

## V/UHF ANTENNA - REMOVAL/INSTALLATION

*EFFECTIVITY: AIRCRAFT WITH SINGLE V/UHF SYSTEM*

### 1. General

- A. This section gives the procedures to remove and install the antenna of the V/UHF communication system.
- 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
23-14-05-000-801-A	V/UHF ANTENNA - REMOVAL	AIRCRAFT WITH SINGLE V/UHF SYSTEM
23-14-05-400-801-A	V/UHF ANTENNA - INSTALLATION	AIRCRAFT WITH SINGLE V/UHF SYSTEM

TASK 23-14-05-000-801-A

EFFECTIVITY: AIRCRAFT WITH SINGLE V/UHF SYSTEM

## 2. V/UHF ANTENNA - REMOVAL

### A. General

- (1) This task gives the procedures to remove the V/UHF antenna.
- (2) The V/UHF antenna is installed in the lower rear fuselage.

### B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-02/100	-

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272BF	Cargo compartment
172		Lower rear fuselage

### D. Tools and Equipment

Not Applicable

### E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Acrylic spatula	To remove the sealant	AR

### F. Consumable Materials

Not Applicable

### G. Expandable Parts

Not Applicable

### H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Lower rear fuselage and cargo compartment

### I. Preparation

#### SUBTASK 841-003-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) On the circuit-breaker panel, open the V/UHF XCVR circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (3) In the cargo compartment, remove the floor panel 272BF (AMM MPP 06-41-02/100).

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

*SUBTASK 020-003-A*

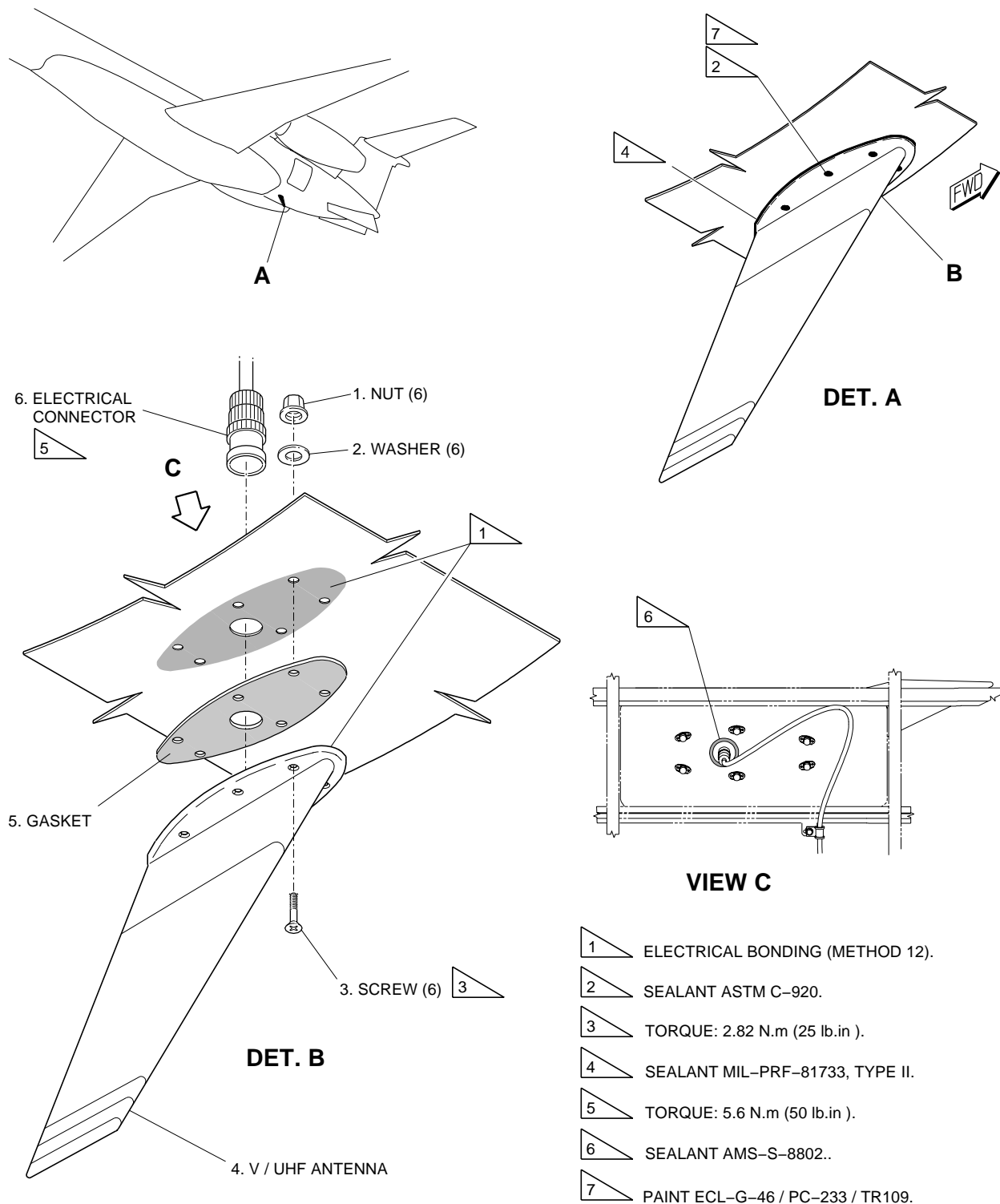
**CAUTION:** DO NOT TOUCH THE ELECTRICAL PINS OF THE CONNECTOR. DAMAGE CAN OCCUR TO THE INTERNAL COMPONENTS.

- (1) Disconnect the electrical connector (6) from the V/UHF antenna (4).
- (2) Install the correct ESD protective cap on the disconnected electrical connector.
- (3) Use an acrylic spatula to remove the sealant from around the fuselage skin hole and the V/UHF antenna (4), on the inner surface of the fuselage skin hole.
- (4) Use an acrylic spatula to remove the sealant from the contour of the V/UHF antenna (4) and from the screws (3).
- (5) Remove the screws (3), washers (2) and nuts (1) that attach the V/UHF antenna (4).
- (6) Use an acrylic spatula between the aircraft structure and the V/UHF antenna (4) to make the removal of the antenna easier.
- (7) Carefully pull the V/UHF antenna (4) away from the fuselage.
- (8) Remove the V/UHF antenna (4).
- (9) Remove and discard the gasket (5) from the V/UHF antenna base.
- (10) Use a spatula to remove the sealant from around the connector of the V/UHF antenna (4).

EFFECTIVITY: AIRCRAFT WITH SINGLE V/UHF SYSTEM

V/UHF Antenna - Removal/Installation

Figure 401



EM145AMM231191A.DGN

TASK 23-14-05-400-801-A

EFFECTIVITY: AIRCRAFT WITH SINGLE V/UHF SYSTEM

### 3. V/UHF ANTENNA - INSTALLATION

#### A. General

- (1) This task gives the procedures to install the V/UHF antenna.
- (2) The V/UHF antenna is installed in the lower rear fuselage.

#### B. References

REFERENCE	DESIGNATION
34-14-05	-
AMM MPP 06-41-02/100	-
<a href="#">AMM TASK 20-13-21-910-801-A/200</a>	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 23-14-00-700-801-A/500	-
AMM TASK 23-14-05-000-801-A/400	-
CPM 51-21-06	-
SRM 51-20-01	-

#### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272BF	Cargo compartment
172		Lower rear fuselage

#### D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To torque	

#### E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Acrylic spatula	To remove the sealant	AR

#### F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM-D-740	Methyl Ethyl Ketone (MEK)	AR
MIL-PRF-81733 TYPE II	Sealant, P/S870 B1/2	AR
ASTM C-920	Sealant, RTV 780	AR
AMS-S-8802 TYPE II CLASS B2	Sealant, PR 1422-B2	AR

(Continued)

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
ECL-G-46/PC-233/TR109 (MEP 10-069)	High Solids Polyurethane White Paint	AR

G. Expendable Parts

<i>ITEM</i>	<i>IPC REFERENCE (VENDOR REFERENCE)</i>	<i>QTY</i>
Gel Conductive Gasket	34-14-05	1

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Lower rear fuselage and cargo compartment

I. Installation (Figure 401)

**SUBTASK 420-003-A**

- (1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task AMM TASK 23-14-05-000-801-A/400.
- (2) Remove all the old sealant from the antenna base and the skin surface, where the V/UHF antenna (4) should be installed. For this, use an acrylic spatula.

**WARNING: BE CAREFUL WHEN YOU USE THE METHYL ETHYL KETONE (MEK). PUT ON SAFETY GOGGLES, PROTECTIVE GLOVES AND CLOTHING. DO NOT BREATHE THE GAS. DO THE WORK IN AN AREA WHICH HAS A GOOD FLOW OF AIR. THE METHYL ETHYL KETONE (MEK) IS POISONOUS AND HIGHLY FLAMMABLE.**

- (3) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the antenna base surface.
- (4) Carefully remove the protective release film identified with "ANTENNA SIDE" from the gel conductive gasket (5).
- (5) Carefully align the gel conductive gasket (5) with the screw holes and connector, and install it to the V/UHF antenna base (4).
- (6) Carefully remove the protective release film identified with "AIRCRAFT SIDE" from the gel conductive gasket (5).

**CAUTION: IF THE ELECTRICAL BONDING DEVICE DOES NOT MAKE UP A GOOD ELECTRIC CONDUCTIVE PATH, DAMAGE CAN OCCUR TO THE AIRCRAFT OR THE EQUIPMENT.**

- (7) Do the electrical bonding procedures, method 12, on the installation surfaces of the V/UHF antenna (4) and the fuselage skin ([AMM TASK 20-13-21-910-801-A/200](#)).
- (8) Put the V/UHF antenna (4) in the installation position.

- (9) Install the screws (3), washers (2) and nuts (1) that attach the V/UHF antenna (4).
- (10) Use a torque wrench to torque the screws (3) to 2.8 N.m (25 lb.in) in a crisscross pattern.
- (11) If necessary, with a spatula, remove the excess gel of the conductive gel gasket (5) from around the V/UHF antenna (4) and from the aircraft skin.
- (12) Do the bonding test between the connector of the V/UHF antenna (4) and aircraft ground (TASK 20-13-21-700-801-A).
- (13) Apply a layer of aerodynamic sealant P/S870 B1/2 around the contour of the V/UHF antenna (4) (SRM 51-20-01).
- (14) Apply paint ECL-G-46/PC-233/TR109 on the screw heads (3) (CPM 51-21-06).
- (15) Apply sealant RTV 780 on the screw heads (3) until you fully fill the recesses in the antenna body (SRM 51-20-01).
- (16) Apply sealant PR1422 B2 around the fuselage skin hole and the V/UHF antenna base, on the inner surface of the fuselage skin (SRM 51-20-01).

**CAUTION:** DO NOT TOUCH THE ELECTRICAL PINS OF THE CONNECTOR. DAMAGE CAN OCCUR TO THE INTERNAL COMPONENTS.

- (17) Remove the ESD protection cap from the disconnected electrical connector.
- (18) Connect the electrical connector (6) to the V/UHF antenna (4).
- (19) Use a torque wrench to torque the electrical connector (6) to 5.6 N.m (50 lb.in).

J. Follow-on

**SUBTASK 842-003-A**

- (1) In the cargo compartment, install the floor panel 272BF (AMM MPP 06-41-02/100).
- (2) On the circuit-breaker panel, close the V/UHF XCVR circuit breakers and remove the DO-NOT-CLOSE tag from them:
- (3) Do the V/UHF Functional Test (AMM TASK 23-14-00-700-801-A/500).

