MODE S XPDR TOP/BOTTOM ANTENNAS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to remove and install the Mode S XPDR top/bottom antennas.

   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*
34-52-02-000-801-A	MODE S XPDR TOP/BOTTOM ANTENNAS - REMOVAL	ALL
34-52-02-400-801-A	MODE S XPDR TOP/BOTTOM ANTENNAS - INSTALLATION	ALL

TASK 34-52-02-000-801-A
EFFECTIVITY: ALL

2. MODE S XPDR TOP/BOTTOM ANTENNAS - REMOVAL

A. General

(1) This task gives the procedure to remove the XPDR top/bottom antennas.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 25-22-04-000-801-A/400	-
AMM TASK 53-01-02-000-801-A/400	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
131, 132	231GF	Area below passenger cabin floor
233, 234	233BLC	Passenger cabin ceiling
243, 244	243BLC, 243CLC	Passenger cabin ceiling

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 XPDR top antenna	AR

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Upper and lower forward fuselage

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) On the circuit breaker panel, open the XPDR 1 and XPDR 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.

(3) To remove the XPDR top antenna:

(a) (EMB-145() MODELS AND EMB-135KE/KL MODELS) Remove ceiling panel 233BLC (AMM TASK 25-22-04-000-801-A/400).

(b) (EMB-145() MODELS WITH ANTENNA INSTALLED BETWEEN FRAMES 30 AND 31) Remove ceiling panel 243CLC (AMM TASK 25-22-04-000-801-A/400).

(c) (EMB-135LR/ER MODELS) Remove ceiling panel 243BLC (AMM TASK 25-22-04-000-801-A/400).

(4) To remove the XPDR bottom antenna:

(a) (EMB-145() MODELS AND EMB-135LR/ER/KE/KL MODELS) Remove floor panel 231GF (AMM TASK 53-01-02-000-801-A/400).

J. Removal

SUBTASK 020-002-A

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET

(1) To remove the XPDR top antenna, do as follows: (Figure 401)

(a) Disconnect the coaxial connector (3) from the XPDR top 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 XPDR top antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a workstand (external top fuselage) to get access to the XPDR top 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.

(d) Use a spatula to remove the sealant from around the XPDR top 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 XPDR top antenna (2) and the aircraft skin to make the separation.

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

(i) Remove the XPDR top antenna (2).

(2) To remove the XPDR bottom antenna, do as follows: (Figure 403)

(a) Disconnect the coaxial connector (1) from the XPDR bottom 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 XPDR bottom antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a spatula to remove the sealant from around the XPDR bottom antenna (2) and aircraft skin.

(d) Remove the sealant used as a protection of screws (3).

(e) Remove the screws (3).

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.

(f) Use a spatula between the baseplate of the XPDR bottom antenna (2) and the aircraft skin to make the separation.

(g) Carefully pull the XPDR bottom antenna (2) away from the fuselage.

(h) Remove the XPDR bottom antenna (2).

K. Removal

SUBTASK 020-003-A

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET

(1) To remove the XPDR top antenna, do as follows: (Figure 402)

(a) Disconnect the coaxial connector (4) from the XPDR top 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 XPDR top antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a workstand (external top fuselage) to get access to the XPDR top 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.

(d) Use a spatula to remove the sealant from the contour of the XPDR top 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 XPDR top antenna (2) and the aircraft skin to make the separation.

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

(i) Remove the XPDR top 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 XPDR top antenna (2).

(2) To remove the XPDR bottom antenna, do as follows: (Figure 404)

(a) Disconnect the coaxial connector (1) from the XPDR bottom 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 XPDR bottom antenna (2), on the inner surface of the fuselage skin hole.

(c) Use a spatula to remove the sealant from the contour of the XPDR bottom antenna (2) and aircraft skin.

(d) Remove the sealant used as a protection of screws (3).

(e) Remove the screws (3).

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.

(f) Use a spatula between the baseplate of the XPDR bottom antenna (2) and the aircraft skin to make the separation.

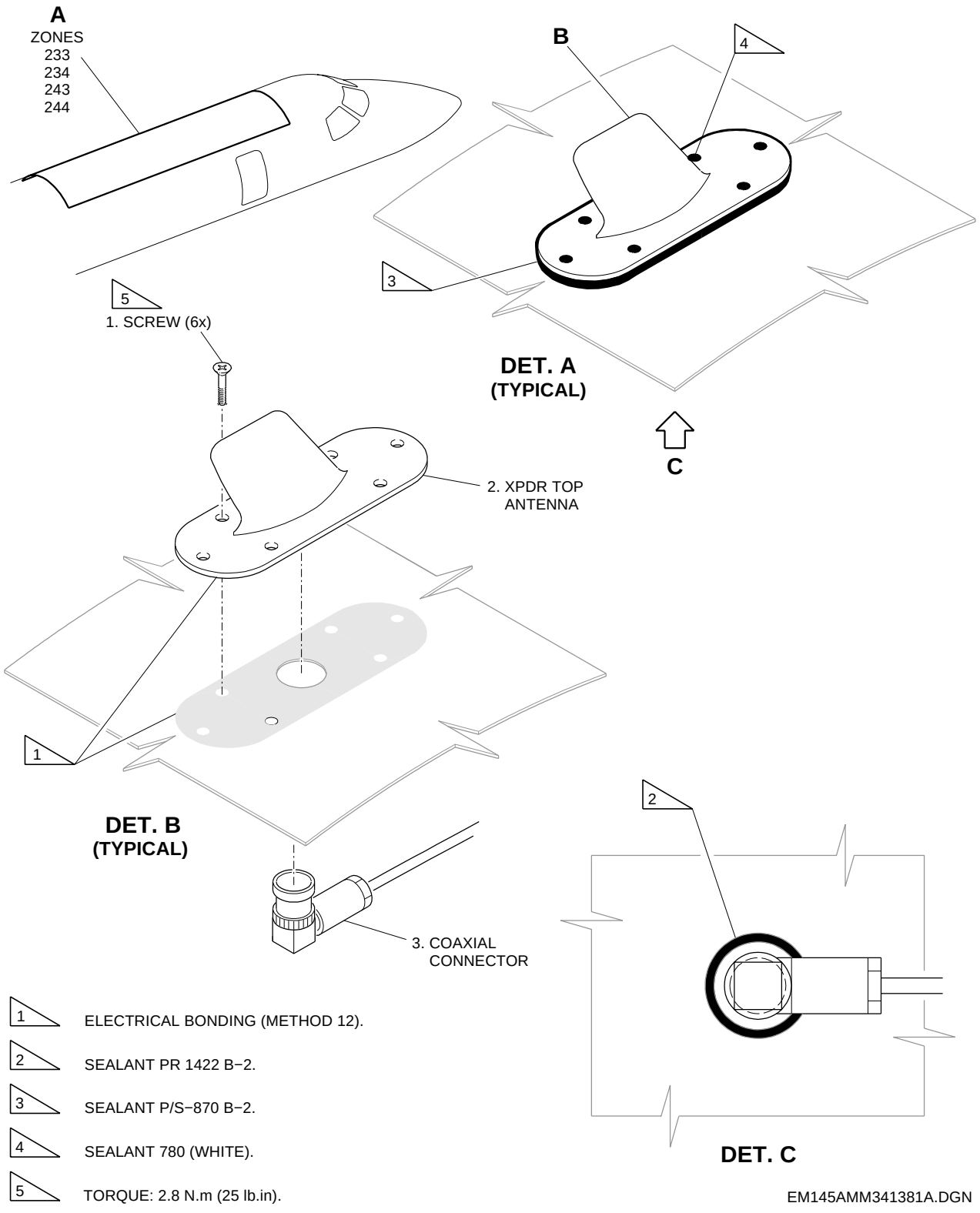
(g) Carefully pull the XPDR bottom antenna (2) away from the fuselage.

(h) Remove the XPDR bottom antenna (2).

(i) Remove and discard the gel conductive gasket (4).

(j) Use a spatula to remove the sealant from around the connector of the XPDR bottom antenna (2).

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



1 ELECTRICAL BONDING (METHOD 12).

2 SEALANT PR 1422 B−2.

3 SEALANT P/S−870 B−2.

4 SEALANT 780 (WHITE).

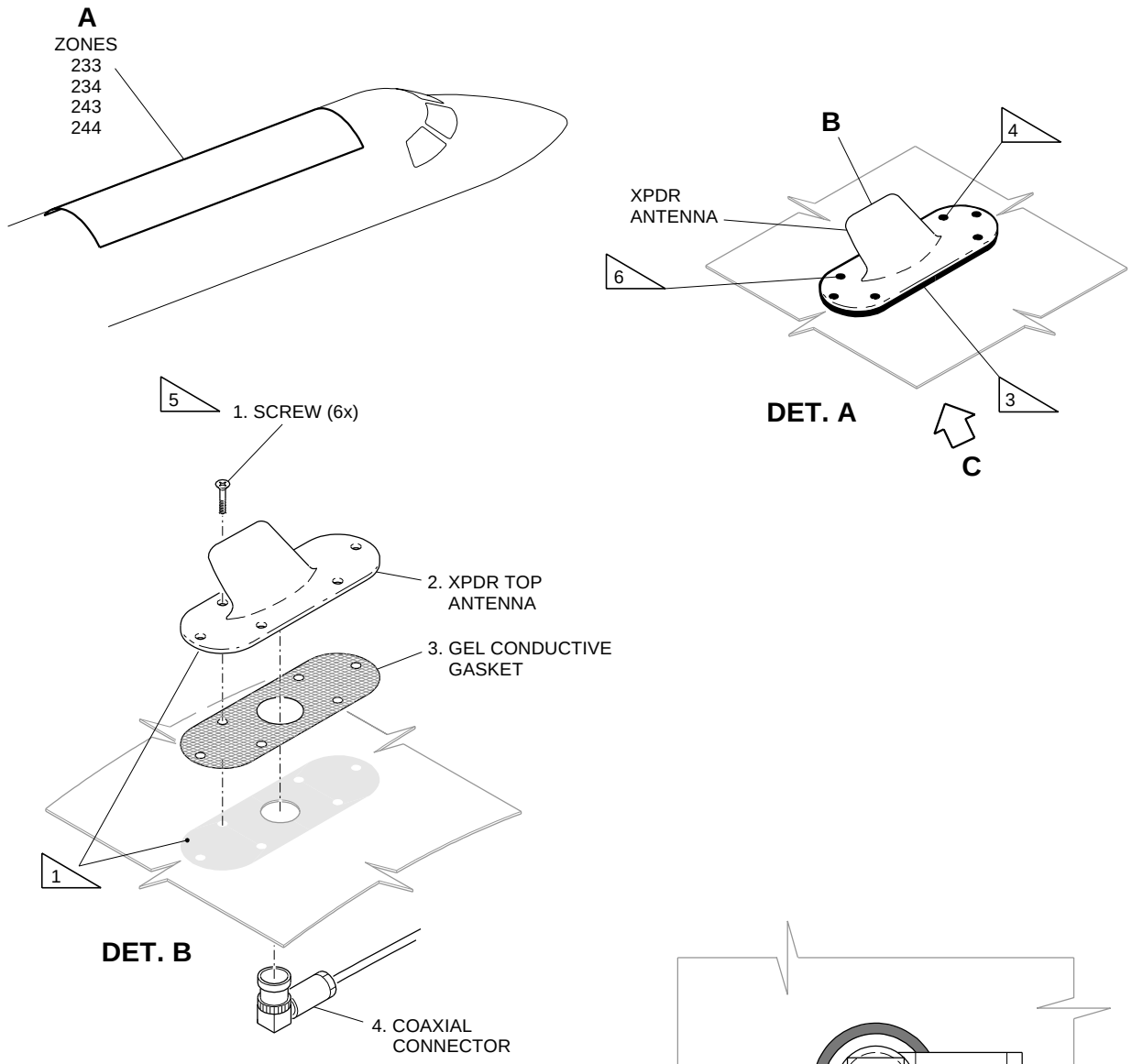
5 TORQUE: 2.8 N.m (25 lb.in).

EM145AMM341381A.DGN

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET

XPDR Top Antenna - Removal/Installation

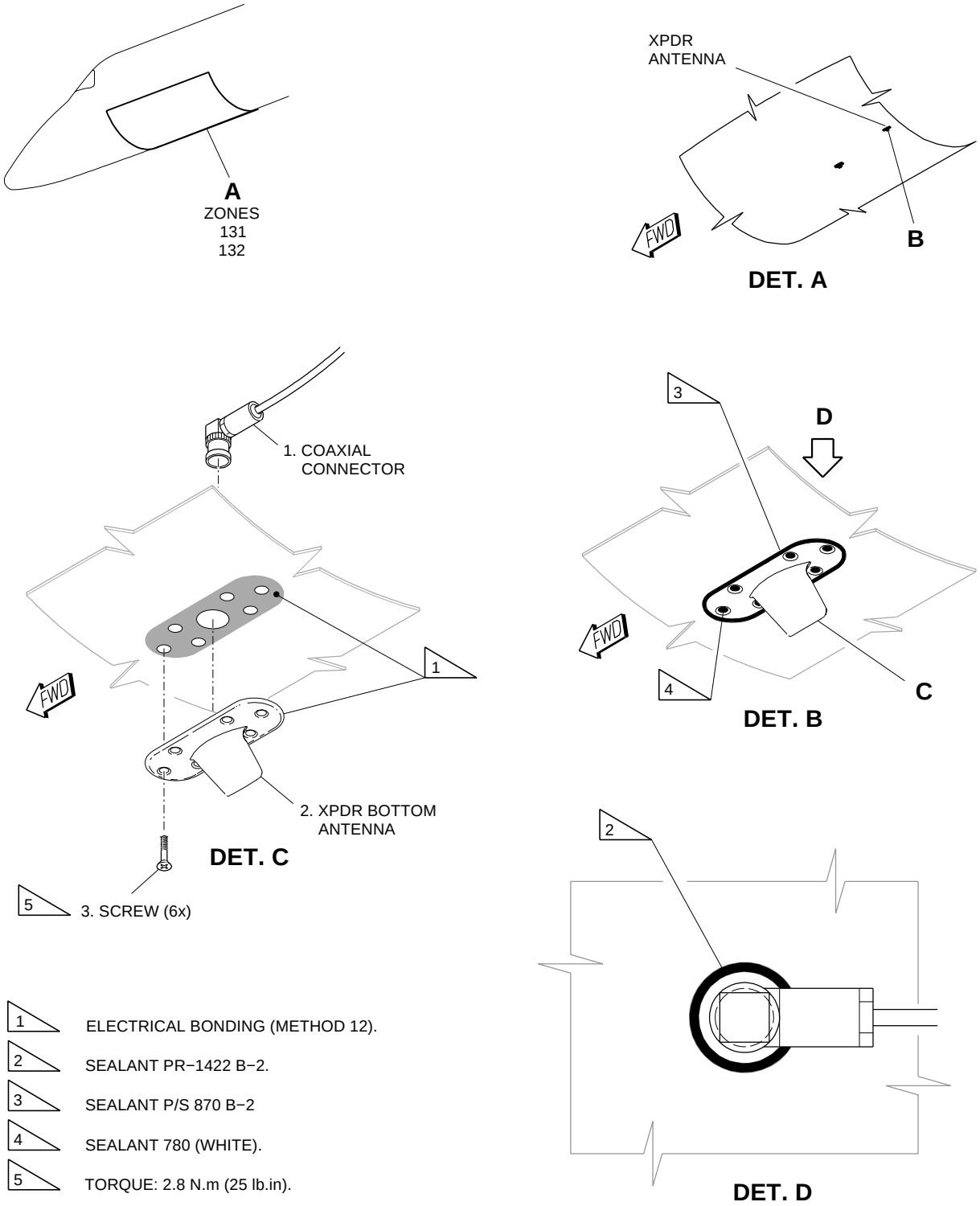
Figure 402



1. ELECTRICAL BONDING (METHOD 12).
2. SEALANT PR1422 B−2.
3. SEALANT P/S 870 B−2
4. SEALANT 780 (WHITE).
5. TORQUE: 2.8 N.m (25 lb.in).
6. PAINT ECL−G−46 / PC−233 / TR109.

EM145AMM341390A.DGN

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET
XPDR Bottom Antenna - Removal/Installation
Figure 403



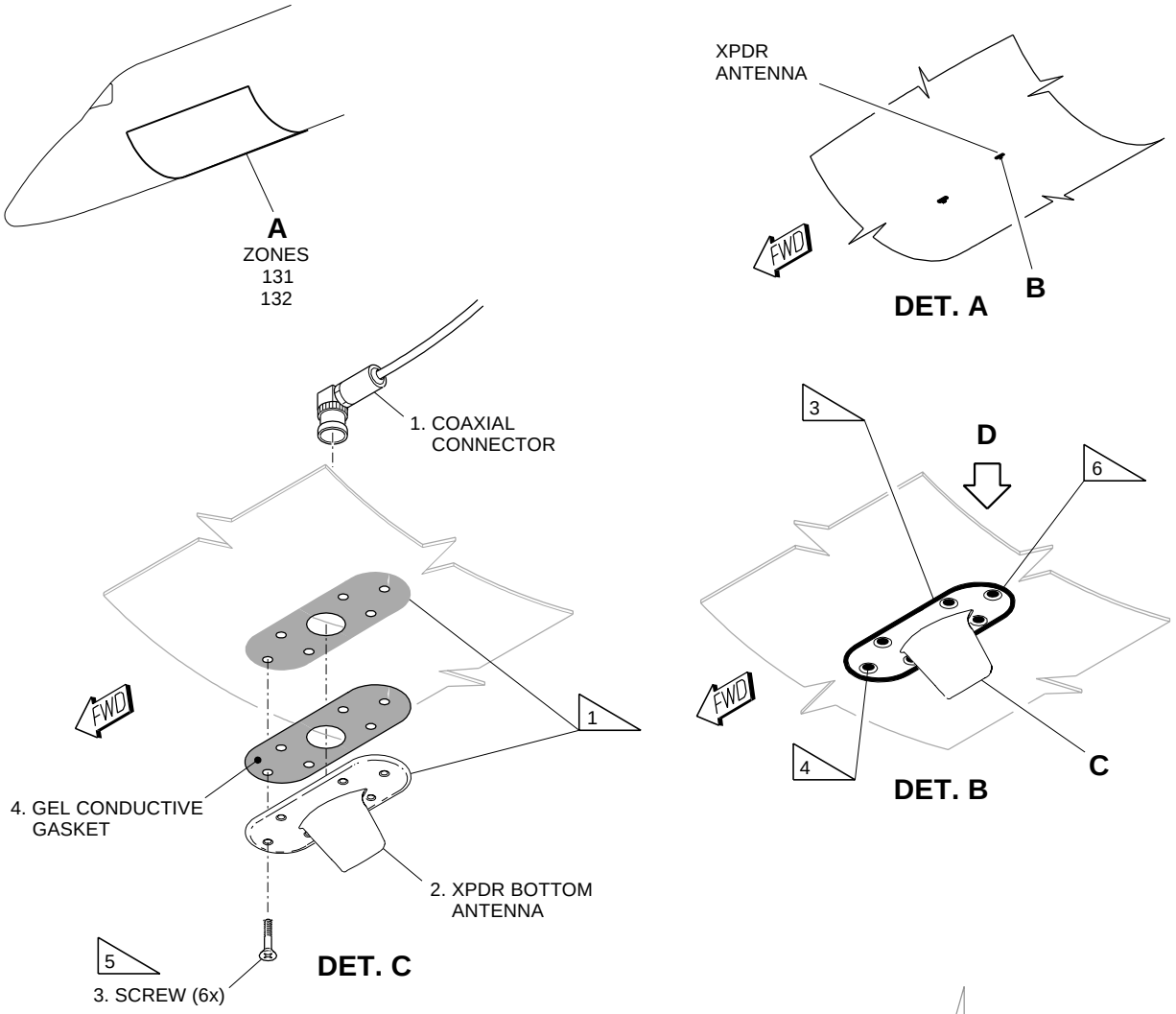
1 ELECTRICAL BONDING (METHOD 12).
2 SEALANT PR−1422 B−2.
3 SEALANT P/S 870 B−2
4 SEALANT 780 (WHITE).
5 TORQUE: 2.8 N.m (25 lb.in).

EM145AMM341388A.DGN

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET

XPDR Bottom Antenna - Removal/Installation

Figure 404



1. ELECTRICAL BONDING (METHOD 12).
2. SEALANT PR−1422 B−2.
3. SEALANT P/S 870 B−2.
4. SEALANT 780 (WHITE).
5. TORQUE: 2.8 N.m (25 lb.in).
6. PAINT ECL−G−46 / PC−233 / TR109.

EM145AMM341389A.DGN

TASK 34-52-02-400-801-A
EFFECTIVITY: ALL

3. MODE S XPDR TOP/BOTTOM ANTENNAS - INSTALLATION

A. General

(1) This task gives the procedure to install the XPDR top/bottom antennas.

B. References

REFERENCE	*DESIGNATION*
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 25-22-04-400-801-A/400	-
AMM TASK 34-52-00-700-802-A/500	TRANSPONDER SYSTEM - OPERATIONAL TEST
AMM TASK 34-52-02-000-801-A/400	MODE S XPDR TOP/BOTTOM ANTENNAS - REMOVAL
AMM TASK 53-01-02-400-801-A/400	-
CPM 51-21-06	-
IPC 34-52-02	MODE S XPDR TOP/BOTTOM ANTENNAS
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
131, 132	231GF	Area below passenger cabin floor
233, 234	233BLC	Passenger cabin ceiling
243, 244	243BLC, 243CLC	Passenger cabin ceiling

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	Workstand - Upper Skin Top Fuselage	To get access to the XPDR top antenna	AR
Commercially available	Clean dry cloth	To clean the antenna base	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 B-2 Polysulfide Sealant	AR
ECL-G-46/PC-233/TR109 (MEP 10-069)	High Polyurethane White Paint	AR

G. Expendable Parts

ITEM	*IPC REFERENCE (VENDOR REFERENCE)*	*QTY*
Gel Conductive Gasket	IPC 34-52-02	2

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Upper and lower forward fuselage

I. Installation

SUBTASK 420-002-A

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT DO NOT HAVE GEL CONDUCTIVE GASKET

(1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task (AMM TASK 34-52-02-000-801-A/400).

(2) To install the XPDR top antenna, do as follows: (Figure 401)

(a) Use a workstand (external top fuselage) to get access to the installation position of the XPDR top antenna (2).

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.

(b) 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.

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

(d) Put the XPDR top antenna (2) in installation position.

(e) Install the screws (1).

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

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

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

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

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

(k) Connect the coaxial connector (3) to the XPDR top antenna (2).

(3) To install the XPDR bottom antenna, do as follows: (Figure 403)

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 XPDR bottom antenna (2) in its installation position.

(d) Install the screws (3).

(e) Use a torque wrench to torque the screws (3) to 2.8 N.m. (25 lb.in) in a crisscross pattern.

(f) Do the bonding test between the connector of the XPDR bottom 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 XPDR bottom antenna (2), on the skin (SRM 51-20-01).

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

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

(j) Connect the coaxial connector (1) to the XPDR bottom antenna (2).

J. Installation

SUBTASK 420-003-A

EFFECTIVITY: AIRCRAFT WITH ANTENNAS THAT HAVE GEL CONDUCTIVE GASKET

(1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task (AMM TASK 34-52-02-000-801-A/400).

(2) To install the XPDR top antenna, do as follows: (Figure 402)

(a) Use a workstand (external top fuselage) to get access to the installation position of the XPDR top antenna (2).

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.

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

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

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

(e) 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.

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

(g) Put the XPDR top antenna (2) in installation position.

(h) Install the screws (1).

(i) Use a torque wrench to torque the screws (1) to 2.8 N.m. (25 lb.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.

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

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

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

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

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

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

(p) Connect the coaxial connector (4) to the XPDR top antenna (2).

(3) To install the XPDR bottom antenna, do as follows: (Figure 404)

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 the gel conductive gasket (4).

(c) Carefully align the gel conductive gasket (4) with the screw holes and connector, and install it to the base of the XPDR bottom antenna (2).

(d) Carefully remove the protective release film identified with "AIRCRAFT SIDE" from the gel conductive gasket (4).

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 XPDR bottom antenna (2) in installation position.

(g) Install the screws (3).

(h) Use a torque wrench to torque the screws (3) to 2.8 N.m. (25 lb.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 (4) from around XPDR top antenna (2) and from the aircraft skin.

(j) Do the bonding test between the connector of the XPDR bottom 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 XPDR bottom 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 XPDR antenna base, on the inner surface of the fuselage skin (SRM 51-20-01).

(o) Connect the coaxial connector (1) to the XPDR bottom antenna (2).

K. Follow-on

SUBTASK 842-002-A

(1) Remove all tools, equipment and unwanted materials from the work area.

(2) For the XPDR top antenna:

(a) (EMB-145() MODELS AND EMB-135KE/KL MODELS) Install ceiling panel 233BLC (AMM TASK 25-22-04-400-801-A/400).

(b) (EMB-145() MODELS WITH ANTENNA INSTALLED BETWEEN FRAMES 30 AND 31) Install ceiling panel 243CLC (AMM TASK 25-22-04-400-801-A/400).

(c) (EMB-135LR/ER MODELS) Install ceiling panel 243BLC (AMM TASK 25-22-04-400-801-A/400).

(d) Move the workstand (external top fuselage) away from the aircraft.

(3) For the XPDR bottom antenna:

(a) (EMB-145() MODELS AND EMB-135LR/ER/KE/KL MODELS) Install floor panel 231GF (AMM TASK 53-01-02-400-801-A/400).

(4) On the circuit breaker panel, close the XPDR 1 and XPDR 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.

(5) Do the Mode S Transponder Operational Test (AMM TASK 34-52-00-700-802-A/500).