



AIRCRAFT
MAINTENANCE MANUAL

ELECTRONIC COMPARTMENT VENTILATION SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures necessary to do the operational check of the electronic compartment ventilation system.
- 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
21-26-00-700-801-A ♦	ELECTRONIC COMPARTMENT VENTILA- TION SYSTEM - OPERATIONAL CHECK	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 21-26-00-700-801-A

EFFECTIVITY: ALL

2. ELECTRONIC COMPARTMENT VENTILATION SYSTEM - OPERATIONAL CHECK

A. General

- (1) This task gives the procedure to do the operational test of the electronic compartment ventilation system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113CZ	Nose landing gear compartment
113	113AZ	Nose landing gear compartment
114	114AZ	Nose landing gear compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Heat gun	To make the thermal switches hot	
GSE 044	Headset - Ramp handling	For communication	
Commercially available	Flashlight	To help the shutoff valve inspection	
Commercially available	Mirror	To help the shutoff valve inspection	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Plastic ice bag	To make the thermal switches cold	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Electronic compartment
1	B - Helps technician A	Cockpit

I. Preparation
SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

- (1) Do the procedure to make the aircraft safe for maintenance ([AMM TASK 20-00-00-910-801-A/200](#)).

SUBTASK 841-003-A

- (2) Remove these access panels, as applicable:
 - 113AZ (LH shutoff valve) (AMM MPP 06-41-01/100).
 - 114AZ (RH shutoff valve) (AMM MPP 06-41-01/100).
- (3) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).

J. Operationally Check Electronic Compartment Ventilation System ([Figure 501](#))
SUBTASK 710-002-A

- (1) Do a check to know if the exhaust fans are in operation:
 - (a) Make sure the exhaustion air comes out through the grilles, on the left and right sides.
 - (b) Make sure that the shutoff valves are open on the left and right sides.
- NOTE: You can use a mirror and a flashlight to do an inspection on the position of the butterfly shutoff valve.

WARNING: WHEN YOU ENERGIZE THE AIRCRAFT THE RECIRCULATION FANS WILL START OPERATION. BE CAREFUL WHEN YOU GET ACCESS TO THE ELECTRONIC COMPARTMENT AND OPEN THE ACCESS DOOR 113 CZ. STAY IN A SAFETY DISTANCE FROM THE RECIRCULATION FAN, TO AVOID INJURY TO YOU AND/OR DAMAGE TO EQUIPMENTS.

- (2) Open access door 113CZ (AMM MPP 06-41-01/100).
- (3) Do a check in the recirculation fans and make sure that they are in operation. They must be in operation during all the check.
- (4) If the exhaust fans are not in operation, do as follows:

WARNING: BE CAREFUL WITH THE HIGH TEMPERATURE WHEN YOU HEAT THE THERMAL SWITCH.

- (a) With a heat gun slowly and continuously heat the two thermal switches simultaneously on the left side to a temperature of more than 24°C (75°F).

Result:

 - 1 The exhaust fan on the left side starts the operation.
 - 2 The shutoff valve on the left side opens.
- (5) On the left side, do as follows:
- (a) Decrease the temperature of one of the thermal switches with an ice bag, to a temperature below 19°C (66°F).

Result:

 - 1 The exhaust fan on the left side stops.
 - 2 The shutoff valve on the left side closes.
- (6) Do step (4) and (5) for the thermal switches on the right side.
- NOTE: Examine the shutoff valve and exhaust fan on the right side.
- (7) Position one mechanic in the cockpit and the other in the nose landing gear compartment.
- (8) With the overtemperature switch on the left side, do as follows:
- WARNING: BE CAREFUL WITH THE HIGH TEMPERATURE WHEN YOU HEAT THE THERMAL SWITCH.**
- (a) Slowly and continuously heat the overtemperature switch with a heat gun, to a temperature above 71°C (160°F).

Result:

 - 1 The EICAS display shows the ELEKBAY OVTEMP caution message.
 - 2 The master CAUTION lights flash.
 - (b) Push the master CAUTION light.

Result:

 - 1 The master CAUTION light goes off.
 - (c) Decrease the temperature of the overtemperature switch, with an ice bag, to less than 71°C (160°F).

Result:

 - 1 On the EICAS display, the ELEKBAY OVTEMP caution message goes out of view.
- (9) Do step (8) for the overtemperature switch on the right side.
- (10) Close the access door 113CZ (AMM MPP 06-41-01/100).

K. Follow-on

SUBTASK 842-002-A

- (1) Remove the External DC Power Supply from the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) Close these access panels, as applicable:



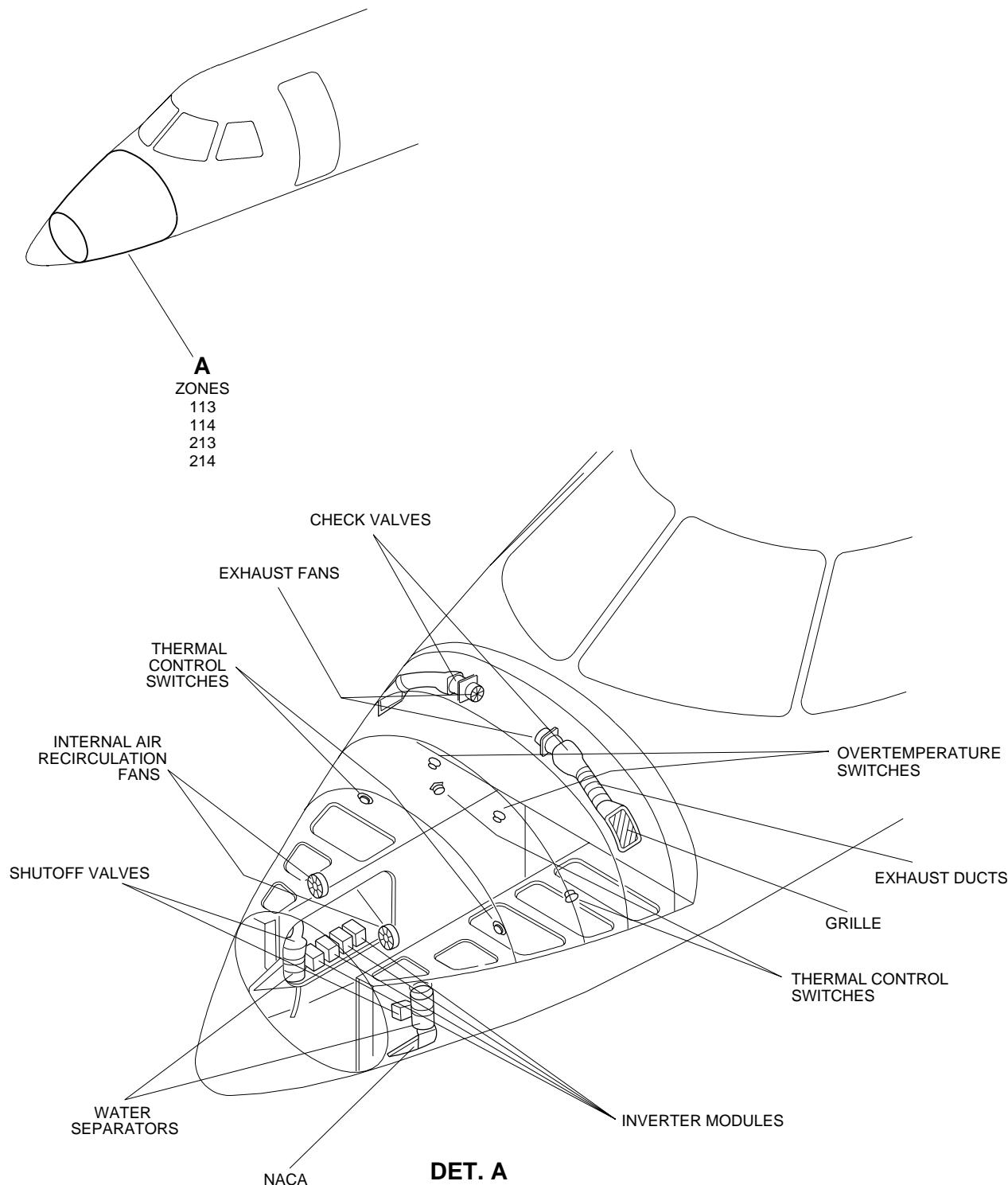
AIRCRAFT
MAINTENANCE MANUAL

- 113AZ (AMM MPP 06-41-01/100).
- 114AZ (AMM MPP 06-41-01/100).

EFFECTIVITY: ALL

Electronic Compartment Ventilation System Location

Figure 501



145AMM210019.MCE A