LOW AIRSPEED AWARENESS SYSTEM - MAINTENANCE PRACTICES
Pneumatic Deice

1. General

A. This section gives the maintenance procedures for the Low Airspeed Awareness (LAA) system that is installed on airplanes with pneumatic anti-ice systems. The LAA system gives the crew warning indications if the airspeed goes below 110 KIAS, +5 or -5 KIAS.

B. Correct maintenance of the pitot-static system is essential for correct operation of the altimeter, vertical speed indicator, and airspeed indicator. Leaks, moisture, and obstructions in the pitot system will result in false airspeed indications. Static system malfunctions will affect indications of all three instruments. Cleanliness and correct installation are the principal rules for maintenance of the pitot-static system. The pitot tube and static port MUST be kept clean and clear of obstructions. When you replace pitot-static system components, use the minimum amount of antiseize compound on the male threads of both metal and plastic connections. Always avoid excess compound which might be able to enter the pitot-static system lines. Tighten connections firmly, but be very careful not to over tighten and distort fittings.

CAUTION: Except for the use of the system drains and alternate static source pressure valves, make sure to do a leak test after the static pressure system is opened or closed. Refer to Pitot System Inspection and Leak Test.

2. Low Airspeed Awareness Pressure System Switch Removal/Installation

A. Remove the Icing Low Airspeed Awareness System Pressure Switch (Refer to Figure 201).

(1) Disconnect the electrical connector.

(2) Identify, disconnect, and put a cap on the pitot line and the static line.

(3) Remove the two nuts and washers that attach the pressure switch to the mounting bracket.

(4) Remove the pressure switch.

(5) Remove the two unions.

B. Install the Icing Low Airspeed Awareness System (110 KIAS) Pressure Switch (Refer to Figure 201).

(1) Install the two unions on the switch with new packings.

(2) Put the pressure switch in the mounting bracket with the ports marked P and S correctly oriented, and install it with two washers and nuts.

(3) Identify the pitot line and static line, remove the caps, and connect the pitot line and static line to the ports marked P and S, respectively.

(4) Connect the electrical connector to the pressure switch.

(5) Do the operational test. Refer to Low Airspeed Awareness System (Pneumatic De-Icing) - Adjustment/Test.

Figure 201 : Sheet 1 : LAA System Installation