

NOTE:

Check fuel sight gauges while in level, balanced flight to avoid mis-reading fuel quantity indications.

Landing Gear: Yankee's FACE SAVER[®] main landing gear struts are of tough, laminated fiberglass to achieve outstanding shock absorption and damping. Yankee's unusually wide stance (99" between the main wheels) imparts extraordinary ground stability and optimizes the performance of differential-braking steering at speeds below the rudder effectiveness threshold. The nose gear is free-castering to 90° on either side of the centerline, which gives Yankee outstanding agility and maneuverability on the ground.

Brakes: Yankee's brakes are toe-operated, single-disc hydraulic systems with integral parking brakes. The parking brake is set by pressing the toe brakes while simultaneously pulling the parking brake knob (at the right side of the panel). To release, push the parking brake knob in and press the toe brakes firmly. *Parking brakes are operated from the left side only.*

Electrical System: Yankee's electrical system (Fig. 3) is extremely simple, yet is quite sophisticated in its approach to reliability. It employs a brushless 14-volt, 40-amp alternator which inherently eliminates a major source of electrical noise (i.e., the brushes in traditional generators), and which maintains proper bus voltage regardless of engine speed. Internal power diodes in the alternator deliver DC power direct to the main bus through a 40-amp circuit breaker. An external transistorized voltage regulator controls the alternator's output voltage, and *automatically* increases the battery charging voltage at low ambient temperatures.

Yankee's 25-ampere-hour battery, located on the upper right firewall in the engine compartment, is connected to the main bus through the battery solenoid when the master switch is in the ON position. The master switch also energizes the voltage regulator, the battery solenoid, and all electrical loads connected to the main bus. With the master switch in the OFF position, the alternator is de-energized, and all electrical loads *except the cabin dome light* are de-energized. Note that it is possible to disconnect the alternator from the bus by manually pulling the 40-amp circuit breaker, yet continue to feed the bus loads from the battery by leaving the master switch in the ON position.

Fuses and circuit breakers for electrical systems are located on the lower right side of the instrument panel, and spare fuses are bracket-mounted in the right side of the glove compartment. All electrical switches for lighting and accessories are located at the right side of the pilot's control wheel.

Yankee's dual-magneto ignition system is completely independent of the aircraft electrical system, and will continue to operate during any electrical emergency.

Heating and Ventilating: Cabin heat and defroster air are supplied by a heat exchanger on the engine exhaust system. This system heats a continuous flow of fresh air, and provides heating and defrosting by diverting the desired portion of that continuous supply into the cabin and bypassing the balance directly overboard. To obtain defrost air, pull out the cabin heat control (on the right side of the instrument panel), and slide open the defroster vent near the lower left edge of the windshield.