ISOLATION CONTROL UNIT (ICU) - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to do the operational check of the Isolation Control Unit (ICU).

   B. ICU 1 is related to the LH Thrust-Reverser and ICU 2 is related to the RH Thrust-Reverser.

   C. 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*
78-33-01-700-801-A ♦	ISOLATION CONTROL UNIT (ICU) - OPERATIONAL CHECK	ALL

TASK 78-33-01-700-801-A
EFFECTIVITY: ALL

2. ISOLATION CONTROL UNIT (ICU) - OPERATIONAL CHECK

A. General

(1) This procedure is applicable to the left and right ICUs.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 31-41-01-000-801-A/400	DATA ACQUISITION UNIT - REMOVAL
AMM TASK 31-41-01-400-801-A/400	DATA ACQUISITION UNIT - INSTALLATION

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
272	272DR	Rear Fuselage Section I - Right Side
312	312AR	Rear Fuselage Section I - Right Side

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Multimeter	To make sure that there is electrical continuity	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Workstand	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*
1	Does the task	Rear electronic compartment
1	Does the task	Cockpit

I. Preparation

SUBTASK 841-002-A

(1) Make sure that the aircraft is safe for maintenance.

(2) Put the workstand in the work location.

(3) Remove DAU 2 (AMM TASK 31-41-01-000-801-A/400).

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

WARNING: BE CAREFUL WITH THE AIRCRAFT HYDRAULIC LINES: THE NOMINAL PRESSURE OF THE HYDRAULIC SYSTEM IS 3,000 PSI. A LEAKAGE COULD CAUSE INJURY TO PERSONS AND DAMAGE TO THE MATERIAL.

CAUTION: MAKE SURE THAT ALL THE HYDRAULIC LINES ARE CONNECTED NOT TO LET THE HYDRAULIC OIL FALL OUT.

(5) Pressurize the aircraft hydraulic system (AMM TASK 29-10-00-860-801-A/200).

WARNING: BEFORE YOU OPEN THE N2 CIRCUIT BREAKERS AND TO PREVENT INJURY TO PERSONS AND DAMAGE TO THE MATERIAL, MAKE SURE THAT SENSORS PITOT 1 - TAT 1/AOA 1, PITOT 3, AND PITOT 2 - TAT 2/AOA 2, ON THE OVERHEAD PANEL, ARE SET TO OFF.

(6) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag on them.

- N2 SIGNAL 1A/1B.
- N2 SIGNAL 2A/2B.

(7) Set the thrust lever to the IDLE position.

J. Operationally Check Isolation Control Unit (Figure 501)

SUBTASK 710-002-A

(1) To do the operational check of the ICU-1 and ICU-2, do the steps below:

(a) Do a check to make sure that there is no continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

WARNING: PERSONS MUST KEEP A SAFE DISTANCE FROM THE THRUST REVERSER DOORS TO PREVENT INJURY.

(b) Set the thrust lever to the MAX REV position and do a check to make sure that there is continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2) during the cycle of operation of the thrust reverser doors.

Result:

1 There is continuity to the ground.

2 The thrust reverser doors deploy fully.

WARNING: PERSONS MUST KEEP A SAFE DISTANCE FROM THE THRUST REVERSER DOORS TO PREVENT INJURY.

(c) Set the thrust lever to the IDLE position.

Result:

1 The thrust reverser doors stow fully.

(d) Do a check to make sure that, after 6 seconds, there is no continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

(e) Release the pressure from the hydraulic system (AMM TASK 29-10-00-860-801-A/200).

(f) Set the ICU-1 (2) inhibit lever to the inhibit position.

(g) Pressurize the aircraft hydraulic system (AMM TASK 29-10-00-860-801-A/200).

(h) Do a check to make sure that there is no continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

(i) Do a check to make sure that there is continuity between pin A-31 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-33 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is continuity to the ground.

WARNING: PERSONS MUST KEEP A SAFE DISTANCE FROM THE THRUST REVERSER DOORS TO PREVENT INJURY.

(j) Set the thrust lever to the MAX REV position.

Result:

1 The thrust reverser doors do not deploy.

(k) Do a check to make sure that there is no continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

(l) Do a check to make sure that there is continuity between pin A-31 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-33 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is continuity to the ground.

WARNING: PERSONS MUST KEEP A SAFE DISTANCE FROM THE THRUST REVERSER DOORS TO PREVENT INJURY.

(m) Set the thrust lever to the IDLE position.

(n) Do a check to make sure that there is no continuity between pin A-36 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-38 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

(o) Do a check to make sure that there is continuity between pin A-31 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-33 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is continuity to the ground.

(p) Release the pressure from the hydraulic system (AMM TASK 29-10-00-860-801-A/200).

(q) Set the ICU inhibit lever to the NOT inhibit position.

(r) Pressurize the aircraft hydraulic system (AMM TASK 29-10-00-860-801-A/200).

(s) Do a check to make sure that there is no continuity between pin A-31 and the ground at DAU-2 connector J1018 (for ICU-1) and between pin A-33 and the ground at DAU-2 connector J1020 (for ICU-2).

Result:

1 There is no continuity to the ground.

WARNING: PERSONS MUST KEEP A SAFE DISTANCE FROM THE THRUST REVERSER DOORS TO PREVENT INJURY.

(t) Set the thrust lever to the MAX REV position, and then to the IDLE position.

Result:

1 The thrust reverser doors will do a complete cycle of operation.

K. Follow-on

SUBTASK 842-002-A

(1) Make sure that the thrust lever is in the IDLE position.

(2) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them.

- N2 SIGNAL 1A/1B.
- N2 SIGNAL 2A/2B.

(3) Release the pressure from the hydraulic system (AMM TASK 29-10-00-860-801-A/200).

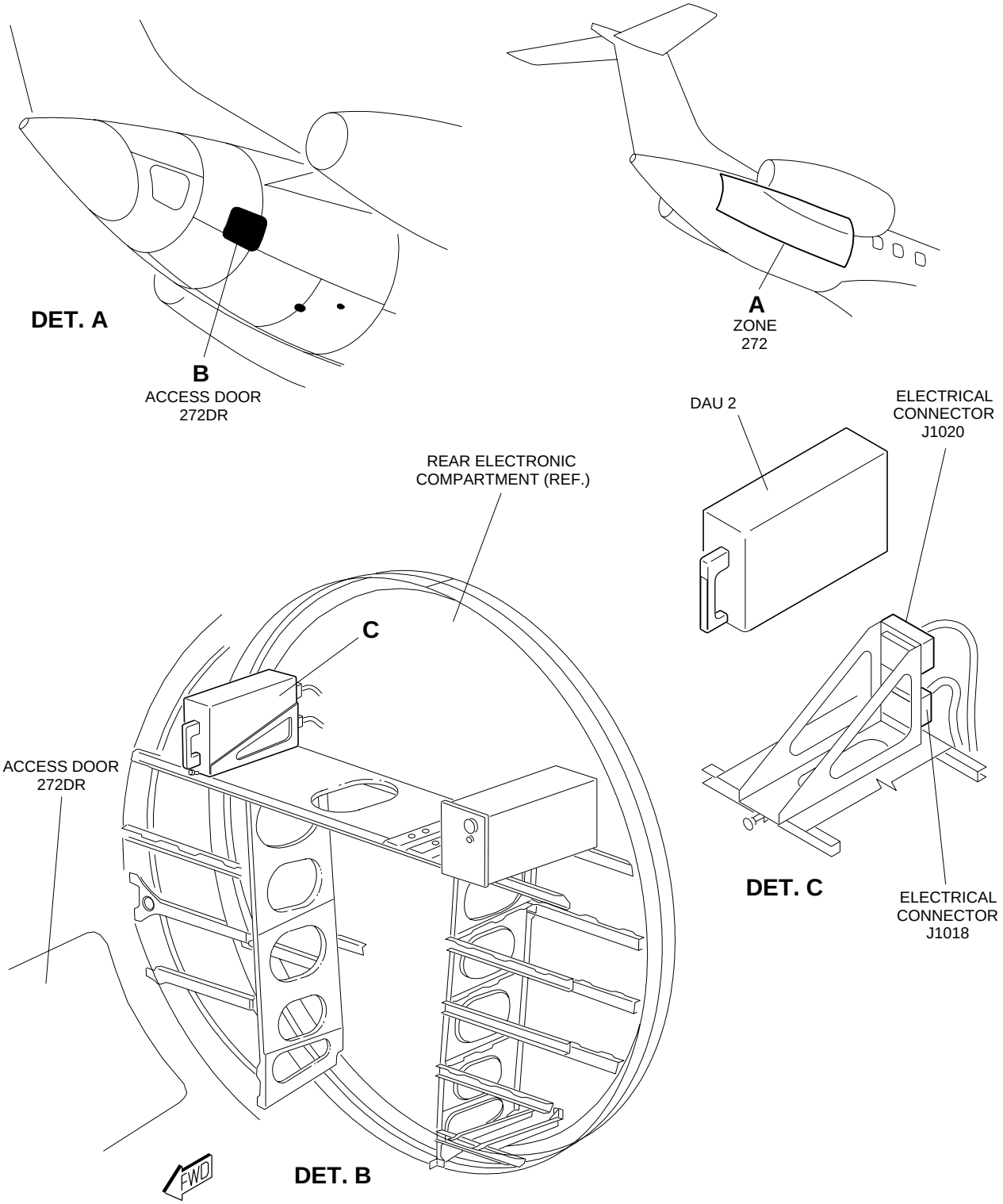
(4) Install DAU 2 (AMM TASK 31-41-01-400-801-A/400).

(5) Remove the DC Power Supply from the aircraft (AMM TASK 20-40-01-860-801-A/200).

(6) Remove the workstand from the work location.

EFFECTIVITY: ALL

ICU Operational Check - Component Locations
Figure 501 - Sheet 1



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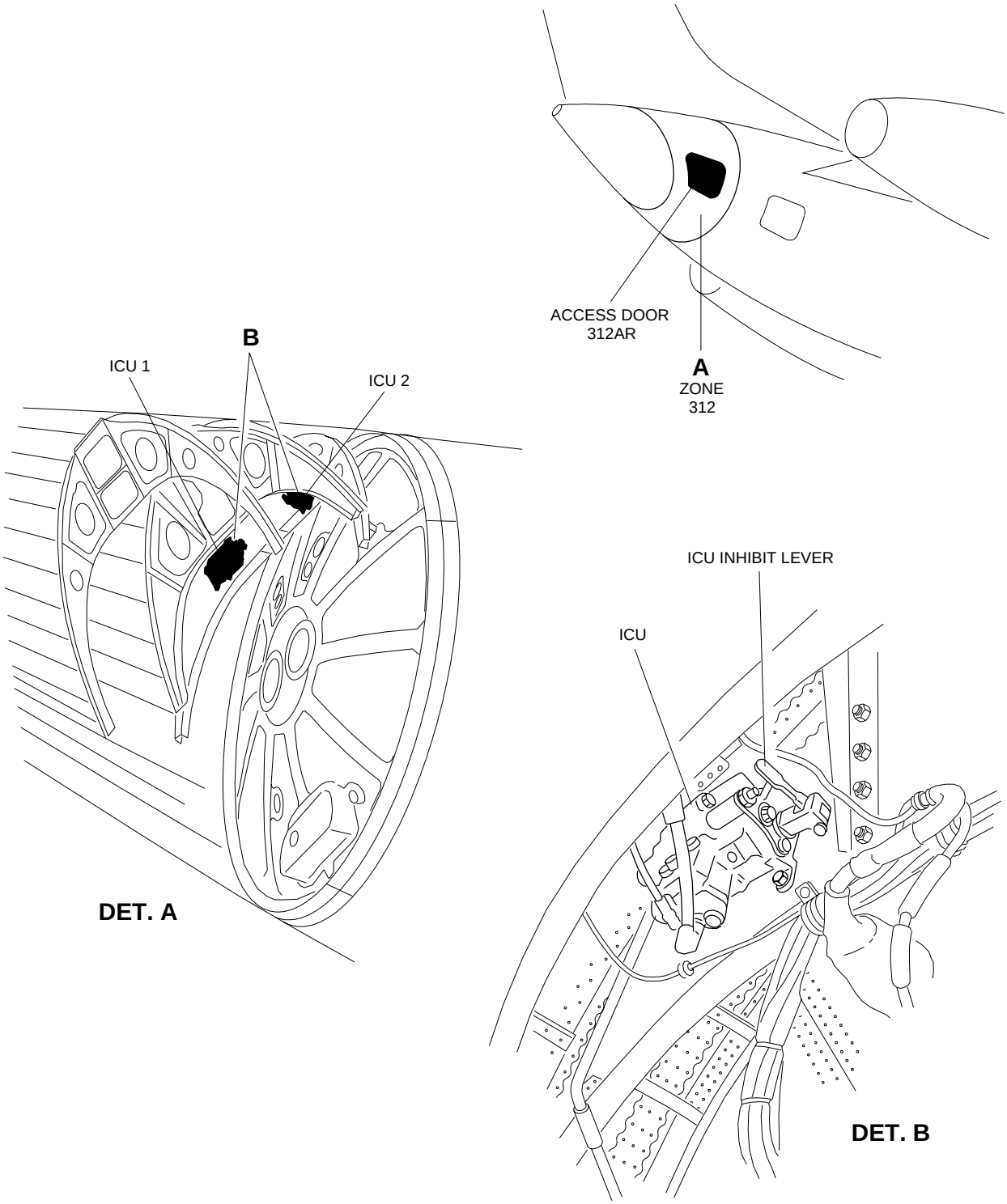
EFFECTIVITY: ALL

ICU Operational Check - Component Locations
Figure 501 - Sheet 2



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