



AIRCRAFT MAINTENANCE MANUAL

APU FADEC - ADJUSTMENT/TEST

EFFECTIVITY: AIRCRAFT WITH APU T-62T-40C14

1. General

- A. This section gives the procedures to do the checks of the APU - FADEC BITE Display and the APU-FADEC Power-Supply Components.
- 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
49-64-03-700-801-A ♦	APU FADEC - OPERATIONAL CHECK	AIRCRAFT WITH APU T-62T-40C14



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 49-64-03-700-801-A

EFFECTIVITY: AIRCRAFT WITH APU T-62T-40C14

2. APU FADEC - OPERATIONAL CHECK

A. General

- (1) The function of this check is to make sure that there are no advisory faults in the APU FADEC and that the APU-FADEC power-supply circuitry is in good condition.
- (2) These advisory faults do not cause an APU shutdown and are not shown on the MFD.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 49-02-00/200	- MAINTENANCE PRACTICES
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 49-13-00-910-802-A/200	APU - START
AMM TASK 49-13-00-910-803-A/200	APU - SHUTDOWN

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 044	Headset, ramp handling	Communication	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the rear electronic compartment	1

F. Consumable Materials

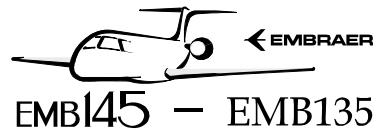
Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Cockpit/Rear electronic compartment



I. Preparation

SUBTASK 841-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 49-02-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO THE MATERIAL.

- (1) Put the ladder in position and open rear electronic compartment access door 272DR (AMM MPP 06-41-01/100).

J. Operational Check of the APU FADEC

SUBTASK 710-002-A

- (1) Do the operational check of the APU FADEC as follows:
 - (a) Do the operational check of the FADEC Bite Display for advisory faults (SUBTASK 49-64-03-710-002-A00).
 - (b) Do the operational check of the APU-FADEC Power-Supply Components (SUBTASK 49-64-03-710-003-A00).

K. Operational Check of the APU - FADEC BITE Display for Advisory Faults ([Figure 501](#))

SUBTASK 710-003-A

- (1) Start the APU ([AMM TASK 49-13-00-910-802-A/200](#)).
- (2) Run the APU until it gets 95% speed and wait for 3 minutes in this condition ("Ready To Load" condition).
- (3) Shut the APU down ([AMM TASK 49-13-00-910-803-A/200](#)) and keep the APU master switch in the ON position.
NOTE: Shut the APU down, but do not deenergize the aircraft.
- (4) Look at the APU - FADEC BITE display ([Figure 501](#)) to make sure that there are no advisory messages.
- (5) If an advisory message is shown, do the troubleshooting. Refer to the latest revision of Hamilton Sundstrand Engine Manual T-62T-40C14 (P/N 4504112), 49-00-00.

L. Operational Check of the APU-FADEC Power-Supply Components ([Figure 502](#))

SUBTASK 710-004-A

EFFECTIVITY: FOR AIRCRAFT POST-MOD S.B. 145-49-0025 OR POST-MOD S.B. 145-49-0032 PART II

- (1) Obey these instructions to do the check of the APU-FADEC power-supply circuitry:

NOTE: This procedure permits you to make sure that these components and their related harnesses are in good conditions:

- Diode CR0508
- Diode CR0509
- Relay K1145

- (a) Set the APU Master Switch to the ON position

NOTE: Make sure that CB0064 (APU Control) on the circuit breaker panel and CB0347 on the left DC distribution box are closed.

Result:

- 1 The APU parameters (RPM and EGT) come into view on the EICAS. Refer to DET. B of [Figure 502](#).

- 2 The APU indications come into view on the FADEC display.

- (b) Set the APU Master Switch to the OFF position.

Result:

- 1 The EICAS shows APU OFF after 6 seconds approximately. Refer to DET. B of [Figure 502](#).

- 2 The APU FADEC is deenergized after 6 seconds approximately.

- (c) Set the APU Master Switch to the ON position.

Result:

- 1 The APU parameters (RPM and EGT) come into view on the EICAS.

- 2 The APU indications come into view on the FADEC Display.

- (d) Manually open CB0064.

Result:

- 1 In approximately 6 seconds, the APU parameters go out of view and the OFF indication comes into view.

- 2 The APU FADEC is deenergized in approximately 6 seconds.

- (e) Close CB0064.

Result:

- 1 The APU parameters (RPM and EGT) come into view on the EICAS.

- 2 The APU indications come into view on the FADEC display.

- (f) Manually open CB0347.

Result:

- 1 Immediately, the APU parameters go out of view and the OFF indication comes into view.

- 2 The FADEC display is deenergized immediately.

- (g) Close CB0347.

- (h) Set the APU Master Switch to the OFF position and make sure that circuit breakers CB0064 and CB0347 are closed.

M. Follow-on

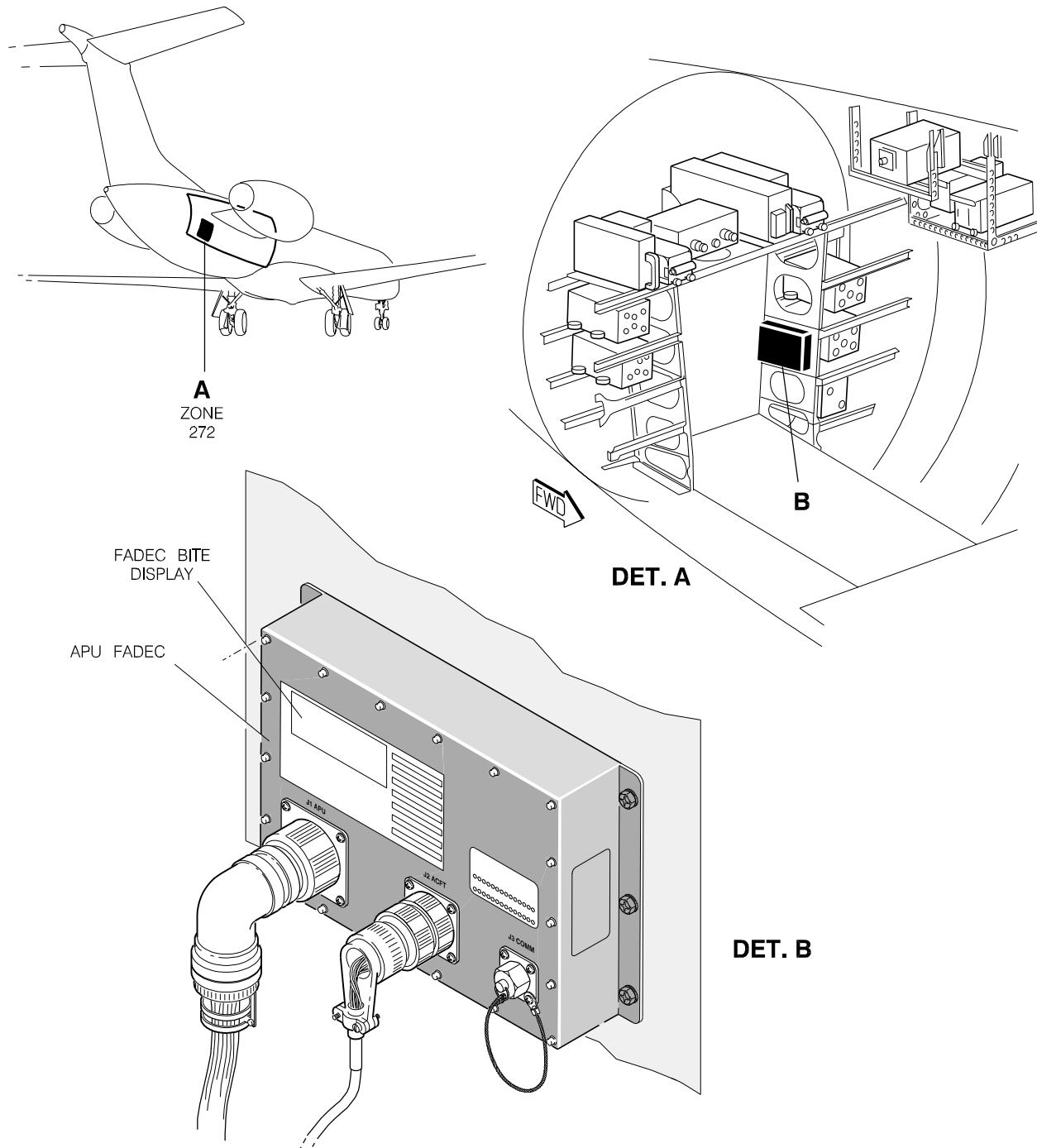
SUBTASK 842-002-A

- (1) Close rear electronic compartment access door 272DR (AMM MPP 06-41-01/100), and remove the ladder.

CAUTION: BEFORE YOU REMOVE THE EXTERNAL DC POWER SUPPLY, MAKE SURE THAT THE GPU PUSHBUTTON IS SET TO THE OFF POSITION (RELEASED).

- (2) If the GPU was used to energize the aircraft, deenergize it ([AMM TASK 20-40-01-860-801-A/200](#)) as applicable.

EFFECTIVITY: AIRCRAFT WITH APU T-62T-40C14
APU - FADEC Location
Figure 501



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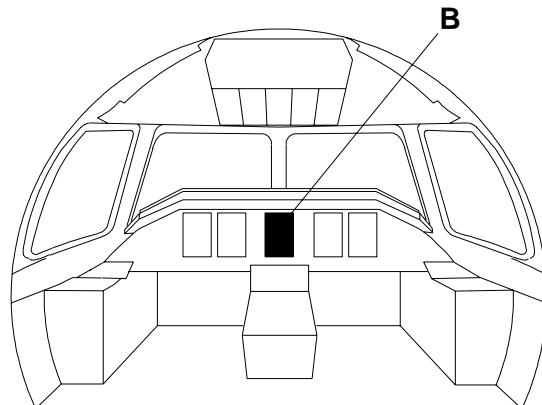
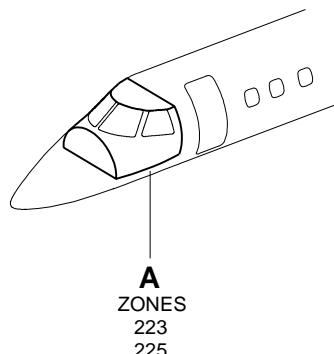


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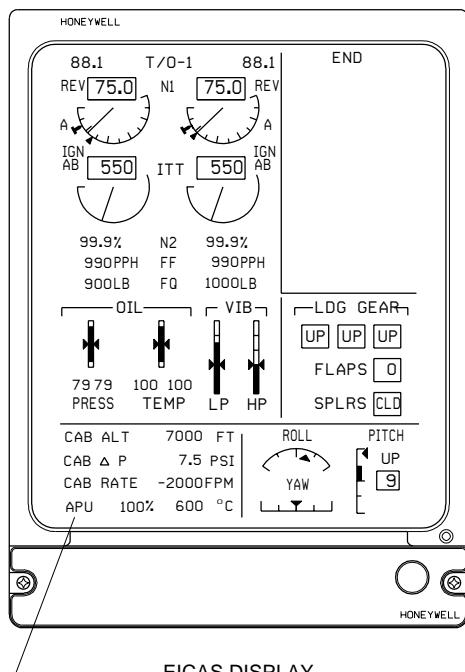
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EICAS - APU Parameters Location

Figure 502

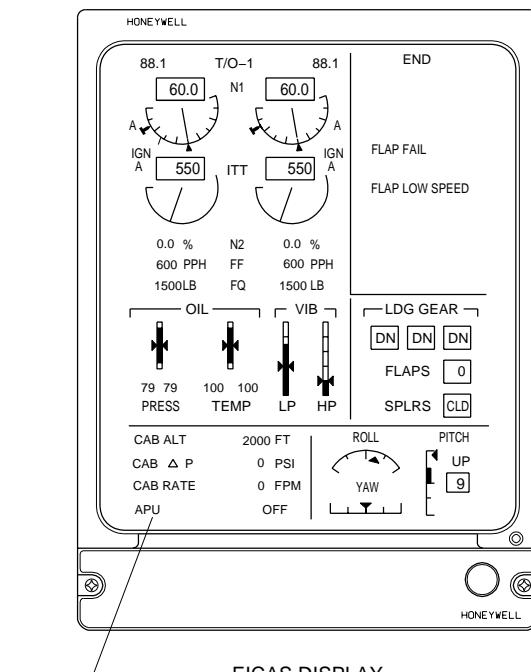


DET. A



APU PARAMETERS

DET. B



APU PARAMETERS

DET. B

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