



AIRCRAFT
MAINTENANCE MANUAL

LOWER COWLING LATCH - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to adjust the lower cowling latch and of the apron keeper eyebolt.
- B. These procedures are applicable to the LH and RH nacelles.
- 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).

| <i>TASK NUMBER</i> | <i>DESCRIPTION</i> | <i>EFFECTIVITY</i> |
|--------------------|---------------------------------------|--------------------|
| 71-12-03-800-801-A | LOWER COWLING LATCH - ADJUSTMENT/TEST | ALL |



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 71-12-03-800-801-A

EFFECTIVITY: ALL

2. LOWER COWLING LATCH - ADJUSTMENT/TEST

A. General

(1) Obey the instructions below to adjust the lower cowling latch and the apron keeper eyebolt.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--------------------------------|
| AMM MPP 71-00-00/200 | - MAINTENANCE PRACTICES |
| AMM TASK 71-12-01-000-801-A/400 | ENGINE LOWER COWLING - OPENING |
| AMM TASK 71-12-01-400-801-A/400 | ENGINE LOWER COWLING - CLOSING |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|---------------|-----------|
| 413 | Lower cowling | LH engine |
| 423 | Lower cowling | RH engine |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|----------------------|--|-----|
| Commercially available | Standard dynamometer | To adjust the preload of the lower cowling latch | |
| Commercially available | Torque wrench | To torque the retaining nut | |

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|-------------------------------------|-----|
| Commercially available | Workstand | To get access to the engine nacelle | |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | In the work area |

I. Preparation

SUBTASK 841-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 71-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

- (1) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:
 - START 1/2.
- (2) Put the workstand in position and get access to the engine nacelle.
- (3) Open the lower cowling ([AMM TASK 71-12-01-000-801-A/400](#)).

J. Adjustment/Test ([Figure 501](#))

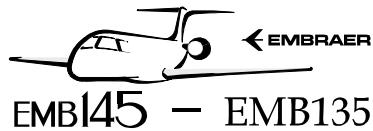
SUBTASK 820-002-A

WARNING: DO NOT TOUCH THE ENGINE COMPONENTS UNTIL THEY ARE COOL. TEMPERATURE CAN STAY HOT AFTER THE ENGINE STOPS.

- (1) Adjust all the apron keeper eyebolts to the extended position in all tie rod brackets of the new latches installed.
- (2) Make sure that the door latches are free of debris.
- (3) Engage all latches. Make sure that the door locators are correctly engaged.
- (4) Release the latch handles and adjust the apron keeper eyebolts until the latches can be engaged again with a contact between the apron structure and all spigots.
- (5) The gap between the door edge and the apron must be 2 mm (0.078 in) to 6 mm (0.236 in) with all spigots in contact with the apron structure.
- (6) A new adjustment to the keeper eyebolt can be necessary to have the necessary preload of 156 N (35 lbf) to 178 N (40 lbf) at the end of the handle to engage the latches, as shown in figure 501.
- (7) If an adjustment is necessary to have the gap between the lower cowling door and the apron specified before or because of nacelle conditions, the washers supplied can be removed or added at each spigot location.

NOTE: • A maximum of two washers are permitted at each spigot.
• Adjustments to get conditions of preload and gap for load and position must be done at the same time for a good installation.

- (8) After the adjustment made with the removal or installation of washers, open the lower cowling door and torque each spigot retaining nut as shown in figure 501, 23.7 N.m (210 lb.in).
- (9) Make sure that all latches are with the closing force kept with all spigots in contact with apron structure, and with the necessary door gap.



AIRCRAFT MAINTENANCE MANUAL

NOTE: After you adjust all the door latches, a step up to 3 mm between the door latch (1) and lower cowling is permitted.

- (10) If necessary, do this adjustment procedure again until you have the values specified.

K. Follow-on

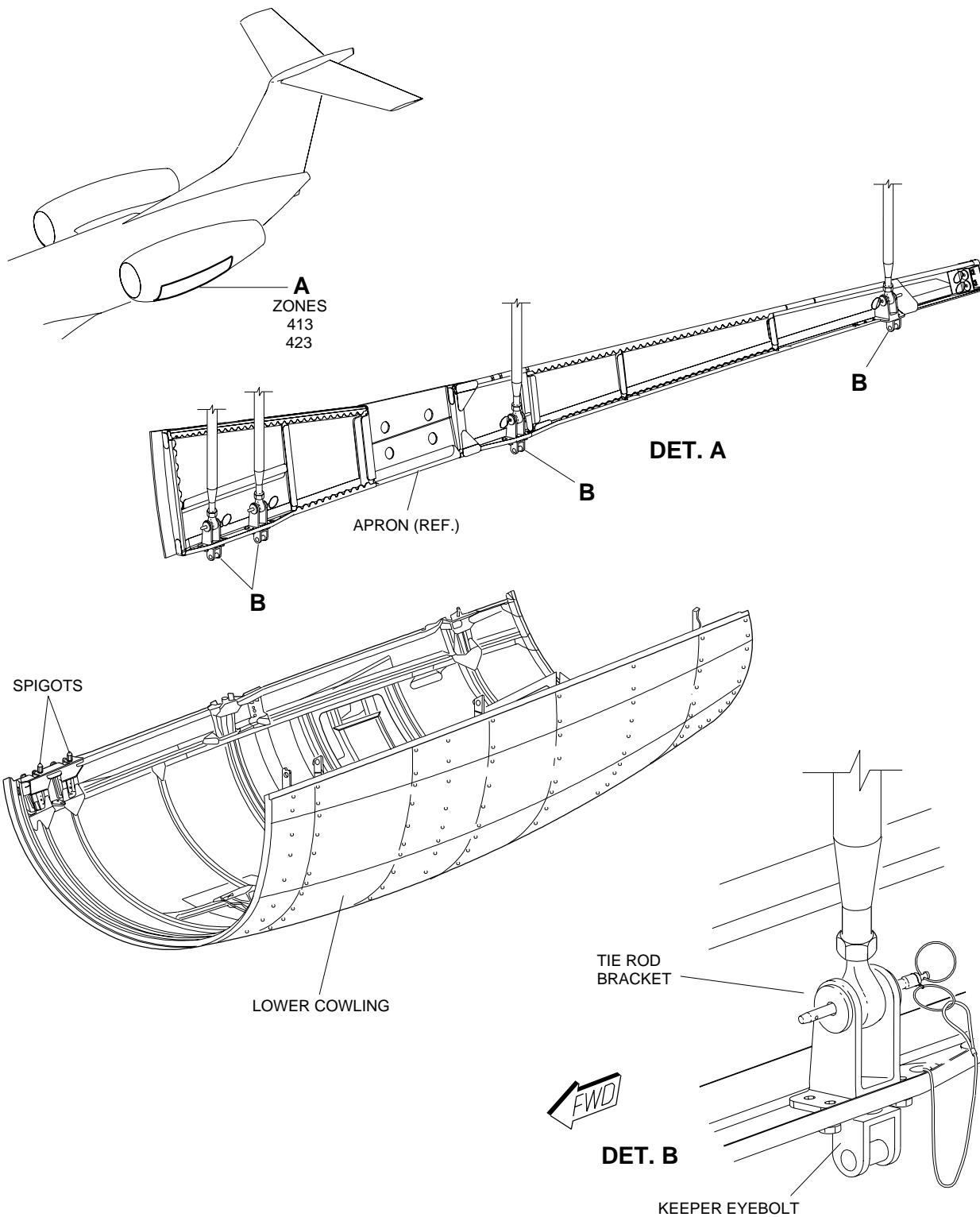
SUBTASK 842-002-A

- (1) Close the lower cowling ([AMM TASK 71-12-01-400-801-A/400](#)).
- (2) Remove the work stand from the work area.
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
 - START 1/2.

EFFECTIVITY: ALL

Lower Cowling Latch And Apron Keeper-Eyebolt - Adjustment/Test

Figure 501 - Sheet 1

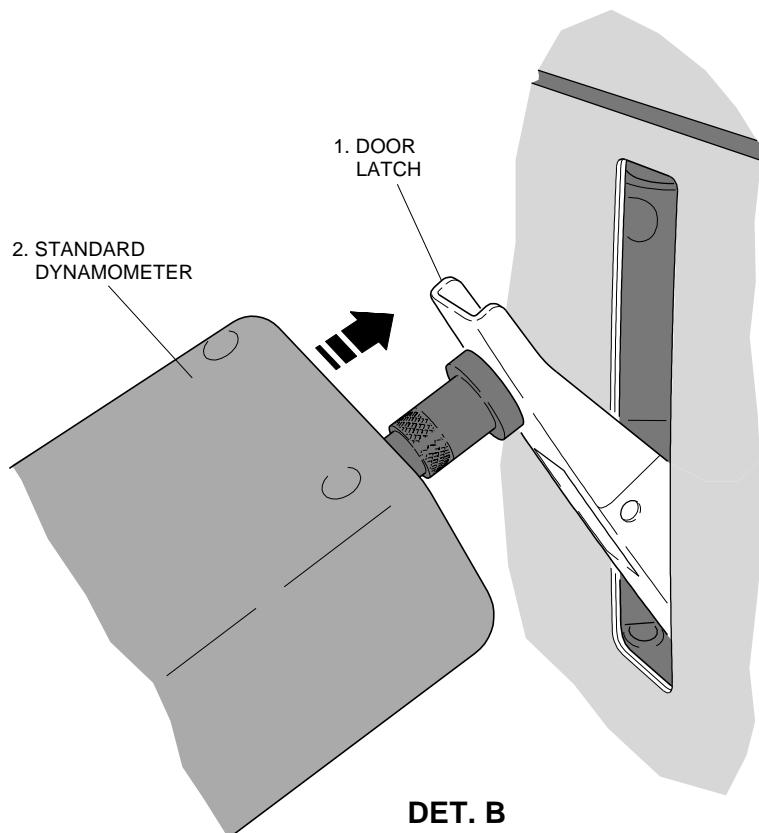
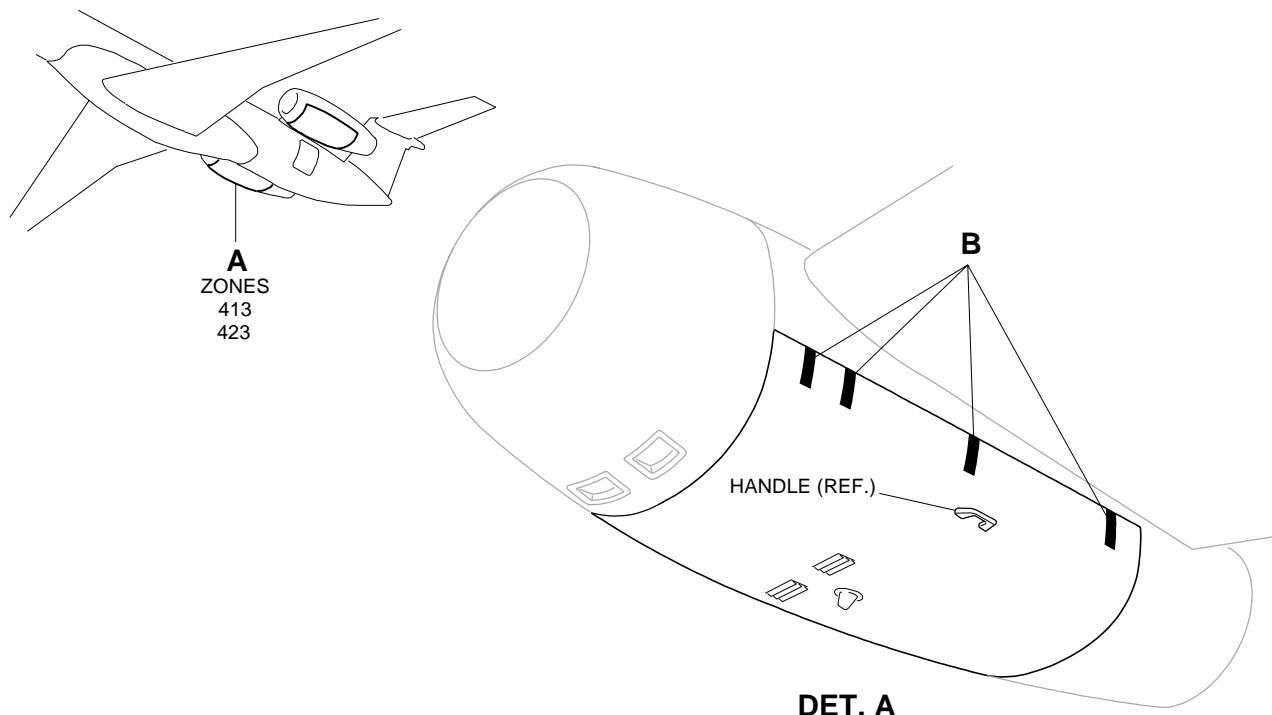


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EFFECTIVITY: ALL

Lower Cowling Latch And Apron Keeper-Eyebolt - Adjustment/Test

Figure 501 - Sheet 2



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