

SIDE-HINGED MAIN DOOR - 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.
- 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
52-18-00-000-801-A	SIDE-HINGED MAIN DOOR - REMOVAL	AIRCRAFT WITH SIDE-HINGED MAIN DOOR
52-18-00-400-801-A	SIDE-HINGED MAIN DOOR - INSTALLATION	AIRCRAFT WITH SIDE-HINGED MAIN DOOR

TASK 52-18-00-000-801-A

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

2. SIDE-HINGED MAIN DOOR - REMOVAL

A. General

(1) This procedure gives the instructions to remove the side-hinged main door.

B. References

REFERENCE	DESIGNATION
AMM TASK 25-23-04-000-801-A/400	MAIN-DOOR LINING PANEL - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
231		Passenger cabin, LH
811		Side-hinged main door

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the fuselage to remove 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	Outside the fuselage, at the side-hinged main door
1	Helps the other technician	Inside the fuselage, at the side-hinged main door

I. Preparation

SUBTASK 841-002-A

(1) Open the side-hinged main door.

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

- (3) Remove the lining panel of the passenger cabin along the contour of the side-hinged main door frame, at the link point of its arms.

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

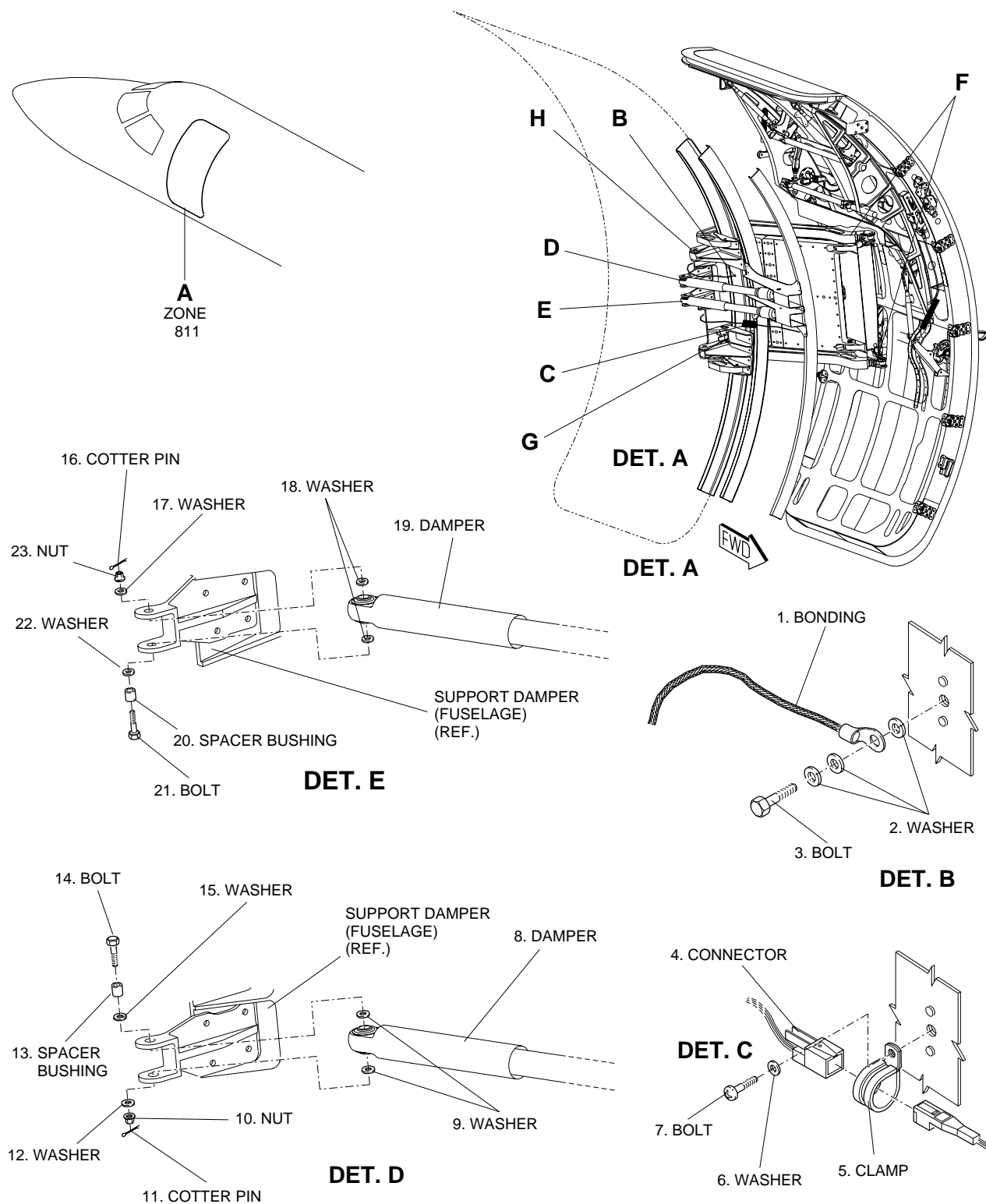
SUBTASK 020-002-A

- (1) Disconnect the electrical connector (4).
- (2) Release the electrical harness from the connector (4), and the end of the bonding strap (1) from the support at the fuselage structure as follows:
 - (a) Remove the bolt (3) and three washers (2) and release the end of the bonding strap (1).
 - (b) Remove the bolt (7) and washer (6) from the clamp (5), and then remove the clamp (5).
- (3) Disconnect the end of the dampers (19) from the support damper (at the fuselage). For this, remove the cotter pin (16), nut (23), washers (22) and (17), spacer bushing (13), and bolts (21).
- (4) Disconnect the end of the dampers (8) from the support damper (at the fuselage). For this, remove the cotter pin (11), nut (10), washers (12) and (15), spacer bushing (13), and bolts (14).
- (5) Disconnect the arms (29) from the link point at the main door. For this, remove the cotter pins (28), nuts (27), washers (26), bushing plain (25), and bolts (24).
- (6) Hold the side-hinged main door.
- (7) Remove the cotter pin (35), nut (36), washers (30) and (34), bushing plains (33) and (32), and bolt (31) to release the upper link point of the rotation arm from the upper hinge fitting.
- (8) Remove the cotter pin (42), nut (41), washers (40) and (38), bushing plain (39), and bolt (37) to release the lower link point of the rotation arm from the lower hinge fitting.
- (9) Remove the side-hinged main door.
- (10) Remove the upper and lower hinge fittings, if necessary, as follows (refer to [Figure 402](#)):
 - (a) Make sure that the main door is removed.
 - (b) Remove the bolts (11) and (4), washers (3), shims (1) and (12), and the upper hinge fitting (2) from the fuselage.
 - (c) Remove the bolts (9) and (8), washers (7), shims (5) and (10), and the lower hinge fitting (6) from the fuselage.

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Side-Hinged Main Door - Removal/Installation

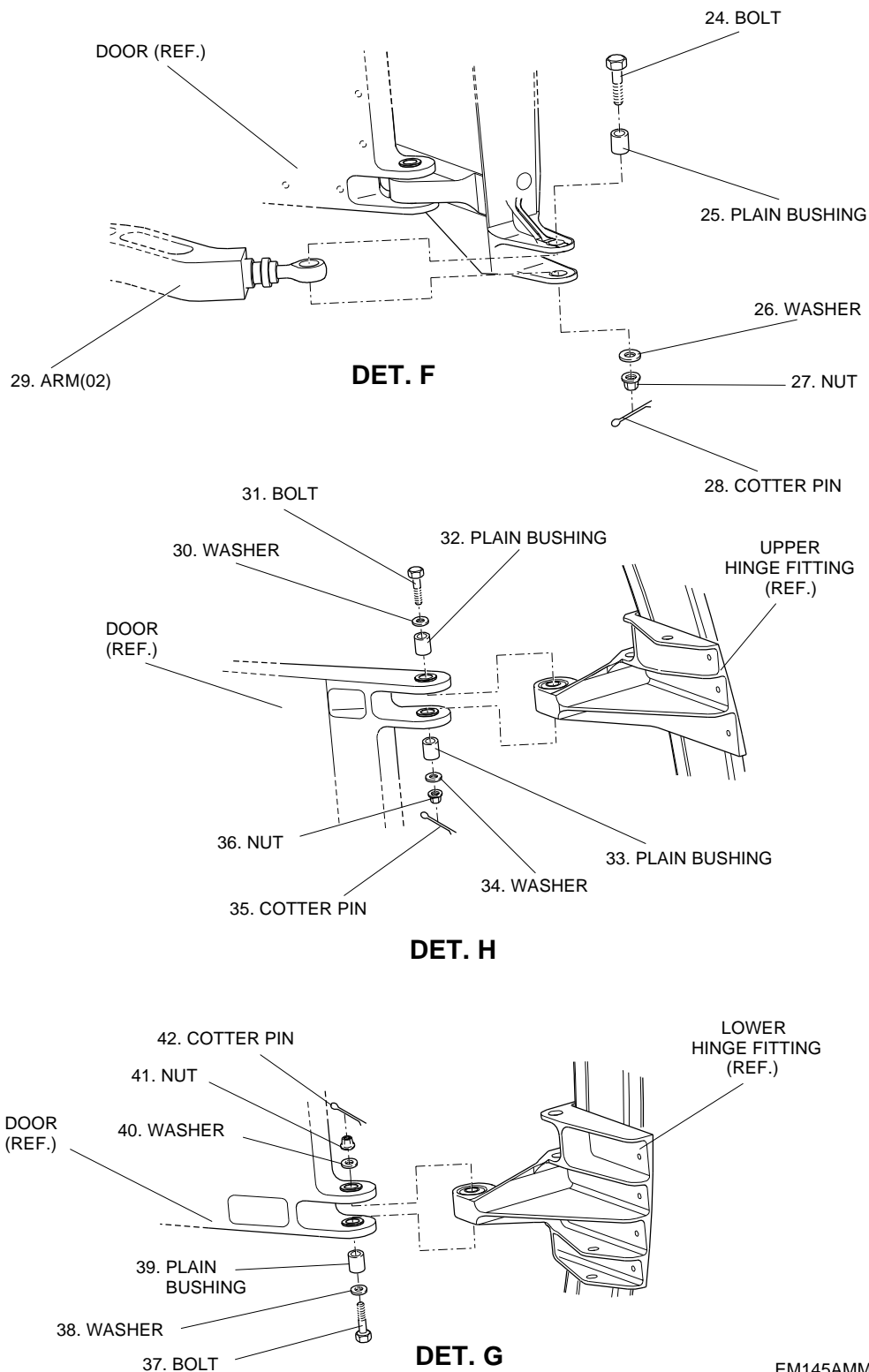
Figure 401 - Sheet 1



EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Side-Hinged Main Door - Removal/Installation

Figure 401 - Sheet 2

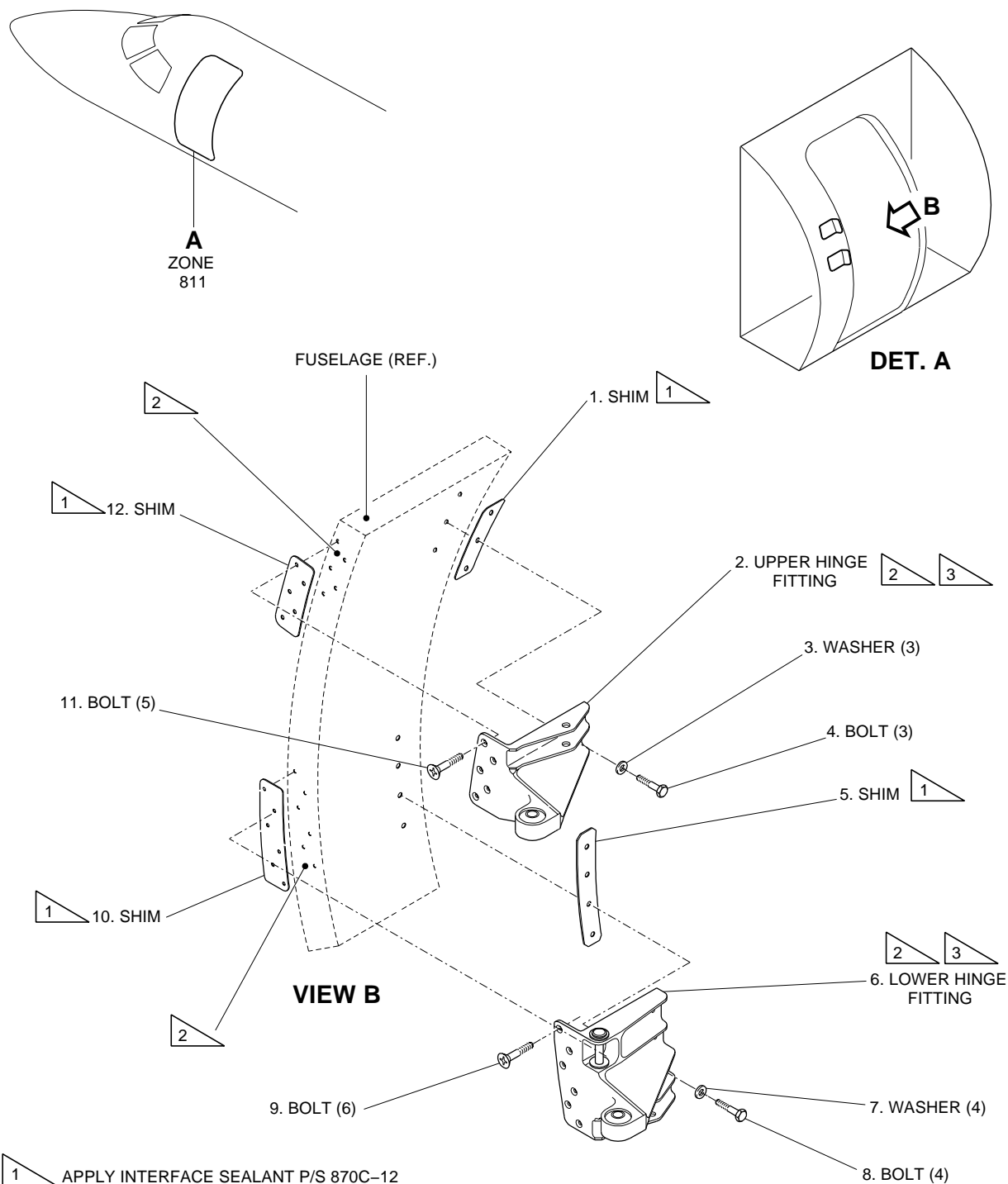


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EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

Hinge Fitting - Removal/Installation

Figure 402



- 1 APPLY INTERFACE SEALANT P/S 870C-12 TO BOTH SHIM FAYING SURFACES.
- 2 APPLY INTERFACE SEALANT P/S 870C-12 TO THE SHIM FAYING SURFACE.
- 3 APPLY FILLET SEALANT PR 1422-B2 TO THE INTERFACE BETWEEN THE HINGE FITTING AND THE FUSELAGE.

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TASK 52-18-00-400-801-A

EFFECTIVITY: AIRCRAFT WITH SIDE-HINGED MAIN DOOR

3. SIDE-HINGED MAIN DOOR - INSTALLATION

A. General

(1) This procedure gives the instructions to install the side-hinged main door.

B. References

REFERENCE	DESIGNATION
AMM SDS 52-18-00/1	
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 52-18-00-820-805-A/500	MAIN DOOR ROLLERS - ADJUSTMENT
AMM TASK 52-18-00-820-806-A/500	MAIN DOOR-TO-FUSELAGE SKIN GAP - ADJUSTMENT
AMM TASK 52-18-00-820-807-A/500	MAIN DOOR-TO-FUSELAGE SKIN STEP - ADJUSTMENT
AMM TASK 52-18-00-820-808-A/500	MAIN DOOR STOPS - ADJUSTMENT
AMM TASK 52-18-00-820-810-A/500	MAIN-DOOR FOLDING FLAP - ADJUSTMENT
SRM 51-20-01/1	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
231		Passenger cabin
811		Side-hinged main door

D. Tools and Equipment

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

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM-D-740	Methyl ethyl ketone	AR
MIL-S-81733 type IV - 12	Sealant P/S 870C-12	AR
SAE AMS-S-8802 Type II -Class B2	Sealant PR 1422 - B2	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Outside the fuselage, at the side-hinged main door
1	Helps the other technician	Inside the fuselage, at the side-hinged main door

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-002-A

- (1) Install the upper and lower hinge fittings, if applicable, as follows (refer to (Figure 402):
 - (a) Clean all faying areas of the shims, hinge fittings, and fuselage with methyl ethyl ketone.
 - (b) Apply interface sealant P/S 870C-12 (SRM 51-20-01/1) to the two faying surfaces of the shims (1), (12), (10), and 5).
 - (c) Apply interface sealant P/S 870C-12 (SRM 51-20-01/1) to the fuselage, at the faying surface with the shim.
 - (d) Apply interface sealant P/S 870C-12 (SRM 51-20-01/1) to the upper and lower hinge fittings (2) and (6), at the faying surface with the shim.
 - (e) Put the shims (1) and (12) in position and install the upper hinge fitting (2), washers (3), and bolts (4) and (11).
 - (f) Put the shims (5) and (10) in position and install the lower hinge fitting (6), washers (7), and bolts (8) and (9).
 - (g) Apply fillet sealant PR 1422 - B2 (SRM 51-20-01/1) to the interface between the hinge fittings (2) and (6), and the fuselage.
- (2) Put the side-hinged main door in its frame at the fuselage.
- (3) Put the door in the link point at the door rotation arm in the upper and lower hinge fittings (fuselage structure) as follows:
- (4) Install the bolt (31), washers (30) and (34), plain bushings (32) and (33), and nut (27) to connect the upper link point of the rotation arm to the upper hinge fitting (fuselage structure).
- (5) Install the bolt (37), washers (38) and (40), plain bushing (39), and nut (41) to connect the lower link point of the rotation arm to the lower hinge fitting (fuselage structure).
- (6) Install the cotter pins (35) and (41).
- (7) Connect the arms (29) to the link at the side-hinged main door as follows:
 - (a) Put the end of the arm (29) in the link at the door (REF.).

- (b) Install the bolt (24), washer (26), plain bushing (25), nut (27), and cotter pin (28) to connect the lower and upper link points of the arms (29) in the link of the door.
- (8) Put the clamp (5) and install the washer (6) and bolt (7) to the electrical harness of the connector (4).
- (9) Connect the electrical connector (4).
- (10) Connect the end of the bonding strap (1) and attach the support at the fuselage as follows:
 - (a) Make sure that the support is correctly prepared for bonding. Refer to [AMM TASK 20-13-21-910-801-A/200](#).
 - (b) Put the end of the bonding strap (1) on the support.
 - (c) Make sure that the length of the electrical harness is sufficient to permit the free movement of the side-hinged main door.
 - (d) Install the bolt (3) and three washers (2) to attach the support to the end of the bonding strap (1). Refer to [AMM TASK 20-13-21-910-801-A/200](#).
- (11) Connect the dampers (8) and (19) to the support damper (at the fuselage) as follows:
 - (a) Put the end of the damper (8) in the support damper (at the fuselage).
 - (b) Install the bolts (14), washers (12) and (15), spacer bushing (13), nuts (10), and cotter pin (11).
 - (c) Put the end of the damper (19) in the support damper (at the fuselage).
 - (d) Install the bolt (21), spacer bushing (20), washers (22) and (17), nut (23), and cotter pin (16).

J. Follow-on

SUBTASK 842-002-A

- (1) Adjust the main door rollers ([AMM TASK 52-18-00-820-805-A/500](#)).
- (2) Adjust the main door-to-fuselage skin gap ([AMM TASK 52-18-00-820-806-A/500](#)).
- (3) Adjust the main door-to-fuselage skin step ([AMM TASK 52-18-00-820-807-A/500](#)).
- (4) Adjust the main door stop ([AMM TASK 52-18-00-820-808-A/500](#)).
- (5) Adjust the main door folding flap ([AMM TASK 52-18-00-820-810-A/500](#)).
- (6) Install lining panel of the side-hinged main door ([AMM TASK 25-23-04-400-801-A/400](#)).
- (7) Install the lining panel of the passenger cabin along the contour of the side-hinged main door frame, at the link point of the door arms.
- (8) Close the side-hinged main door ([AMM SDS 52-18-00/1](#)).

