



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

AIR DATA COMPUTER (ADC) - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to remove/install the Air Data Computer (ADC1 and ADC2).
- B. ADC1 is installed on the left side of the forward electronic compartment.
- C. ADC2 is installed on the right side of the forward electronic compartment.
- 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
34-15-01-000-801-A	AIR DATA COMPUTER (ADC) - REMOVAL	ALL
34-15-01-400-801-A	AIR DATA COMPUTER (ADC) - INSTALLA- TION	ALL



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TASK 34-15-01-000-801-A

EFFECTIVITY: ALL

2. AIR DATA COMPUTER (ADC) - REMOVAL

A. General

- (1) This task gives the procedure to remove the ADC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 20-10-03-000-801-A/400	TUBING - REMOVAL
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
213	113CZ	Electronic compartment
214	113CZ	Electronic compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Electronic compartment

I. Preparation

SUBTASK 841-002-A

- (1) (Applicable to aircraft PRE-MOD. S.B.145-32-0036) Make sure that the pressure in hydraulic system 1 is fully released (AMM TASK 29-10-00-860-802-A/200).
- (2) (Applicable to aircraft POST-MOD. S.B.145-32-0036) Install the safety pin of the NLG-door solenoid valve (AMM TASK 32-00-02-910-801-A/200).



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- (3) Open access door 113CZ (AMM MPP 06-41-01/100).
- (4) On the Circuit Breaker Panel, open the ADC1 (Location tip: ESSENTIAL DC BUS 1/NAV/ADC1) or ADC2 (Location tip: DC BUS 2/NAV/ADC2) circuit breaker and attach a DO-NOT-CLOSE tag to it.

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

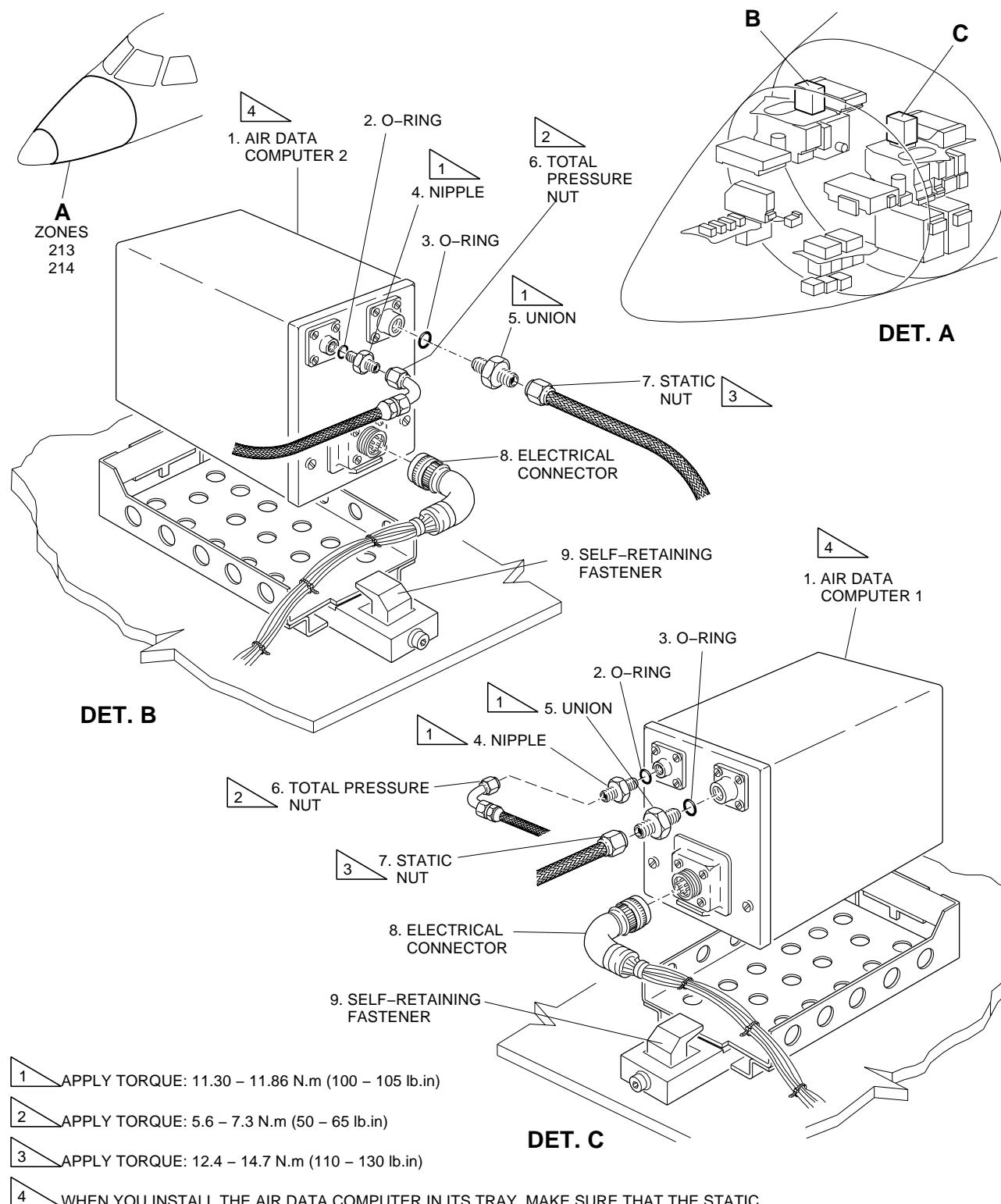
SUBTASK 020-002-A

- (1) Disconnect the static hose from the union (5) ([AMM TASK 20-10-03-000-801-A/400](#)).
- (2) Disconnect the total pressure hose from the nipple (4) ([AMM TASK 20-10-03-000-801-A/400](#)).
- (3) Remove the electrical connector (8).
- (4) Loosen the self-retaining fastener (9).
- (5) Remove the Air Data Computer (1).
- (6) NOTE: If you are performing a cleaning procedure of the PITOT/STATIC 1 or 2 lines, the steps 6 and 7 are not applicable.
Disconnect the union (5) from the ADC static port. Remove and discard the O-ring (3).
- (7) Disconnect the nipple (4) from the ADC total pressure port. Remove and discard the O-ring (2).

EFFECTIVITY: ALL

Air Data Computer - Removal/Installation

Figure 401



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TASK 34-15-01-400-801-A

EFFECTIVITY: ALL

3. AIR DATA COMPUTER (ADC) - INSTALLATION

A. General

(1) This task gives the procedure to install the ADC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 20-10-03-400-801-A/400	TUBING - INSTALLATION
AMM TASK 20-13-21-700-801-A/200	ELECTRICAL BONDING TEST - STANDARD PROCEDURES
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 34-13-00-200-803-A/600	PITOT LINES - INSPECTION
AMM TASK 34-13-00-790-802-A/500	PITOT-STATIC SYSTEM 1 - LEAKAGE TEST
AMM TASK 34-13-00-790-803-A/500	PITOT-STATIC SYSTEM 2 - LEAKAGE TEST
AMM TASK 34-15-00-700-802-A/500	ADC SYSTEM - OPERATIONAL TEST
IPC 34-15-01	AIR DATA COMPUTER
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
213	113CZ	Electronic compartment
214	113CZ	Electronic compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially Available	Torque wrench (For the torque range, refer to figure)	To torque the connections correctly	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring (2)	IPC 34-15-01	1



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(Continued)

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring (3)	IPC 34-15-01	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Electronic compartment

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) **NOTE:** If you are performing a cleaning procedure of the PITOT/STATIC 1 or 2 lines, go to step 3.

Install a new O-ring (2) (IPC 34-15-01). Connect the nipple (4) to the ADC total pressure port.

- (2) Install a new O-ring (3) (IPC 34-15-01). Connect the union (5) to the ADC static port.
- (3) Put the ADC (1) on the aircraft.

NOTE: When you install the air data computer in its tray, make sure that the static and total pressure ports stay in the upper part of the air data computer.

- (4) Lock the self-retaining fastener (9).

CAUTION: MAKE SURE THAT THE FLEXIBLE TUBE IS NOT TWISTED BEFORE AND AFTER TORQUE APPLICATION.

- (5) Connect the static hose to the union (5) ([AMM TASK 20-10-03-400-801-A/400](#)).

CAUTION: MAKE SURE THAT THE FLEXIBLE TUBE IS NOT TWISTED BEFORE AND AFTER TORQUE APPLICATION.

- (6) Connect the pitot hose to the nipple (4) ([AMM TASK 20-10-03-400-801-A/400](#)).
- (7) Do a visual inspection on the hoses that connects to ADC ([AMM TASK 34-13-00-200-803-A/600](#)).
- (8) Install the electrical connector (8).
- (9) Do the bonding test ([AMM TASK 20-13-21-700-801-A/200](#)).

J. Follow-on

SUBTASK 842-002-A

- (1) On the Circuit Breaker Panel, close the ADC1 (Location tip: ESSENTIAL DC BUS 1/NAV/ADC1) or ADC2 (Location tip: DC BUS 2/NAV/ADC2) circuit breaker and remove the DO-NOT-CLOSE tag from it.



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- (2) Do the PITOT/STATIC System 1 leakage test ([AMM TASK 34-13-00-790-802-A/500](#)) for ADC 1 installation or the PITOT/STATIC System 2 leakage test ([AMM TASK 34-13-00-790-803-A/500](#)) for ADC 2 installation.
- (3) Do the ADC System Operational Check ([AMM TASK 34-15-00-700-802-A/500](#)).
- (4) Close access panel 113CZ (AMM MPP 06-41-01/100).
- (5) (Applicable to aircraft POST-MOD. S.B.145-32-0036) Remove the safety pin form the NLG-door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).

