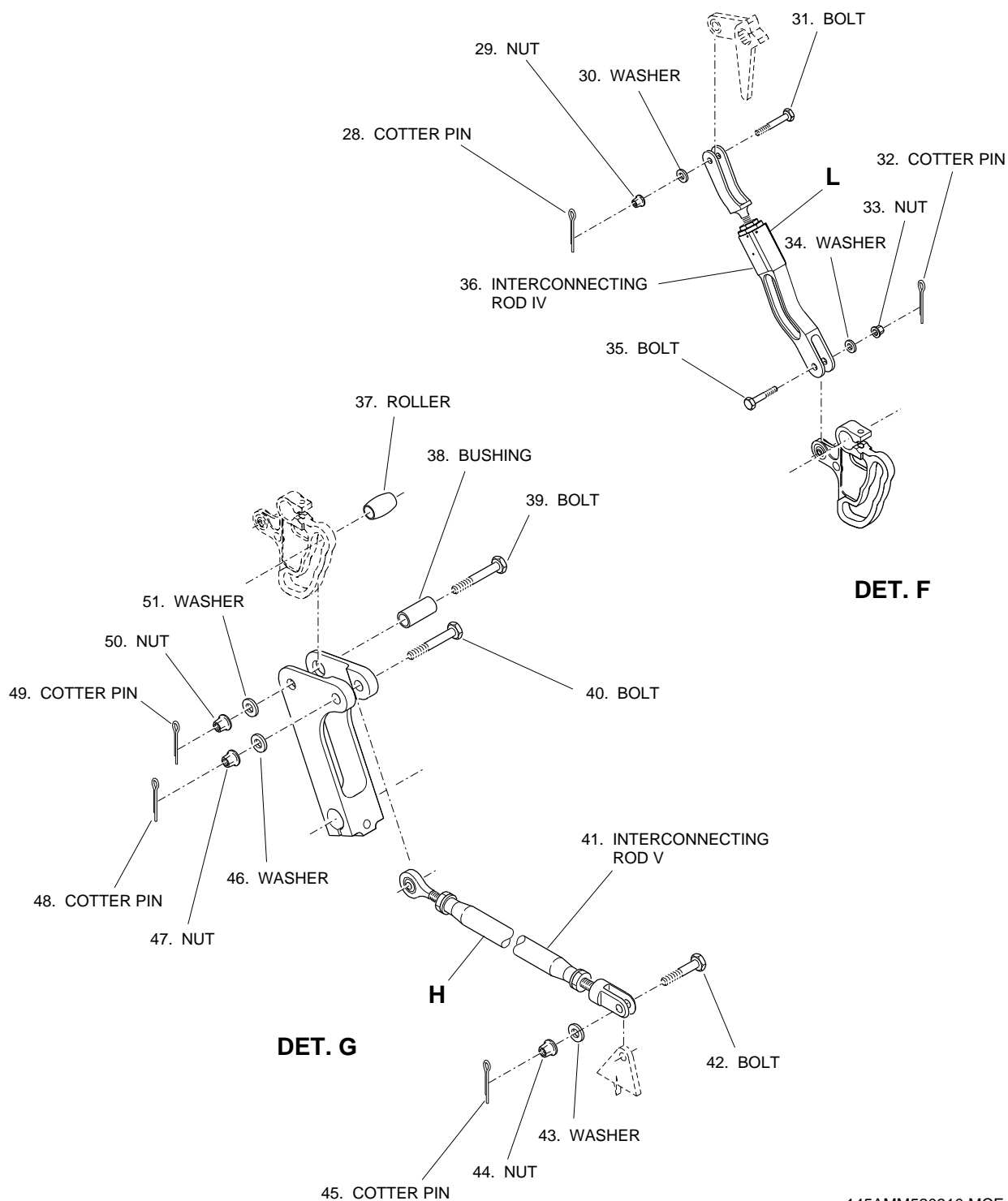


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EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR
Main-Door Interconnecting Rods - Removal/Installation
Figure 401 - Sheet 2

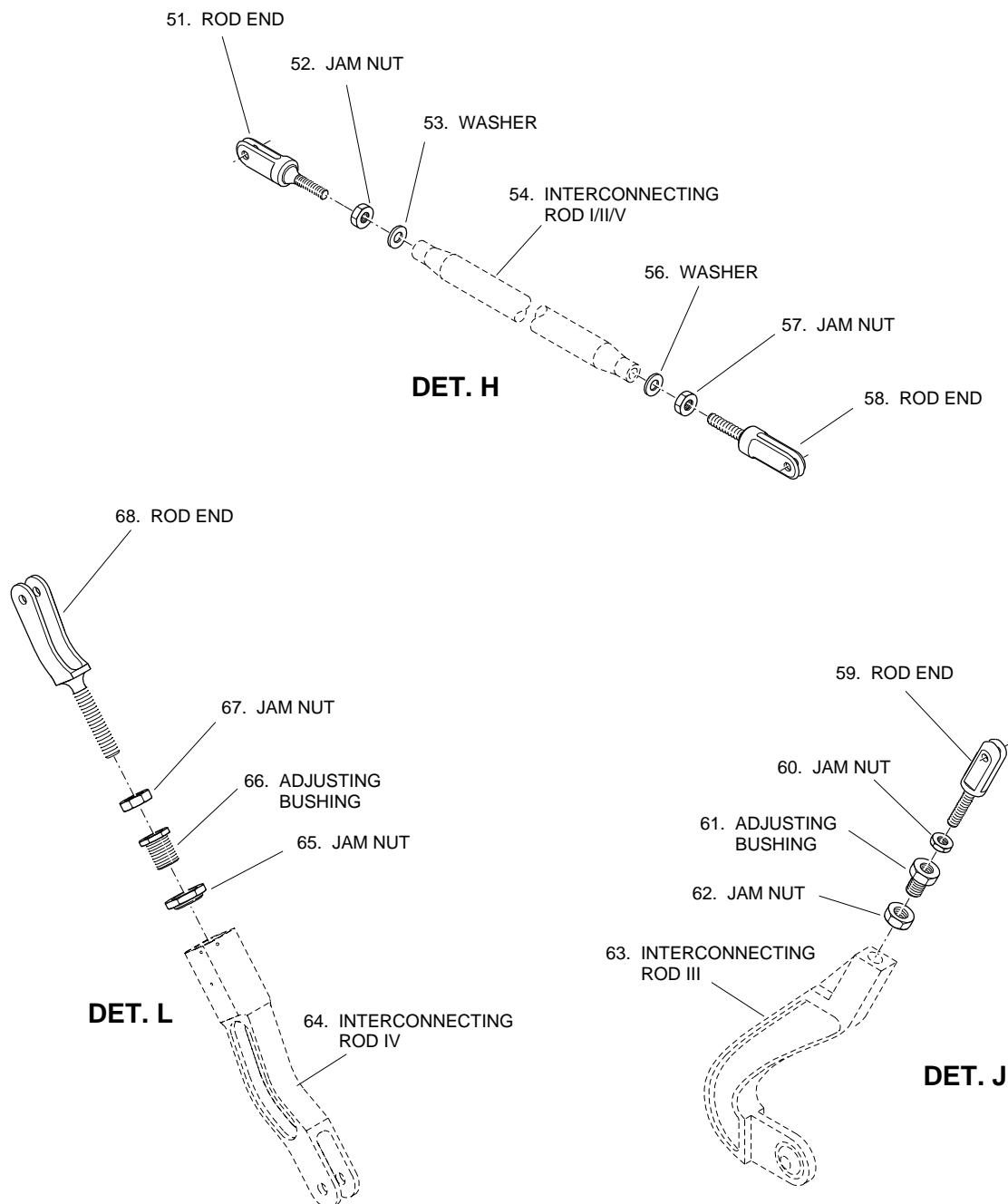


EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR
Main-Door Interconnecting Rods - Removal/Installation
Figure 401 - Sheet 3



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EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR
Main-Door Interconnecting Rods - Removal/Installation
Figure 401 - Sheet 4

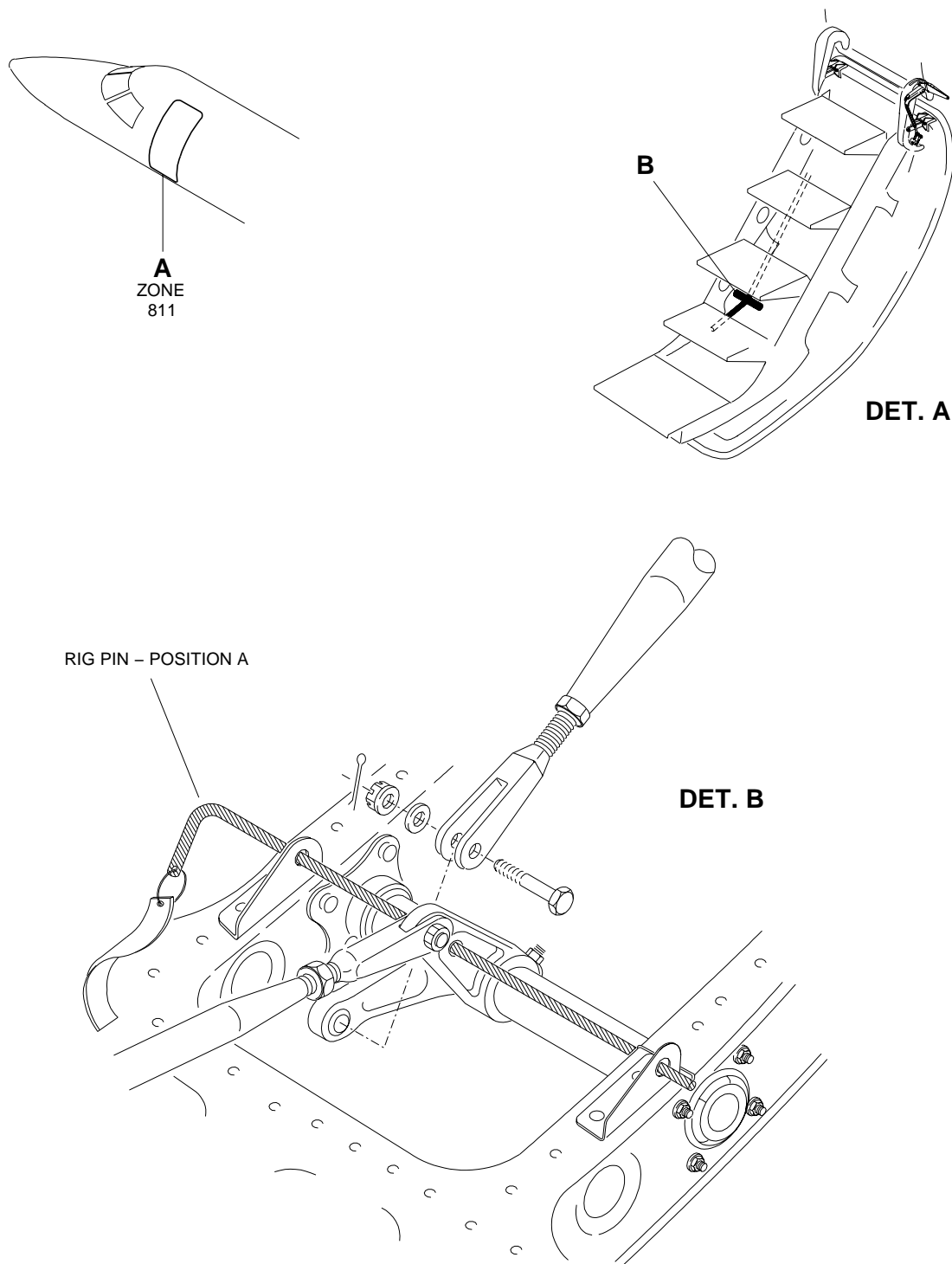


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EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

Rig Pins - Removal/Installation

Figure 402

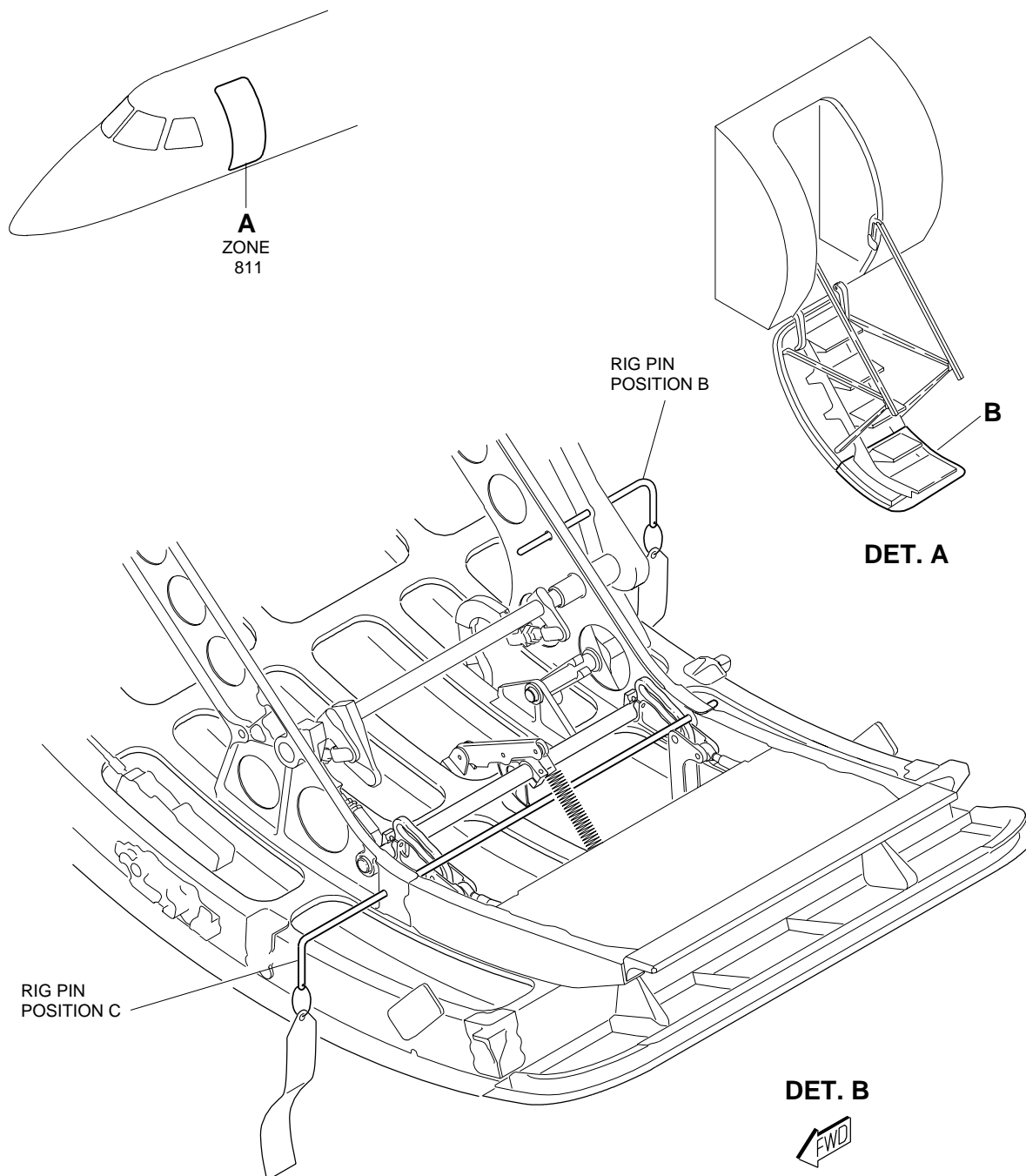


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EFFECTIVITY: PRE-MOD SB 145-52-0029

Rig Pins - Removal/Installation

Figure 403

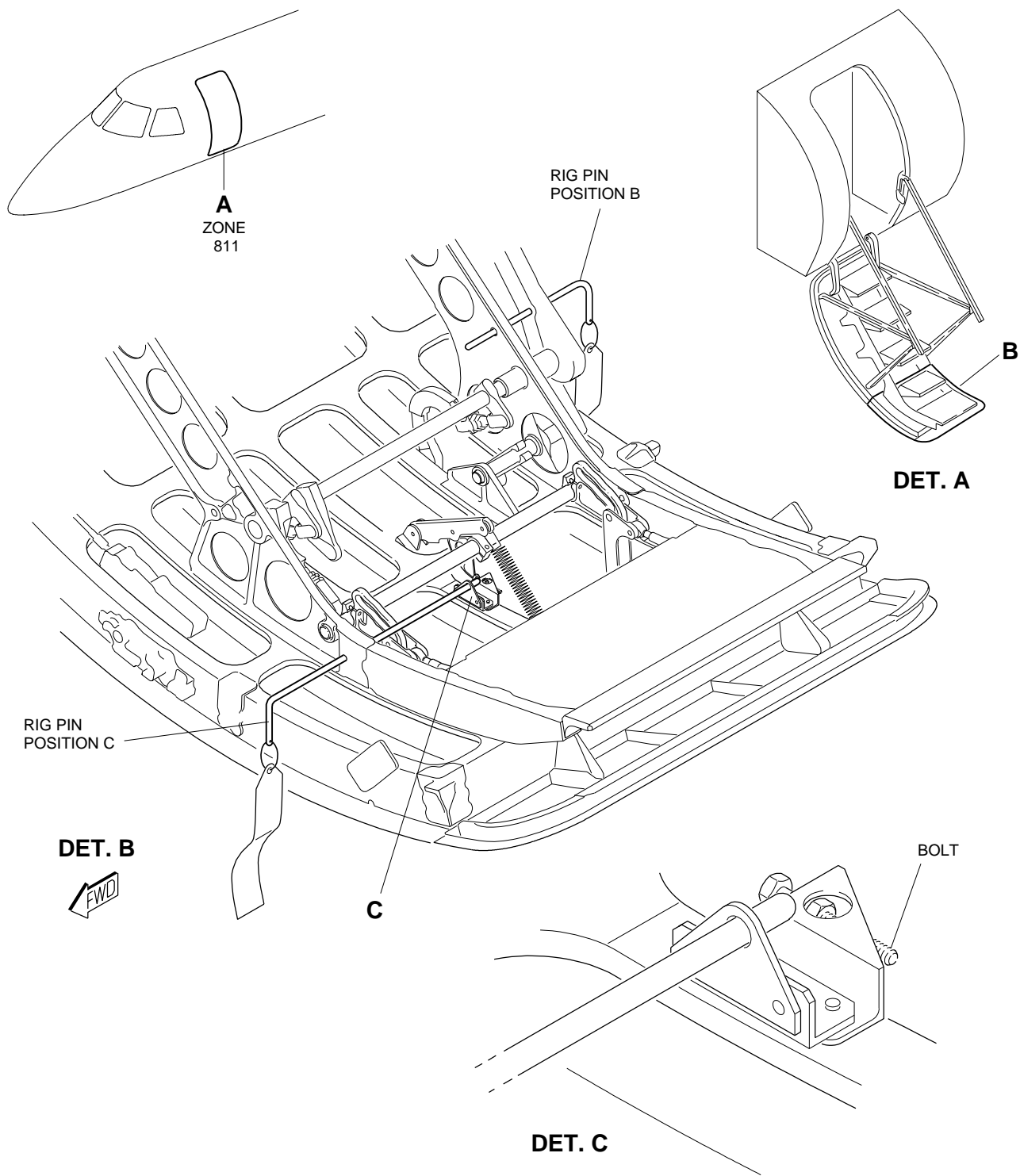


145AMM520316.MCE C

EFFECTIVITY: POST-MOD SB 145-52-0029

Rig Pins - Removal/Installation

Figure 404



145AMM520478.MCE

TASK 52-11-08-400-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

3. MAIN-DOOR INTERCONNECTING RODS - INSTALLATION

A. General

- (1) This task gives the procedures to install the interconnecting rods of the main-door locking and actuating mechanism.
- (2) These rods can be installed independently of each other.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--|
| AMM SDS 52-10-00/1 | |
| AMM TASK 25-23-04-400-801-A/400 | MAIN-DOOR LINING PANEL - INSTALLATION |
| AMM TASK 52-10-01-820-803-A/500 | MAIN-DOOR INTERCONNECTING RODS - ADJUSTMENT |
| AMM TASK 52-10-02-400-801-A/400 | MAIN-DOOR STEP-TREAD LINING PANEL - INSTALLATION |
| IPC 52-11-00 | MAIN DOOR - ACTUATING AND LOCKING MECHANISM |
| SB145-52-0029 | - |

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|--------------------------|-------------|-----|
| MS20995-C32 | Lockwire | AR |

G. Expendable Parts

| ITEM | IPC REFERENCE (VENDOR REFERENCE) | QTY |
|------------|-------------------------------------|-----|
| Cotter pin | IPC 52-11-00 | AR |

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|-----------|
| 1 | Does the task | Main door |

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-002-A

- (1) Install interconnecting rod I (Figure 401), DET. C) as follows:

NOTE: Do steps (b) through (d) below only to install a new interconnecting rod I.

- (a) The door internal actuating handle must be at the locked position.
- (b) Turn the rod end (51) (Figure 401), DET. H) to increase or decrease the length of interconnecting rod I as follows:
 - 1 To increase the length, turn the rod end counterclockwise.
 - 2 To decrease the length, turn the rod end clockwise.
- (c) Tighten the jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod I.

CAUTION: MAKE SURE THAT THE HOLES OF THE ROD ENDS AND OF THE BELLCRANKS ARE ALIGNED.

- (d) Safety jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod I.
 - (e) Install interconnecting rod I (5).
 - (f) Install the bolt (4), washer (3), nut (2), and new cotter pin (1).
 - (g) Install the bolt (6), washer (7), nut (8), and new cotter pin (9).
- (2) Install interconnecting rod II (Figure 401), DET. D) as follows:
- NOTE: Do steps (a) through (c) below only to install a new interconnecting rod II.
- (a) Turn the rod end (58) (Figure 401), DET. H) to increase or decrease the length of interconnecting rod II as follows:
 - 1 To increase the length, turn the rod end counterclockwise.
 - 2 To decrease the length, turn the rod end clockwise.
 - (b) Tighten the jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod II.
- CAUTION: MAKE SURE THAT THE HOLES OF THE ROD ENDS AND OF THE BELLCRANKS ARE ALIGNED.
- (c) Safety jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod II.
 - (d) Install interconnecting rod II (14).
 - (e) Install the bolt (15), washer (16), nut (17), and new cotter pin (18).
 - (f) Install the bolt (13), washer (12), nut (11), and new cotter pin (10).
 - (g) Remove the rig pin (Position A in (Figure 402) and position B in Figure 403 or Figure 404, as applicable).

- (h) Install the bolt (4), washer (3), nut (2), and the new cotter pin (1) (Det. C in Figure 401).

- (3) Install interconnecting rod III (Figure 401), DET. E) as follows:

NOTE: Do steps (a) through (c) below only to install a new interconnecting rod III.

- (a) Turn the rod end (59) and/or adjusting bushing (61) (Figure 401), DET. J) to increase or decrease the length of interconnecting rod III as follows:

- 1 To increase the length, turn the rod end (59) and/or adjusting bushing (61) counterclockwise.
- 2 To decrease the length, turn the rod end (59) and/or adjusting bushing (61) clockwise.

- (b) Tighten the jam nuts (60) and (62) (Figure 401), DET. J) of interconnecting rod III.

CAUTION: MAKE SURE THAT THE HOLES OF THE ROD ENDS AND OF THE BELLCRANKS ARE ALIGNED.

- (c) Safety jam nuts (60) and (62) (Figure 401), DET. J) of interconnecting rod III.

- (d) Install interconnecting rod III (23).

- (e) Install the bolt (19), washer (20), nut (21), and new cotter pin (22).

- (f) Install the bolt (24), washer (25), nut (26), and new cotter pin (27).

- (g) Remove the rig pin (Position B in Figure 403 or Figure 404, as applicable).

- (4) Install interconnecting rod IV (Figure 401), DET. F) as follows:

NOTE: Do steps (a) through (c) below only to install a new interconnecting rod IV.

- (a) Turn the rod end (68) and/or adjusting bushing (66) (Figure 401), DET. L) to increase or decrease the length of interconnecting rod IV as follows:

- 1 To increase the length, turn the rod end (68) and/or adjusting bushing (66) counterclockwise.
- 2 To decrease the length, turn the rod end (68) and/or adjusting bushing (66) clockwise.

- (b) Tighten the jam nuts (67) and (65) (Figure 401), DET. L) of interconnecting rod IV.

CAUTION: MAKE SURE THAT THE HOLES OF THE ROD ENDS AND OF THE BELLCRANKS ARE ALIGNED.

- (c) Safety jam nuts (67) and (65) (Figure 401), DET. L) of interconnecting rod IV.

- (d) Install interconnecting rod IV (34).

- (e) Install the bolt (35), washer (34), nut (33), and new cotter pin (32).

- (f) Install the bolt (31), washer (30), nut (29), and new cotter pin (28).

- (g) For aircraft PRE-MOD [SB145-52-0029](#), remove the rig pin (Position B and C in Figure 403).
- (h) For aircraft POST-MOD [SB145-52-0029](#), do as follows:
 - 1 Tighten the bolt until it touches the cam (Figure 404, DET. C).
 - 2 Tighten the bolt nut.
 - 3 Remove the rig pin (Position B and C in Figure 404)
- (5) Install interconnecting rod V (Figure 401), DET. G) as follows:

NOTE: Do steps (c) through (e) below only to install a new interconnecting rod V.

 - (a) Turn the rod end (58) (Figure 401), DET. H) to increase or decrease the length of interconnecting rod V as follows:
 - 1 To increase the length, turn the rod end counterclockwise.
 - 2 To decrease the length, turn the rod end clockwise.
 - (b) Tighten the jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod V.

CAUTION: MAKE SURE THAT THE HOLES OF THE ROD ENDS AND OF THE BELLCRANKS ARE ALIGNED.

 - (c) Safety jam nuts (52) and (57) (Figure 401), DET. H) of interconnecting rod V.
 - (d) Install interconnecting rod V (41).
 - (e) Install the bolt (40), washer (46), nut (47), and new cotter pin (48).
 - (f) Install the bolt (42), washer (43), nut (44), and new cotter pin (45).
 - (g) Remove the rig pin (Position C in Figure 403 or Figure 404, as applicable).

J. Follow-on

SUBTASK 842-002-A

- (1) Adjust the Main-Door interconnecting rods as ([AMM TASK 52-10-01-820-803-A/500](#))
- (2) Install the tread lining panel of the main door fifth step ([AMM TASK 52-10-02-400-801-A/400](#)) if interconnecting rod V was removed.
- (3) Install the main door lining panels ([AMM TASK 25-23-04-400-801-A/400](#)).
- (4) Close the main door ([AMM SDS 52-10-00/1](#)).

