

ZONES: 212
 A/C NUMBER:
 REV. DATE: 07/16/07
 FREQUENCY: A/R

W/C NUMBER: 721F3408 DATE:

TOOLS	DESCRIPTION	QTY
T33B	Transponder test set	1
Common	Power Cable extension cord	1
127-1	Air Data Tester (Milhard Engineering)	1

REFERENCES

AMM 34-16-00

MECH INSP

MRB ITEM: 34-54-00-01

PERFORM AN OPERATIONAL CHECK OF THE AIR TRAFFIC CONTROL (ATC) TRANSPONDER

CAUTION: THE EMERGENCY CODES OF 7777, 7700, 7600, OR LOCAL AIRPORT AREA TRAFFIC CONTROL FREQUENCY MUST NOT BE USED WHEN CONDUCTING SYSTEM TEST.

CAUTION: LINE MAINTENANCE PERSONNEL MUST BE ALERT TO THE FACT THAT UNDER CERTAIN CONDITIONS THE CADC REMOTE TEST FUNCTION CAN RESULT IN SUDDEN MOVEMENT OF POWERED CONTROL SURFACES. THIS CONDITION IS ONLY PRESENT WHEN A FLIGHT GUIDANCE SYSTEM IS IN OPERATION AND HYDRAULIC POWER IS ENERGIZED. UNDER THESE CIRCUMSTANCES, ACTUATION OF THE REMOTE TEST SWITCHES PROVIDES CADC OUTPUTS THAT CAN CAUSE A FLIGHT GUIDANCE CORRECTIVE RESPONSE AND RESPONSE AND RESULT IN MOVEMENT OF THE CONTROL SURFACES. THEREFORE, PRIOR TO CONNECTING THE CADC REMOTE TEST ADAPTER, OPEN, TAG, AND SAFETY FLIGHT GUIDANCE SYSTEM CIRCUIT BREAKERS. SEE AMM 34-16-00.

1. Do a Functional Check of the ATC Transponder as follows:

- _____ XXXXX A. Open, tag, and safety flight guidance system circuit breakers as per AMM 34-16-00.
- _____ XXXXX B. Test ATC System as follows:
- (1) Set transponder code selectors to 1200.
 - (2) Turn transponder selector switch to 1.
 - (3) Set transponder MODE selector switch to A.
 - (4) Note presence of framing pulses indicated by small x symbols above FR1 and FR2 legends in test set readout

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 721F3408 (continued)

MECH: INSP:

window.

- (5) Observe 1200 on test set.
- (6) Set code selector on transponder control to 6577.
 - (a) Observe 6577 on test set.
- (7) Actuate transponder IDENT function.
 - (a) Observe a small x will appear above IDENT legend in test set readout window.
- (8) Set transponder MODE switch to B.
- (9) Set test set mode selector to MODE B.
 - (a) Observe 6577 on test set.
- (10) Set transponder selector switch to 2.
- (11) Set MODE switch to A and test set MODE selector to 3/A.
- (12) Note presence of framing pulses, FR1 and FR2, in test set read out window.
- (13) Set CODE selector on transponder control to 1200.
 - (a) Observe 1200 on test set.
- (14) Set CODE selector on transponder control to 6577.
 - (a) Observe 6577 on test set.
- (15) Actuate transponder IDENT function.
 - (a) Observe a small x will appear above IDENT legend in test set readout window.
- (16) Set MODE switch and test set mode selector to MODE B.
 - (a) Observe 6577 on test set.

_____ XXXXX C. Test Altitude Reporting.

- (1) Connect air data tester to Captain's and First Officer's

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 721F3408 (continued)

MECH: INSP:

pitot and static system.

- (2) Adjust Captain's altimeter to a barometric pressure of 29.92 m Hg.
- (3) Set transponder test set READOUT switch to ALTITUDE.
- (4) Set transponder selector switch to 1.
- (5) Set ALT SOURCE switch to 1.
- (6) Set transponder MODE switch to A and test set MODE selector to C.
- (7) Set transponder altitude reporting switch to ALT RPTG.
- (8) Adjust air data tester to pressure altitude of 10,100 feet.
 - (a) Observe 0101 on test set, ALT READOUT.
 - (b) NUMERIC GREY CODE is 6530.
 - (c) ALTITUDE GREY CODE is 10,100.
- (9) Set transponder selector switch to 2.
- (10) Observe 0101 on test set, ALT READOUT.
 - (a) NUMERIC GREY CODE is 6530.
 - (b) ALTITUDE GREY CODE is 10,100.
- (11) Adjust air data tester to pressure altitude of 32,700 feet.
- (12) Observe 0327 on test set, ALT READOUT.
 - (a) NUMERIC GREY CODE is 1244.
 - (b) ALTITUDE GREY CODE is 32,700.
- (13) Set transponder selector to switch to 1.
- (14) Observe 0327 on test set, ALT READOUT.

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 721F3408 (continued)

MECH: INSP:

(a) NUMERIC GREY CODE is 1244.

(b) ALTITUDE GREY CODE is 32,700.

(15) Adjust First Officer's altimeter to barometric pressure altitude of 29.92 in Hg.

(16) Set ALT SOURCE switch to 2.

(17) Observe 0327 on test set, ALT READOUT.

(a) NUMERIC GREY CODE is 1244.

(b) ALTITUDE GREY CODE is 32,700.

(18) Set transponder selector switch to 2.

(19) Observe 0327 on test set, ALT READOUT.

(a) NUMERIC GREY CODE is 1244.

(b) ALTITUDE GREY CODE is 32,700.

(20) Adjust the air data tester to pressure altitude of 10,100 feet.

(21) Observe 0101 and test set, ALT READOUT.

(a) NUMERIC GREY CODE is 6530.

(b) ALTITUDE GREY CODE is 10,100.

(22) Set transponder selector switch to 1.

(23) Observe 0101 on test set, ALT READOUT.

(a) NUMERIC GREY CODE is 6530.

(b) ALTITUDE GREY CODE is 10,100.

_____ XXXXX 2. Remove test equipment.

_____ XXXXX 3. Return airplane to required configuration.

***** END OF WORKCARD *****