



AIRCRAFT MAINTENANCE MANUAL

RAM AIR VALVE - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures necessary to do the ram-air valve operational check.
- 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
21-25-01-700-801-A ♦	RAM AIR VALVE - OPERATIONAL CHECK	ALL



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 21-25-01-700-801-A

EFFECTIVITY: ALL

2. RAM AIR VALVE - OPERATIONAL CHECK

A. General

- (1) The ram air valves open when the two pack valves are closed in flight.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 21-25-03-800-801-A/200	LINEAR ACTUATOR - ADJUSTMENT
AMM TASK 32-63-00-700-801-A/500	AIR/GROUND SYSTEM - OPERATIONAL CHECK

C. Zones and Accesses

Not Applicable

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	A - Does the task	Air conditioning inlet NACAs
1	B - Helps technician A	Cockpit

I. Preparation

SUBTASK 841-002-A

- (1) Energize the aircraft with External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).

- (2) On the ELECTRICAL control panel, on the overhead panel, set the BATT 1 and BATT 2 switches to OFF.

NOTE: The BATT 1 and BATT 2 switches must be set to the OFF position to permit the external power supply to energize the electrical systems when the aircraft is in the AIR condition.

- (3) On the ICE PROTECTION control panel, on the overhead panel, set the SENSORS (PITOT 1/TAT 1/AOA 1, PITOT 3 and PITOT 2/TAT 2/AOA 2) pushbuttons to OFF (lights ON). Attach DO-NOT-SET-ON tags to them.

- (4) On the circuit breaker panel, make sure that the SENSORS HTG circuit breaker is closed.

NOTE: If this circuit breaker is open, the heating of the sensors and static ports will be activated.

- (5) On the STALL PROTECTION control panel, on the control pedestal, set the CUTOUT 1 and CUTOUT 2 pushbuttons to ON (lights ON).

NOTE: The CUTOUT 1 and CUTOUT 2 pushbuttons must be set to ON to prevent the operation of the stick shaker.

J. Operationally Check Ram Air Valve ([Figure 501](#))

SUBTASK 710-002-A

CAUTION: AFTER EACH 30 SECONDS OF OPERATION OF THE LINEAR ACTUATOR, STOP 2 MINUTES TO OPERATE IT AGAIN.

- (1) On the circuit breaker panel, open the AIR/GND A, the AIR/GND B, the AIR/GND C, and the AIR/GND D circuit breakers.

- (2) Make sure that the flap valves of the ram air valves go to the DOWN position (which permit the airflow to go to the cockpit and to the passenger cabin).

CAUTION: WHEN YOU ARE TO CLOSE THE AIR/GND A, B, C, AND D CIRCUIT BREAKERS, THE TIME NECESSARY FOR YOU TO CLOSE ALL THE FOUR CIRCUIT BREAKERS MUST NOT BE MORE THAN 10 SECONDS ([AMM TASK 32-63-00-700-801-A/500](#)).

- (3) On the circuit breaker panel, close the AIR/GND A, the AIR/GND B, the AIR/GND C, and the AIR/GND D circuit breakers.

- (4) Make sure that the flap valves of the ram air valves go to the UP position (which stop the airflow to the cockpit and to the passenger cabin). Refer [AMM TASK 21-25-03-800-801-A/200](#).

K. Follow-on

SUBTASK 842-002-A

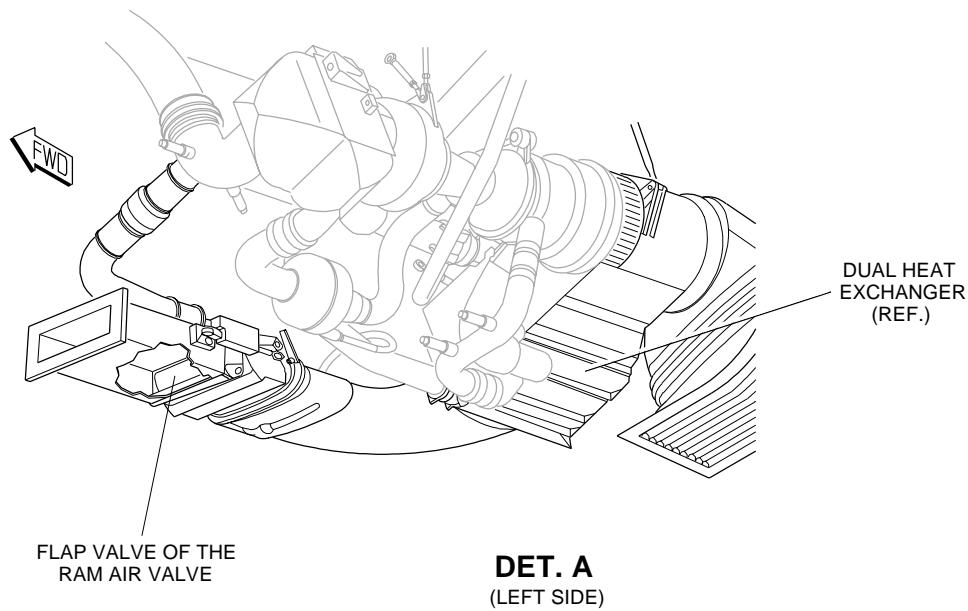
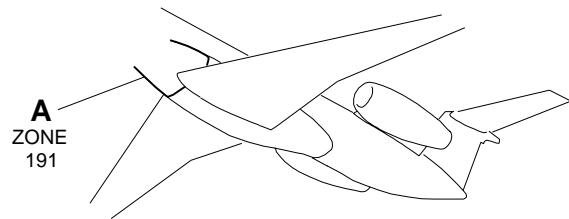
- (1) On the STALL PROTECTION control panel, on the control pedestal, set the CUTOUT 1 and CUTOUT 2 pushbuttons to OFF (lights OFF).

- (2) On the ICE PROTECTION control panel, on the overhead panel, remove the DO-NOT-SET-ON tags from the SENSORS (PITOT 1/TAT 1/AOA 1, PITOT 3 and PITOT 2/TAT 2/AOA 2) pushbuttons and set them to ON (lights OFF).

- (3) On the ELECTRICAL control panel, on the overhead panel, set the BATT 1 and BATT 2 switches to AUTO.

- (4) Remove the External DC Power Supply from the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

EFFECTIVITY: ALL
Ram Air Valve - Location
Figure 501



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