



AIRCRAFT MAINTENANCE MANUAL

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 |



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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).



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

SUBTASK 020-003-A

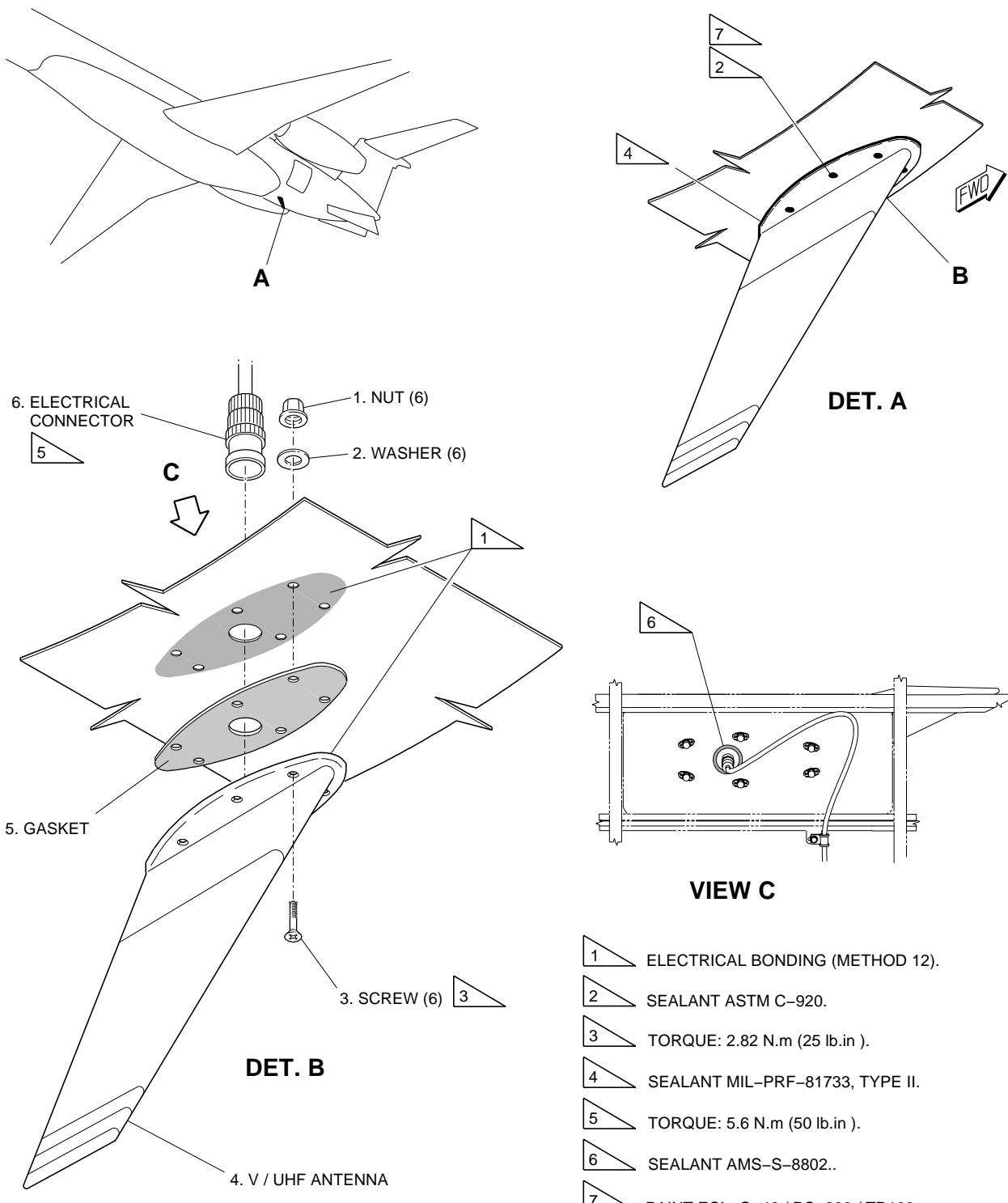
CAUTION: DO NOT TOUCH THE ELECTRICAL PINS OF THE CONNECTOR. DAMAGE CAN OCCUR TO THE INTERNAL COMPONENTS.

- (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).

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V/UHF Antenna - Removal/Installation

Figure 401



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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 | - |
| AMM TASK 20-13-21-910-801-A/200 | 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 |



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

G. Expendable Parts

| ITEM | IPC REFERENCE (VENDOR REFERENCE) | QTY |
|-----------------------|-------------------------------------|-----|
| Gel Conductive Gasket | 34-14-05 | 1 |

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|---|
| 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.



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- (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).

