



## AIRCRAFT MAINTENANCE MANUAL

### MANUAL CONTROLLER - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to remove and install the cabin-pressure-control-system manual controller.
- B. The manual controller is installed on the control pedestal.
- 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
21-31-02-000-801-A	MANUAL CONTROLLER - REMOVAL	ALL
21-31-02-400-801-A	MANUAL CONTROLLER - INSTALLATION	ALL



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 21-31-02-000-801-A

EFFECTIVITY: ALL

2. MANUAL CONTROLLER - REMOVAL

A. General

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

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM TASK 23-22-02-000-801-A/400	ACARS PRINTER - REMOVAL
AMM TASK 23-24-02-000-801-A/400	CMU PRINTER - REMOVAL
WM 20-00-03/1	-
WM 20-50-01/201	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223TZ	Control pedestal

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To loosen/tighten the pressure and vacuum tubes	
Standard	Installation and removal tool P/N M81969/14-11	To connect/disconnect the electrical wiring	

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	Control pedestal

I. Preparation

**SUBTASK 841-002-A**

- (1) Remove access panel 223TZ ( [AMM MPP 06-41-03/100](#) ) (only for aircraft with manual controller installed on the right side of the control pedestal).



## AIRCRAFT MAINTENANCE MANUAL

- (2) On aircraft with the manual controller installed on the left side of the control pedestal, remove the ACARS Printer ( [AMM TASK 23-22-02-000-801-A/400](#)), or CMU Printer ( [AMM TASK 23-24-02-000-801-A/400](#)), or the control-pedestal top cover, as applicable.
- (3) On the overhead circuit breaker panel, open the PEDESTAL PANEL circuit breaker and attach a DO-NOT-CLOSE tag to it (Location tip: ESSENTIAL DC BUS 2/LIGHTS/ PEDESTAL PANEL).

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

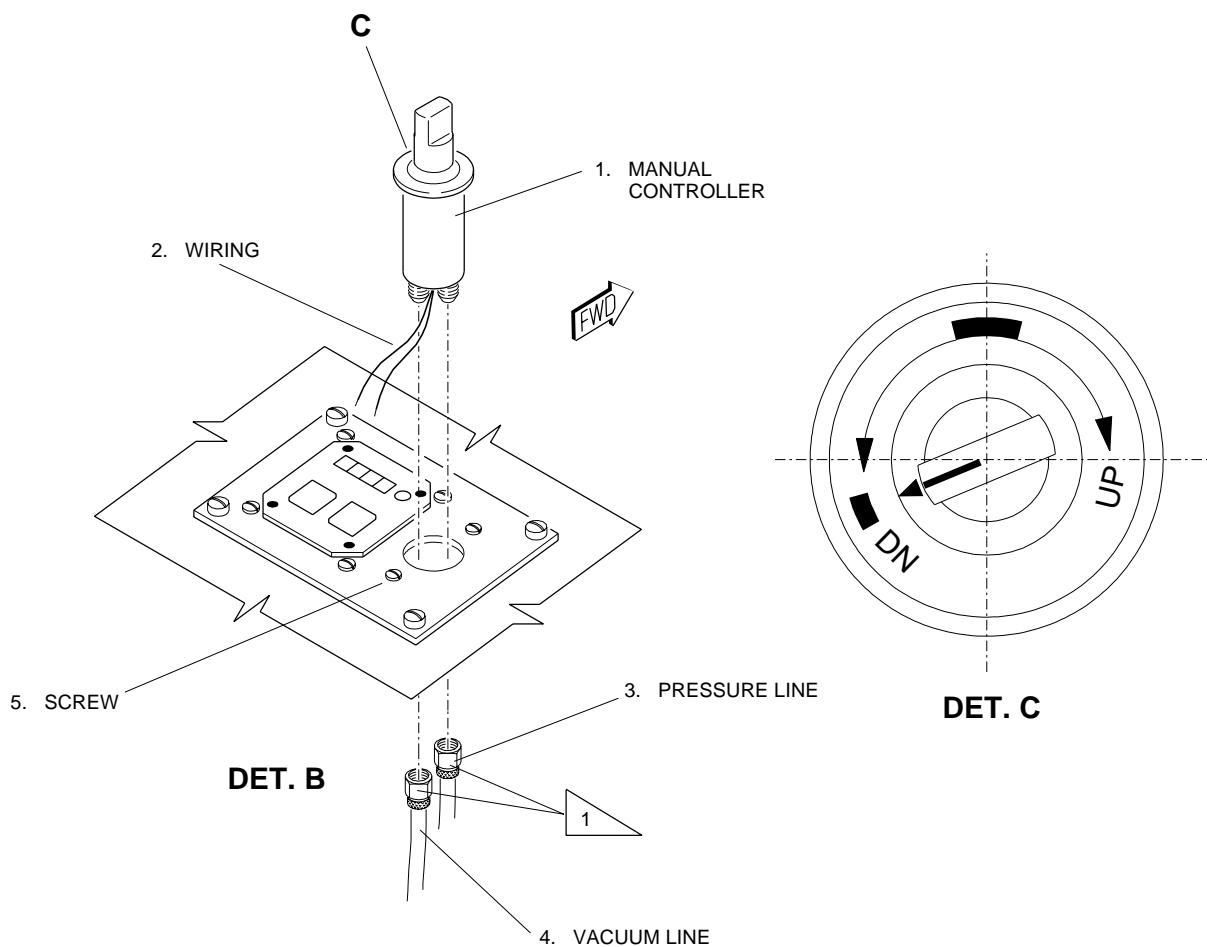
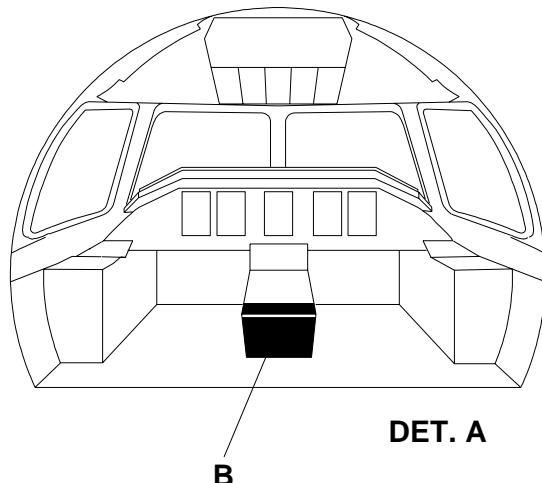
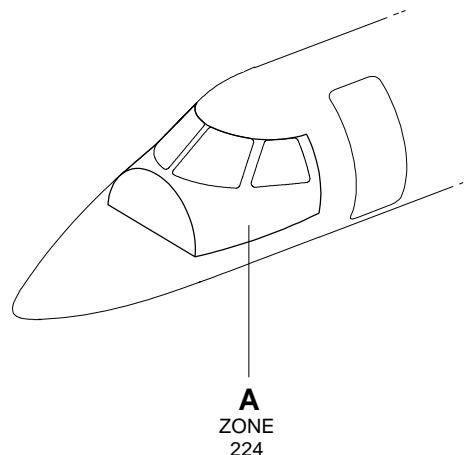
#### SUBTASK 020-002-A

- (1) Loosen the screw (5).
- (2) Disconnect the pressure (3) and vacuum (4) tubes.
- (3) Move the manual controller (1) from its position.
- (4) Use the removal tool (WM 20-00-03/1 and WM 20-50-01/201) to disconnect the electrical wiring (2).
- (5) Remove the manual controller (1).
- (6) Install caps on the tubes.

**EFFECTIVITY: ALL**

Manual Controller - Removal/Installation

Figure 401



 **TORQUE:** 7.9 – 9.0 N.m (70 – 80 Lb.in)

EM145AMM210027D.DGN



AIRCRAFT  
MAINTENANCE MANUAL

TASK 21-31-02-400-801-A

EFFECTIVITY: ALL

3. MANUAL CONTROLLER - INSTALLATION

A. General

(1) This task gives the procedure to install the manual controller.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM TASK 21-31-00-700-801-A/500	-
AMM TASK 23-22-02-400-801-A/400	ACARS PRINTER - INSTALLATION
AMM TASK 23-24-02-400-801-A/400	CMU PRINTER - INSTALLATION
WM 20-00-03/1	-
WM 20-50-01/201	-
WM 33-12-52	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223TZ	Control pedestal

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To loosen/tighten the pressure and vacuum tubes	
Standard	Installation and removal tool P/N M81969/14-11	To connect/disconnect the electrical wiring	
Standard	Crimping tool P/N M22520/1-01 with turret head P/N M22520/1-02	To crimp the contacts	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
M39029/1-101	Contact	2

G. Expandable Parts

Not Applicable



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Control pedestal

I. Preparation

SUBTASK 841-003-A

- (1) Make sure that the PEDESTAL PANEL circuit breaker, on the overhead circuit breaker panel, is open and with a DO-NOT-CLOSE tag attached to it (Location tip: ESSENTIAL DC BUS 2/LIGHTS/PEDESTAL PANEL).

J. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Remove the caps from the tubes.
- (2) If the controller is replaced, crimp the contacts (WM 20-00-03/1 and WM 20-50-01/201) in the new controller electrical wires.
- (3) Use the installing tool (WM 20-00-03/1 and WM 20-50-01/201) to connect the blue electrical wire to the SP2129 splice and the red electrical wire to the SP2128 splice (2) (WM 33-12-52).
- (4) Put the manual controller (1) in the installation position.
- (5) Connect the pressure (3) and the vacuum tubes (4). Tighten the tubes to the torque shown in (Figure 401).
- (6) Attach the screw (5).

K. Follow-on

SUBTASK 842-002-A

- (1) On the overhead circuit breaker panel, remove the DO-NOT-CLOSE tag from the PEDESTAL PANEL circuit breaker and close it (Location tip: ESSENTIAL DC BUS 2/LIGHTS/PEDESTAL PANEL).
- (2) On aircraft with the manual controller installed on the left side of the control pedestal, install the ACARS Printer ([AMM TASK 23-22-02-400-801-A/400](#)), or CMU Printer ([AMM TASK 23-24-02-400-801-A/400](#)), or the control-pedestal top cover, as applicable.
- (3) Install access panel 223TZ ([AMM MPP 06-41-03/100](#)) (only for aircraft with manual controller installed on the right side of the control pedestal).
- (4) Do the Pressurization Control System - Operational Check in Manual Mode (AMM TASK 21-31-00-700-801-A/500).