

## SIDE-HINGED MAIN-DOOR CONNECTION CABLES - REMOVAL/INSTALLATION

*EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR*

### 1. General

- A. This section gives the procedures to remove and install the side-hinged main-door cables.
- 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                         |
|--------------------|---|-------------------------------------|
| 52-18-09-000-801-A | SIDE-HINGED MAIN-DOOR CABLES - REMOVAL      | AIRCRAFT WITH SIDE-HINGED MAIN DOOR |
| 52-18-09-400-801-A | SIDE-HINGED MAIN-DOOR CABLES - INSTALLATION | AIRCRAFT WITH SIDE-HINGED MAIN DOOR |

TASK 52-18-09-000-801-A

*EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR*

## 2. SIDE-HINGED MAIN-DOOR CABLES - REMOVAL

### A. General

(1) This task gives the procedures to remove the main-door cables.

### B. References

| REFERENCE                                       | DESIGNATION  |
|---|--|
| <a href="#">AMM SDS 52-18-00/1</a>              |  |
| <a href="#">AMM TASK 25-23-04-000-801-A/400</a> | MAIN-DOOR LINING PANEL - REMOVAL                       |
| <a href="#">AMM TASK 52-73-01-000-802-A/400</a> | SIDE-HINGED MAIN DOOR WARNING MICRO-SWITCHES - REMOVAL |

### C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION  |
|------|------------|-----------|
| 811  |            | Main door |

### D. Tools and Equipment

Not Applicable

### 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 | Passenger cabin |

### I. Preparation

**SUBTASK 841-002-A**

**NOTE:** Do not open the door fully. Only put it out of its frame.

(1) Open the main door ([AMM SDS 52-18-00/1](#)).

(2) Remove the main-door lining panels ( [AMM TASK 25-23-04-000-801-A/400](#)).

### J. Removal ([Figure 401](#))

**SUBTASK 020-002-A**

(1) Remove the side-hinged main-door connecting cables (4) (refer to DET. B) from the support (13) as follows:

- (a) Remove the cotter pin (8), nut (9), and washer (10).
- (b) Remove the spring (11) attached to the bellcrank (12).
- (c) Remove the bellcrank (12) from the support (13).
- (d) Remove the cotter pin (5), washer (6), and straight pin (7).
- (e) Remove the end of the cables (4) attached to the bellcrank (12).
- (f) On each side of the support (1), remove and discard two lockwires (3).

**CAUTION:** BE CAREFUL TO PREVENT DAMAGE TO THE PROTECTIVE BOOT.

- (g) For connecting cables with protective boots (15) (refer to DET. B), loosen the tiedown straps (14) (2 positions) to permit the protective boot (15) movement.
  - (h) Loosen the two nuts (2) at each cable.
  - (i) Remove the cables (4) from the support (1).
- (2) Remove the lock connection cables (31) from the lock boxes (28) as follows (refer to DET. C and DET. D):
- (a) Remove the microswitch (20). Refer to [AMM TASK 52-73-01-000-802-A/400](#).
  - (b) Remove the nut (23), washer (24), and the bolt (26) to remove the clamp (25) from the end of the torque tube (30).
  - (c) Remove the nuts (16), washers (17), and bolts (21) (2 positions) that attach the lock box (28) to the support (29).
  - (d) Remove the lock box (28).
  - (e) Loosen the screw (22) (3 positions) and remove the lock box cover (27).
  - (f) Remove and discard the lockwire (36).

**CAUTION:** BE CAREFUL TO PREVENT DAMAGE TO THE PROTECTIVE BOOT.

- (g) For connecting cables with protective boots (refer to DET. D), loosen the tiedown straps (37) (2 positions) to permit the protective boot (38) movement.
- (h) Loosen the nuts (32) (2 positions).
- (i) Loosen the spring (34).
- (j) Remove the cotter pin (35) and straight pin (33) from the lock box (28).
- (k) Pull the cable (31) (covered portion end) to permit its removal from the lock box (28).

**NOTE:** Do the procedure for removal/installation of the lock connection cables for the two lock boxes.

- (3) Remove the internal-handle connection cable (42) (refer to DET. E) from the support (46) as follows:

- (a) Remove and discard the lockwire (45).

**CAUTION:** BE CAREFUL TO PREVENT DAMAGE TO THE PROTECTIVE BOOT.

- (b) For connecting cables with protective boot (48) (refer to DET. E), loosen the tiedown straps (47) (2 positions) to permit the protective boot (48) movement.
  - (c) Loosen the nuts (44) to release the cable (42) from the support (46).
  - (d) Remove the cotter pin (40), washer (39), and bushing (43).
  - (e) Remove the cable (42) from the bellcrank (41).
- (4) Remove the external-handle connection cable (54) (refer to DET. F) from the support (57) as follows:

- (a) Remove and discard the lockwire (55) that safety the nuts (56).

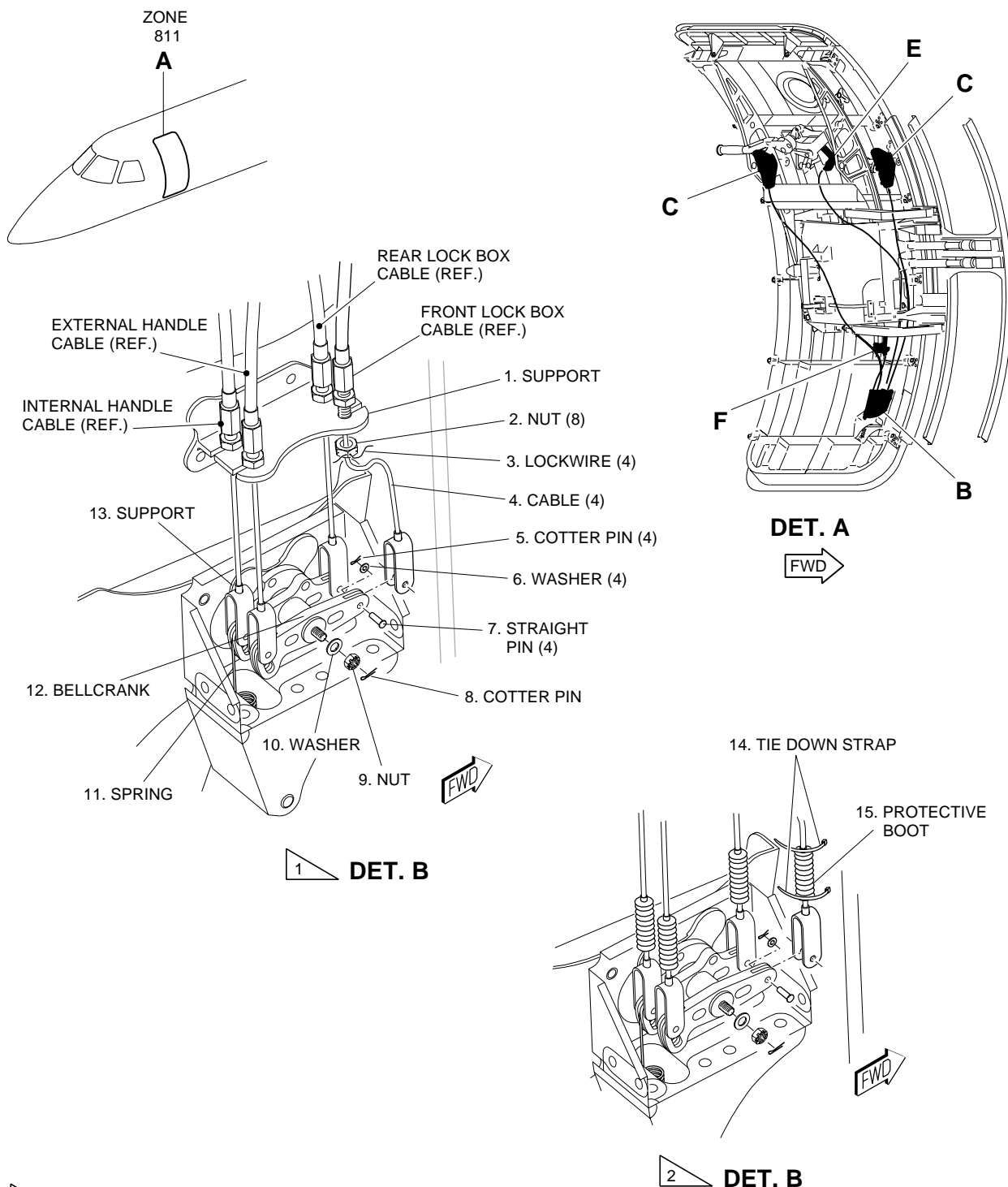
**CAUTION:** BE CAREFUL TO PREVENT DAMAGE TO THE PROTECTIVE BOOT.

- (b) For connecting cables with protective boot (49) (refer to DET. F), loosen the tiedown straps (50) (2 positions) to permit the protective boot (49) movement.
- (c) Loosen the nuts (56) of the cable (54).
- (d) Remove the cotter pin (53), washer (52), and straight pin (58) from the bellcrank (51).
- (e) Remove the cable (54) from the support (57) and bellcrank (51).

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Side-Hinged Main-Door Cables - Removal/Installation

Figure 401 - Sheet 1



1 CONNECTING CABLES WITHOUT PROTECTIVE BOOTS.

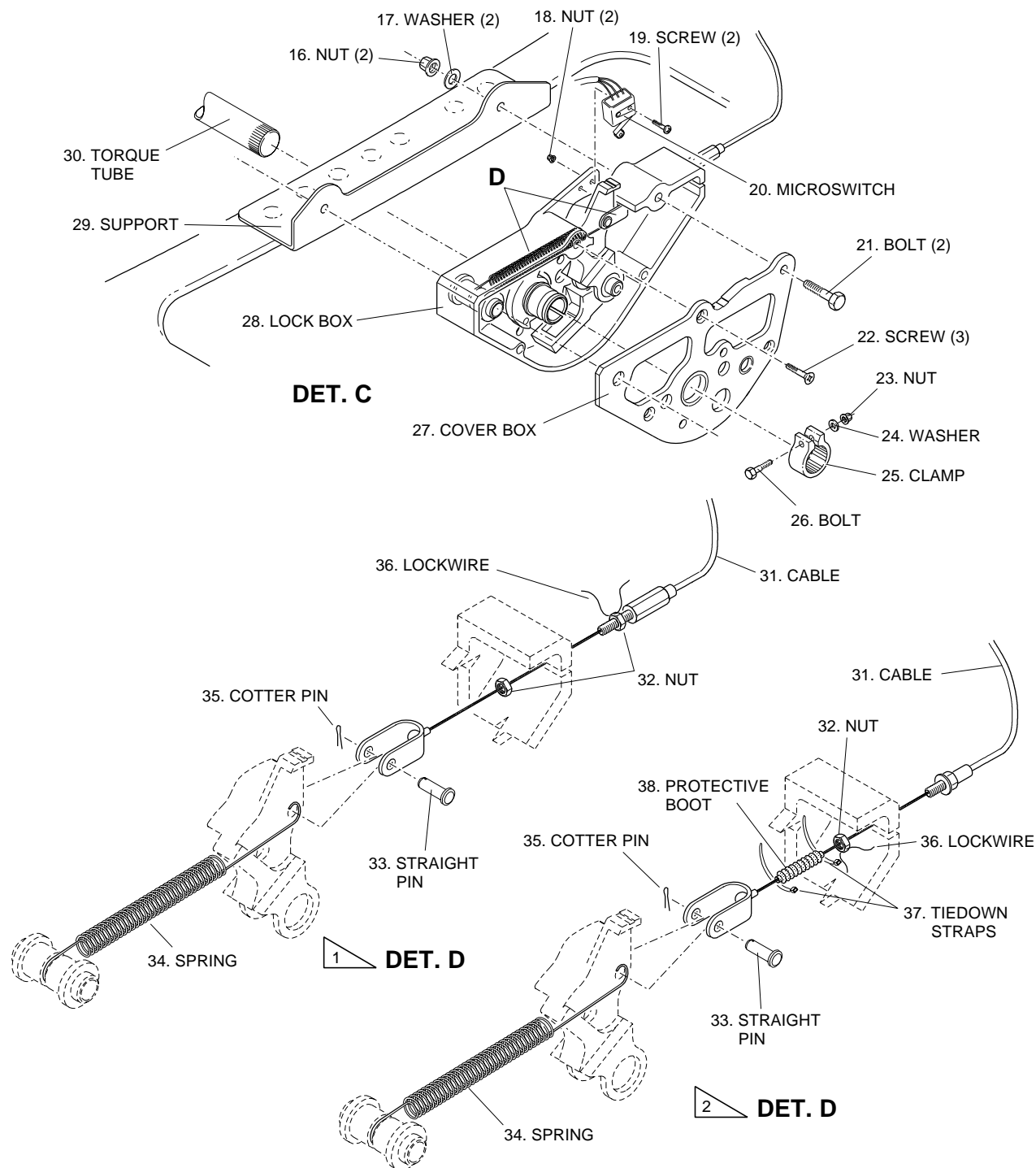
2 CONNECTING CABLES EQUIPPED WITH PROTECTIVE BOOTS.

EM145AMM520321D.DGN

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Side-Hinged Main-Door Cables - Removal/Installation

Figure 401 - Sheet 2



1 CONNECTING CABLES WITHOUT PROTECTIVE BOOTS.

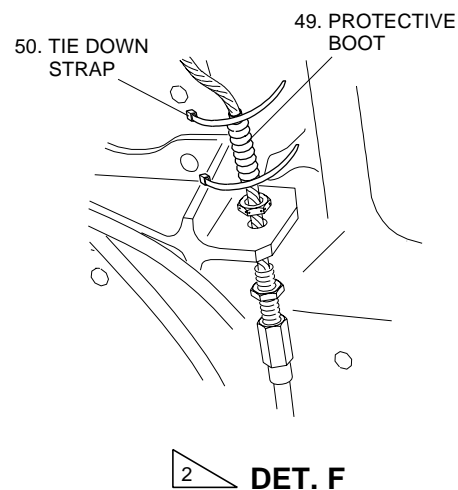
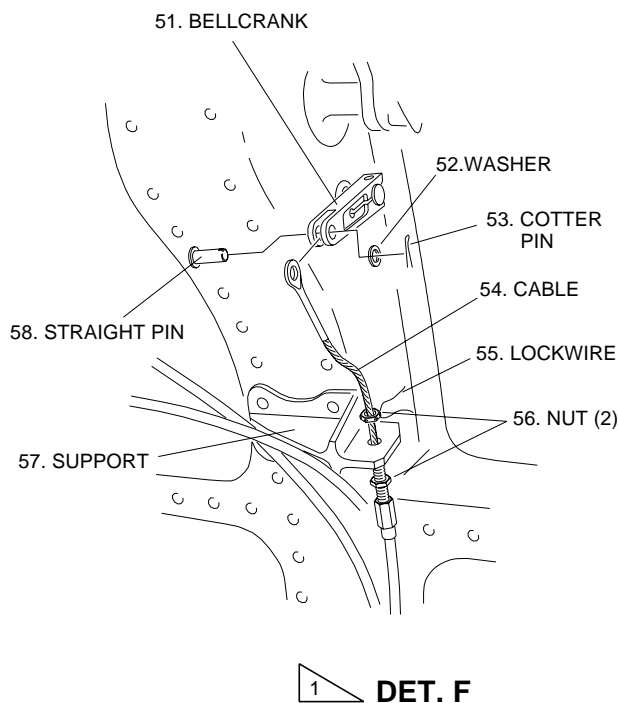
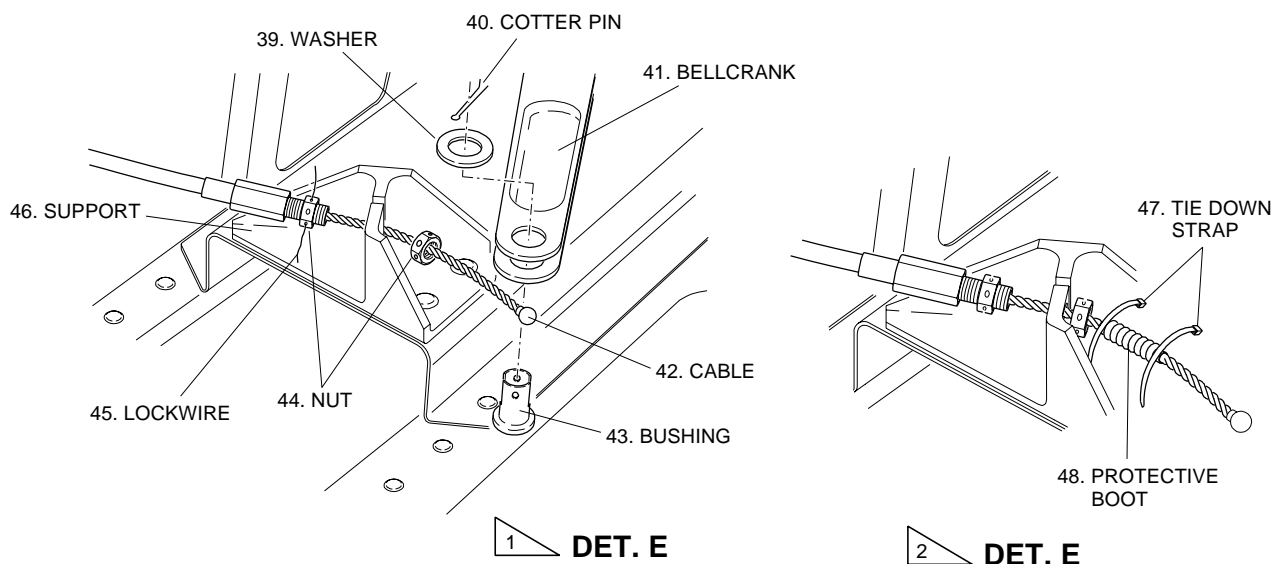
2 CONNECTING CABLES EQUIPPED WITH PROTECTIVE BOOTS.

EM145AMM520431C.DGN

**EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR**

**Side-Hinged Main-Door Cables - Removal/Installation**

**Figure 401 - Sheet 3**



1 CONNECTING CABLES WITHOUT PROTECTIVE BOOTS.

2 CONNECTING CABLES EQUIPPED WITH PROTECTIVE BOOTS.

EM145AMM520322C.DGN

**TASK 52-18-09-400-801-A**

**EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR**

**3. SIDE-HINGED MAIN-DOOR CABLES - INSTALLATION**

**A. General**

(1) This task gives the procedures to install the main-door cables.

**B. References**

| REFERENCE                       | DESIGNATION   |
|---------------------------------|---|
| 52-14-00                        | -   |
| AMM SDS 52-18-00/1              |   |
| AMM TASK 25-23-04-400-801-A/400 | MAIN-DOOR LINING PANEL - INSTALLATION                               |
| AMM TASK 52-18-00-600-801-A/300 | SIDE-HINGED MAIN-DOOR ACTUATING AND LOCKING MECHANISM - LUBRICATION |
| AMM TASK 52-18-00-820-804-A/500 | MAIN DOOR CABLES - ADJUSTMENT                                       |
| AMM TASK 52-73-01-400-802-A/400 | SIDE-HINGED MAIN DOOR WARNING MICRO-SWITCHES - INSTALLATION         |

**C. Zones and Accesses**

| ZONE | PANEL/DOOR | LOCATION  |
|------|------------|-----------|
| 811  |            | Main Door |

**D. Tools and Equipment**

Not Applicable

**E. Auxiliary Items**

Not Applicable

**F. Consumable Materials**

| SPECIFICATION<br>(BRAND) | DESCRIPTION          | QTY |
|--------------------------|----------------------|-----|
| MS20995-C32              | Lockwire             | AR  |
| Mobil SHC 100            | Mobil grease SHC 100 | AR  |

**G. Expendable Parts**

| ITEM       | IPC REFERENCE<br>(VENDOR REFERENCE) | QTY |
|------------|-------------------------------------|-----|
| Cotter pin | 52-14-00                            | AR  |

**H. Persons Recommended**

| QTY | FUNCTION      | PLACE           |
|-----|---------------|-----------------|
| 1   | Does the task | Passenger cabin |



I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Install the side-hinged main-door connecting cables (4) on the support (13) (refer to DET. B) as follows:
  - (a) For connecting cables without protective boot (15), lubricate them as given in [AMM TASK 52-18-00-600-801-A/300](#).
  - (b) Install the cables (4) on the support (1).
  - NOTE:** For preadjustment, approximately half of the threads must stay on one side of the support and the other half, on the other side.
  - (c) Install the end of the cables (4) on the bellcrank (12).
  - (d) Install the straight pin (7), washer (6), and cotter pin (5) to each cable.
  - (e) Put the bellcrank (12) on the support (13).
  - (f) Install the spring (11) on the bellcrank (12).
  - (g) Install the washer (10), nut (9), and cotter pin (8).
  - (h) For connecting cables with protective boot, do as follows:
    - 1 Lubricate the protective boots (15) ([AMM TASK 52-18-00-600-801-A/300](#)).
    - 2 Put the protective boot (15) of the cable end near the support (1).
    - 3 Install new tiedown straps (14) at the ends of the protective boot (15).
- (2) Install the lock box connection cables (31) (refer to DET. C and DET. D) on the lock boxes (28) as follows:

**NOTE:** The lock box must be out of the side-hinged main door.

  - (a) For connecting cables without protective boot, lubricate them as given in [AMM TASK 52-18-00-600-801-A/300](#).
  - (b) Install the cable (31) on the lock box (28).

**NOTE:** Put approximately half of the threads on one side of the lock box and the other half on the other side.
  - (c) Tighten the two nuts (32).
  - (d) For connecting cables with protective boot, do as follows (refer to DET. D):
    - 1 Lubricate the protective boots (31) ([AMM TASK 52-18-00-600-801-A/300](#)).
    - 2 Put the protective boot (31) nearer to the nut (32).
    - 3 Install new tiedown straps (37) at the ends of the protective boot (38).
  - (e) Put the cable fork end-fitting inside the lock box (28).

- (f) Install the straight pin (33) and cotter pin (35) to attach the cable in the lock box (28).
  - (g) Install the spring (34).
  - (h) Lubricate the lock-box internal assemblies with Mobil SHC 100 I grease.
  - (i) Install new lockwires (36) to safety the nuts (32).
  - (j) Install the lock box cover (27) with the screws (22) (3 positions).
  - (k) Put the lock box (28) on the torque tube (30) and the support (29) at the door structure.
  - (l) Install the bolts (21), washers (17), and nuts (16) (2 positions) to attach the lock box (28) to the support (29).
  - (m) Put the clamp (25) at the end of the torque tube (30).
  - (n) Install the bolt (26), washer (24), and nut (23) to attach the clamp (25).
  - (o) Install the microswitch (20). Refer to [AMM TASK 52-73-01-400-802-A/400](#).
- (3) Install the internal-handle connecting cable (42) on the support (46) as follows (refer to DET. E):
- (a) Install the cable (42) on the support (46).  
**NOTE:** Put approximately half of the threads on one side of the support and the other half on the other side.
  - (b) Tighten the nuts (44).
  - (c) For connecting cables with protective boots, do as follows:
    - 1 Lubricate the protective boots (48) ([AMM TASK 52-18-00-600-801-A/300](#)).
    - 2 Put the protective boot (48) nearer to the nut (44).
    - 3 Install new tiedown straps (47) at the ends of the protective boot (48).
  - (d) Install the end of the cable (42) on the bellcrank (41).
  - (e) Install the bushing (43), washer (39), and cotter pin (40).
  - (f) Install new lockwires (45) to safety the nuts (44).
- (4) Install the external-handle connecting cable (54) on the support (57) as follows (refer to DET. F):
- (a) Install the cable (54) on the support (57).  
**NOTE:** Put approximately half of the threads on one side of the support and the other half on the other side.
  - (b) Tighten the nuts (56).

- (c) For connecting cables equipped with protective boots, do as follows:
  - 1 Lubricate the protective boots (49) ([AMM TASK 52-18-00-600-801-A/300](#)).
  - 2 Put the protective boot (49) nearer to the nut (56).
  - 3 Install new tiedown straps (50) at the ends of the protective boot (49).
- (d) Install the end of the cable (54) on the bellcrank (51).
- (e) Install the straight pin (58), washer (52), and cotter pin (53).
- (f) Install new lockwires (55) to safety the nuts (56).
- (5) Adjustment of the main-door connecting cables ([AMM TASK 52-18-00-820-804-A/500](#)).
- (6) Install new lockwires (3) to safety the nuts (2). Refer to DET. B.

J. Follow-on

*SUBTASK 842-002-A*

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

