



SPEED BRAKE PANEL - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the speed brake panels.
- B. These procedures are applicable to the LH and RH speed brake panels.
- 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
27-62-06-000-801-A	SPEED BRAKE PANEL - REMOVAL	ALL
27-62-06-400-801-A	SPEED BRAKE PANEL - INSTALLATION	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-62-06-000-801-A

EFFECTIVITY: ALL

2. SPEED BRAKE PANEL - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the speed brake panel.

B. References

REFERENCE	DESIGNATION
AMM TASK 57-56-01-000-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
551		Wing
561		Wing

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	Wing
1	Helps the other technician	Wing

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE FLAP CANNOT BE OPERATED ACCIDENTALLY. AN ACCIDENTAL OPERATION OF THE FLAP CAN CAUSE INJURY TO PERSONS.

- (1) On the Circuit Breaker Panel, open the FLAP 1 and FLAP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (2) On the Circuit Breaker Panel, open the GND SPLR OUTBD circuit breaker and attach a DO-NOT-CLOSE tag to it.



CAUTION: WHEN YOU OPEN THE INBOARD-FLAP LOWER SHROUD, IF IT IS NECESSARY TO MOVE THE FLAPS, DO AS FOLLOWS (IT WILL PREVENT DAMAGE TO THE INBOARD-FLAP LOWER SHROUD AND INBOARD-FLAP LEADING EDGE):

- RELEASE THE SPRINGS FROM THE ROOT AND TIP SUPPORTS OF THE INBOARD-FLAP LOWER SHROUD.
- REMOVE THE TIP AND ROOT SUPPORTS ONLY FROM THE INBOARD-FLAP LOWER SHROUD ([AMM TASK 57-56-01-000-801-A/400](#)).

(3) Open the lower shroud of the inboard flap ([AMM TASK 57-56-01-000-801-A/400](#)).

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

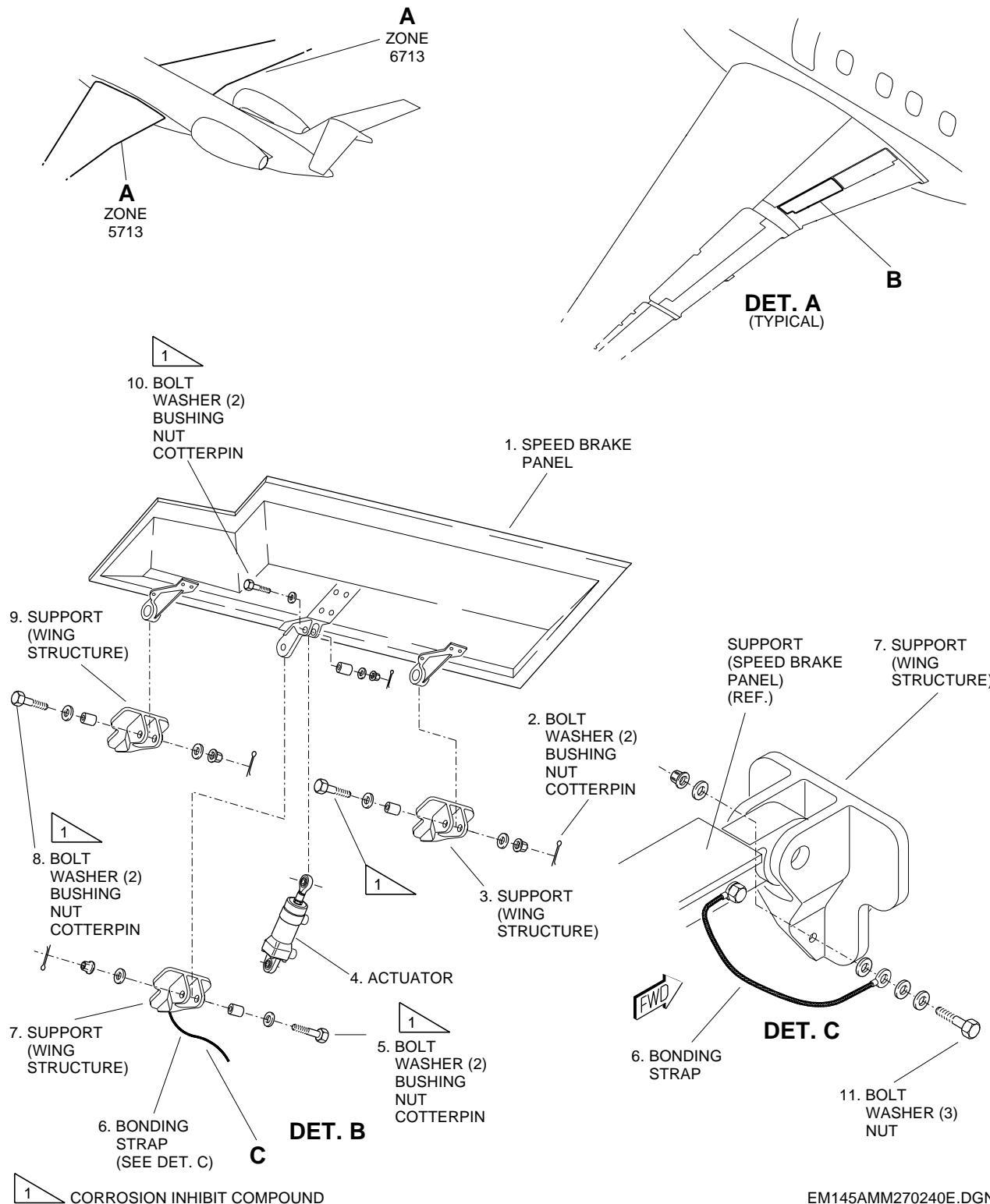
SUBTASK 020-002-A

- (1) Remove the bolt, three washers, and nut (11) to disconnect the end of the bonding strap (6) from the support (7) at the wing structure. Refer to DET. B.
- (2) Remove the cotter pin, nut, two washers, bushing, and bolt (10) to disconnect the end of the actuator (4) from the support at the speed brake panel (1).
- (3) Remove the cotter pins, nuts, washers (2 positions), bushing, and bolts (2), (5), and (8) to disconnect the hinges of the speed brake panel (1) from the supports (3), (7), and (9) at the wing structure (3 positions).
- (4) Remove the speed brake panel (1).

EFFECTIVITY: ALL

Speed Brake Panel - Removal/Installation

Figure 401



EM145AMM270240E.DGN



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-62-06-400-801-A

EFFECTIVITY: ALL

3. SPEED BRAKE PANEL - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the speed brake panel.
- (2) The approved Corrosion-Inhibiting Compound for the Ground Spoiler panel is:
 - Compound COR-BAN 27L

B. References

REFERENCE	DESIGNATION
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 27-62-02-400-801-A/400	SPEED BRAKE ACTUATOR - INSTALLATION
AMM TASK 27-63-01-700-801-A/500	SPOILER SYSTEM - OPERATIONAL CHECK
AMM TASK 27-63-01-700-802-A/500	SPOILER SURFACE - ADJUSTMENT
AMM TASK 57-56-01-400-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - INSTALLATION
IPC 27-60-00	SPOILERS
IPC 27-62-03	SPEED BRAKE ACTUATOR

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
551		Wing
561		Wing

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 27-60-00	2
Cotter pin	IPC 27-60-00	1
Cotter pin	IPC 27-62-03	1



H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing
1	Helps the other technician	Wing

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the speed brake panel (1) on the wing structure.
- (2) Install the bolts, bushing, washers (2 positions), nuts, and cotter pins (2), (5), and (8) to connect the hinges of the speed brake panel (1) to the supports (3), (7), and (9) at the wing structure (3 positions).
- (3) Put the end of the actuator (4) in the support at the speed brake panel (1) and attach it with the bolt, two washers, bushing, nut, and cotter pin (10).

NOTE: Refer to [AMM TASK 27-62-02-400-801-A/400](#) for the correct installation of the actuator (4).

- (4) Connect the bonding strap (6) to the support (7) at the wing structure with the bolt, three washers, and nut (11).

NOTE: Refer to [AMM TASK 20-13-21-910-801-A/200](#) for the correct installation of the bonding strap (6).

J. Follow-on

SUBTASK 842-002-A

- (1) On the Circuit Breaker Panel, close the GND SPLR OUTBD circuit breaker and remove the DO-NOT-CLOSE tag from it.

- (2) On the Circuit Breaker Panel, close the FLAP 1 and FLAP 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.

- (3) Close the lower shroud of the inboard flap ([AMM TASK 57-56-01-400-801-A/400](#)).

NOTE: If you removed the tip and root supports from the inboard-flap lower shroud, install them now ([AMM TASK 57-56-01-400-801-A/400](#)).

- (4) Check if the gap between the proximity sensor and the target and the gap between the proximity sensor and the bracket agree with the values specified in [AMM TASK 27-63-01-700-802-A/500](#).

- (5) Do the operational check of the spoiler system ([AMM TASK 27-63-01-700-801-A/500](#)).