

weapons bay. The air induction control system actuators are cooled by the landing gear and drag chute compartment ethylene glycol/water cooling system. (See figure 4-4.) Caution lights and indicators in the crew compartment indicate any system malfunction or abnormal operations.

AIR INDUCTION CONTROL SYSTEM CONTROLS AND INDICATORS - AIRPLANE AF62-001.

AIR INDUCTION CONTROL SYSTEM PACKAGE POWER SWITCH.

The two-position air induction control system power switch (21, figure 1-9) on the copilot's console receives power from the right primary ac and essential ac busses. The switch is mechanically latched at ON and must be pulled out before it can be moved. Also a spring-loaded guard must be raised to permit moving the switch out of ON. When the switch is ON, power is supplied to the cooled components of the air induction control system. Moving the switch to OFF turns off the cooled components and protects the components from damage in the event of cooling system failure. The switch should be left at ON at all times except when the AICS coolant caution light comes on.

NOTE

The air induction control system package power switch must be at ON 25 minutes prior to manual or automatic operation of the air induction control system.

DUCT PERFORMANCE SWITCH.

The two-position duct performance switch (27, figure 1-9), on the copilot's console, is used to provide inlet stability during maneuvering flight. The switch should be at NORM while manually controlling the inlets, or during stable flight when the inlets are controlled automatically. If maneuvering flight is anticipated and the inlets are being controlled automatically, the switch should be moved to LOW. This lowers inlet efficiency by increasing the throat width slightly. The switch should be returned to NORM after stable flight has resumed. The duct performance switch, which receives power from the

right primary ac bus, is latched mechanically at its LOW position and must be pulled out before it can be moved to NORM.

THROAT MACH SCHEDULE MODE SWITCHES.

The two throat Mach schedule mode switches (1 and 4, figure 1-10), one for each inlet, are on the copilot's control pedestal and receive power from the right primary ac bus. The three-position switches are mechanically latched at MAN and OFF and must be pulled out before they can be moved. Moving the switches to AUTO provides automatic control and hydraulic operation of the respective inlet throat panels. Moving the switches to MAN permits manual control of the panels with a manual control wheel for each inlet. Moving the switches to OFF locks the master cylinder to prevent erratic operation and also provide an anchor point for the standby system linkage. The OFF position is used whenever the standby system is required.

THROAT MACH SCHEDULE MANUAL CONTROL WHEELS.

The two throat Mach schedule manual control wheels (2 and 3, figure 1-10), one for each inlet, are on the copilot's control pedestal and receive power from the right primary ac bus. The rim of each wheel is marked with two sets of numbers. The outer set of numbers on each wheel are reference numbers that represent Mach. (For example, reference number 2.6 represents Mach 2.6.) The reference numbers increase as the wheels are rolled forward towards INCR. Rolling the wheels aft towards DCR decreases the reference numbers. The inner set of numbers on each wheel are restart numbers 0, 3, 6, and 9. The four restart numbers are used to restart the inlets at various speeds. During automatic operation of the air induction control system, both manual control wheels must be maintained at the proper restart number depending on the airplane Mach. This is referred to as "updating." The "updating" schedule is as follows: Between Mach 1.7 and 2.3, use restart number 0; between Mach 2.3 and 2.6, use restart number 3; between Mach 2.6 and 2.9, use restart number 6;