



AIRCRAFT MAINTENANCE MANUAL

ISOLATION CONTROL UNIT (ICU) - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the Isolation Control Unit (ICU).
- B. These procedures are applicable to ICU 1 and ICU 2, which are installed in the fuselage tail cone.
- C. ICU 1 is related to the LH Thrust-Reverser and ICU 2 is related to the RH Thrust-Reverser.
- D. 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
78-33-01-000-801-A	ISOLATION CONTROL UNIT (ICU) - RE- MOVAL	ALL
78-33-01-400-801-A	ISOLATION CONTROL UNIT (ICU) - IN- STALLATION	ALL



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TASK 78-33-01-000-801-A

EFFECTIVITY: ALL

2. ISOLATION CONTROL UNIT (ICU) - REMOVAL

A. General

- (1) Obey the instructions below to remove the Isolation Control Unit (ICU).

B. References

REFERENCE	DESIGNATION
AMM MPP 06-42-00/100	-
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
225	225DTC	Cockpit
312	312AR	Rear Fuselage II

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Container	To catch oil	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber gloves, phosphate ester-base, fluid-resistant	Protection for the hands	1
Commercially available	Rubber goggles, phosphate ester-base, fluid-resistant	Protection for the eyes	1
Commercially available	Ladder	To get access to rear fuselage II	

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	In the work area



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I. Preparation

SUBTASK 841-002-A

WARNING: • REFER TO THE GROUND SAFETY PRECAUTIONS GIVEN IN [AMM MPP 78-30-00/200 MAINTENANCE PROCEDURES](#).

- MAKE SURE THAT THE HYDRAULIC TEST STAND IS NOT CONNECTED.
- THE PHOSPHATE-ESTER-BASE OIL IS HIGHLY CORROSIVE AND CAUSES INJURY TO THE EYES AND SKIN. BE CAREFUL NOT TO TOUCH THIS OIL. YOU MUST USE GLOVES AND GOGGLES.

CAUTION: • ALWAYS CLEAN THE HYDRAULIC FLUID THAT FALLS FROM THE HYDRAULIC LINES. DAMAGE COULD COME FROM ITS CORROSIVE ACTION.

- USE APPLICABLE CONTAINERS TO COLLECT THE REMAINING FLUIDS FROM THE OPEN LINES, TO KEEP THE WORK AREA CLEAN AND SAFE.

- (1) Put the ladder near the tail cone.
- (2) Open access panel 312AR (AMM MPP 06-42-00/100) to get access to the ICU.
- (3) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (4) Put a DO-NOT-OPERATE-THE-THRUST-REVERSERS sign on the instrument panel, in the cockpit.
- (5) Make sure that, on the circuit breaker panel, the circuit breakers below are closed:
 - N2 SIGNAL 1A/1B.
 - N2 SIGNAL 2A/2B.
- (6) Make sure that the pressure from the hydraulic system is released ([AMM TASK 29-10-00-860-801-A/200](#)).

J. Removal ([Figure 401](#))

SUBTASK 020-002-A

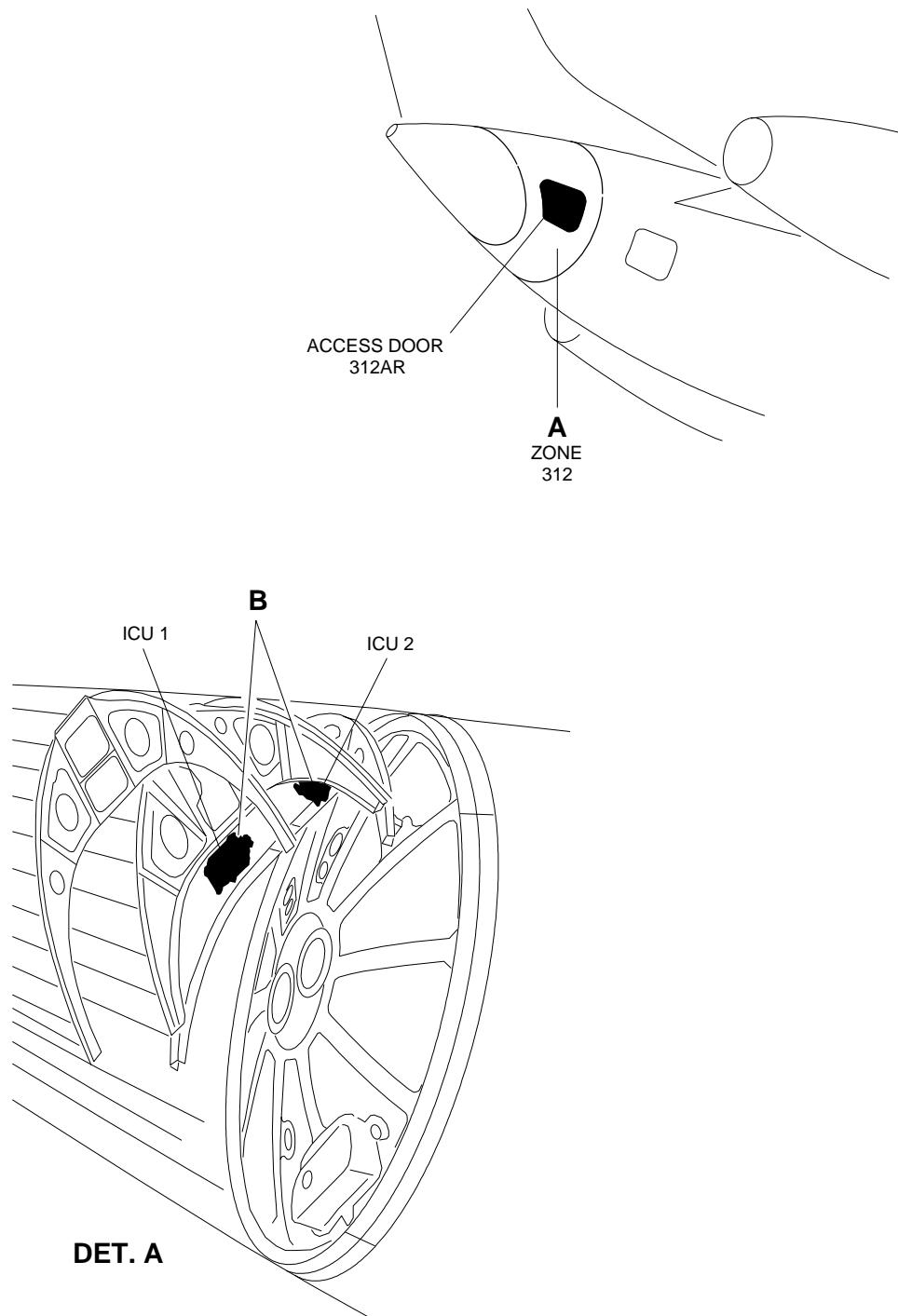
CAUTION: BE VERY CAREFUL WHEN YOU DISCONNECT HYDRAULIC LINES. SKYDROL FLUID IS HIGHLY DANGEROUS.

- (1) Disconnect the electrical connectors (1) and install protection caps on them.
- (2) Loosen the nuts (2), disconnect the hydraulic lines, and install applicable caps in the tubes and in the ICU ports.
- (3) Remove the bolts (3), washers (4), and nuts (5).
- (4) Remove the ICU (6).

EFFECTIVITY: ALL

Isolation Control Unit (ICU) - Removal/Installation

Figure 401 - Sheet 1

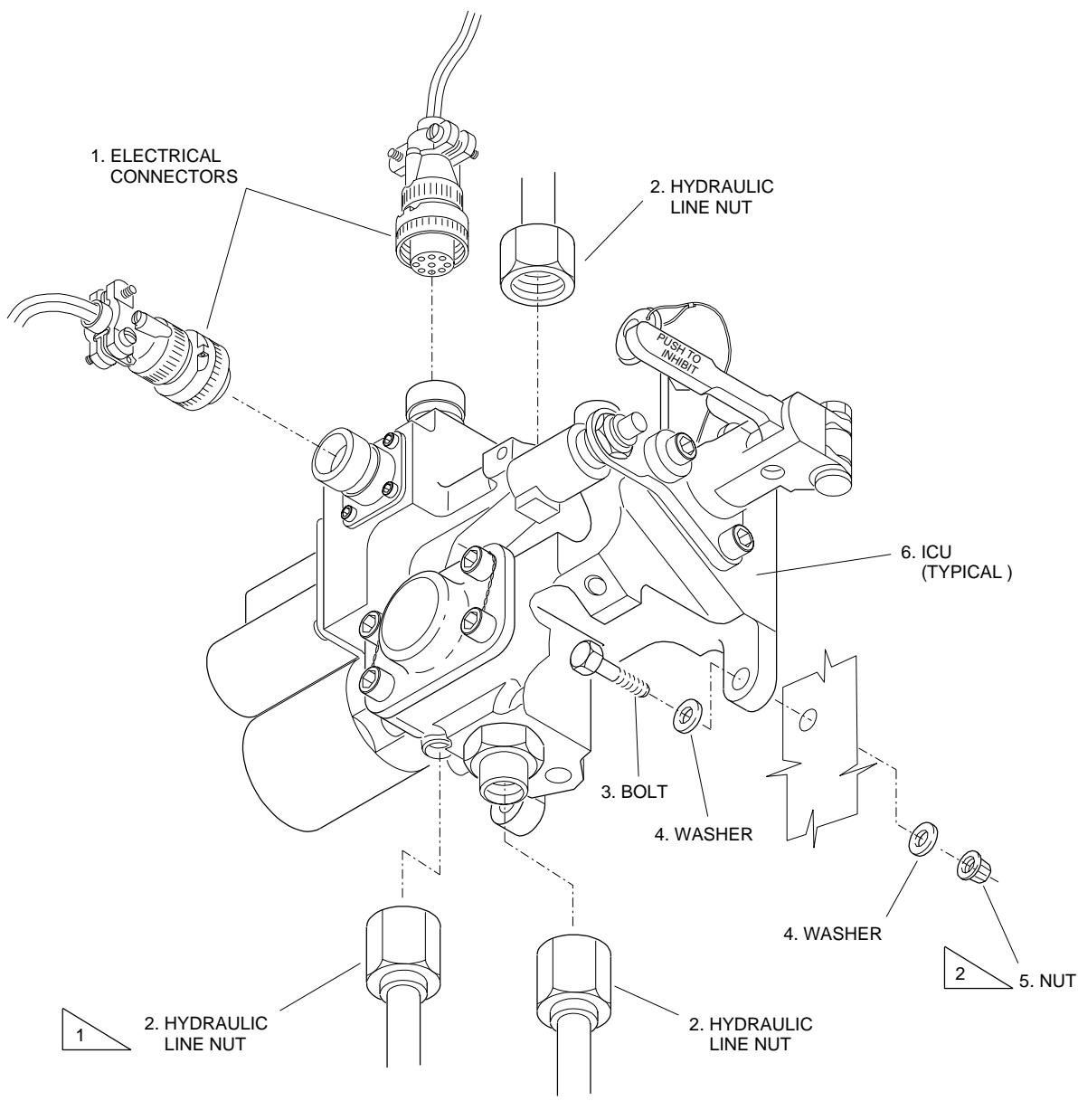


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EFFECTIVITY: ALL

Isolation Control Unit (ICU) - Removal/Installation

Figure 401 - Sheet 2



DET. C

 1 TORQUE: 12.4 Nm (110 lb.in)

 2 TORQUE: 5.6 TO 6.8 Nm (50 TO 60 lb.in)

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TASK 78-33-01-400-801-A

EFFECTIVITY: ALL

3. ISOLATION CONTROL UNIT (ICU) - INSTALLATION

A. General

- (1) Obey the instructions below to install the isolation control unit (ICU).

B. References

REFERENCE	DESIGNATION
AMM MPP 06-42-00/100	-
AMM TASK 78-33-01-700-801-A/500	ISOLATION CONTROL UNIT (ICU) - OPERATIONAL CHECK

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
225	225DTC	Cockpit
312	312AR	Rear Fuselage II

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To tighten the attachment nuts	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber gloves, phosphate ester-base, fluid-resistant	Protection for the hands	1
Commercially available	Rubber goggles, phosphate ester-base, fluid-resistant	Protection for the eyes	1
Commercially available	Ladder	To get access to rear fuselage II	

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear Fuselage II



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I. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: • **MAKE SURE THAT THE ELECTRICAL POWER SUPPLY IS REMOVED.**

• **MAKE SURE THAT THE HYDRAULIC TEST STAND IS NOT CONNECTED.**

- (1) Install the ICU (6) in the tail cone.
- (2) Install the bolts (3), washers (4), and nuts (2).
- (3) Remove the protection caps from the electrical connectors (1) and connect them.
- (4) Remove the protection caps from the hydraulic lines, connect them, and torque their nuts (2).

J. Follow-on

SUBTASK 842-002-A

- (1) Install access panel 312AR (AMM MPP 06-42-00/100).
- (2) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (3) Remove the DO-NOT-OPERATE-THE-THRUST-REVERSERS sign from the instrument panel, in the cockpit.
- (4) Remove the ladder from the work area.
- (5) Do the ICU operational check ([AMM TASK 78-33-01-700-801-A/500](#)).

