PROXIMITY SENSOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

A. This section gives the procedures to remove and install the Proximity Sensor.

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*
27-63-04-000-801-A	PROXIMITY SENSOR - REMOVAL	ALL
27-63-04-400-801-A	PROXIMITY SENSOR - INSTALLATION	ALL

TASK 27-63-04-000-801-A
EFFECTIVITY: ALL

2. PROXIMITY SENSOR - REMOVAL

A. General

(1) This task gives the procedures to remove the Proximity Sensor.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-30-00/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
S.B.145-27-0123	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
5712		Wing trailing edge
5713		Wing trailing edge
6712		Wing trailing edge
6713		Wing trailing edge

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Heat Gun	To supply hot air over the heat-shrinkable boot	1

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
P/N ATUM-32/8-0 (RAYCHEM MENLO) - or similar	Heat-Shrinkable Boot	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Wing trailing edge

I. Preparation

SUBTASK 841-002-A

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

(2) Do not do other tasks on the Ground Spoiler, Speed Brake and Flap System.

(3) Energize the aircraft with the External DC Power Supply (AMM TASK 20-40-01-860-801-A/200).

(4) Set the flaps to the 45-degree position.

(5) On the Circuit Breaker Panel, open the FLAP 1, FLAP 2, SPEED BRAKE, GND SPLR INBD/OUTBD and SPOILER IND circuit breakers and attach a DO-NOT-CLOSE tag to them.

(6) Open the lower shroud of the inboard flap (AMM MPP 06-30-00/100).

J. Removal

SUBTASK 020-002-A

(1) For aircraft PRE-MOD. S.B.145-27-0123, do as follows. Refer to Figure 401.

(a) Cut and discard the heat-shrinkable boots (4). .

(b) Cut the lockwire (7).

(c) Disconnect the electrical connector (5).

(d) Loosen the nut (6) to remove the proximity sensor (3) from the bracket (2).

(e) Remove the proximity sensor (3).

(2) For aircraft POST-MOD. S.B.145-27-0123, do as follows. Refer to Figure 402.

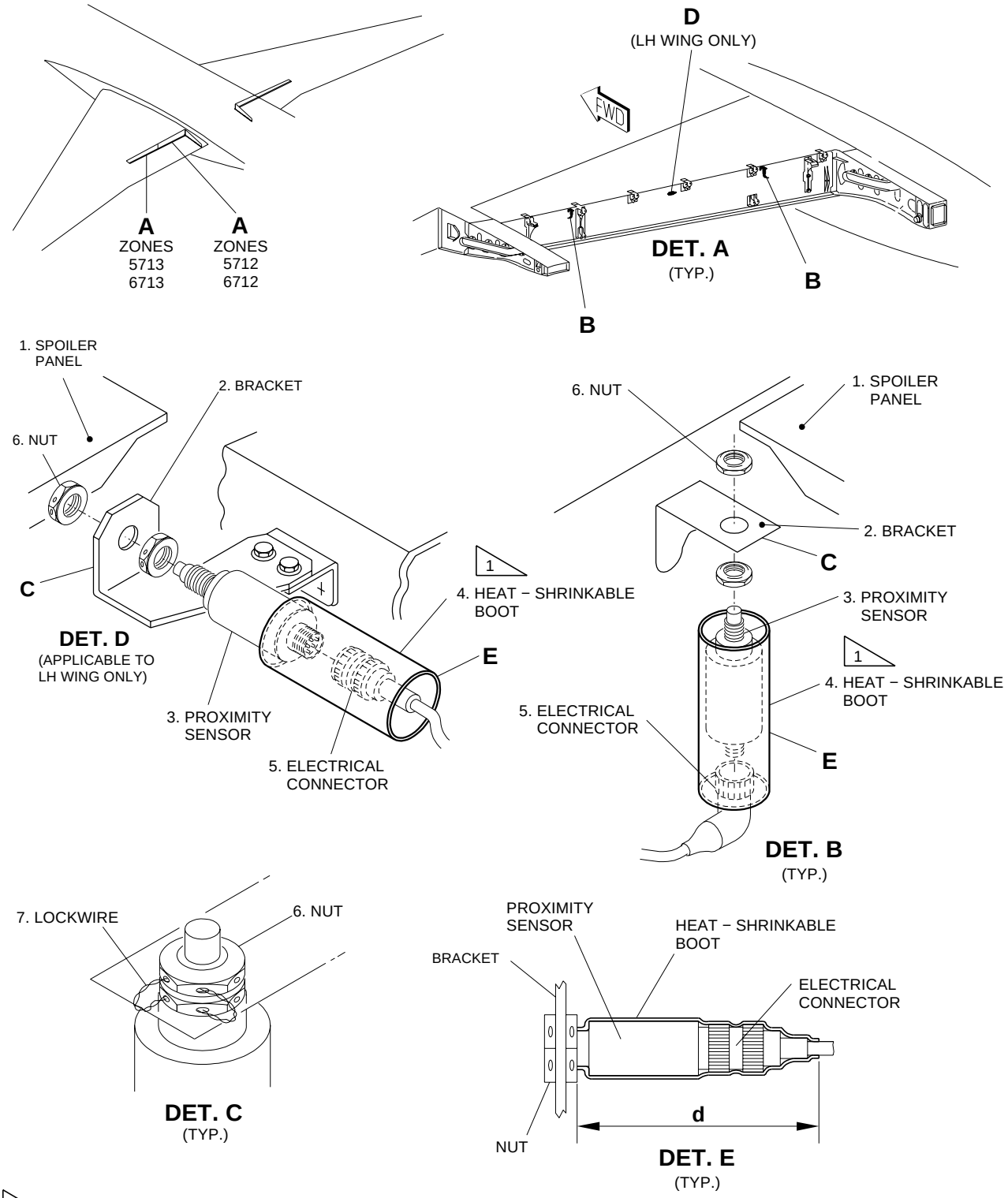
(a) Cut the lockwire (7).

(b) Disconnect the electrical connector (4) from the proximity sensor (3).

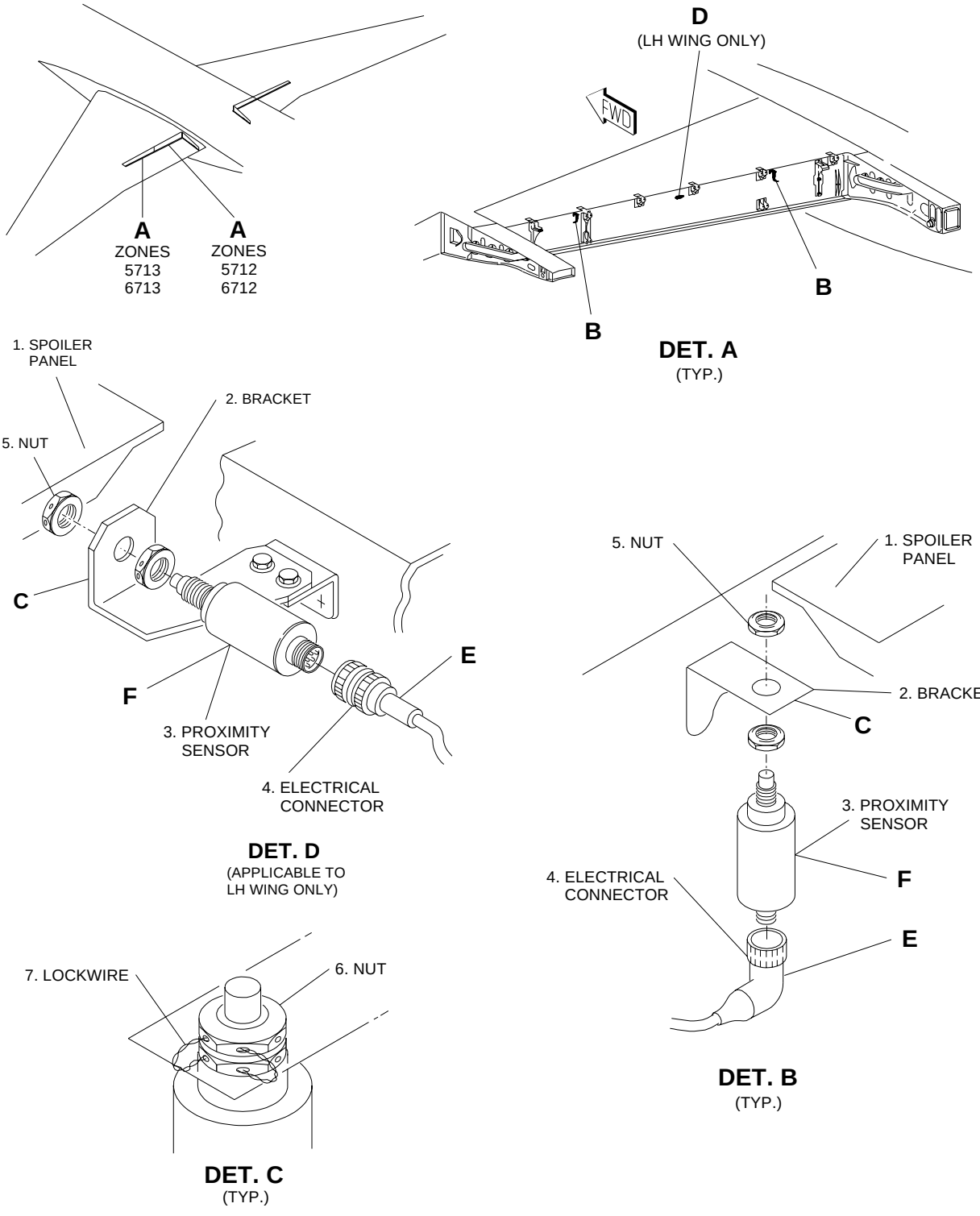
(c) Loosen the nut (6) to remove the proximity sensor (3) from the bracket (2).

(d) Remove the proximity sensor (3).

EFFECTIVITY: AIRCRAFT PRE-MOD. S.B. 145-27-0123
Proximity Sensor - Removal/Installation
Figure 401



EFFECTIVITY: aircraft POST-MOD. S.B. 145-27-0123
Proximity Sensor - Removal/Installation
Figure 402 - Sheet 1



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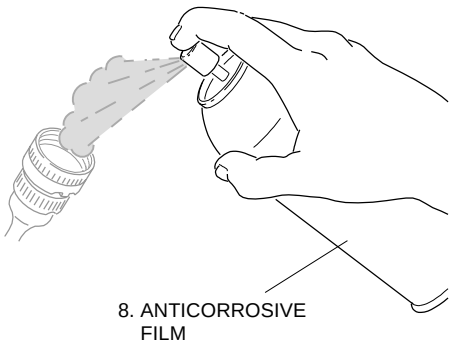
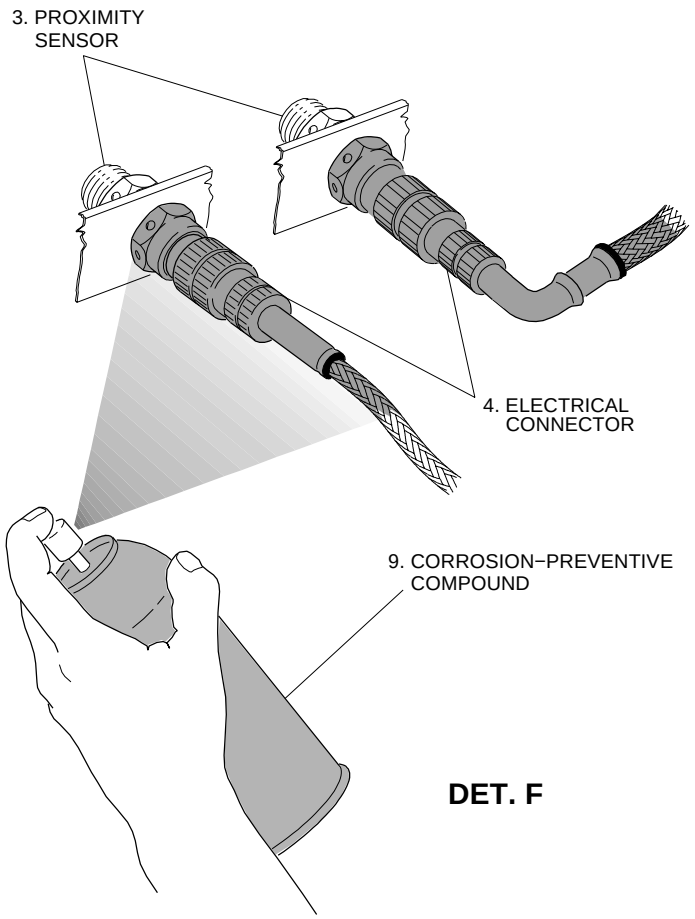
EFFECTIVITY: aircraft POST-MOD. S.B. 145-27-0123
Proximity Sensor - Removal/Installation
Figure 402 - Sheet 2



DET. E



DET. F

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TASK 27-63-04-400-801-A
EFFECTIVITY: ALL

3. PROXIMITY SENSOR - INSTALLATION

A. General

(1) This task gives the procedures to install the Proximity Sensor.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-30-00/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 27-63-01-700-801-A/500	SPOILER SYSTEM - OPERATIONAL CHECK
AMM TASK 27-63-01-700-802-A/500	SPOILER SURFACE - ADJUSTMENT
S.B.145-27-0123	-
SWPM 20-50-00	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
5712		Wing trailing edge
5713		Wing trailing edge
6712		Wing trailing edge
6713		Wing trailing edge

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
MS20995C32	Lockwire	As necessary

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Wing trailing edge

I. Installation

SUBTASK 420-002-A

(1) For aircraft PRE-MOD. S.B.145-27-0123, do as follows. Refer to (Figure 401).

(a) Remove one nut (6) of the proximity sensor (3).

(b) Put the proximity sensor (3) on the bracket (2).

NOTE: The torque on the nut of the proximity sensor will be applied on the (AMM TASK 27-63-01-700-802-A/500).

(c) Put the nut (6) into the sensor and tighten it manually.

(d) Adjust the proximity sensor, refer to AMM TASK 27-63-01-700-802-A/500.

NOTE: It is not necessary to measure the gap from the speed brake and ground spoiler to the rubbing strips of the inboard flap and to adjust the rod end of the actuator.

(e) Lockwire the nut (6) of the proximity sensor (3) (AMM TASK 27-63-01-700-802-A/500).

(f) Put the heat-shrinkable boot (4) over the electrical connector (5). Cut heat-shrinkable boot to dimension indicated in the DET. E, Figure 401.

(g) Connect the electrical connector (5).

(h) With a heating gun, heat up the shrinkable boot (4) over the proximity sensor/electrical connector. Star heading from the proximity switch support to the harness.

NOTE: Use a thermal gun with an operation temperature range of 90°C - 150°C (194°F - 302°F).

(2) For aircraft POST-MOD. 145-27-0123, do as follows. Refer to (Figure 402).

(a) Remove one nut (6) of the proximity sensor (3).

(b) Put the proximity sensor (3) on the bracket (2).

NOTE: The torque on the nut of the proximity sensor will be applied on the (AMM TASK 27-63-01-700-802-A/500).

(c) Put the nut (6) into the sensor and tighten it manually.

(d) Adjust the proximity sensor, refer to AMM TASK 27-63-01-700-802-A/500.

NOTE: It is not necessary to measure the gap from the speed brake and ground spoiler to the rubbing strips of the inboard flap and to adjust the rod end of the actuator.

(e) Lockwire the nut (6) of the proximity sensor (3) (AMM TASK 27-63-01-700-802-A/500).

(f) Before the connection of the connector (4) with proximity switch (3), apply the Lektro-Tech SuperCorr-A (8) to the internal side of the electrical connector and proximity switch pin surfaces.

1 For aerosol applications, apply two coats, if necessary. Wait 30 seconds after you apply the first coat to apply the second one.

2 Apply the compound for a uniform coverage of the connector and pins from a distance of 25 - 20 cm (10 - 12 in).

NOTE: There is not a definition for the exact amount of spray to be applied, but the product should cover the contacts without excess spray. Excess spray does not cause any damage to the connector contacts and/or rubber, but can cause dirt accumulation.

3 You can remove excess spray with acetone or MEK.

CAUTION: MAKE SURE THAT THE CONNECTION BETWEEN PLUG AND RECEPTACLE HAVE A GOOD MATING. IT IS NECESSARY TO MAKE SURE THAT THE PLUG COMPLETELY COVERS THE RED STRIPE ON THE RECEPTACLE BODY. IF YOU DO NOT OBEY THIS PROCEDURE, DAMAGE AND/OR CORROSION TO THE PROXIMITY SWITCH CAN OCCUR.

(g) Connect the electrical connector (4) to proximity sensor (3). Refer to SWPM 20-50-00.

WARNING: DO NOT LET CORROSION-PREVENTIVE COMPOUND PN D-5026NS (MIL-PRF-81309) GET IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE CORROSION-PREVENTIVE COMPOUND. KEEP IT AWAY FROM SPARKS, FLAME AND HEAT. IT IS A POISONOUS AND FLAMMABLE SUBSTANCE

CAUTION: DO NOT APPLY THE CORROSION COMPOUND PN D-5026NS (MIL-PRF-81309) TO THE INTERNAL SIDE OF THE ELECTRICAL CONNECTOR AND PROXIMITY SWITCH CONNECTOR (PINS). IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE PARTS CAN OCCUR.

(h) Apply corrosion-preventive compound (9) PN D-5026NS (MIL-PRF-81309) on the external side of the connected electrical connectors (4).

(i) Let the corrosion-preventive compound dry for ten minutes.

J. Follow-on

SUBTASK 842-002-A

(1) Close the lower shroud of the inboard flap (AMM MPP 06-30-00/100).

(2) On the Circuit Breaker Panel, close the FLAP 1, FLAP 2, SPEED BRAKE, GND SPLR INBD/OUTBD and SPOILER IND circuit breakers and remove the DO-NOT-CLOSE tag from them.

(3) Set the flaps to the 0-degree position.

(4) Operate the spoiler system to bleed the air bubbles from the lines.

(5) Do the operational check of the spoiler system (AMM TASK 27-63-01-700-801-A/500).

(6) De-energize the aircraft (AMM TASK 20-40-01-860-801-A/200).