

VENT VALVE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the vent valve.
- B. 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
28-23-04-000-801-A	VENT VALVE - REMOVAL	ALL
28-23-04-400-801-A	VENT VALVE - INSTALLATION	ALL

TASK 28-23-04-000-801-A

EFFECTIVITY: ALL

2. VENT VALVE - REMOVAL

A. General

(1) This task is applicable to the LH and RH fuel tanks.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 12-11-01-600-802-A/300	FUEL-TANK PRESSURE DEFUELING - SERVICING
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 28-11-01-000-801-A/400	FUEL-TANK ACCESS PANELS - REMOVAL
AMM TASK 28-11-01-000-802-A/400	FUEL-TANK ACCESS PANELS - REMOVAL
AMM TASK 57-56-01-000-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223IZ	Control pedestal - cockpit
541	541EB	LH Underwing area
541	541DB	LH Underwing area
641	641EB	RH Underwing area
641	641DB	RH Underwing area

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Extractor Pin Tool P/N M81969/14-02, or equivalent	To insert/extract contact pin	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Plastic spatula	To remove the sealant	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH/RH Underwing area

I. Preparation

SUBTASK 841-002-A

WARNING: • **BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN [AMM MPP 28-00-00/200](#) TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.**

- **MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE FLAP TRAVEL AREA.**

- (1) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) On the control pedestal, set the flap selector lever to the 45-degree position.
- (3) Defuel the tanks ([AMM TASK 12-11-01-600-802-A/300](#)).
- (4) De-energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (5) Open the outboard flap lower shroud ([AMM TASK 57-56-01-000-801-A/400](#)).
- (6) On the circuit breaker panel, open the FUEL REFUELING 1/2/3 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (7) Remove these access panels ([AMM MPP 06-44-00/100](#) and [AMM TASK 28-11-01-000-801-A/400](#) or [AMM TASK 28-11-01-000-802-A/400](#) as applicable) to get access to the vent valves:
 - (a) LH fuel tank:
 - 541EB.
 - 541DB.
 - (b) RH fuel tank:
 - 641EB.
 - 641DB.

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

SUBTASK 020-002-A

CAUTION: WHEN YOU REMOVE THE VENT VALVE, DO NOT CUT THE HARNESS. ONLY DISCONNECT THE CONTACT PINS FROM THE SPLICES.

- (1) Remove the contact pin (1) from the splice (2).

NOTE: Use the extractor P/N M81969/14-02.

- (2) Remove the tube/hose (3) from the vent valve (4).
- (3) Remove the tube (5) from the precision union (7).
- (4) Remove the precision union (7) from the vent valve (4).
- (5) Remove the O-ring (6) from the precision union (7).
- (6) Discard the O-ring (6).
- (7) Remove the bolt (8) and the washer (9).

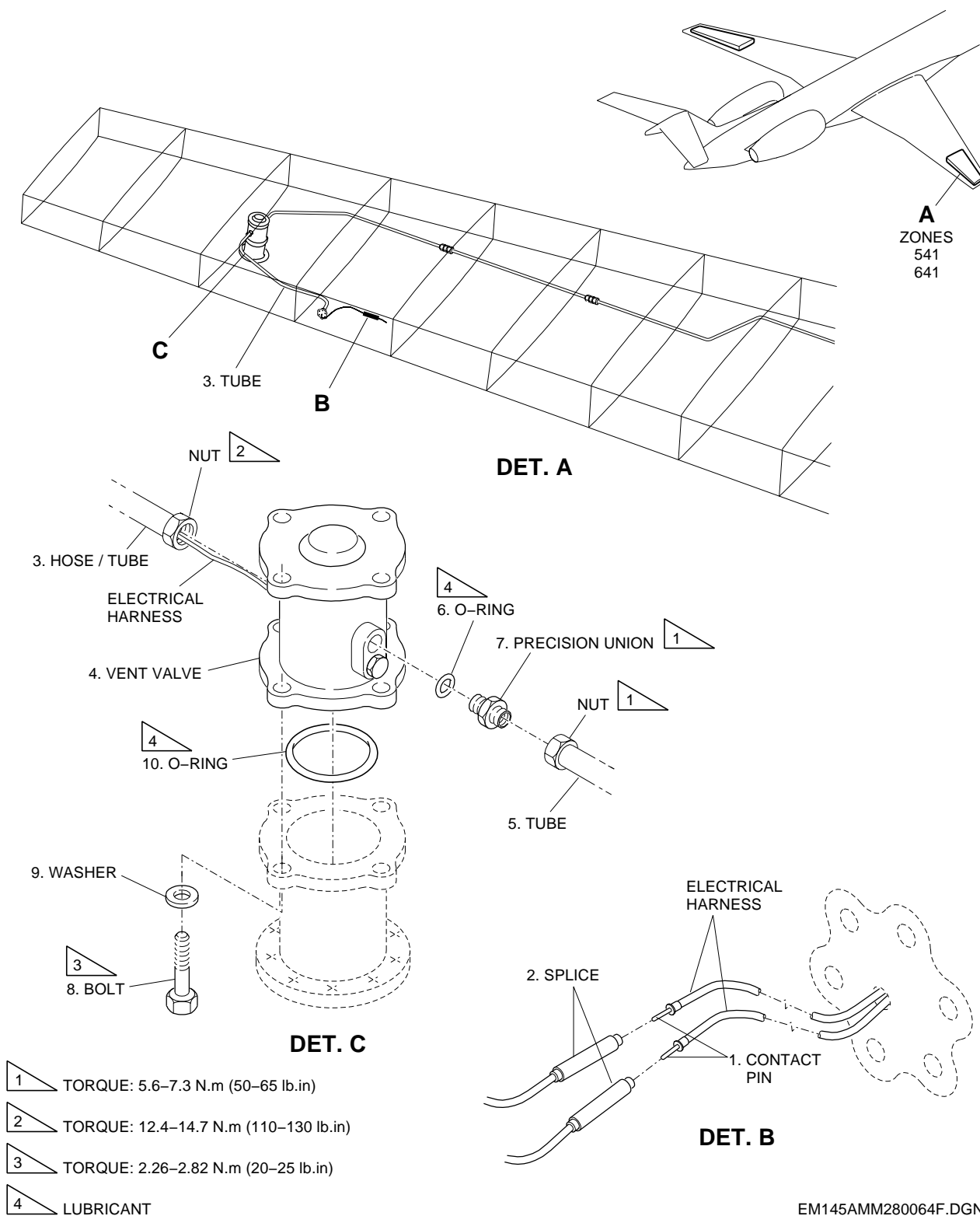
CAUTION: CAREFULLY REMOVE THE VENT VALVE TO PREVENT DAMAGE TO THE ELECTRICAL HARNESS.

- (8) Remove the electrical harness from the tube/hose (3).
- (9) Remove the vent valve (4) and the O-ring (10).
- (10) Discard the O-ring (10).

EFFECTIVITY:: ALL

Vent Valve - Removal/Installation

Figure 401



TASK 28-23-04-400-801-A

EFFECTIVITY: ALL

3. VENT VALVE - INSTALLATION

A. General

(1) This task is applicable to the LH and RH fuel tanks.

B. References

REFERENCE	DESIGNATION
28-23-00	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 12-11-01-600-801-A/300	FUEL-TANK PRESSURE REFUELING - SERVICING
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 20-13-21-910-802-A/200	ELECTRICAL BONDING PROTECTION - STANDARD PROCEDURES
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 28-11-00-700-801-A/500	FUELED-TANK LEAK CHECK - OPERATIONAL CHECK
AMM TASK 28-11-00-700-803-A/500	FUELED-TANK LEAK CHECK - OPERATIONAL CHECK
AMM TASK 28-11-01-400-801-A/400	FUEL-TANK ACCESS PANELS - INSTALLATION
AMM TASK 28-11-01-400-802-A/400	FUEL-TANK ACCESS PANELS - INSTALLATION
AMM TASK 57-56-01-400-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - INSTALLATION
SWPM 20-00-03	Wire Termination Code and Tooling - Description
WM 28-23-50	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223IZ	Control pedestal - cockpit
541	541EB	LH Underwing area
541	541DB	LH Underwing area
641	641EB	RH Underwing area
641	641DB	RH Underwing area

D. Tools and Equipment

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

(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Extractor Pin Tool P/N M81969/14-02, or equivalent	To insert/extract contact pin	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
M39029/1-16-20	Contact pin	02
Molykote DC-33 Light	Lubricant	AR
Commercially available	Adhesive tape	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	28-23-00	2

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH/RH Underwing area

I. Preparation

SUBTASK 841-003-A

- (1) If you will install a new vent valve, install new contact pins (1) to the vent valve electrical harnesses. Refer to [SWPM 20-00-03](#) (contact pin code: MAA).
- (2) Lightly apply Molykote lubricant to the O-ring (6) and to O-ring (10).
- (3) Wind a piece of adhesive tape around the contact pin (1) to prevent scratches in the inner side of the hose/tube.
- (4) Prepare the vent valve base surface for bonding. Do the bonding procedure by method 3 ([AMM TASK 20-13-21-910-801-A/200](#)).

J. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN [AMM MPP 28-00-00/200](#) TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

CAUTION: DO NOT USE SAFETY WIRE TO PULL THE ELECTRICAL HARNESS THROUGH THE TUBE/HOSE.

- (1) Insert the electrical harness into the tube/hose (3).

NOTE: If necessary, use wax string and shop air to pull the electrical harness through the tube/hose.

- (2) Install the O-ring (10) and the vent valve (4).
- (3) Install the bolts (8) and the washers (9).
- (4) Use a torque wrench to torque the bolts (8) to 2.26 - 2.82 N.m (20 - 25 lb.in).
- (5) Install the O-ring (6) in the precision union (7).
- (6) Install the precision union (7) on the vent valve (4).
- (7) Use a torque wrench to torque the precision union (7) to 5.6 - 7.3 N.m (50 - 65 lb.in).
- (8) Install the tube (5) on the precision union (7).
- (9) Use a torque wrench to torque the tube (5) to 5.6 - 7.3 N.m (50 - 65 lb.in).
- (10) Install the tube/hose (3) on the vent valve (4).
- (11) Use a torque wrench to torque the tube (3) to 12.4 - 14.7 N.m (110 - 130 lb.in).
- (12) Do the bonding protection for the vent valve base ([AMM TASK 20-13-21-910-802-A/200](#)).
- (13) Instal the contact pin (1) on the splice (2) (WM 28-23-50).

NOTE:

- Use the insertion tool P/N M81969/14-02.
- Polarity markings of vent valve harness are not relevant.

K. Follow-on

SUBTASK 842-002-A

- (1) Install access panels ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-400-801-A/400](#)) or ([AMM TASK 28-11-01-400-802-A/400](#)) as applicable:
 - (a) LH fuel tank:
 - 541EB.
 - 541DB.
 - (b) RH fuel tank:
 - 641EB.
 - 641DB.
- (2) Close the outboard flap lower shroud ([AMM TASK 57-56-01-400-801-A/400](#)).
- (3) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).

- (4) On the control pedestal, set the flap selector lever to the zero-degree position.
- (5) De-energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (6) On the circuit breaker panel, close the FUEL REFUELING 1/2/3 circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (7) Refuel the tanks ([AMM TASK 12-11-01-600-801-A/300](#)) as applicable.
- (8) Do a check of the work area for leakage ([AMM TASK 28-11-00-700-801-A/500](#) or [AMM TASK 28-11-00-700-803-A/500](#), as applicable). Correct as required.

