STANDBY ALTIMETER - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-145

1. General

A. This section gives the procedures to do the functional check of the standby altimeter.

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*
34-11-00-700-801-A ♦	STANDBY ALTIMETER - FUNCTIONAL CHECK	ACFT MODEL(S) EMB-145

TASK 34-11-00-700-801-A
EFFECTIVITY: ACFT MODEL(S) EMB-145

2. STANDBY ALTIMETER - FUNCTIONAL CHECK

A. General

(1) The function of this test is to make sure that the standby altimeter indications are correct.

B. References

REFERENCE	*DESIGNATION*
AMM SDS 34-52-00/1	
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 34-13-00-000-801-A/400	PITOT/STATIC-SYSTEM TEST SET - DISCONNECTION
AMM TASK 34-13-00-400-801-A/400	PITOT/STATIC-SYSTEM TEST SET - CONNECTION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 128	Air Data Kit	To permit interface between GSE 129 and the aircraft	
GSE 129	Pitot/Static System Test Set	To simulate altitude and airspeed	

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	Does the task	Pitot/static system test set

I. Preparation

SUBTASK 841-005-B

(1) Energize the aircraft with the external DC power supply (AMM TASK 20-40-01-860-801-A/200).

(2) On the circuit breaker panel, located at the cockpit ceiling, make sure the STBY ALT circuit breaker (Location Tip: ESSENTIAL DC BUS 2/NAV/STBY ALT) is closed.

(3) Make sure that the vibrator in the standby altimeter operates.

NOTE: Feel the standby altimeter casing.

J. Functionally Check Standby Altimeter Indicator (Figure 501)

SUBTASK 720-005-B

WARNING: MAKE SURE PITOT/STATIC SENSORS AND ANEMOMETRIC STATIC PORTS HEATING SYSTEM IS OFF, THIS PREVENT INJURY TO PERSONS IF TOUCHED AND/OR DAMAGE TO TEST SET ADAPTERS.

CAUTION:
- STATIC LINE S1 IS USED BY BOTH STANDBY ALTIMETER AND STANDBY AIRSPEED INDICATORS. THUS, DURING THE STANDBY ALTIMETER TEST IT IS ALSO NECESSARY TO APPLY PITOT PRESSURE TO THE PITOT 3 IN ORDER TO PREVENT DAMAGE TO THE STANDBY AIRSPEED INDICATOR.
- KEEP THE PITOT PRESSURE THE SAME OR LITTLE GREATER THAN THE STATIC PRESSURE. FAILURE TO DO THIS COULD CAUSE DAMAGE TO THE STBY AIRSPEED INDICATOR.

(1) NOTE: For the standby airspeed indicator test it is necessary to connect the pitot 3 adapter only.

Connect the pitot/static system test set (GSE 129) (AMM TASK 34-13-00-400-801-A/400).

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).

(2) Do the altitude test with the pitot/static system test set as follows:

(a) On the standby altimeter indicator, set the baro scale to 29.92 IN HG (1013 mB).

(b) Apply pressures to the to standby air data system equivalent to altitudes shown in the table that follows. Make sure the values on the standby altimeter indicator are within the tolerances for each test point.

- Increase the pressure altitude at a rate of 5000 feet per minute.

Table 501

ALTITUDE	STANDBY ALTIMETER INDICATOR VALUE
0 ft	0 ft (± 30 ft)
5000 ft	5000 ft (± 40 ft)
10000 ft	10000 ft (± 80 ft)
15000 ft	15000 ft (± 110 ft)
20000 ft	20000 ft (± 130 ft)
25000 ft	25000 ft (± 155 ft)

Table 501 (Continued)

ALTITUDE	STANDBY ALTIMETER INDICATOR VALUE
30000 ft	30000 ft (± 180 ft)
35000 ft	35000 ft (± 205 ft)
37000 ft	37000 ft (± 216 ft)

(3) Set the altitude back to the room pressure at a rate of descent of less than 5000 ft/min.

K. Follow-on

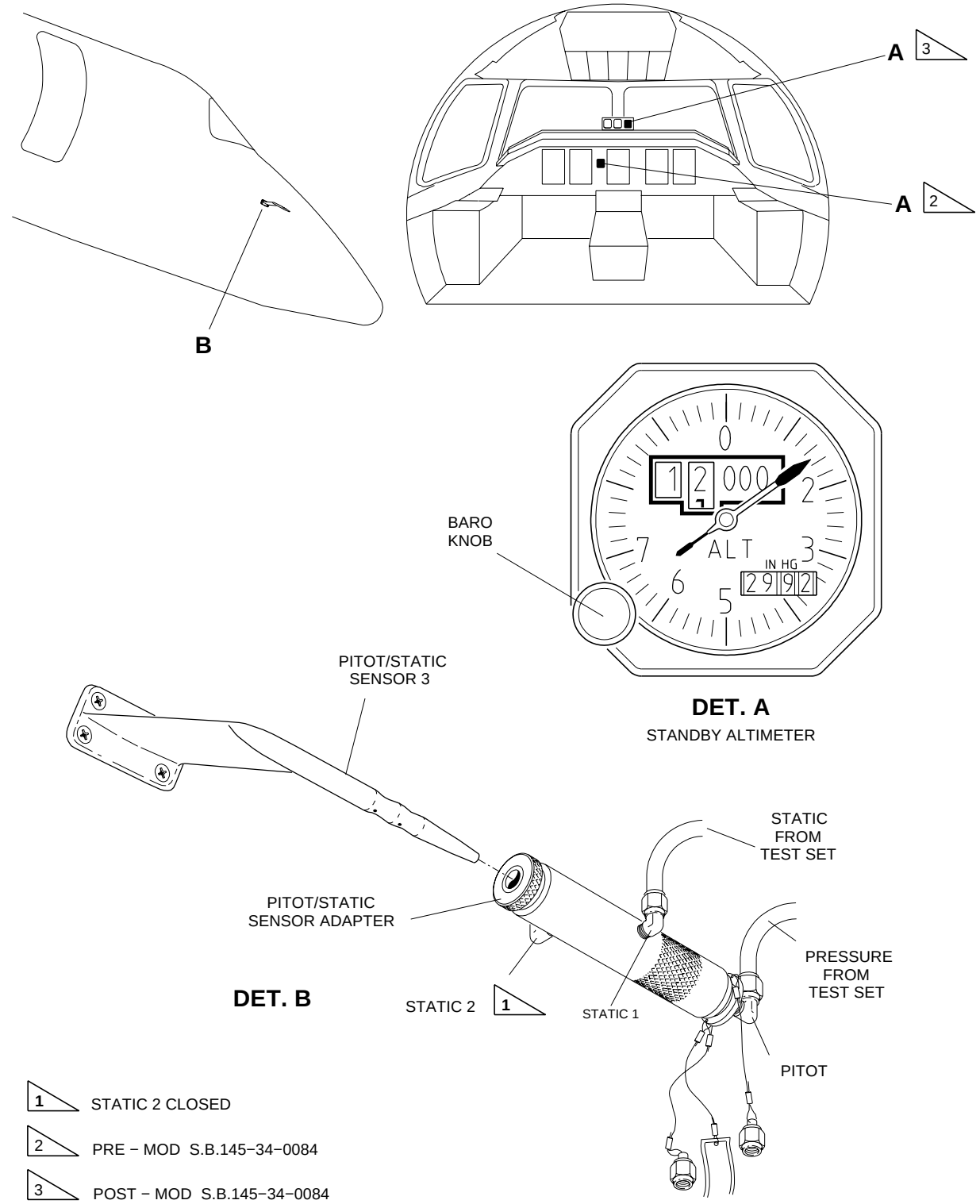
SUBTASK 842-005-B

(1) Disconnect the pitot/static system test set (GSE 129) (AMM TASK 34-13-00-000-801-A/400).

(2) Put the pitot/static 3 sensor protection.

(3) Deenergize the aircraft with the external DC power supply (AMM TASK 20-40-01-860-801-A/200).

EFFECTIVITY: ACFT MODEL(S) EMB-145
Standby Altimeter - Functional Check
Figure 501



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