ALTITUDE SENSING SWITCH - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-135

1. General

A. This section gives the procedure to do the functional check of the altitude sensing switch.

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*
35-20-03-700-801-A	ALTITUDE SENSING SWITCH - FUNCTIONAL CHECK	ACFT MODEL(S) EMB-135

TASK 35-20-03-700-801-A
EFFECTIVITY: ACFT MODEL(S) EMB-135

2. ALTITUDE SENSING SWITCH - FUNCTIONAL CHECK

A. General

(1) This task gives the procedure to do the functional check of the altitude sensing switch.

B. References

REFERENCE	*DESIGNATION*
AMM SDS 34-52-00/1	
AMM TASK 20-13-10-000-801-A/400	CONTROL PANELS - REMOVAL (TYPICAL)
AMM TASK 20-13-10-400-801-A/400	CONTROL PANELS - INSTALLATION (TYPICAL)
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 34-61-02-000-801-A/400	CONTROL DISPLAY UNIT (CDU) - REMOVAL
AMM TASK 34-61-02-400-801-A/400	CONTROL DISPLAY UNIT (CDU) - INSTALLATION
AMM TASK 34-62-02-000-801-A/400	-
AMM TASK 34-62-02-400-801-A/400	-
AMM TASK 35-10-00-910-801-A/200	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 129	Test Set - Pitot/Static System, Bench	To make conditions equivalent to the necessary altitude	
GSE 128	Kit - Air Data	To adapt the Pitot-Static System Test Set to the aircraft	

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	Pitot-static system test set
1	B - Helps technician A	Cockpit and passenger cabin

I. Preparation

SUBTASK 841-008-B

(1) Obey the safety precautions (AMM TASK 35-10-00-910-801-A/200).

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

(3) Set the test knob of the dispensing units to “Test” (Figure 501).

(4) Remove the FMS Control Panel:

- (AMM TASK 34-61-02-000-801-A/400) aircraft equipped with single FMS.
- (AMM TASK 34-62-02-000-801-A/400) aircraft equipped with dual FMS.

(5) Remove the Pitch and Turn Controller (AMM TASK 20-13-10-000-801-A/400).

(6) Make sure that the knob of the passenger oxygen control panel is in the AUTO position.

J. Functional Check of the Altitude Sensing Switch (Figure 501)

SUBTASK 720-011-B

(1) *EFFECTIVITY: ACFT PRE-MOD S.B. 145LEG-21-0014*

Do the functional check of the altitude sensing switch as follows:

(a) Close one of the circuit breakers (PASS OXY DEPLOY 1 or PASS OXY DEPLOY 2).

(b) Connect the test hose to the suction port of the anemometric bench and to the altitude sensing switch port.

(c) Adjust the barometric scale on the anemometric bench to 1013 millibars.

(d) On the anemometric bench, set the altitude (at a maximum climb rate of 500 ft/min) until the display of the anemometric bench shows 15000 ft. Between 13500 and 14500 ft, the result below must occur.

NOTE: This procedure can cause interference with the local air traffic during simulations of altitude with the anemometric bench test. To prevent this, make sure that the transponder is on the STANDBY condition (AMM SDS 34-52-00/1).

Result:

1 The dispensing unit doors must open.

(e) Stop for 6 seconds after the dispensing unit doors open. Then push the manual reset lever in (to put the latch back in the automatic operation conditions) and close the doors.

(f) On the anemometric bench, set the altitude back to the ambient pressure at a rate of descent of less than 500 ft/min.

(g) Set the passenger oxygen control knob to CLOSE and then to AUTO.

Result:

1 The “NO SMOKING” light, in the passenger cabin, goes off.

2 The “FASTEN SEAT BELTS” light, in the passenger cabin, goes off.

3 The “ON” light, on the passenger oxygen control panel, goes off.

4 The "RETURN TO SEAT" light, in the lavatory, goes off.

(2) *EFFECTIVITY: ACFT POST-MOD S.B. 145LEG-21-0014*

Do the functional check of the altitude sensing switch as follows:

(a) Close one of the circuit breakers (PASS OXY DEPLOY 1 or PASS OXY DEPLOY 2).

(b) Connect the test hose to the suction port of the anemometric bench and to the altitude sensing switch port.

(c) Adjust the barometric scale on the anemometric bench to 1013 millibars.

(d) On the anemometric bench, set the altitude (at a maximum climb rate of 500 ft/min) until the display of the anemometric bench shows 15500 ft. Between 14400 and 15000 ft, the result below must occur.

NOTE: This procedure can cause interference with the local air traffic during simulations of altitude with the anemometric bench test. To prevent this, make sure that the transponder is on the STANDBY condition (AMM SDS 34-52-00/1).

Result:

1 The dispensing unit doors must open.

(e) Stop for 6 seconds after the dispensing unit doors open. Then push the manual reset lever in (to put the latch back in the automatic operation conditions) and close the doors.

(f) On the anemometric bench, set the altitude back to the ambient pressure at a rate of descent of less than 500 ft/min.

(g) Set the passenger oxygen control knob to CLOSE and then to AUTO.

Result:

1 The “NO SMOKING” light, in the passenger cabin, goes off.

2 The “FASTEN SEAT BELTS” light, in the passenger cabin, goes off.

3 The “ON” light, on the passenger oxygen control panel, goes off.

4 The "RETURN TO SEAT" light, in the lavatory, goes off.

K. Follow-on

SUBTASK 842-008-B

(1) Close the “PASS OXY DEPLOY 1” and “PASS OXY DEPLOY 2” circuit breakers.

(2) Deenergize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(3) Move the dispensing-unit test knob back to the normal position (Figure 501).

(4) Remove the anemometric bench. Keep the equipment used in a clean place and in the conditions necessary for the oxygen system services.

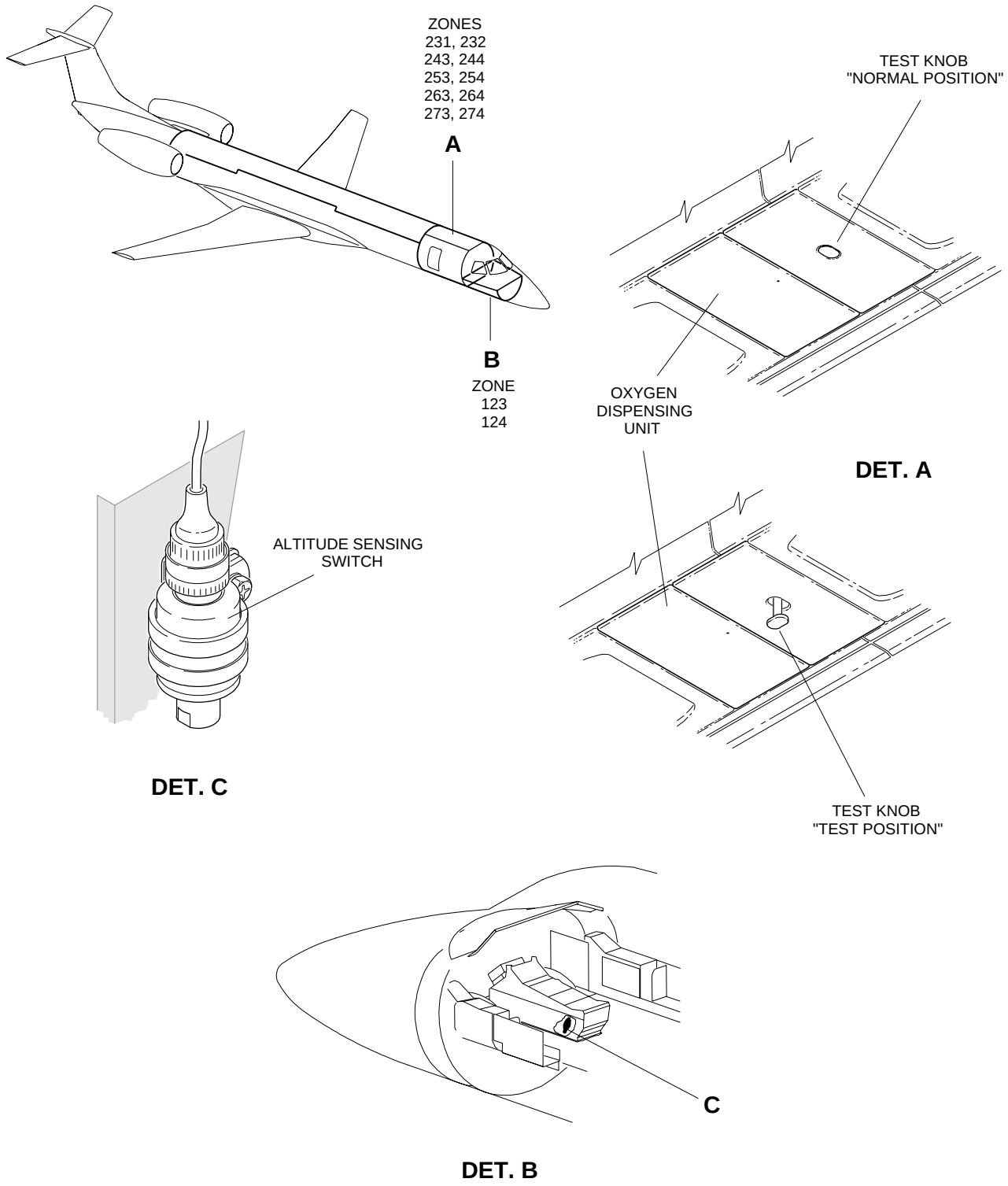
(5) Install the FMS Control Panel:

- (AMM TASK 34-61-02-400-801-A/400) aircraft equipped with single FMS.

- (AMM TASK 34-62-02-400-801-A/400) aircraft equipped with dual FMS.

(6) Install the Pitch and Turn Controller (AMM TASK 20-13-10-400-801-A/400).

EFFECTIVITY: ACFT MODEL(S) EMB-135
Altitude Sensing Switch - Functional Check
Figure 501



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