**TAT CURRENT SENSOR - REMOVAL/INSTALLATION**

*EFFECTIVITY:  ALL*

1.    General

A.    This section gives the procedures to remove and install the total-air-temperature (TAT) CURRENT SENSOR.

B.    These procedures are applicable to the TAT-1 CURRENT SENSOR and TAT-2 CURRENT SENSOR.

C.    The TAT-1 CURRENT SENSOR is installed on the LH relay support and the TAT-2 CURRENT SENSOR is installed on the RH relay support.

D.    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 |
|---|---|---|
| 30-33-01-000-801-A | TAT CURRENT SENSOR - REMOVAL | ALL |
| 30-33-01-400-801-A | TAT CURRENT SENSOR - INSTALLATION | ALL |

TASK 30-33-01-000-801-A
*EFFECTIVITY:  ALL*

2.  <u>TAT CURRENT SENSOR - REMOVAL</u>

    A.  General

        (1)  This procedure gives the instructions to remove the TAT current sensor.

    B.  References

| REFERENCE | DESIGNATION |
|---|---|
| AMM MPP 06-41-03/100 | - COMPONENT LOCATION |
| AMM SDS 23-51-00/1 | |
| AMM SDS 24-60-00/1 | |

    C.  Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|---|---|---|
| 223 | 223ELW | LH sidewall lining |
| 224 | 224ERW | RH sidewall lining |

    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 | LH or RH sidewall lining |

    I.  Preparation

    *SUBTASK 841-002-A*

        (1)  Open the HEATING/TAT 1 circuit breaker and attach a DO-NOT-CLOSE tag to it (LH electrical-power control/distribution box (AMM SDS 24-60-00/1)).

        (2)  Open the HEATING/TAT 2 circuit breaker and attach a DO-NOT-CLOSE tag to it (RH electrical-power control/distribution box (AMM SDS 24-60-00/1)).

        (3)  Remove access panel 223ELW or 224ERW, as applicable ( AMM MPP 06-41-03/100).

        (4)  Carefully remove access panel 223ELW or 224ERW, as applicable ( AMM MPP 06-41-03/100).

(5) To remove the Pilot/Copilot Audio Jack panel (AMM SDS 23-51-00/1), do as follows:

    (a) Unlock the two Dzus fasteners that attach the pilot/copilot Audio Jack panel, as applicable.

    (b) Carefully pull the Pilot/Copilot Audio Jack panel and pass it through the hole in the access panel.

J.    Removal (Figure 401)

    *SUBTASK 020-002-A*
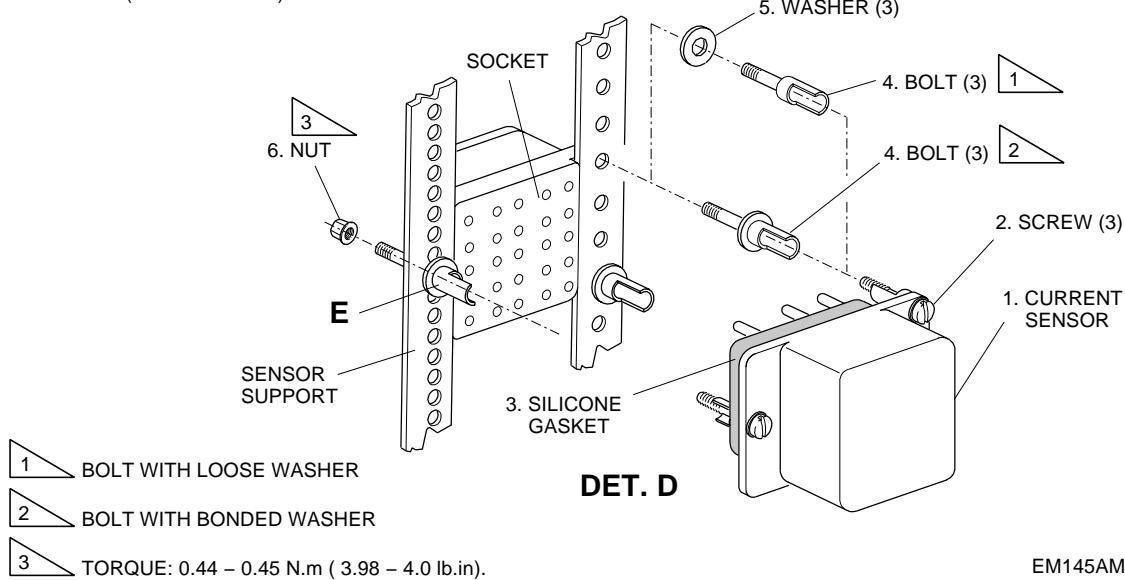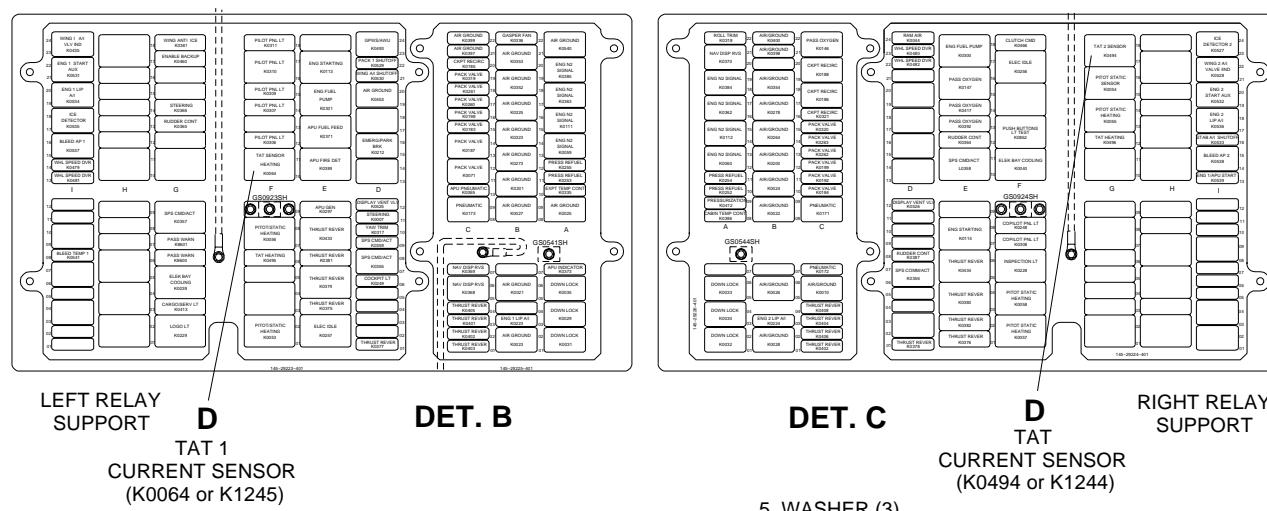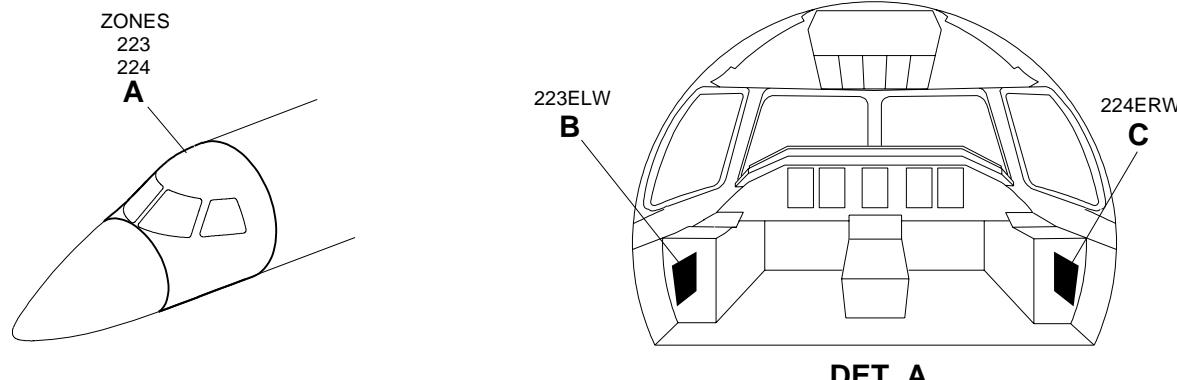
    <u>CAUTION:</u> WHEN YOU REMOVE THESE COMPONENTS, BE CAREFUL NOT TO LET THEM FALL INTO THE AIRFRAME INTERIOR AND CAUSE DAMAGE.

    (1) For current sensor removal, do as follows:

        (a) Loosen the three screws (2) (Figure 401).

        (b) Remove the current sensor (1) (Figure 401).

    (2) For the socket removal, do as follows:

        (a) Remove the LH relay support or the RH relay support, as applicable (AMM SDS 24-60-00/1).

        (b) Remove the three nuts (6) (Figure 401).

        (c) Remove the socket from the support (Figure 401).

*EFFECTIVITY: ALL*
TAT Current Sensor - Removal/Installation
Figure 401

ZONES
223
224
**A**

223ELW
**B**

224ERW
**C**

**DET. A**

LEFT RELAY
SUPPORT
**D**
TAT 1
CURRENT SENSOR
(K0064 or K1245)

**DET. B**

**DET. C**

**D**
TAT
CURRENT SENSOR
(K0494 or K1244)

RIGHT RELAY
SUPPORT

5. WASHER (3)

4. BOLT (3) △1

4. BOLT (3) △2

2. SCREW (3)

1. CURRENT
SENSOR

△3
6. NUT

SOCKET

**E**

SENSOR
SUPPORT

3. SILICONE
GASKET

**DET. D**

△1  BOLT WITH LOOSE WASHER

△2  BOLT WITH BONDED WASHER

△3  TORQUE: 0.44 – 0.45 N.m ( 3.98 – 4.0 lb.in).

EM145AMM300008D.DGN

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EMB-145 - AMM 1285

**30-33-01**

TASK 30-33-01-400-801-A
*EFFECTIVITY:  ALL*

3.   TAT CURRENT SENSOR - INSTALLATION

A.   General

(1)   This procedure gives the instructions to install the TAT current sensor.

B.   References

| REFERENCE | DESIGNATION |
|---|---|
| AMM MPP 06-41-03/100 | - COMPONENT LOCATION |
| AMM SDS 23-51-00/1 | |
| AMM SDS 24-60-00/1 | |
| AMM TASK 23-51-00-700-801-A/500 | AUDIO SYSTEM EMERGENCY MODE - OPERATIONAL CHECK |
| AMM TASK 23-51-00-700-802-A/500 | AUDIO SYSTEM - OPERATIONAL TEST |
| AMM TASK 30-31-00-700-801-A/500 | PITOT AND ANEMOMETRIC STATIC PORT HEATING - OPERATIONAL CHECK |
| AMM TASK 30-33-00-700-801-A/500 | TAT SENSOR HEATING - OPERATIONAL CHECK |

C.   Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|---|---|---|
| 223 | 223ELW | LH sidewall lining |
| 224 | 224ERW | RH sidewall lining |

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 | LH or RH sidewall lining |

I.   Installation (Figure 401)

*SUBTASK 420-002-A*

CAUTION: MAKE SURE THAT YOU INSTALL WASHERS ONLY TO THE BOLTS THAT DO NOT HAVE WASHER INSTALLED TO THEM.

(1) For the socket installation, do as follows:

 (a) Install the socket in the sensor support (Figure 401).

 (b) Install the bolt as applicable:

  <u>1</u> (Bolt with loose washer) Install the washers (5), bolts (4), and nuts (6) (Figure 401).

  <u>2</u> (Bolt with bonded washer) Install the bolts (4) and nuts (6) (Figure 401).

  <u>3</u> Install the LH relay support or the RH relay support back, as applicable (AMM SDS 24-60-00/1).

(2) For the current sensor installation, do as follows:

 (a) Install the current sensor (1) to its socket (Figure 401).

 (b) Tighten the three screws (2) to attach the current sensor (1) (Figure 401).

  <u>NOTE:</u> Make sure that there is no gap between the current sensor and its silicone gasket (3).

J. Follow-on

*SUBTASK 842-002-A*

(1) Carefully pass the Pilot/Copilot Audio Jack panel through the hole in the access panel, as applicable (AMM SDS 23-51-00/1).

(2) Install the Pilot/Copilot Audio Jack panel in position (AMM SDS 23-51-00/1).

(3) Attach the two Dzus fasteners to install the Pilot/Copilot Audio Jack panel (AMM SDS 23-51-00/1).

(4) Close the 223ELW or 224ERW access panel, as applicable ( AMM MPP 06-41-03/100).

(5) Close the HEATING/TAT 1 circuit breaker and remove the DO-NOT-CLOSE tag from it (on the LH electrical-power control/distribution box (AMM SDS 24-60-00/1)).

(6) Close the HEATING/TAT 2 circuit breaker and remove the DO-NOT-CLOSE tag from it (on the RH electrical-power control/distribution box (AMM SDS 24-60-00/1)).

(7) Do the Operational Check of the Pitot & Anemometric Static Port Heating ( AMM TASK 30-31-00-700-801-A/500).

(8) Do the operational check of the total-air-temperature(TAT) sensor heating ( AMM TASK 30-33-00-700-801-A/500).

(9) Do the Operational Check of AIRBORNE AUDIO SYSTEM ( AMM TASK 23-51-00-700-801-A/500 and AMM TASK 23-51-00-700-802-A/500).