



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

SATCOM ANTENNA - REMOVAL/INSTALLATION

EFFECTIVITY: ACFT MODEL(S) EMB-135

1. General

- A. This section gives the procedures to remove and install the SATCOM antenna.
- B. The SATCOM antenna is installed on the fuselage upper skin.
- 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
23-15-03-000-801-A	IRIDIUM ANTENNA - REMOVAL	FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM
23-15-03-400-801-A	IRIDIUM ANTENNA - INSTALLATION	FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM



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TASK 23-15-03-000-801-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

2. IRIDIUM ANTENNA - REMOVAL

A. General

- (1) This task gives the procedures to remove Iridium Antenna 1 and Iridium Antenna 2.
- (2) The removal procedures are the same for the two Iridium Antennas.

B. References

REFERENCE	DESIGNATION
AMM TASK 25-81-01-000-802-A/400	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
253		Upper fuselage skin

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	Upper fuselage

I. Preparation

SUBTASK 841-005-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

- (1) On the Circuit Breaker Panel (Location Tip: SHED DC BUS 2), open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - Transceiver 1.
 - Transceiver 2.
- (2) Remove the thermoacoustic insulation (AMM TASK 25-81-01-000-802-A/400), in zone 253.



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

SUBTASK 020-005-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

- (1) To remove the Iridium Antenna, do as follows:

- (a) Carefully remove the sealant (2) from around the Iridium Antenna (1).
- (b) Disconnect the electrical connector (4) from the Iridium Antenna (1).

NOTE: • Carefully remove the sealant (3) from around the internal free space of the Iridium-Antenna electrical connector (4).

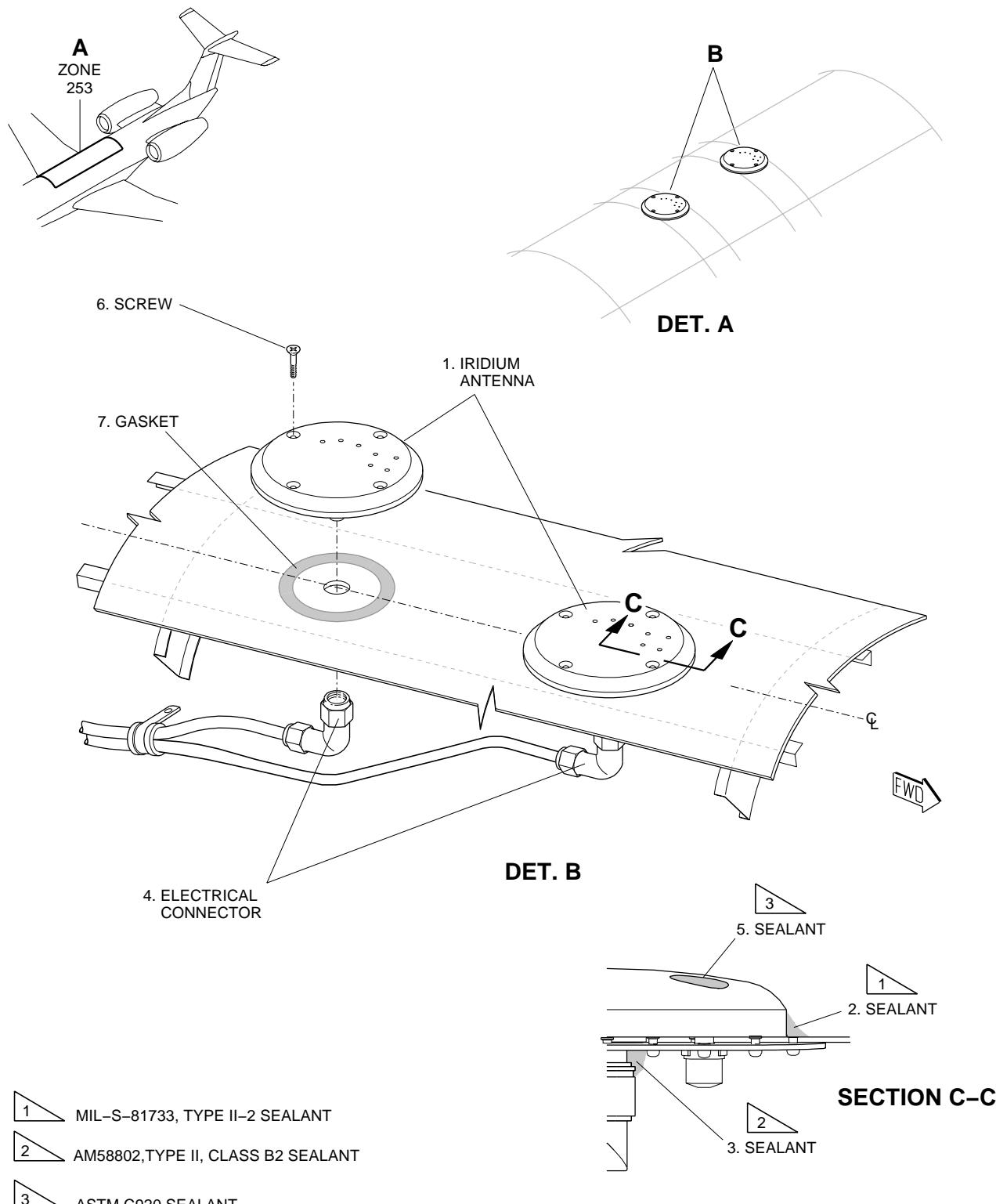
• Carefully remove the sealant (5) from the top of the screws (6).

- (c) Remove the four screws (6) that attach the Iridium Antenna (1) to the fuselage.
- (d) Remove the Iridium Antenna (1) from the fuselage.
- (e) Remove the gasket (7).
- (f) Put the protection caps on the electrical connector (4).

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

Iridium Antenna - Removal/Installation

Figure 401



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TASK 23-15-03-400-801-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

3. IRIDIUM ANTENNA - INSTALLATION

A. General

- (1) This task gives the procedures to install Iridium Antenna 1 and Iridium Antenna 2.
- (2) The installation procedures are the same for the two Iridium Antennas.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-11-01-910-801-A/200	ANTENNA SEALING
AMM TASK 23-15-00-700-801-A/500	-
AMM TASK 25-81-01-400-802-A/400	-
IPC 23-13-06	AIR GROUND TELEPHONE SYSTEM

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
253		Upper fuselage skin

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM C920	Sealant	1
MIL-S-81733, Type II-2	Sealant	1
AMS8802, Type II, Class B2	Sealant	1

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Gasket	IPC 23-13-06	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Upper fuselage



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I. Installation (Figure 401)

SUBTASK 420-005-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

- (1) To install the Iridium Antenna, do as follows:
 - (a) Remove the protection caps from the electrical connector (4).
 - (b) Install a new gasket (7) between the Iridium Antenna (1) and the fuselage.
 - (c) Put the Iridium Antenna (1) in position.
 - (d) Put the four screws (6) that attach the Iridium Antenna (1) to the fuselage in position.
 - (e) Carefully tighten the four screws (6).
 - (f) Apply the ASTM C920 sealant on the top of the screws (6) ([AMM TASK 20-11-01-910-801-A/200](#)).
 - (g) Apply the AMS8802, Type II, Class B2 sealant (3) around the internal free space of the Iridium-Antenna electrical connector (4) ([AMM TASK 20-11-01-910-801-A/200](#)).
 - (h) Connect the electrical connector (4) to the Iridium Antenna (1).
 - (i) Apply the MIL-S-81733 sealant (2) externally around the Iridium Antenna (1) ([AMM TASK 20-11-01-910-801-A/200](#)).

J. Follow-on

SUBTASK 842-005-A

EFFECTIVITY: FOR AIRCRAFT WITH IRIDIUM-SATELLITE COMMUNICATIONS SYSTEM

- (1) On the Circuit Breaker Panel (Location Tip: SHED DC BUS 2), remove the DO-NOT-CLOSE tags from these circuit breakers and close them:
 - Transceiver 1.
 - Transceiver 2.
- (2) Install the thermoacoustic insulation (AMM TASK 25-81-01-400-802-A/400), in zone 253.
- (3) Do the Telephone System operational test (AMM TASK 23-15-00-700-801-A/500).