# DESCRIPTION
# AIRPLANE AND SYSTEMS


Engine and Accessories (Normally Aspirated) . . . . . 1
Engine and Accessories (Turbocharged) . . . . . 1
Fuel Injection . . . . . 3
Fuselage and Wing Structure . . . . . 3
Landing Gear . . . . . 4
Hydraulic System . . . . . 4
Control System and Surfaces . . . . . 6
Fuel System . . . . . 7
Electrical System . . . . . 8
Instrument Panel . . . . . 10
Heating and Ventilating System . . . . . 11
Finish . . . . . 12
Baggage Compartments . . . . . 12
Seats . . . . . 12
Cabin Features . . . . . 12
Radio Equipment . . . . . 13

# DESCRIPTION

## AIRPLANE AND SYSTEMS

### ENGINE AND ACCESSORIES (Normally Aspirated)

The Lycoming lO-540-C4B5 engines in the Aztec are rated at 250 HP at 2575 RPM. These engines have a compression ratio of 8.5:1 and use 91/96 minimum octane aviation fuel.

Both engines on the Aztec are equipped with a geared starter, alternator, vacuum pump, fuel injector, two magnetos, shielded ignition system, diaphragm fuel pump, propeller governor and an oil thermostat. The left engine is equipped with a hydraulic pump.

Engine mounts are of steel tubing construction and incorporate vibration absorbing Lord mounts. Engine cowls are cantilever structures, attached at the firewall. Side panels are quickly removable by means of quick release fasteners. The nose section is split for quick removal.

The exhaust system is a crossover type with exhaust gases directed outboard at the bottom of the nacelles in the area of the cowl flaps. The cowl flaps, located on the bottom of the engine nacelles provide additional cooling for ground operation or high temperature conditions. They are manually operated by push-pull controls located in the cabin, on the fuel control panel located between the front seats.

An efficient aluminum oil cooler is mounted on a rear baffle of each engine. Engine oil drainage is accomplished with quick oil drain valves located on the inboard rear corner of the engine crankcases.

The "Compact" propellers on the Aztec are Hartzell constant speed, full-feathering units which represent new concepts in basic design. They combine low weight with simplicity in design and are controlled entirely by use of the propeller control levers located in the center of the control quadrant. Feathering of the propellers is accomplished by moving the controls fully aft through the low RPM detent into the feathering position. Feathering takes approximately three to ten seconds. A propeller is unfeathered by moving the prop control ahead and engaging the starter. Loss of engine oil pressure will also result in propeller feathering.

### ENGINE AND ACCESSORIES (Turbocharged)

The Lycoming TIO-540-C1A engines in the Turbo-Aztec are rated at 250 HP at 2575 RPM. These engines have a compression ratio of 7.2:1 and use 100/130 minimum octane aviation fuel. The special Inconel exhaust valves and high temperature - high altitude shielded ignition harness allow continued operation at high manifold pressure without decreasing overhaul time or engine life. Internal piston cooling is accomplished by injecting oil into the piston interior.

Each of the engines on the Aztec is equipped with TEO 659 turbochargers. The turbocharger is designed to increase the power output and efficiency of the engine by supplying compressed air to the engine intake manifold. This allows the engines to operate at peak power at a much higher altitude than normally aspirated engines. The power to drive the turbocharger is extracted from energy in the exhaust gas. The exhaust gases are ducted through the turbine and then directed overboard at the bottom of the nacelles in the area of the cowl flaps.

The cowl flaps, located on the bottom of the engine nacelles, provide cooling for ground operation or high temperature at low airspeed-high power conditions. They are manually operated by push-pull controls located in the cabin on the fuel control panel between the front seats. For multi-engine operation maximum cowl flap position is half open. Single engine operation requires fully open flap on operative engine.

## FUEL INJECTION

The Bendix RSA-5 fuel injection system is based on the principle of measuring engine air consumption by use of a venturi tube and using airflow to control fuel flow to the engines. Fuel distribution to the cylinders is accomplished by a fuel flow divider.

Fuel pressure regulation by means of the servo valve causes a minimal drop in fuel pressure throughout the metering system. Metering pressure is maintained above vapor forming conditions while fuel inlet pressure is low enough to allow the use of a diaphragm pump. Vapor lock and associated problems of difficult starting are thus eliminated.

Incorporated in the servo regulator is the airflow sensing system which contains a throttle valve and venturi. The differential pressure between the entrance and the throat of the venturi is the measurement of air entering the engine. These pressures are applied across an air diaphragm in the regulator. A change in power changes the airflow to the engine and across the diaphragm in the regulator.

Mounted on top of the engine is the ported fuel flow divider with six nozzle lines routed to the cylinders. The divider contains a spring loaded positive shut-off valve. Within each cylinder are continuous flow air bleed nozzles with provisions to eliminate the adverse effects of low manifold pressure when idling. Since fuel metering is provided by the servo regulator rather than the nozzles, more uniform cylinder head temperatures result and a longer engine life is possible.

An automatic alternate induction air system is provided for each engine. Should the induction air filters become obstructed by ice or other causes, the induction air doors will open automatically to provide air to the engine.

On the control pedestal are two manual alternate air controls which may be used by the pilot to select alternate air if the automatic feature should fail. These should be placed in the FULL "ON" position prior to entering known or expected icing conditions.

In the event of a turbocharger compressor failure the engine will automatically revert to normal outside air through the alternate air door.

## FUSELAGE AND WING STRUCTURE

The Aztec fuselage is a composition of four basic units; the sheet metal tail cone, cabin section, nose section, and the steel tubular structure which extends from the tail cone to the nose wheel. The steel tube unit is intended to withstand the high loads imposed on the center section region of the airplane, and provides an extra safety factor in this area.

Finish on the tubular unit, as on all steel tube structures is zinc chromate primer with synthetic enamel.

All windows are double pane except the second window on the left side which is the emergency exit window. A storm window located in the forward lower section of the pilot's side window opens downward and in when unlatched.

The wing structure is lightweight but rugged, and consists of a massive stepped down main spar, a front and rear spar, lateral stringers, longitudinal ribs, stressed skin sheets, and a detachable wing tip section. The rectangular plan form of the wing simplifies the construction while providing excellent stability and performance characteristics.

The wings are attached to the fuselage steel tubular structure with fittings at the sides and in the center of this structure, and the main spars are bolted to each other with high strength butt fittings in the center of the fuselage, giving the effect of a continuous main spar. This arrangement combines high strength and lightweight structure.

## LANDING GEAR

All three landing gear units on the Aztec incorporate the same soft acting air-oil struts, and contain many directly interchangeable parts.

Main wheels are 600 x 6 Cleveland Aircraft Products units with disc type brakes with metallic lining and 700 x 6 tires with an eight ply rating. The nose wheel is a Cleveland 600 x 6 model fitted with a 600 x 6 tire with a four ply rating.* All tires have tubes.

Main gear brakes are actuated by toe brake pedals on the left set of rudder pedals. Hydraulic brake cylinders located in front of the left rudder pedals are readily accessible in the cockpit for servicing. Toe brakes for the right side are available as optional equipment. A brake fluid reservoir, which is connected to the brake cylinders with flexible lines provides a reserve of fluid for the brake system, and is mounted on the fuselage structure inside the left nose access panel.

Parking brake valves, operated by a control on the left side of the instrument panel, are installed ahead of the forward cabin bulkhead and are also serviced through the left nose access panel.

The nose wheel is steerable through a 30 degree arc, through use of the rudder pedals. As the nose gear retracts, the steering linkage becomes disconnected from the gear so that the rudder pedal action with the gear retracted is not impeded by nose gear operation.

The position of the landing gear is indicated by four light bulbs located on the pedestal. When the three green lights are on, all three legs of the gear are down and locked; when the amber light is on, the gear is entirely up and enclosed by the gear doors. When no light is on, the gear is in an intermediate position. On early models, the gear indication lights dim automatically when the post light control is turned on. Gear indication lights on airplanes with serial numbers 27-7554001 and up incorporate individual mechanical dimming features.

A red light in the landing gear control knob flashes when the gear is up and either one of the throttles is pulled back. When both throttles are closed (ser. nos. 27-4426, 27-4574 thru 27-7405476) beyond approximately 12 inches of manifold pressure with the gear up, the landing gear warning horn sounds. With the gear up, the landing gear warning horn will sound when either throttle is pulled back (beyond 12 inches of manifold pressure) on airplanes with serial numbers 27-7554001 and up.

To guard against inadvertent retraction of the landing gear on the ground, a mechanical latch, which must be operated before the landing gear control can be moved upward, is positioned just above the control lever. The control knob is in the shape of a wheel to differentiate it from the flap control knob, which has an air-foil shape. There is also an anti-retraction valve located on the left main gear which prevents a build-up of hydraulic pressure in the retraction system while the weight of the airplane is resting on its wheels.

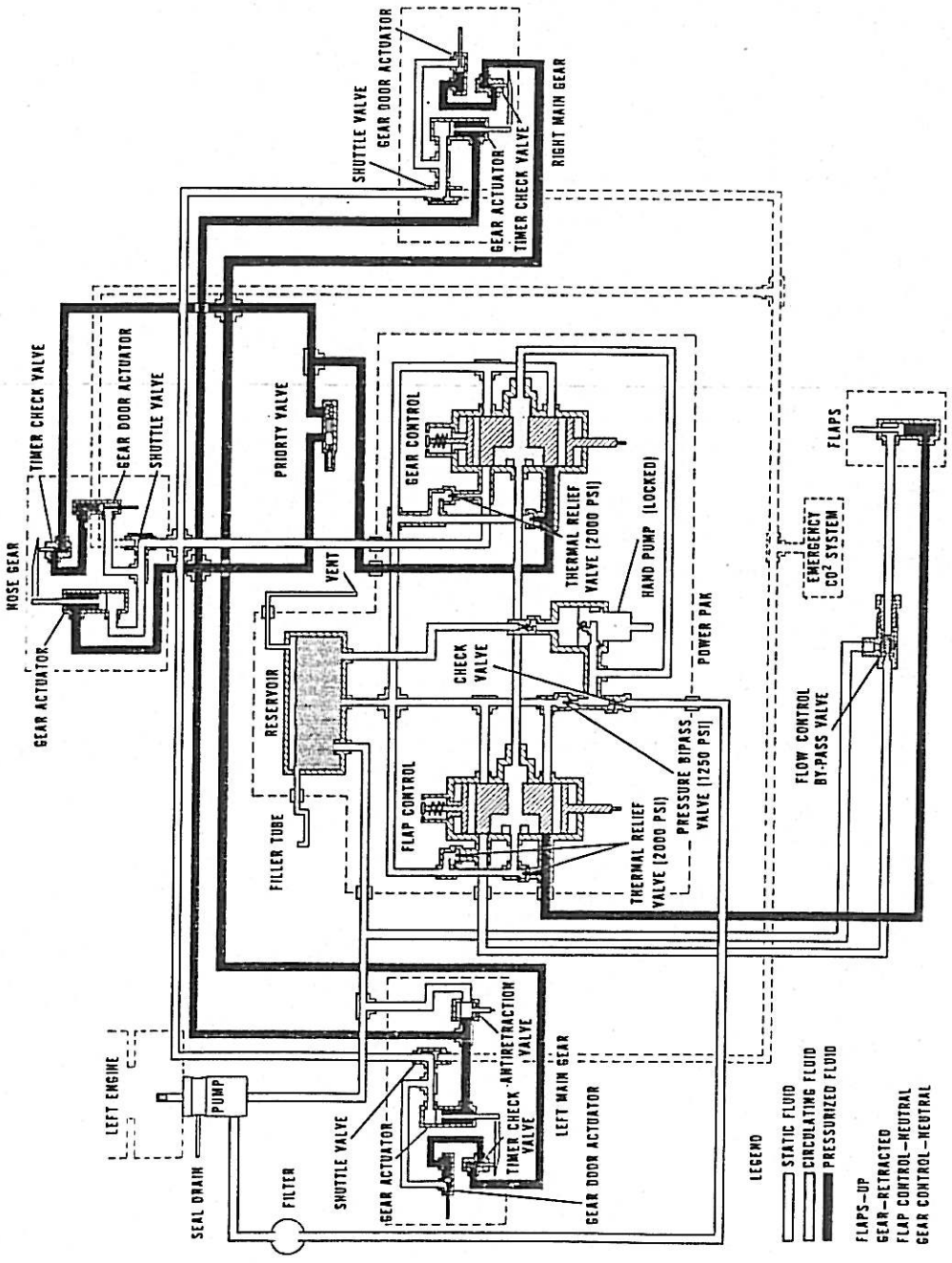
A tow bar is provided with each airplane. When not in use, it is stowed in the forward baggage compartment.

When towing with power equipment, caution should be used not to turn the nose gear beyond its 30 degree arc as this may cause damage to the nose gear and steering mechanism.

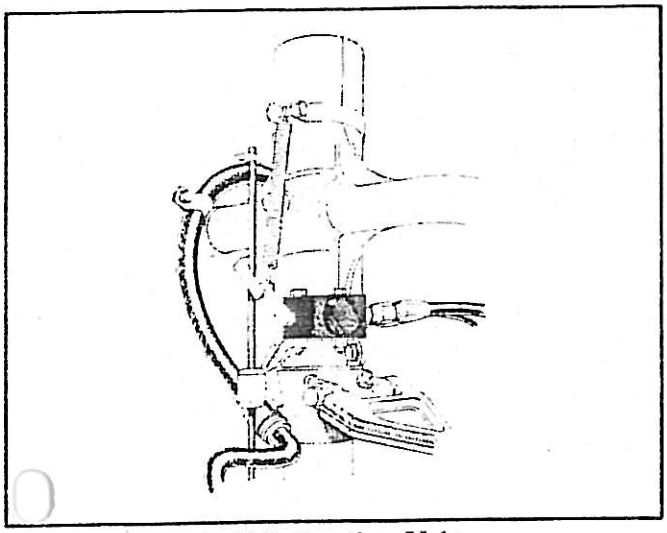
## HYDRAULIC SYSTEM

The hydraulic system is used for the extension and retraction of both the landing gear and the flaps. The position of the flaps or the landing gear is controlled by the levers protruding through the face of the control pedestal. The hydraulic control unit which is also a hydraulic fluid reservoir is housed within the control pedestal. Pressure for the system is supplied by the engine driven hydraulic pump mounted on the left engine. Movement of the gear or flaps occurs when hydraulic pressure is routed into actuating cylinders directly connected to the gear or flaps. Landing gear doors are also operated by the hydraulic system.

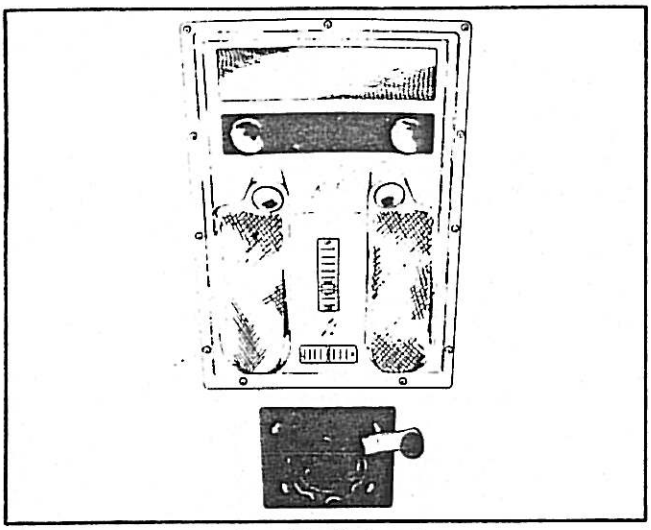
*On turbocharged Aztec "E" only with serial no. 27-4781 and subsequent, nose tire is 6.00 x 6, six ply rating and should be inflated to 32 psi.




Hydraulic System Schematic



Anti-Retraction Valve



Overhead Panel

The gear control knob is wheel-shaped, and the flap control knob is airfoil-shaped. When a selector lever is in the off or neutral position, hydraulic fluid flows through selector ports and circulates freely between the engine driven pump and the control unit. For extension or retraction of gear or flaps, the respective control lever is moved from the center position into the desired direction. When a control lever is placed in an up or down position, the selector ports hydraulic fluid into the proper actuating cylinder. Once a selected component reaches full extension or retraction, hydraulic pressure within the control unit forces the control lever back into a neutral or off position, allowing hydraulic fluid to resume free circulation between the pump and the control unit. Flap travel can be stopped at any intermediate position if the control knob is manually returned to the neutral position. Although both gear and flap levers may be moved at the same time, the flaps will not extend until the gear system completes its operation; however, the flaps will "blow" up during the retraction cycle with the priority valve supplying the gear system.

When the gear or flaps have reached their selected position, the actuating cylinders and their associated lines are isolated from the hydraulic fluid supply. This feature, along with a system of check valves, insures the retention of sufficient fluid under pressure in the actuating cylinder to operate the landing gear in the event of a leak in the hydraulic system.

The emergency hydraulic hand pump, which is an integral part of the control unit, is used to obtain hydraulic pressure should the engine driven pump malfunction. The hand pump must also be used to provide hydraulic pressure when the left engine is inoperative. To operate the hand pump, the handle should be pulled aft to its full extension and the gear or flap selector positioned as desired. Approximately fifty strokes are required to raise or lower the landing gear. At altitudes above 10,000 feet, the hand pump becomes increasingly inefficient.

An additional back-up system exists independent of the need for hydraulic fluid. The system is powered by a CO2 cylinder, and emergency extension of the landing gear may be accomplished by this CO2 system. The control for the CO2 system is located beneath a small cover plate under the pilot's seat. When the control is pulled, the gear selector must be in the down position. Pulling the emergency gear extender ring releases CO2 from a cylinder under the floor panel. The gas flows into the gear actuating cylinders, extending the landing gear. Note that this system may be used for gear extension only; it must never be used for gear retraction or operation of the flaps.

The landing gear position lights and the flap indicator, along with visual observation, should be used as primary indications of the positions of gear and flaps. The mirror on the right side of the left nacelle shows the position of the nose gear. Secondary indication that gear and flaps have reached their selected position is the return of the control lever to the off or neutral position.

The left main gear includes a by-pass valve which prevents the retraction of the landing gear while the airplane is on the ground. The weight of the airplane causes the valve to remain open while the strut is compressed, and all fluid by-passes directly from the pressure side of the system to the return side, preventing any build-up of hydraulic pressure in the retraction system. Note that this sytem is designed to prevent inadvertent retraction during aircraft start-up. The by-pass valve cannot be relied upon as the sole means of preventing retraction during high engine power on the ground or during taxi and takeoff operations. Be sure the gear handle is down before moving the aircraft.

## CONTROL SYSTEM AND SURFACES

Dual flight controls are provided in the Aztec as standard equipment. All controls are light, yet solid and effective in flight at all speeds down through the stalling speed. The nose wheel is steerable on the ground through the rudder pedals.

All control surfaces are cable controlled and are conventional sheet metal structures, fitted with aluminum hinges and needle bearings. The flaps are actuated by a hydraulic cylinder located in the right side of the cabin wall. Access to this cylinder is obtained by the removal of the upholstered interior panel directly aft of the entrance door, under the side windows.

The ailerons and rudder are connected by cables with the control wheel and rudder pedals. The rudder has a servo tab which also acts as a directional trim tab, actuated by a knob in the center of the forward cabin ceiling.

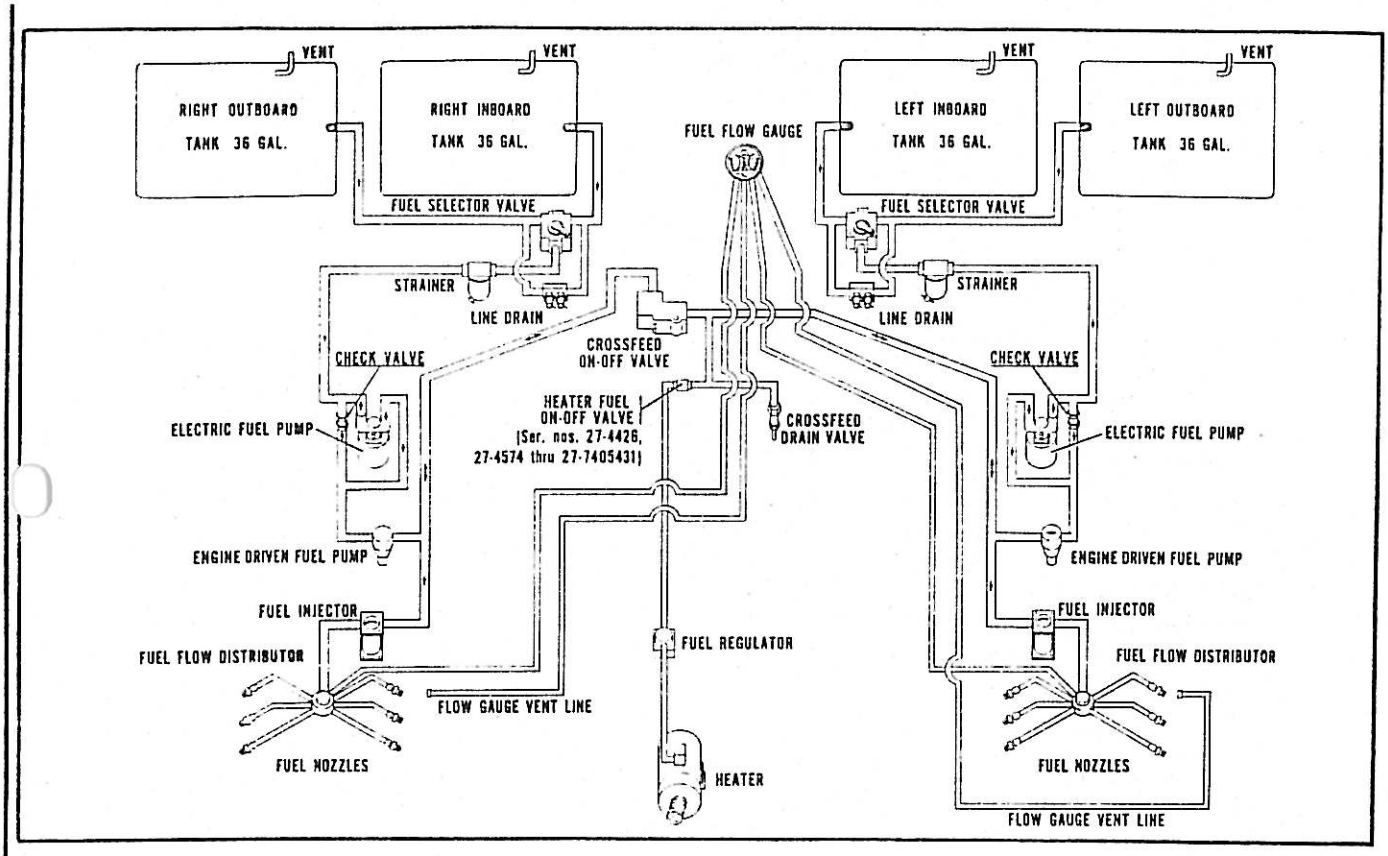
The horizontal tail is a stabilator, with an anti-servo tab which also acts as longitudinal trim tab, actuated by a larger crank concentric with the rudder tab knob in the center of the forward cabin ceiling. The stabilator provides extra stability and controllability with less size, drag and weight than with conventional horizontal tail surfaces.

## FUEL SYSTEM

Four thirty-six gallon flexible fuel cells located outboard of the engines provide fuel storage in the Aztec. The cells should be kept full of fuel during storage of the airplane to prevent accumulation of moisture, and to prevent deterioration of the cells. For storage of more than ten days without fuel, the cells should be coated with light engine oil to keep from drying out.

The fuel system in the Aztec is simple, but completely effective. Fuel can be pumped from any tank to either engine, through use of the engine-driven and electric fuel pumps.

For normal operation, fuel is pumped by the engine-driven pumps from the tanks directly to the adjacent fuel injector. The fuel valves can be left on at all times and the crossfeed left in the off position. Electric auxiliary fuel pumps, located in the engine nacelles, are installed in by-pass fuel lines between the tanks and the engine-driven pumps. The electric pumps can be used to provide pressure in the event of failure of the engine-driven pumps. They are normally turned on to check their operation before starting the engines, turned off after starting, to check engine-driven pumps and left on during take-off and landing, to preclude the possibility of fuel pressure loss due to pump failure at critical times. If one of the engine-driven pumps fails, the electric pump to that engine can be turned on to supply the fuel.




Fuel System Schematic

A pressure crossfeed system is incorporated for extended range during single-engine operation. To utilize the fuel on the inoperative engine side, turn the crossfeed on, the main fuel valve of the inoperative engine on, the electric fuel pump of the inoperative engine on, then the main fuel valve of the operating engine off.

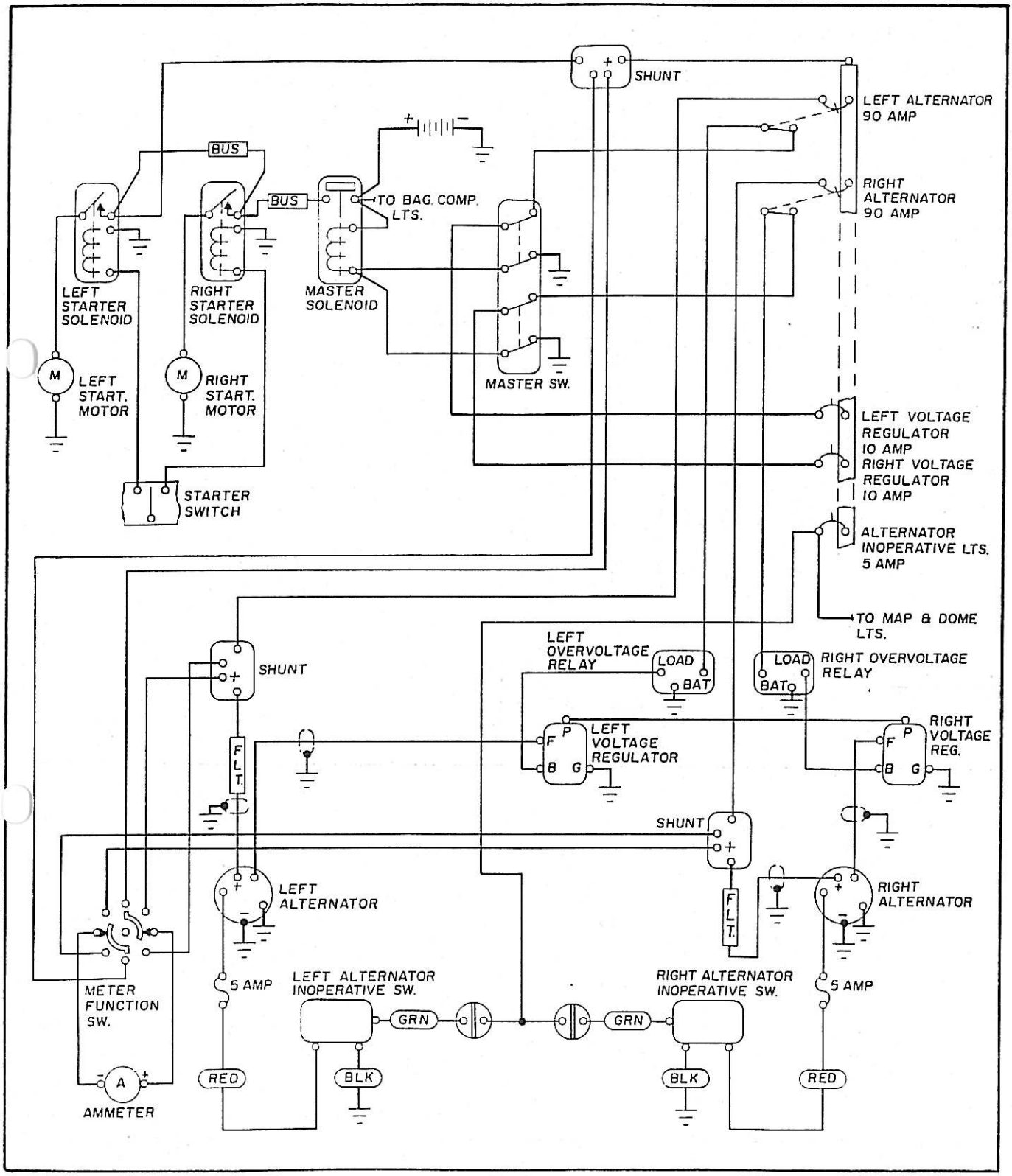
Fuel can thus be used from one tank or the other, by shutting off one main valve and turning on the crossfeed, to balance fuel loads or to extend range. For all normal operation, it is recommended that fuel be pumped directly from the tanks to their respective engines, with the crossfeed off.

The fuel valve controls and crossfeed control are located in the fuel control panel between the front seats. Two electric fuel gauges in the engine gauge cluster on the instrument panel indicate the fuel quantity in each tank. The electric fuel gauges indicate the fuel quantity in the tank selected by the fuel selector handle, located in the fuel control box. The electric fuel pump switches are on the lower left side sub-panel.

A crossfeed line drain valve control is mounted on the front face of the fuel control panel box. This valve should be opened occasionally, with the crossfeed on, the left electric fuel pump on, and then the right electric fuel pump on to allow any water that might accumulate at that point to be drained out. On airplane serial numbers 27-4426, 27-4574 through 27-7405431, a heater fuel control is also placed on the fuel control panel so that fuel to the heater can be turned off if necessary.

The fuel strainers and fuel line drain valves are located in the inboard sides of the main wheel wells. They are fitted with quick drains and should be drained regularly through their small access ports. In order to check the fuel system for possible moisture content, each fuel cell quick drain valve should be opened and drained and the quick drain valve on the fuel strainer should be opened and drained. This procedure should be accomplished at the three quick drain valves located in each main wheel well. Fuel screens are provided at the tank outlets, in the injectors and in the fuel filter bowls.

Idle cut-offs are incorporated in the injectors and should always be used to stop the engines. This is accomplished by pulling the mixture control levers to the rearmost position.




Electrical Schematic
(Aircraft Serial No. 27-4794 and up)

## ELECTRICAL SYSTEM

The electrical system for the Aztec includes a 12 volt 35 ampere hour battery or a 24 volt 17 ampere hour battery, enclosed in a sealed stainless steel battery box. Installed are two 12 volt 70 ampere alternators or two 24 volt 70 ampere alternators respectively.

There are two voltage regulator systems installed in the Aztec aircraft.

~~On aircraft up to and including serial number 27-4793 the alternators are coupled by using one voltage~~ regulator to control field voltage of both alternators. Also incorporated in the system is ~~an~~ overvoltage relay. Its function is to open and remove field voltage to the unregulated ~~alternators in~~ the event of a failure of the voltage regulator, thus preventing an overvoltage which ~~could damage~~ the electrical equipment.

As an added feature, to provide for complete ~~dual~~ system reliability, an auxiliary voltage regulator and overvoltage relay has been installed. ~~Each~~ set of regulators and relays is controlled by a switch located on the left sub-panel next ~~to the~~ master switch. The switch is placarded "Voltage Regulator Selector," "Main," and "~~Auxiliary.~~" The switch should normally be in the "Main" position. The operation of the alterators ~~may be checked by an ammeter switch located directly under the ammeter.~~

NOTE

Refer to the Airplane Flight Manual Section for corrective action for a voltage regulator failure.

NOTE

If the battery is completely discharged, remove the battery and charge prior to starting engines.

On aircraft with serial number 27-4794 and up, the electrical system incorporates an alternator paralleling system. The system has two voltage regulators which control the alternators. The regulators are interconnected electrically to provide parallel outputs from their respective alternators under normal operating engine RPM's. Whenever the engines are operating at a high differential RPM, the alternator inoperative light for the slower engine may come on.

Alternator inoperative lights are located below the ammeter. The lights illuminate when the respective alternator fails to provide voltage. The lights should be checked prior to starting the engines, to see if the bulbs are burned out, by turning on the master switch. If the bulbs do not illuminate the bulbs should be replaced.

A distinctive feature of the alternators paralleling system is the split rocker type master switch and the alternator inoperative lights.

NOTE

Refer to the Airplane Flight Manual Section for corrective action for an alternator failure.

Electrical switches for the various systems are located on both sub-panels of the instrument panel. The circuit breakers are on the right side sub-panel. To reset the circuit breakers simply push in the reset button. Reduce the electrical load to minimum and allow two minutes before resetting the breakers. Corrective action should be taken in event of continual circuit breaker popping. The alternator circuit breakers. mounted on the same panel, are of the switch type and should not be turned off while the engines are running.

Instrument lighting is provided by two spotlights installed in the center of the cabin ceiling. (S/N up to and including 27-4803.) These lights are operated by a rheostat switch which is located directly aft of the lights. The lights are turned on with the first movement of the rheostat knob and the light intensity increased by further rotation of the control. Provided as optional equipment (standard on S/N 27-4804 and up) are individual post lamps mounted on the panel adjacent to each instrument. These lights are controlled by a rheostat switch located on the panel with the other electrical switches. Operation of the rheostat is the same as for the spotlights. Located in the cabin ceiling just aft of the windshield, on both the right and left sides, are map lights equipped with clear lenses. Each light is operated by the switch located adjacent to the unit. For the passengers, reading lights are installed over each seat as well as a cabin dome light located in the center of the cabin ceiling. A separate switch is used for each of these units.

There are overhead lights in both the forward and aft baggage compartments. They will turn on and off with the opening and closing of the baggage doors. On the upper right side of the instrument panel is a red warning light labeled "Door Ajar". It will light if the master switch is on and either the forward baggage door or main cabin door is not completely closed and latched.

CAUTION

Do not leave either baggage compartment door open for extended periods.

The starter and magneto switches are on the left side panel near the instrument panel. The starter switch is of the momentary rocker type.

An external power receptacle, located in the lower right side of the nose, is available as optional equipment. Turn the master switch off before inserting or removing a plug at this receptacle. Leave the master switch off while using external power.

## INSTRUMENT PANEL

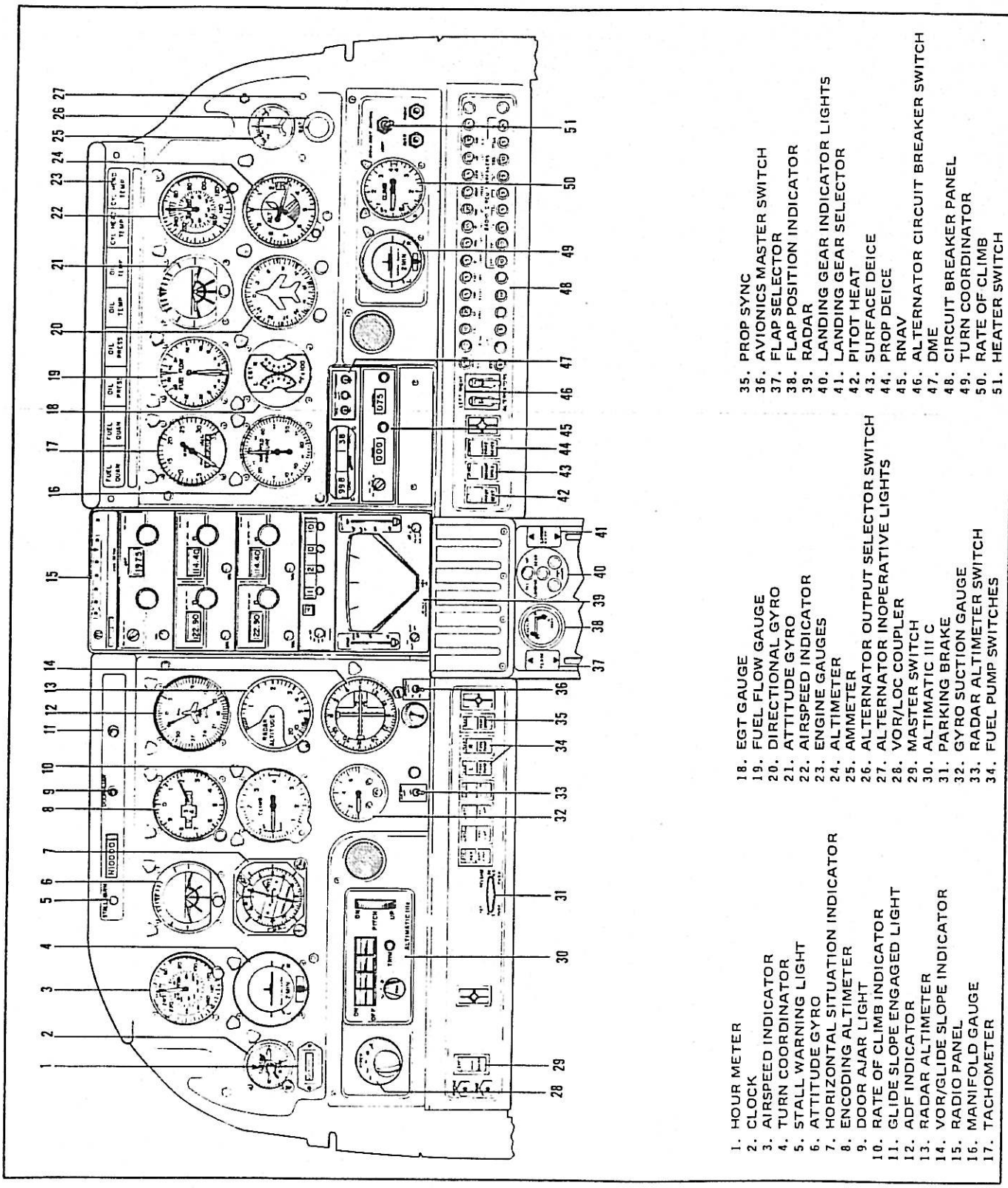
The instrument panel of the Aztec is designed to accommodate all of the customary advanced flight instruments and all required engine instruments. Space is provided for the installation of optional navigational and radio equipment, as well as optional copilot's instruments. The instrument panel is shock mounted and lighted, and all instruments are accessible for maintenance.

The flight instrument group includes the airspeed indicator, the rate of climb indicator, and the meter, which are operated by the pitot-static system; the directional gyro and the artificial horizon, which are operated by the vacuum system; and an electrically operated turn coordinator, which serves as a standby in the event of a gyro instrument failure. Gyro instruments employ vacuum pumps installed on each engine. The gyro suction gauge on the instrument panel should indicate 4.8 to 5.1 inches of mercury for proper operation of the gyro instruments.

Engine instruments include recording tachometers, a dual manifold pressure gauge, and a dual fuel flow gauge. A cluster of fuel and engine gauges incorporates fuel quantity, oil pressure, oil temperature, and cylinder head temperature indicators for each engine. On earlier models there is a separate tachometer for each engine; on later models there is a dual tachometer. A dual exhaust gas temperature gauge is provided on turbocharged models.

Radio equipment is mounted in the center and autopilot controls are mounted on the lower left of the instrument panel. Electrical switches and the circuit breaker panel are installed along the bottom of the instrument panel. The ammeter, located on the right side of the instrument panel, can be set to show the condition of the battery or the output of either alternator.

The instrument panel also includes various warning lights, the cabin heat control, an engine hour meter and microphone and earphone jacks.




Instrument Panel for Ser. Nos. 27-7554001 and up

## HEATING AND VENTILATING SYSTEM

The flow of air for cooling or heating the Aztec cabin is controlled by the five knobs on the cabin air control panel located at the bottom of the control pedestal.

The left control regulates air flowing to the front seat through the heater system and the second knob from the left controls air flowing to the rear seat through this system. The middle knob controls the heater thermostat. The second knob from the right is the defroster control and the right hand control supplies additional cold air to the front seat through a vent on the bulkhead.

Cabin air enters the heater system through an inlet above the landing light, and when the heater is not in operation, the inlet can serve as a source for cool air by pulling out the heater controls.

A 35,000 B.T.U. Janitrol heater installed in the nose section furnishes a source of hot air for cabin heating and windshield defrosting.

Operation of the heater is controlled by a three position switch located on the right side of the instrument panel, labeled "FAN", "OFF" and "HEAT". The "FAN" position will operate the vent blower only and may be used for cabin ventilation on the ground or windshield defogging when heat is not desired.

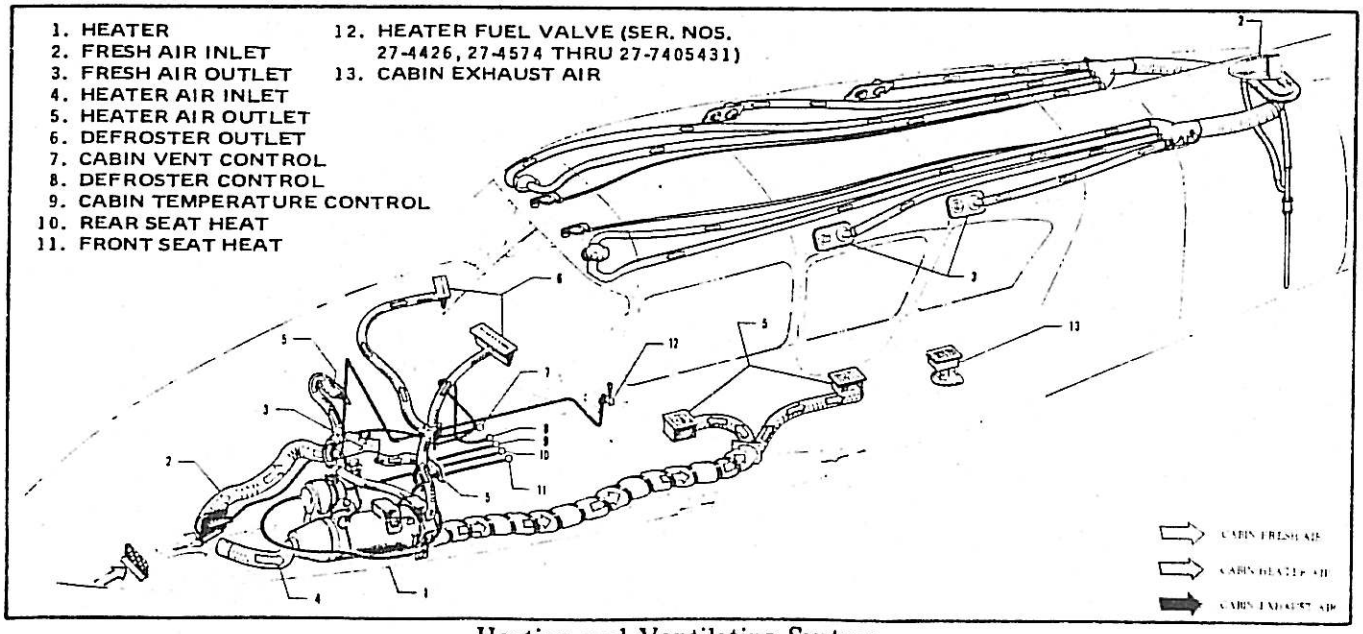
For heat, the three position heater switch must be turned to "HEAT". On airplane serial numbers 27-4426, 27-4574 through 27-7405431, the manual heater fuel valve must also be on. This will start fuel flow and ignite the burner simultaneously. With instant starting and no need for priming, heat should be felt within a few seconds.

Regulation of heat, airflow and defroster operation is controlled by the push-pull knobs on the cabin air control panel. The middle knob is connected to an adjustable thermostat which makes it possible to select a desired temperature of heated air through a wide range.

Cabin temperature and air circulation can be maintained by using various combinations of knob settings, to suit individual desires. To minimize the feeling of drafts, a low air flow-high heat combination should be used.

Windshield defrosting may be regulated by various settings of the defroster knob and in severe windshield fogging or icing conditions, it may be desirable to restrict the heater air, since this will drive more air through the defrosters.

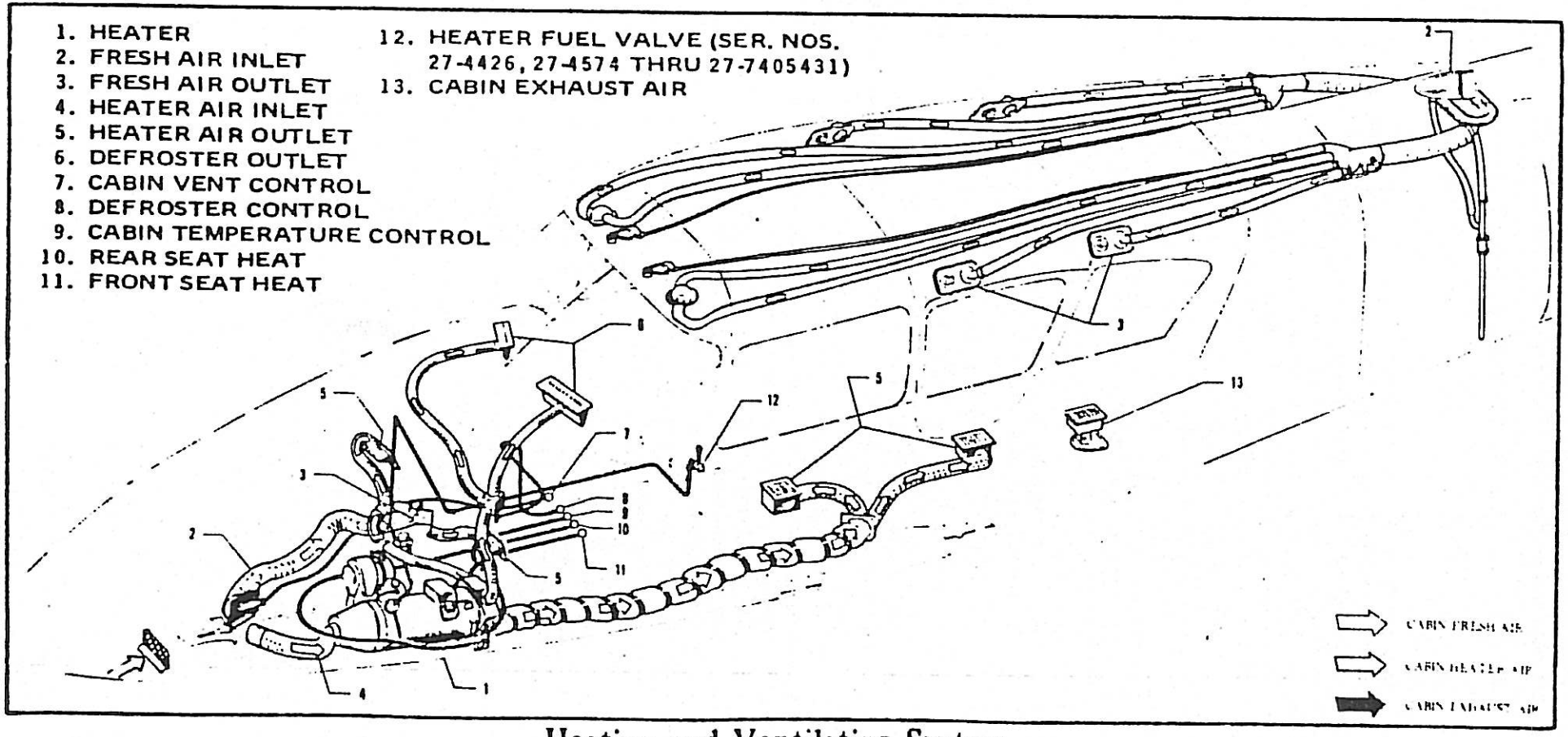
When heat is no longer desired, the three position switch may be turned to the "OFF" position and the manual fuel valve, if installed, closed. When the heater has been operating with the airplane on the ground, turn the switch to "FAN" for several minutes to cool the heater. It may then be turned off.




Heating and Ventilating System

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Heating and Ventilating System

Heat may be supplied to warm the cabin before flight by turning on the master switch, the left auxiliary fuel pump, and starting the heater. It should not be used in such a way as to deplete the battery.

The cabin heater uses gasoline from the left main fuel tank when the crossfeed is off and from both tanks when the crossfeed is on.

Located in the heater is an overheat lockout switch which acts as a safety device to render the heater system inoperative if a malfunction should occur causing excessively high temperatures. This control is located in the downstream end of the vent jacket, with the reset button on the heater shroud. It is reached only through the access panel in the left side of the nose section to insure that the malfunction causing the overheat condition is corrected prior to further heater operation.

For fresh air ventilation, an air scoop is mounted on the dorsal fin which draws air into the cabin through overhead vents in the ceiling. Each individual vent is adjustable for desired air flow. Two master control knobs are located in the ceiling just aft of the windshield. These control the air supply to the right and left overhead vents. Air is exhausted through an outlet on the floor of the aft baggage compartment.

## FINISH

All sheet aluminum components of the Aztec are carefully finished inside and outside to assure maximum service life. Both sides of all pieces are alodine treated, and sprayed with zinc chromate primer. External surfaces are coated with durable acrylic lacquer in attractive high gloss colors. The application of primer to interior surfaces prevents corrosion of structural and non-structural parts where inaccessible for normal maintenance.

## BAGGAGE COMPARTMENTS

There are two large baggage compartments, each compartment is placarded for 150 pounds. The forward compartment provides 21.3 cubic feet of space accessible through a door measuring an average of 19.5 x 30.5 inches. The rear compartment has a volume of 26.2 cubic feet with door measuring about 30 x 31 inches and hinged on the forward side.

## SEATS

All seats in the Aztec are constructed of steel tubing, foam cushions on rubber bladders and headrests. Crew seats will slide fore and aft through a seven inch range by operation of the release control on the front of each seat. The right side crew seat adjusts aft beyond the normal range to provide ease of entry to the pilot's seat. To remove either of the front seats, remove the stop plates from the tracks at the rear of the seat structure, and slide the seat forward and off the tracks.

The passenger area is equipped with two individual bucket seats and a couch seat that accommodates two people. To remove the center seats, remove the stop plates from the tracks and slide the seats forward then aft as required to disengage the seat supports from their tracks. The rear seat can be removed for added cabin space by pulling the back of the seat forward, then lifting it out. Pull the bottom of the seat forward to disengage the pins at the rear, then push it rearward to disengage the seat supports from the floorboards.

All six seats are provided with headrests.

## CABIN FEATURES

Removable armrests for front and middle seats, coat hangers, ash trays, a cigarette lighter, reading lights and pilot's map pocket are all standard. The cabin door and baggage doors are equipped with locks. The locks on both baggage doors are operated by one key, while the cabin door has a separate key.

## RADIO EQUIPMENT

In the standard model of the Aztec, provisions for radio installations include dual microphone and headset jacks, a microphone, overhead loud speakers and panel space for four radio sets. Radios are available in different combinations to provide in the Aztec all of the most recent radio developments normally desired in this type of aircraft.

Located to the rear of the forward baggage compartment is a shelf providing ample room for power supplies for the various radios installed.