

ATA AIRLINES, INC.

APU CONTROL UNIT (ECU)

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CHECK BEING PERFORMED: Custom

ZONES: 154
A/C NUMBER:
REV. DATE: 11/13/03
FREQUENCY: 1A

W/C NUMBER: 213M4901 DATE:
W/O:
JAC CODE:

PANELS

822

REFERENCES

1, 2

MECH INSP

PERFORM APU CONTROL UNIT (ECU) SYSTEM SELF-TEST.

ACCESS NOTE: DOOR COVERING E6 RACK MUST BE OPENED.

1 APU CONTROL UNIT - BITE TEST (FIG. 1 AND 2).

A ACCESS.

1 LOCATION ZONES.

A 162 BULK CARGO COMPARTMENT (RIGHT).

2 ACCESS PANELS.

B 156AR AFT CARGO DOOR CONTROLS.

B PROCEDURE.

_____ XXXXX 1 MAKE SURE THIS CIRCUIT BREAKER ON THE OVERHEAD PANEL P11 IS CLOSED:

A 11B34, APU ALTN CONT.

_____ XXXXX 2 MAKE SURE THE APU MASTER CONTROL SWITCH IS IN THE OFF POSITION AND ATTACH A DO-NOT-OPERATE TAG.

_____ XXXXX 3 MAKE SURE THE APU RPM IS LESS THAN 7%.

_____ XXXXX 4 PUT THE TEST SWITCH ON THE SPU CONTROL UNIT IN THE LAMP POSITION AND RELEASE THE SWITCH.

A MAKE SURE ALL OF THE LIGHTS COME ON COLUMN BY COLUMN.

WARNING: DO NOT DO THE ECU SELF TEST AND IGNITION SYSTEM

MAINTENANCE AT THE SAME TIME. THE IGNITER LEAD IS ENERGIZED DURING THE SELF TEST AND CAN CAUSE INJURY TO PERSONS.

XXXXX 5 PUT THE TEST SWITCH IN THE SELF TEST POSITION AND RELEASE THE SWITCH.

NOTE: THIS WILL DO A CHECK OF THE CONTROL UNIT SOFTWARE AND OF THE APU HARDWARE.

- A THE WAIT LIGHT WILL COME ON DURING THE SELF TEST.
B THE TEST OK LIGHT WILL COME ON WHEN THE SELF TEST DOES NOT FIND ANY DEFECTIVE UNITS.
C IF DEFECTIVE UNITS ARE FOUND DURING THE SELF TEST, THE LIGHTS FOR THOSE UNITS WILL COME ON.
D RECORD EACH OF THE FAULTY LRU LIGHTS THAT COMES ON.

NOTE: THE LIGHTS FOR DEFECTIVE UNITS WILL COME ON ONE AT A TIME FOR 4 SECONDS (FROM LEFT TO RIGHT AND TOP TO BOTTOM).

XXXXX 6 PERFORM THE APPROPRIATE STEPS THAT FOLLOW FOR THE APU CONTROL UNIT (ECU) SYSTEM SELF-TEST.

- A AIRCRAFT WITH -18 APU CONTROL UNIT:
1 PUT THE TEST SWITCH IN THE FAULTY UNIT POSITION AND RELEASE THE SWITCH TO DO A CHECK FOR INTERMITENT HARDWARE DEFECTS.
A THE TEST OK LIGHT WILL COME ON IF THE TEST IS SATISFACTORY.
B LIGHTS FOR THE DEFECTIVE UNITS IN THE FAULTY UNIT TEST WILL COME ON FOR 4 SECONDS (FROM LEFT TO RIGHT AND TOP TO BOTTOM).

B AIRCRAFT WITH -19 THRU -999 APU CONTROL UNIT:

| 1 SET THE RECORD SELECT SWITCH TO THE SUMMARY POSITION.

_____ XXXXX 7 PERFORM THE APPROPRIATE STEPS THAT FOLLOW FOR THE APU CONTROL UNIT (ECU) SYSTEM SELF-TEST.

A AIRCRAFT WITH -18 APU CONTROL UNIT:

| 1 PUT THE TEST SWITCH IN THE FAULT DISPLAY POSITION
| AND MAKE SURE THAT NO LIGHTS COME ON.

B AIRCRAFT WITH -19 THRU -999 APU CONTROL UNIT:

1 SET THE FAULT SWITCH IN THE LRU POSITION AND RELEASE THE SWITCH TO DO A CHECK FOR INTERMITTENT HARDWARE DEFECTS.

A THE NO DATA LIGHT WILL COME ON IF THE CHECK IS SATISFACTORY.

B IF A UNIT HAS A PROBLEM, ITS FAULTY LRU LIGHT WILL COME ON FOR 6 SECONDS.

| C RECORD EACH OF THE FAULTY LRU LIGHTS THAT COME
| ON.

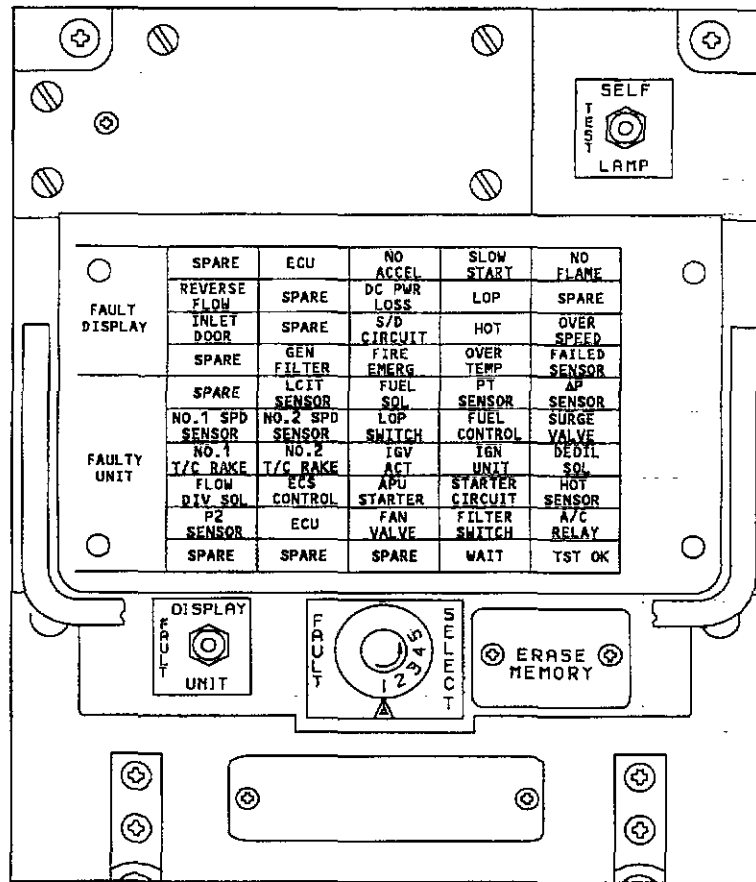
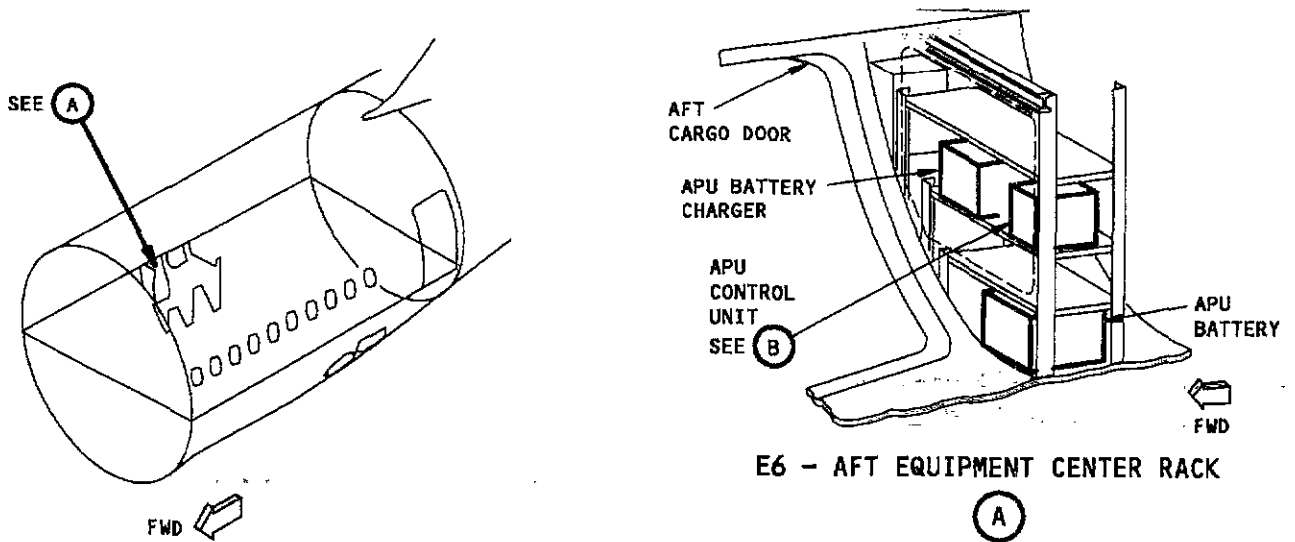
NOTE: THE HISTORY OF APU SHUTDOWNS IS PUT IN THE NON-VOLATILE MEMORY OF THE CONTROL UNIT. THERE SHOULD NOT BE ANY SHUTDOWNS PUT IN THE MEMORY OF A NEW CONTROL UNIT. ALSO, A CONTROL UNIT WITH ALL OF THE DEFECTS CORRECTED SHOULD NOT HAVE ANY SHUTDOWNS IN THE MEMORY.

_____ XXXXX 8 SET THE RECORD SELECT SWITCH TO THE LAST RUN POSITION (AIRCRAFT WITH -19 THRU -999 APU CONTROL UNITS).

_____ XXXXX 9 SET THE FAULT SWITCH TO THE REASON POSITION AND MAKE SURE THAT NORMAL STOP SIG LIGHT COMES ON (AIRCRAFT WITH -19 THRU -999 APU CONTROL UNITS).

_____ XXXXX 10 PUSH THE ERASE MEMORY SWITCH TO ERASE THE DEFECTS FROM THE MEMORY.

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

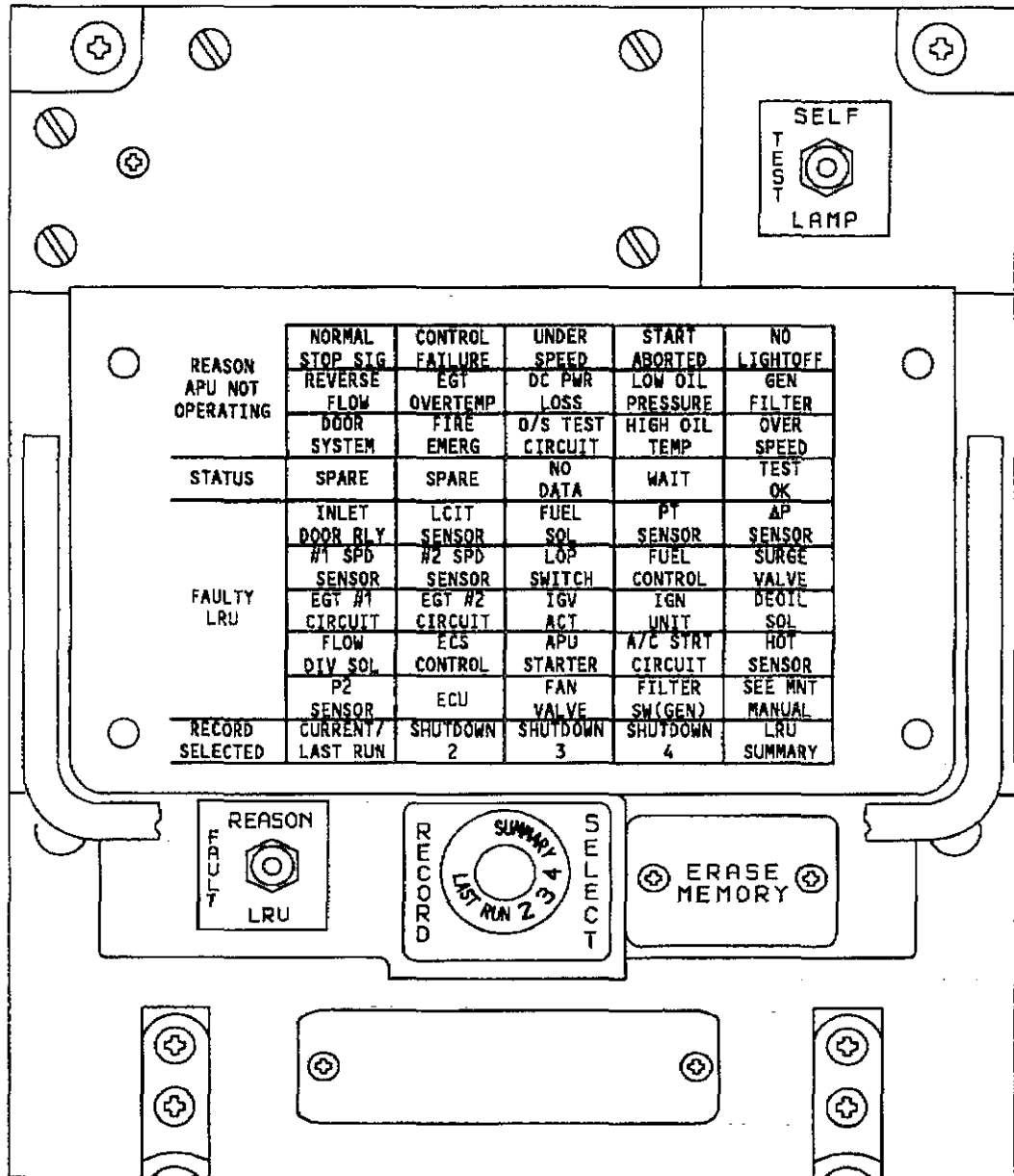


APU CONTROL UNIT FRONT PANEL

(B) 1

1 AIRPLANES WITH THE APU CONTROL UNIT -18 AND BEFORE

APU Control Unit (ECU) Installation



APU CONTROL UNIT FRONT PANEL



2 AIRPLANES WITH THE APU CONTROL UNIT -19 AND SUBSEQUENT

APU Control Unit (ECU) Installation