GPS ANTENNA - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

A. This section gives the procedures to remove and install the GPS1 and/or GPS2 antenna(s).

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*
34-56-02-000-801-A	GPS ANTENNA - REMOVAL	PRE-MOD SB 145-34-0118
34-56-02-400-801-A	GPS ANTENNA - INSTALLATION	PRE-MOD SB 145-34-0118
34-56-02-000-802-A	GPS ANTENNA - REMOVAL	POST-MOD SB 145-34-0118
34-56-02-400-802-A	GPS ANTENNA - INSTALLATION	POST-MOD SB 145-34-0118

TASK 34-56-02-000-801-A
EFFECTIVITY: PRE-MOD SB 145-34-0118

2. GPS ANTENNA - REMOVAL

A. General

(1) This procedure gives the instructions to remove the GPS 1 Antenna and/or GPS 2 antenna.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-04/100	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
233		On the fuselage top, LH
234		On the fuselage top, RH

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Polyethylene spatula	To remove the sealant	AR
Commercially available	Workstand - Upper Skin Top Fuselage	To get access to the GPS Antenna	AR

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	At the fuselage top, in the area above the passenger cabin

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

(1) Make sure that the aircraft is safe for maintenance.

(2) (Aircraft with Single FMS) On the circuit breaker panel, open the GPS circuit breaker and attach a DO-NOT-CLOSE tag to it.

(3) (Aircraft with Dual FMS) On the circuit breaker panel, open the GPS1 and/or GPS2 circuit breaker(s) and attach a DO-NOT-CLOSE tag to it (them).

(4) Remove the ceiling panel 233ALC to access the GPS antenna (2) (AMM MPP 06-41-04/100).

J. Removal

SUBTASK 020-002-A

(1) (AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET) To remove GPS antenna, do as follows: (Figure 401)

CAUTION: IDENTIFY THE COAXIAL CONNECTORS TO PREVENT A POSSIBLE INVERSION DURING THE INSTALLATION. INCORRECT CONNECTIONS CAN CAUSE MAL-FUNCTION OR DAMAGE TO THE COMPONENT.

(a) Disconnect the coaxial connector (3) from the GPS antenna (2).

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(b) Use a spatula to remove the sealant from around the fuselage skin hole and the GPS antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a workstand (external top fuselage) to get access to the GPS antenna (2).

(d) Use a spatula to remove the sealant from around the GPS antenna (2) and from the aircraft skin.

(e) Remove the sealant used as a protection of the screws (1).

(f) Remove the screws (1).

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(g) Use a spatula between the baseplate of the GPS antenna (2) and the aircraft skin to make the separation.

(h) Carefully pull the GPS antenna (2) away from the fuselage.

(i) Remove the GPS antenna (2).

(2) (AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET) To remove GPS antenna, do as follows: (Figure 402)

CAUTION: IDENTIFY THE COAXIAL CONNECTORS TO PREVENT A POSSIBLE INVERSION DURING THE INSTALLATION. INCORRECT CONNECTIONS CAN CAUSE MAL-FUNCTION OR DAMAGE TO THE COMPONENT.

(a) Disconnect the coaxial connector (4) from the GPS antenna (2).

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(b) Use a spatula to remove the sealant from around the fuselage skin hole and the GPS antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a workstand (external top fuselage) to get access to the GPS antenna (2).

(d) Use a spatula to remove the sealant from the contour of the GPS antenna (2) and from the aircraft skin.

(e) Remove the sealant used as a protection of the screws (1).

(f) Remove the screws (1).

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(g) Use a spatula between the baseplate of the GPS antenna (2) and the aircraft skin to make the separation.

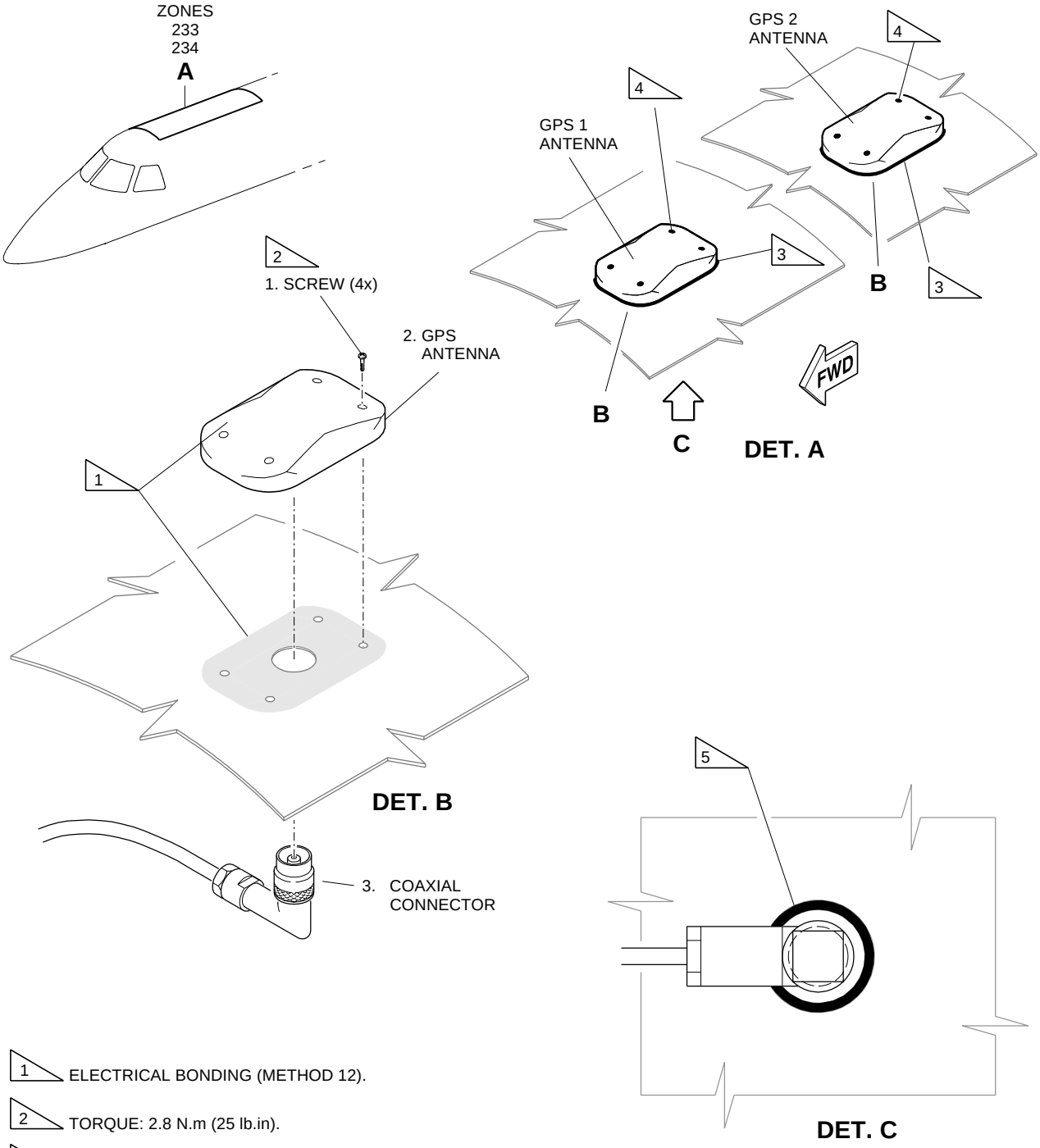
(h) Carefully pull the GPS antenna (2) away from the fuselage.

(i) Remove the GPS antenna (2).

(j) Remove and discard the gel conductive gasket (3).

(k) Use a spatula to remove the sealant from around the connector of the GPS antenna (2).

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET
GPS Antenna - Removal/Installation
Figure 401



1 ELECTRICAL BONDING (METHOD 12).

2 TORQUE: 2.8 N.m (25 lb.in).

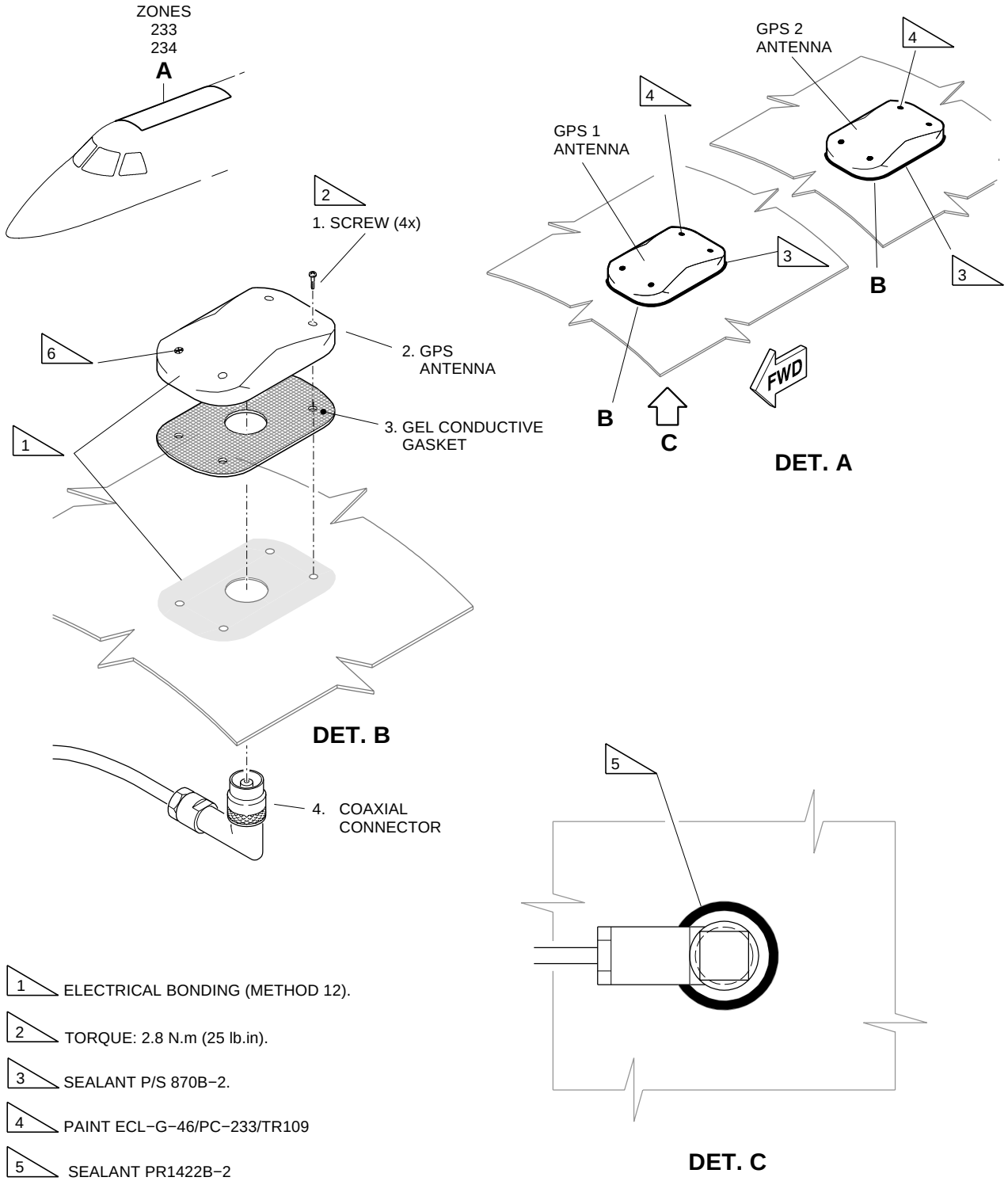
3 SEALANT P/S 870B−2.

4 SEALANT 780 (WHITE).

5 SEALANT PR1422B−2.

EM145AMM341093A.DGN

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET
GPS Antenna - Removal/Installation
Figure 402



1 ELECTRICAL BONDING (METHOD 12).

2 TORQUE: 2.8 N.m (25 lb.in).

3 SEALANT P/S 870B−2.

4 PAINT ECL−G−46/PC−233/TR109

5 SEALANT PR1422B−2

6 SEALANT 780 (WHITE)

EM145AMM341092A.DGN

TASK 34-56-02-400-801-A
EFFECTIVITY: PRE-MOD SB 145-34-0118

3. GPS ANTENNA - INSTALLATION

A. General

(1) This procedure gives the instructions to install the FMS1 and/or FMS2 GPS antenna(s).

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-04/100	-
AMM TASK 20-13-21-700-801-A/200	ELECTRICAL BONDING TEST - STANDARD PROCEDURES
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 34-56-02-000-801-A/400	GPS ANTENNA - REMOVAL
AMM TASK 34-61-00-700-801-A/500	FLIGHT MANAGEMENT SYSTEM (FMS) - OPERATIONAL TEST
CPM 51-21-06	-
IPC 34-56-02	GPS ANTENNA
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
233		On the fuselage top, LH
234		On the fuselage top, RH

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Torque wrench	To torque	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Polyethylene spatula	To remove the sealant	AR
Commercially available	Clean dry cloth	To clean the antenna base	AR
Commercially available	Workstand - Upper Skin Top Fuselage	To get access to the GPS Antenna	AR

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
ASTM-D-740	Methyl Ethyl Ketone (MEK)	AR
780(WHITE) (ASTM-C-920)	Type II Class A White Silicone, Sealant	AR
P/S870 B-2 (MIL-PRF-81733)	Type II CL B-2 Polysulfide Aerodynamic Sealant	AR
PR1422 B-2 (AMS-S-8802)	Type I CL B2 Polysulfide Sealant	AR
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	IPC 34-56-02	1 (Aircraft with Single FMS)
Gel Conductive Gasket	IPC 34-56-02	2 (Aircraft with Dual FMS)

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	At the fuselage top, in the area above the passenger cabin

I. Installation

SUBTASK 420-002-A

(1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task (AMM TASK 34-56-02-000-801-A/400)

(2) Use a workstand (external top fuselage) to get access to the GPS antenna (2).

(3) (AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET) To install GPS antenna, do as follows: (Figure 401)

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.

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the antenna base surface.

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT AND TO THE EQUIPMENT CAN OCCUR.

(b) Do the bonding procedure, method 12, on the antenna installation surface on the aircraft skin (AMM TASK 20-13-21-910-801-A/200)

(c) Put the GPS antenna (2) in installation position.

(d) Install the screws (1).

(e) Use a torque wrench to torque the screws (1) to 2.8 N.m. (25 lb.in) in a crisscross pattern.

(f) Do the bonding test between the connector of the GPS antenna (2) and aircraft ground (AMM TASK 20-13-21-700-801-A/200).

(g) Apply aerodynamic sealant P/S870 B-2 around the contour of the GPS antenna (2), on the skin (SRM 51-20-01).

(h) Apply sealant 780 (WHITE) on the screw heads until you fully fill the recesses in the antenna body (SRM 51-20-01).

(i) Apply sealant PR1422 B-2 around the fuselage skin hole and the GPS antenna base, on the inner surface of the fuselage skin (SRM 51-20-01).

CAUTION: LOOK AT THE IDENTIFICATION OF THE COAXIAL CONNECTORS TO MAKE SURE THAT YOU MAKE THE CORRECT CONNECTIONS. INCORRECT CONNECTIONS CAN CAUSE MALFUNCTION OF THE SYSTEM OR DAMAGE TO THE COMPONENT.

(j) Connect the electrical connector (3) to the antenna (2).

(4) (AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET) To install GPS antenna, do as follows: (Figure 402)

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.

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the antenna base surface.

(b) Carefully remove the protective release film identified with "ANTENNA SIDE" from gel conductive gasket (3).

(c) Carefully align the gel conductive gasket (3) with the screw holes and connector, and install it to the base of the GPS antenna (2).

(d) Carefully remove the protective release film identified with "AIRCRAFT SIDE" from the gel conductive gasket (3).

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT AND TO THE EQUIPMENT CAN OCCUR.

(e) Do the bonding procedure, method 12, on the antenna installation surface on the aircraft skin (AMM TASK 20-13-21-910-801-A/200)

(f) Put the GPS antenna (2) in installation position.

(g) Install the screws (1).

(h) Use a torque wrench to torque the screws (1) to 2.8 N.m. (25lb.in) in a crisscross pattern.

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(i) If necessary, with a spatula, remove the excess gel of the conductive gel gasket (3) from around the GPS antenna (2) and from the aircraft skin.

(j) Do the bonding test between the connector of the GPS antenna (2) and aircraft ground (AMM TASK 20-13-21-700-801-A/200).

(k) Apply aerodynamic sealant P/S870 B-2 around the contour of the GPS antenna (2), on the skin (SRM 51-20-01).

(l) Apply paint ECL-G-46/PC-233/TR109 on the screw (1) heads (CPM 51-21-06).

(m) Apply sealant 780 (WHITE) on the screw heads until you fully fill the recesses in the antenna body (SRM 51-20-01).

(n) Apply sealant PR1422 B-2 around the fuselage skin hole and the GPS antenna base, on the inner surface of the fuselage skin (SRM 51-20-01).

CAUTION: LOOK AT THE IDENTIFICATION OF THE COAXIAL CONNECTORS TO MAKE SURE THAT YOU MAKE THE CORRECT CONNECTIONS. INCORRECT CONNECTIONS CAN CAUSE MALFUNCTION OF THE SYSTEM OR DAMAGE TO THE COMPONENT.

(o) Connect the electrical connector (4) to the antenna (2).

J. Follow-on

SUBTASK 842-002-A

(1) (Aircraft with Single FMS) On the circuit breaker panel, close the GPS circuit breaker and remove the DO-NOT-CLOSE tag from it.

(2) (Aircraft with Dual FMS) On the circuit breaker panel, close the GPS1 and/or GPS2 circuit breaker(s) and remove the DO-NOT-CLOSE tag from it (them).

(3) Do an operational test of the FMS system (AMM TASK 34-61-00-700-801-A/500).

(4) Install ceilling panel (AMM MPP 06-41-04/100).

TASK 34-56-02-000-802-A
EFFECTIVITY: POST-MOD SB 145-34-0118

4. GPS ANTENNA - REMOVAL

A. General

(1) This task gives the procedure to remove the GPS antenna.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-04/100	-
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
233		On the fuselage top, LH
234		On the fuselage top, RH

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Polyethylene spatula	To remove the sealant	AR
Commercially available	Workstand - Upper Skin Top Fuselage	To get access to the GPS antenna	AR

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	At the fuselage top, in the area above the passenger cabin

I. Preparation

SUBTASK 840-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

(1) Make sure that the aircraft is safe for maintenance (AMM TASK 20-00-00-910-801-A/200).

SUBTASK 862-002-A

(2) To remove GPS 1 antenna, open GPS 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.

(3) To remove GPS 2 antenna, open GPS 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.

SUBTASK 010-002-A

(4) Remove ceiling panel 233ALC to get access to the GPS antenna (2) (AMM MPP 06-41-04/100).

SUBTASK 940-002-A

CAUTION: DO NOT LET THE WORKSTAND OR OTHER EQUIPMENT TOUCH OR HIT THE AIRCRAFT PARTS. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE CAN OCCUR.

(5) Use a workstand to get access to the installation position of the GPS antenna.

J. Removal (Figure 403)

SUBTASK 000-002-A

(1) Disconnect the coaxial connector (4) from the GPS antenna (2).

CAUTION: USE ONLY PROTECTIVE CAPS FOR THE PROTECTION OF CONNECTOR PINS OR SOCKETS IN ELECTRICAL CONNECTORS. OTHER MATERIALS CAN CAUSE DAMAGE TO THE CONNECTOR PINS OR SOCKETS, OR LET UNWANTED MATERIALS STAY IN THE CONNECTOR.

(2) Install a protective cap (No ESD) on the coaxial connector (4) and on the connector of the GPS antenna (2).

CAUTION: DO NOT USE METAL BRUSHES, METAL SCRAPERS, CHIPCHASERS, PICKS, SCREWDRIVERS, BLADES, STEEL WOOL OR ABRASIVES TO REMOVE SEALANTS AND PAINT. THESE TOOLS CAN CAUSE SCRATCHES AND CRACKS AND, AS A RESULT, SERIOUS DAMAGE TO THE AIRCRAFT CAN OCCUR.

(3) Use a polyethylene spatula to remove the sealant from the contour of the GPS antenna (2) and adapter (SRM 51-20-01).

(4) Use a polyethylene spatula to remove the sealants that do the protection of the screws (1) (SRM 51-20-01).

(5) Remove the screws (1) that attach the GPS antenna (2) to the adapter.

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

(6) Use a polyethylene spatula between the baseplate of the GPS antenna (2) and the adapter to make the separation.

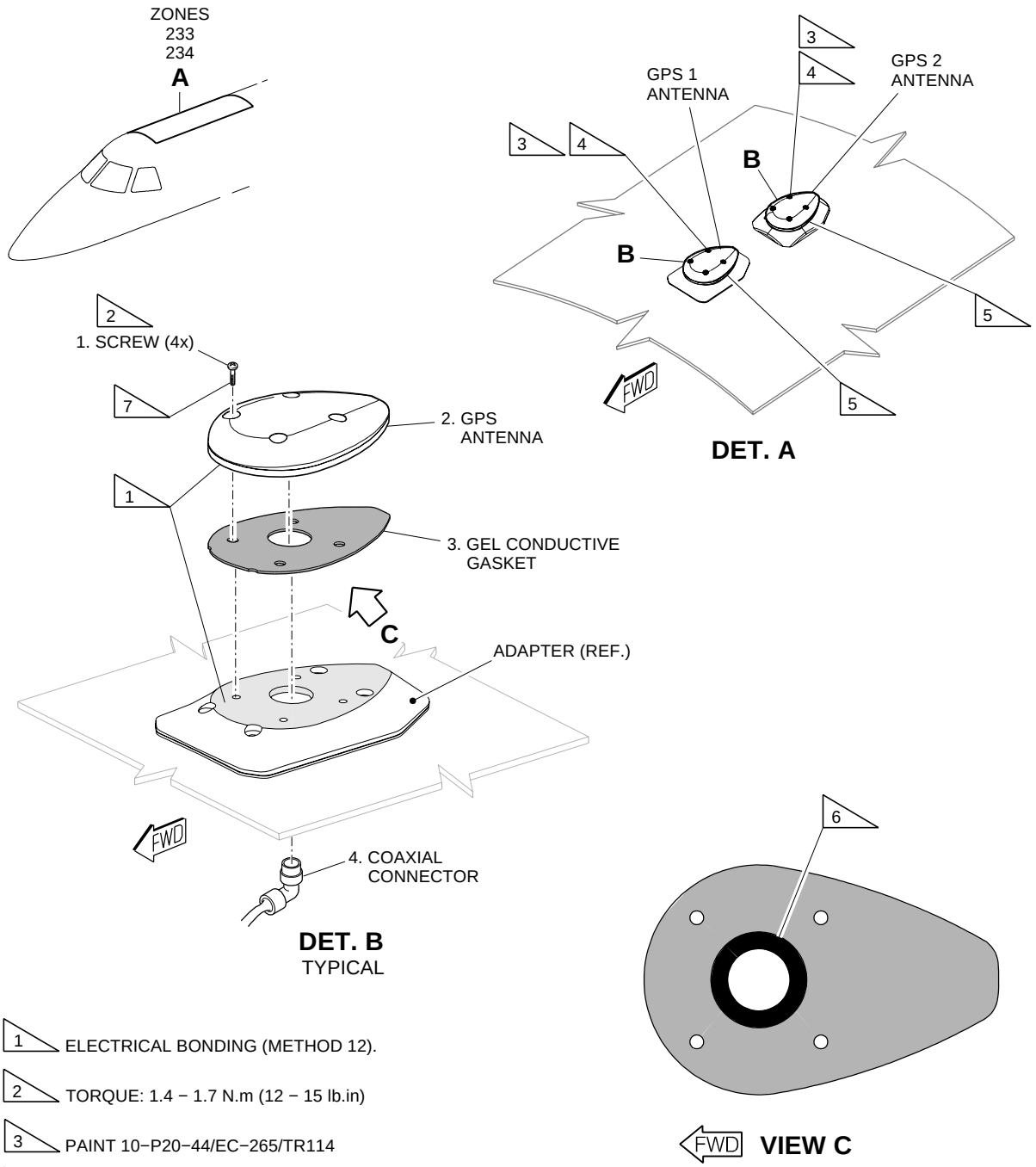
(7) Carefully pull the GPS antenna (2) away from the fuselage.

(8) Remove and discard the gel conductive gasket (3).

CAUTION: DO NOT USE METAL BRUSHES, METAL SCRAPERS, CHIPCHASERS, PICKS, SCREWDRIVERS, BLADES, STEEL WOOL OR ABRASIVES TO REMOVE SEALANTS AND PAINT. THESE TOOLS CAN CAUSE SCRATCHES AND CRACKS AND, AS A RESULT, SERIOUS DAMAGE TO THE AIRCRAFT CAN OCCUR.

(9) Use a polyethylene spatula to remove the sealant from around the connector of the GPS antenna (2) (SRM 51-20-01).

EFFECTIVITY: POST-MOD SB 145-34-0118
GPS Antenna - Removal/Installation
Figure 403



1 ELECTRICAL BONDING (METHOD 12).

2 TORQUE: 1.4 − 1.7 N.m (12 − 15 lb.in)

3 PAINT 10−P20−44/EC−265/TR114

4 SEALANT RTV 780

5 SEALANT NAFTOSEAL MC 780 B−1/2

6 SEALANT HT3326−5−50

7 COR−BAN 27L

EM145AMM341472A.DGN

TASK 34-56-02-400-802-A
EFFECTIVITY: POST-MOD SB 145-34-0118

5. GPS ANTENNA - INSTALLATION

A. General

(1) This task gives the procedure to install the GPS antenna.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-04/100	-
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
AMM TASK 20-13-21-700-801-A/200	ELECTRICAL BONDING TEST - STANDARD PROCEDURES
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 34-56-02-000-802-A/400	GPS ANTENNA - REMOVAL
CPM 51-21-05	-
IPC 34-56-02	GPS ANTENNA
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
233		On the fuselage top, LH
234		On the fuselage top, RH

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Torque wrench	To torque	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Workstand - Upper Skin Top Fuselage	To get access to the GPS antenna	AR

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
RTV 780 (ASTM C-920)	Type II, Class A, White Silicone Sealant	AR
NAFTOSEAL MC 780 B-1/2 (MEP 09-084)	Class B-1/2, Grade B, Polysulfide Sealant	AR
HT3326-5-50 (MEP 09–079)	Green Polyurethane Sealant	AR

(Continued)

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
COR-BAN 27L (MEP 09-075)	Corrosion Inhibiting Compound	AR
10-P20-44/EC-265/TR114 (MEP 10-068)	High Solids Epoxy Primer for Exterior	AR

G. Expendable Parts

ITEM	*IPC REFERENCE (VENDOR REFERENCE)*	*QTY*
Gel Conductive Gasket	IPC 34-56-02	2

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	At the fuselage top, in the area above the passenger cabin

I. Preparation

SUBTASK 860-002-A

(1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task (AMM TASK 34-56-02-000-802-A/400).

J. Installation (Figure 403)

SUBTASK 400-002-A

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT OR TO THE EQUIPMENT CAN OCCUR.

(1) Do the bonding procedure, method 12, on the installation surfaces of the GPS antenna (2) and adapter (AMM TASK 20-13-21-910-801-A/200)

(2) Carefully remove the protective release film with the "ANTENNA SIDE" identification from the gel conductive gasket (3).

(3) Carefully align the gel conductive gasket (3) with the screw holes and antenna connector and install it on the GPS antenna (2) base.

(4) Apply the sealant HT3326-5-50 between the bottom of the GPS antenna connector and the internal edge of the gel conductive gasket (3) until you level the surface (SRM 51-20-01).

(5) Carefully remove the protective release film with the "AIRCRAFT SIDE" identification from the gel conductive gasket (3).

(6) Put the GPS antenna (2) in its installation position.

(7) Install the screws (1) wet with the compound COR-BAN 27L (SRM 51-20-01).

(8) Use a torque wrench to torque the screws (1) to 1.4 - 1.7 N.m. (12 - 15 lb.in), in a crisscross pattern.

(9) Remove one of the screws (1).

(10) Do the bonding test (AMM TASK 20-13-21-700-801-A/200).

NOTE: Use the empty screw hole to get access to the antenna base.

(11) Install the screw (1) again and use a torque wrench to torque it to 1.4 - 1.7 N.m. (12 - 15 lb.in).

CAUTION: DO NOT APPLY DIFFERENT TYPES OF SEALANTS ON THE SAME REGION. IF YOU DO, THE SEALANT WILL NOT HAVE GOOD ADHESION. THIS CAN CAUSE AN UNWANTED EFFECT ON THE AERODYNAMIC SMOOTHNESS.

(12) Apply sealant NAFTOSEAL MC 780 B-1/2 on the contour of the GPS antenna (2), on the aircraft skin (SRM 51-20-01).

(13) Apply sealant RTV 780 on the heads of the screws (1) until you fully fill the recesses of the antenna body (SRM 51-20-01).

(14) Apply paint 10-P20-44/EC-265/TR114 on the sealant on the heads of the screws (1) (CPM 51-21-05).

(15) Remove the protective cap (No ESD) from the coaxial connector (4) and from the connector of the GPS antenna (2).

(16) Connect the coaxial connector (4) to the GPS antenna (2).

K. Follow-on

SUBTASK 940-003-A

(1) Remove from the work area all tools, equipment, and materials that you used.

CAUTION: DO NOT LET THE WORKSTAND OR OTHER EQUIPMENT TOUCH OR HIT THE AIRCRAFT PARTS. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE CAN OCCUR.

(2) Remove the workstand from the work area.

SUBTASK 862-003-A

(3) For GPS 1 receiver, close GPS 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.

(4) For GPS 2 receiver, close GPS 2 circuit breaker and remove the DO-NOT-CLOSE tag from it.

SUBTASK 710-002-A

(5) Do the operational test of the GPS as follows:

NOTE: • The aircraft must be out of the hangar so that the GPS can receive a satisfactory level of the satellite signal.

(a) On the CDU, push the NAV function key to show NAV INDEX page 1/2.

(b) On the CDU, push the line select key adjacent to the POS SENSORS option to show POS SENSORS page 1/2. Then, if necessary, push the NEXT key until the position related to the applicable GPS (GPS 1 or GPS 2) shows.

(c) On the CDU, push the line select key adjacent to the STATUS option related to the applicable GPS (GPS 1 or GPS 2) to show GPS 1 STATUS or GPS 2 STATUS page 1/2.

(d) On the CDU, push the NEXT key.

Result:

1 GPS 1 STATUS or GPS 2 STATUS page 2/2 shows on the CDU.

2 FOM < 1 NM shows on the CDU.

3 SATELLITES TRACKED = 4 or more shows on the CDU.

4 MODE = NAVIGATION shows on the CDU.

SUBTASK 410-002-A

(6) Install ceiling panel 233ALC (AMM MPP 06-41-04/100).

SUBTASK 840-003-A

(7) Do the procedure to restore the aircraft after the maintenance procedures (AMM TASK 20-00-00-910-801-A/200).