



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

MAIN-DOOR ROTATING ARM - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

1. General

- A. This section gives the procedures to remove and install the rotating arms of the main door.
- B. These procedures are applicable to the two rotating arms.
- C. 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
52-11-03-000-801-A	MAIN DOOR ROTATING ARM - REMOVAL	AIRCRAFT WITH AIR-STAIRS DOOR
52-11-03-400-801-A	MAIN DOOR ROTATING ARM - INSTALLATION	AIRCRAFT WITH AIR-STAIRS DOOR

TASK 52-11-03-000-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

2. MAIN DOOR ROTATING ARM - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the rotating arm of the main door.

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 52-12-08-000-801-A/400	MAIN-DOOR ACTUATOR - REMOVAL

C. Zones and Accesses

Not Applicable

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	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) Disconnect the end of the door actuator from the rotating arm ([AMM TASK 52-12-08-000-801-A/400](#)).
- (3) Remove the lining panels from the main door ([AMM TASK 25-23-04-000-801-A/400](#)).

J. Removal ([Figure 401](#)) ([Figure 402](#)) ([Figure 403](#))

SUBTASK 020-002-A

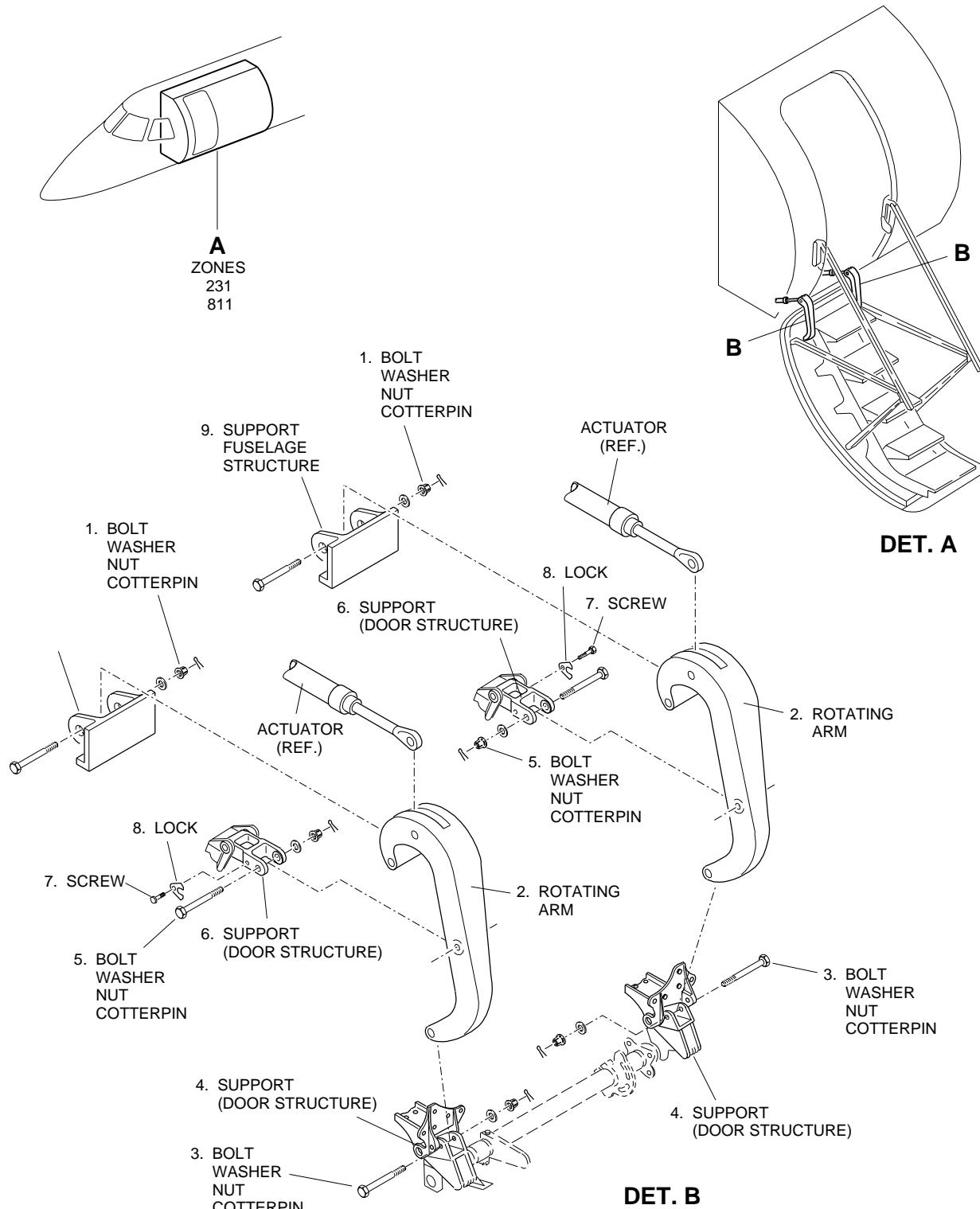
- (1) For the aft rotating arm, release the harness (14) and disconnect the bonding straps (10) and (17). For this, do these steps:

- (a) Remove the four screws (12) and washers (13) to loosen the clamps (15) and release the harness (14) ([Figure 402](#) or [Figure 403](#), as applicable).
- (b) Remove the bolt, three washers, and nut (16), and disconnect the end of the bonding strap (17) from the rotating arm (2).
- (c) Remove the bolt, three washers, and nut (11), and disconnect the end of the bonding strap (10) from the rotating arm (2).
- (2) Remove the cotter pin, nut, washer, and bolt (3) to disconnect the rotating arm (2) from the support (4) at the door structure ([Figure 401](#)).
- (3) Remove the screw (7) and remove the lock (8) from the support (6) at the door structure.
- (4) Remove the cotter pin, nut, washer, and bolt (5) to disconnect the rotating arm (2) from the support (6) at the door structure.
- (5) Remove the cotter pin, nut, washer, and bolt (1) to disconnect the rotating arm (2) from the support (9) at the fuselage.
- (6) Remove the rotating arm (2).

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

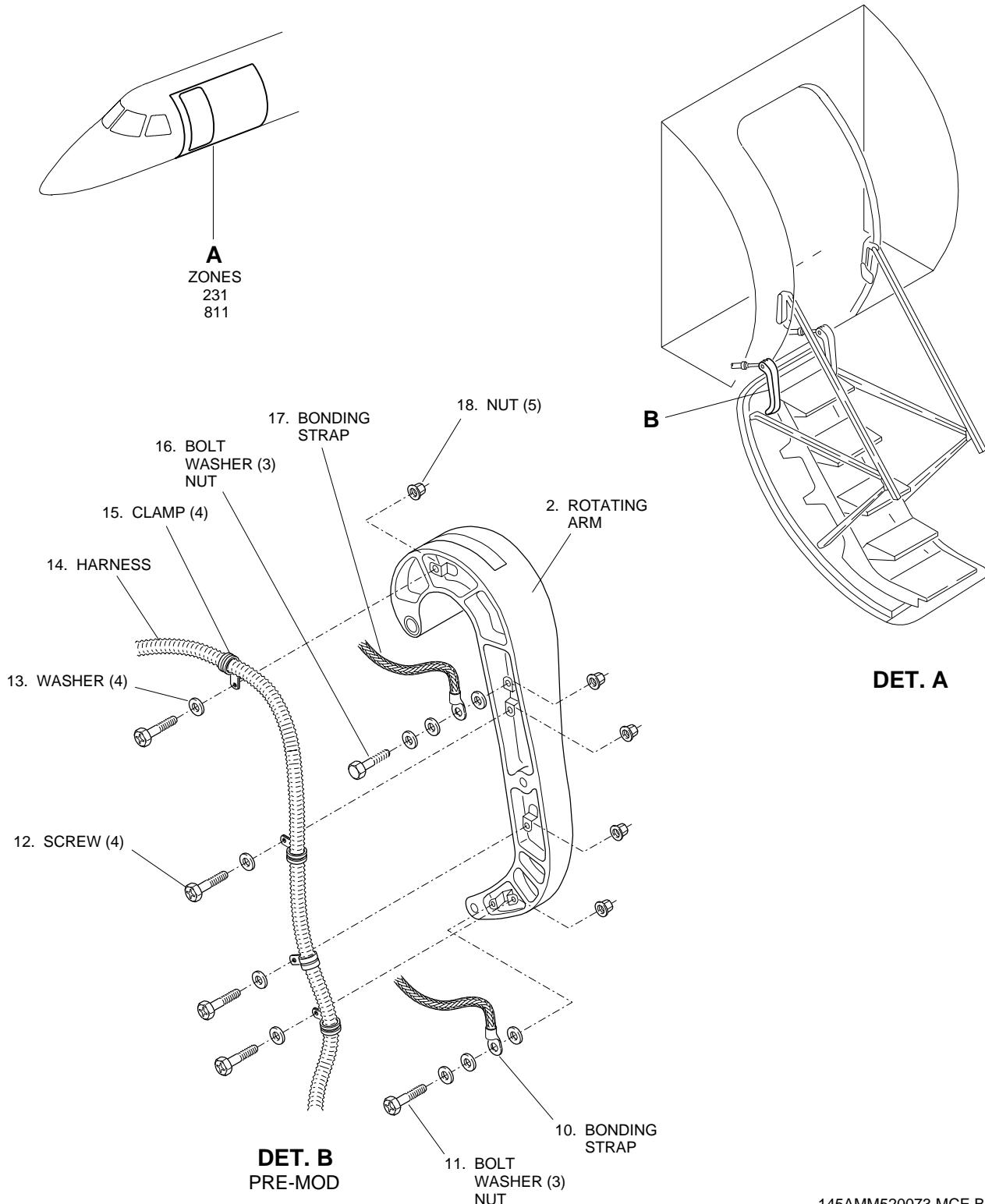
Rotating Arm - Removal/Installation

Figure 401



145AMM520076.MCE B

EFFECTIVITY: PRE-MOD SB 145-52-0031
Rotating Arm Harness - Removal/Installation
Figure 402

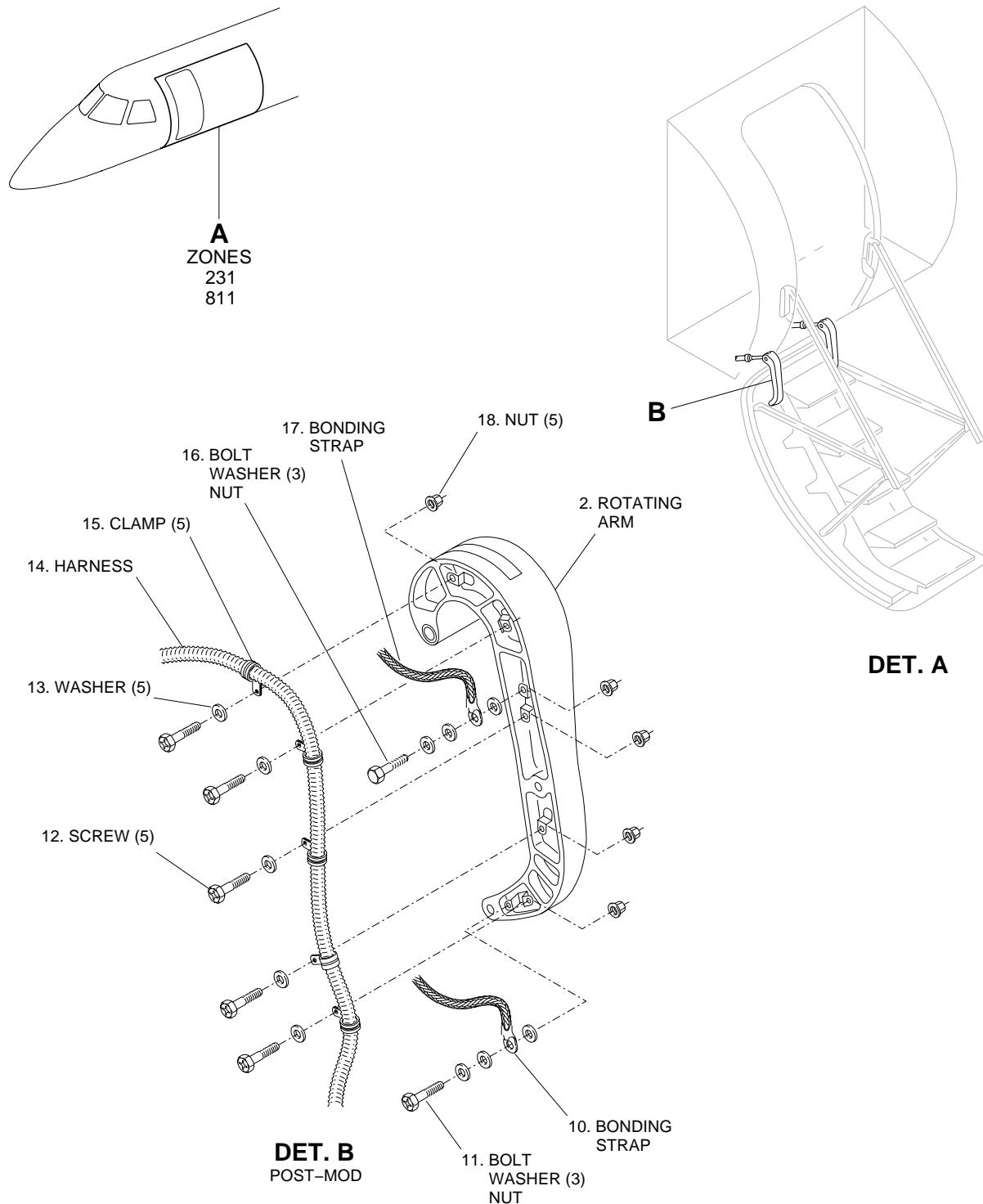


145AMM520073.MCE B

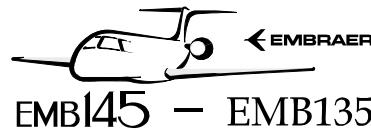
EFFECTIVITY: POST-MOD SB 145-52-0031

Rotating Arm Harness - Removal/Installation

Figure 403



EM145AMM520819A.DGN



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 52-11-03-400-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

3. MAIN DOOR ROTATING ARM - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the rotating arm of the main door.

B. References

REFERENCE	DESIGNATION
AMM SDS 52-10-00/1	
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 25-23-04-400-801-A/400	MAIN-DOOR LINING PANEL - INSTALLATION
AMM TASK 52-11-00-700-801-A/500	MAIN-DOOR ACTUATING LATCHING AND LOCKING MECHANISM - FUNCTIONAL CHECK
AMM TASK 52-12-08-400-801-A/400	MAIN-DOOR ACTUATOR - INSTALLATION
IPC 52-11-00	MAIN DOOR - ACTUATING AND LOCKING MECHANISM

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Cotter pin	IPC 52-11-00	3

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Main door

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the rotating arm (2) on the supports (9) at the fuselage structure and on the supports (6) and (4), at the door structure.



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (2) Install the bolt, washer, nut, and cotter pin (1) to connect the rotating arm (2) to the support (9) at the fuselage structure.
- (3) Install the bolt, washer, nut, and cotter pin (3) to connect the rotating arm (2) to the support (4) at the door structure.
- (4) Install the bolt, washer, nut, and cotter pin (5) to connect the rotating arm (2) to the support (6) at the door structure.
- (5) Install the lock (8) with the screw (7).
- (6) For the aft rotating arm, attach the harness (14) and connect the bonding straps (10) and (17) (Figure 402 or Figure 403, as applicable). For this, do these steps:
 - (a) Connect the end of the bonding strap (10) to the rotating arm (2) with the bolt, three washers, and nut (11). Refer to [AMM TASK 20-13-21-910-801-A/200](#).
 - (b) Connect the end of the bonding strap (17) to the rotating arm (2) with the bolt, three washers, and nut (16). Refer to [AMM TASK 20-13-21-910-801-A/200](#).
 - (c) Put the harness (14) on the rotating arm (2).
 - (d) Install the screws (12) and washers (13) to attach the clamps (15) (4 positions) to the rotating arm (2).

J. Follow-on

SUBTASK 842-002-A

- (1) Connect the end of the door actuator to the rotating arm ([AMM TASK 52-12-08-400-801-A/400](#)).
- (2) Do an operational check of the main door.
- (3) If necessary, do an adjustment of the actuation and locking mechanism of the main door ([AMM TASK 52-11-00-700-801-A/500](#)).
- (4) Install the lining panels of the main door ([AMM TASK 25-23-04-400-801-A/400](#)).
- (5) Close the main door ([AMM SDS 52-10-00/1](#)).