

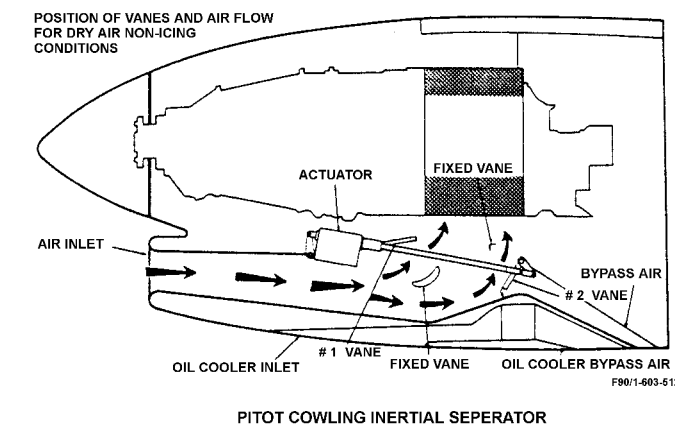
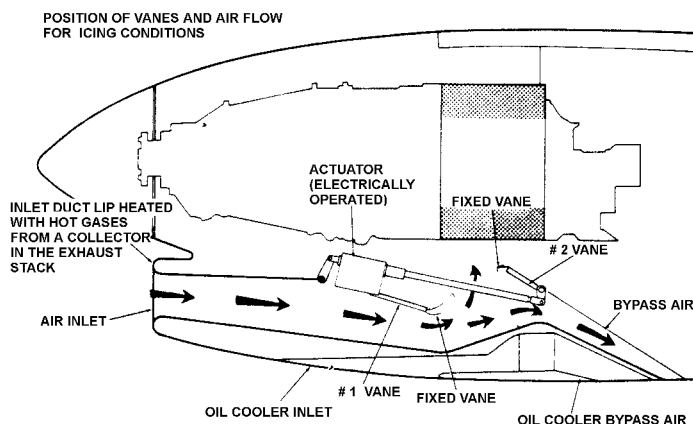
PITOT COWLING ENGINE AIR INLET

The engine air inlets are heated with hot gases from the exhaust stacks to prevent the formation of ice and the consequent effect on the airflow.

ENGINE ANTI-ICE SYSTEM

An inertial separation system is built into each engine air inlet to prevent moisture particles from entering the engine inlet plenum during icing conditions. This is done by a turn in the airstream to the engine, causing the moisture particles to continue on, undeflected, because of their greater momentum, and to be discharged overboard.

During normal operation, moveable vanes direct the total flow of air through the engine. For cold weather operation (41°F / + 5°C or below) in visible moisture, the vane positions are changed (see illustration) in order to initially remove the moisture. The anti-ice vanes are controlled by switches



PITOT COWLING INERTIAL SEPARATOR

OIL-TO-FUEL HEAT EXCHANGER

An oil-to-fuel heat exchanger, located on the engine accessory case, operates continuously and controls temperature automatically to heat the fuel to prevent freezing of any water in the fuel. Under extreme conditions additional protection may be required as given in Section 2, LIMITATIONS.

FUEL CONTROL HEAT

Each fuel control's compressor discharge air line is protected against ice by electrically heated jackets. Cams on the CONDITION levers activate switches that control the electric power to the air line heaters. Fuel control heat is "ON" for all flight operations when the condition levers are moved out of the fuel cutoff range.

located on the pilot's left subpanel. The switches are placarded ENGINE ANTI-ICE - LEFT - RIGHT - ON - OFF - ACTUATORS - STANDBY - MAIN. Vane position during operation is indicated by a slight decrease in torque with switches ON. In addition, the actuators have dual motors to provide a redundant system. The ACTUATORS switch allows the selection of either MAIN or STANDBY actuator motor.

The vanes have only two positions, there are no intermediate positions.

The system is monitored by L and R ENG ANTI-ICE (green) and L and R ENG ICE FAIL (amber) annunciators. Illumination of the L or R ENG ANTI-ICE (green) annunciator indicates that the system is actuated. Illumination of the L or R ENG ICE FAIL (amber) annunciator indicates that the system did not operate to the desired position. Immediate illumination of the L or R ENG ICE FAIL (amber) annunciator indicates loss of electrical power, whereas delayed illumination indicates an inoperative actuator.