



AIRCRAFT MAINTENANCE MANUAL

AILERON DISCONNECTION - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do a check of the aileron disconnect system, installed at the aileron front quadrant.
- 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
27-15-00-700-801-A ♦	OPERATIONAL CHECK OF THE AILERON ALL DISCONNECT SYSTEM	



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-15-00-700-801-A

EFFECTIVITY: ALL

2. OPERATIONAL CHECK OF THE AILERON DISCONNECT SYSTEM

A. General

- (1) This task gives the procedures to adjust and test the aileron disconnect system.
- (2) [Figure 501](#) shows the location of the aileron disconnect handle.
- (3) [Figure 502](#) shows the location of the disconnectable link of the aileron disconnect system.
- (4) [Figure 503](#) shows the location of the internal cable and conduit terminal of the aileron disconnect system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-02/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 76-11-01-000-801-A/400	CONTROL STAND ASSEMBLY - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
221	221GF	Cockpit floor

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 068	Aileron/elevator reconnect wrench	To connect the aileron system again	

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	Cockpit
1	Helps the other technician	Cockpit

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE AILERON TRAVEL AREA.

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Remove the Floor panel 221GF (AMM MPP 06-41-02/100) to get access to the internal cable of the aileron disconnect system:
- (3) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (4) Make sure that the aileron control yokes, aileron torque tube, aileron intermediary sector, and aileron wing sector are not rig pinned.

J. Operationally Check Aileron Disconnect System ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#))

SUBTASK 710-002-A

- (1) Do the check of the aileron control system connection:
 - (a) Push the left control yoke to the left, and the right control yoke to the right.
Result:
1 There must be no relative movement between the two control yokes.
 - (b) Push the left control yoke to the right, and the right control yoke to the left.
Result:
1 There must be no relative movement between the two control yokes.
- (2) Do the check of the tension of the Internal Cable ([Figure 503](#)).
 - (a) The internal cable must be loose.
 - (b) If the internal cable is tensioned, decrease its tension with the conduit terminal ([Figure 503](#)).
- (3) Disconnect the Aileron Control System by pulling the aileron disconnect handle.

NOTE: The aileron disconnect handle is located on right side of the control pedestal.
Refer to [Figure 501](#), DET. C.

- (a) The aileron amber caution light of the system comes on, which indicates a aileron system disconnection. Refer to [Figure 501](#), DET. C.

NOTE: Make sure that the aileron amber caution light is on RH side of the control stand, below the aileron disconnect handle that is installed horizontally.

If the aileron amber caution light is not installed correctly, probably occurred a swapping position with the elevator caution light. If the light positions between the elevator and aileron are inverted do the [AMM TASK 76-11-01-000-801-A/400](#) and install them accordingly.

- (4) Push the aileron disconnect handle back to its position at the control pedestal.

NOTE: The aileron disconnect handle is located on right side of the control pedestal. Refer to [Figure 501](#), DET. C.

- (a) The aileron amber caution light of the system stays on. Refer to [Figure 501](#), DET. C.
- (5) Do step (1) again, and make sure that the control yoke movements are independent.
- (6) Make sure that disconnectable link grooves with black mark are aligned.
- (7) Install tool GSE 068 between the connecting flange (1) and the floating plate (2) of the disconnectable link, refer to [Figure 502](#), DET. C.
- (8) Turn the tool until you hear the mechanical click.
 - (a) The aileron amber caution light of the system goes off. Refer to [Figure 501](#), DET. C.
- (9) Continue to turn the tool, until you feel a moderate resistance. Do not remove the tool.
- (10) Operate the aileron disconnection system with the aileron disconnect handle at the control console five to ten times. Refer to [Figure 501](#), DET. C.

NOTE: The aileron disconnect handle is located on right side of the control pedestal. Refer to [Figure 501](#), DET. C.

- (a) The aileron amber caution light of the system comes on when you pull the aileron disconnect handle ([Figure 501](#)). Refer to [Figure 501](#), DET. C.

NOTE: Make sure that the aileron amber caution light is on RH side of the control stand, below the aileron disconnect handle that is installed horizontally.

If the aileron amber caution light is not installed correctly, probably occurred a swapping position with the elevator caution light. If the light positions between the elevator and aileron are inverted do the [AMM TASK 76-11-01-000-801-A/400](#) and install them accordingly.

- (b) The aileron amber caution light of the system goes off when you push the aileron disconnect handle. Refer to [Figure 501](#), DET. C.
- (c) If it does not go off, turn the tool one more time until it goes off. Refer to [Figure 501](#), DET. C.

NOTE: Do not continue to turn the tool if you feel too much resistance.

- (11) Push the aileron disconnect handle back to its position at the control console.

- (a) The amber caution light of the system goes off. Refer to [Figure 501](#), DET. C.

K. Follow-on

SUBTASK 842-002-A

- (1) Remove tool GSE 068 from the Disconnectable Link.
- (2) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).



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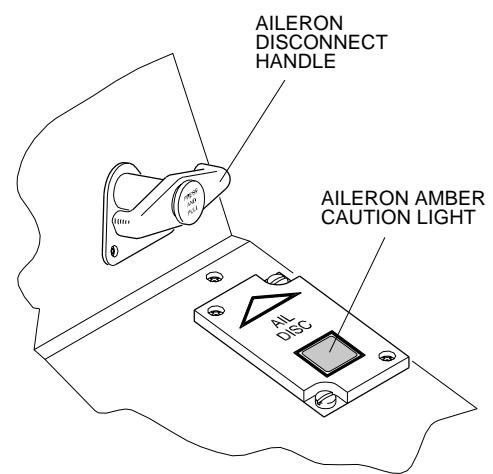
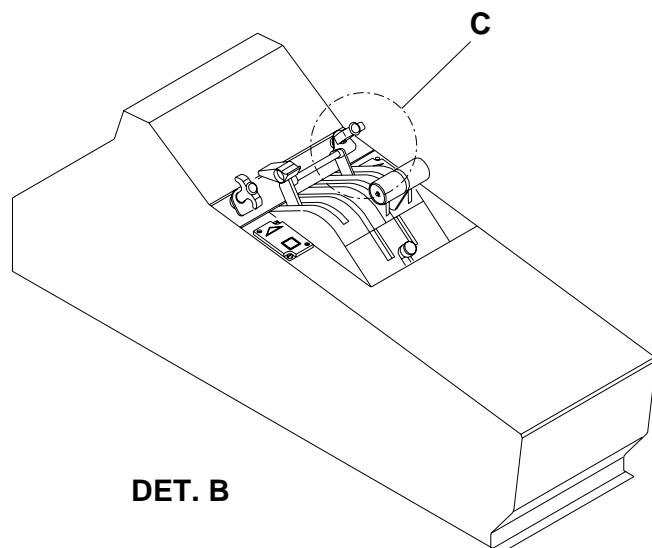
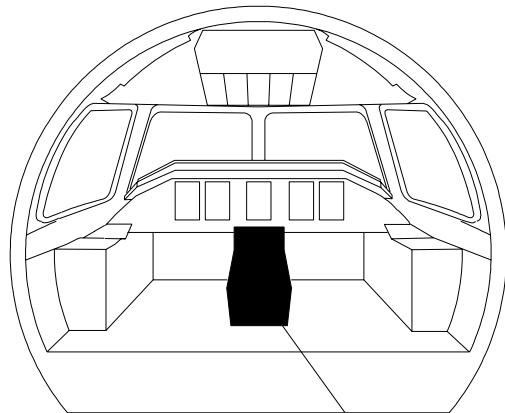
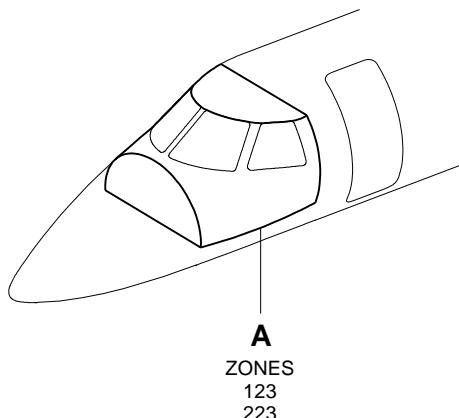
NOTE: The inspection of fuel quantity indication harness is part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Aircraft Maintenance Program.

- (3) Install floor panel 221GF (AMM MPP 06-41-02/100).
- (4) Deenergize de aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

EFFECTIVITY: ALL

Aileron Disconnect Handle - Location

Figure 501

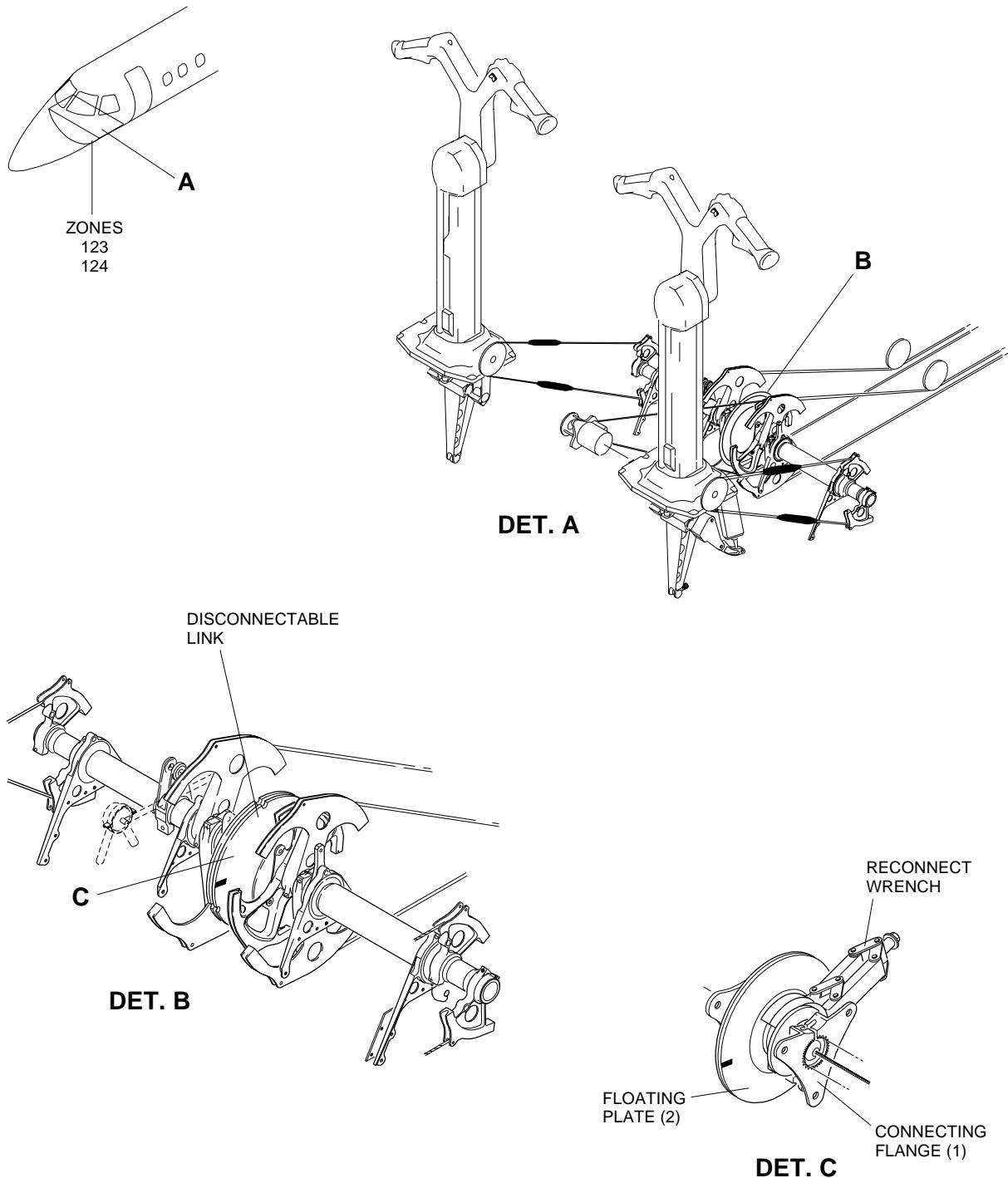


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EFFECTIVITY: ALL

Aileron Disconnectable Link - Location

Figure 502

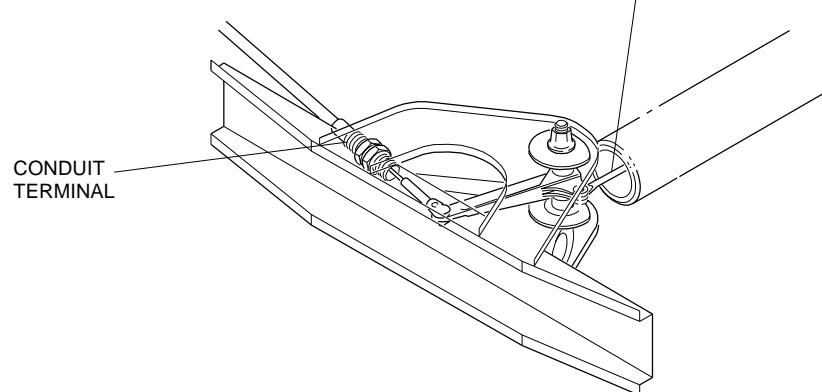
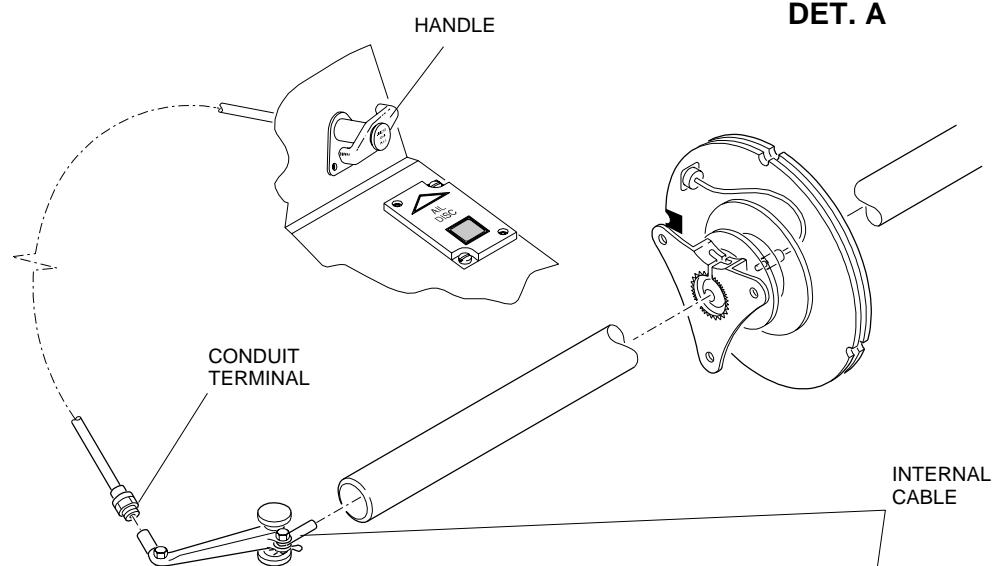
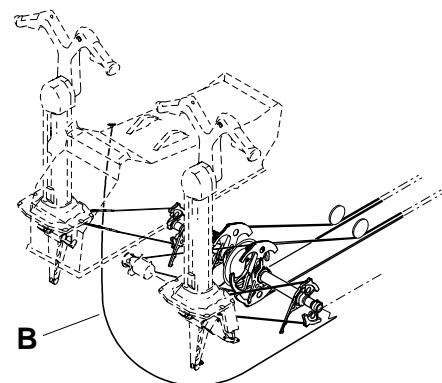
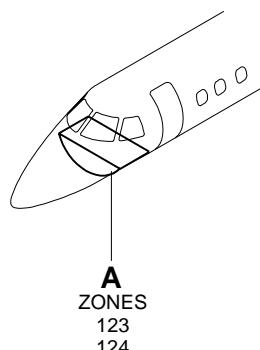


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EFFECTIVITY: ALL

Conduit Terminal and Internal Cable - Location

Figure 503



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