

SEAREY POWER BUSS

Aircraft Components Inc.

Model: ACI 2075A

The SeaRey Power Buss is an electronic device providing 12 volt DC overload monitoring and protection for 18 electrical circuits. The Power Buss also monitors (high amperage) generator supply and landing gear actuator circuits.



Protection is provided by 18 solid-state PTC current limiters that automatically remove power when a circuit becomes overloaded. Just as mechanical circuit breakers can be reset, the PTC can be reset if power to the PTC, or the load (or service) supplied by the PTC is manually shut off for approximately 15 seconds.

Monitoring is provided by a red warning “switch-light” and an electronic voice annunciator system that warns of a tripped circuit through a Power Buss speaker and the pilot’s headset.

The SeaRey Power Buss includes an avionics buss that automatically removes power from sensitive avionics systems during engine start. Although there is provision for an avionics master switch, the built-in power down function reduces this requirement.

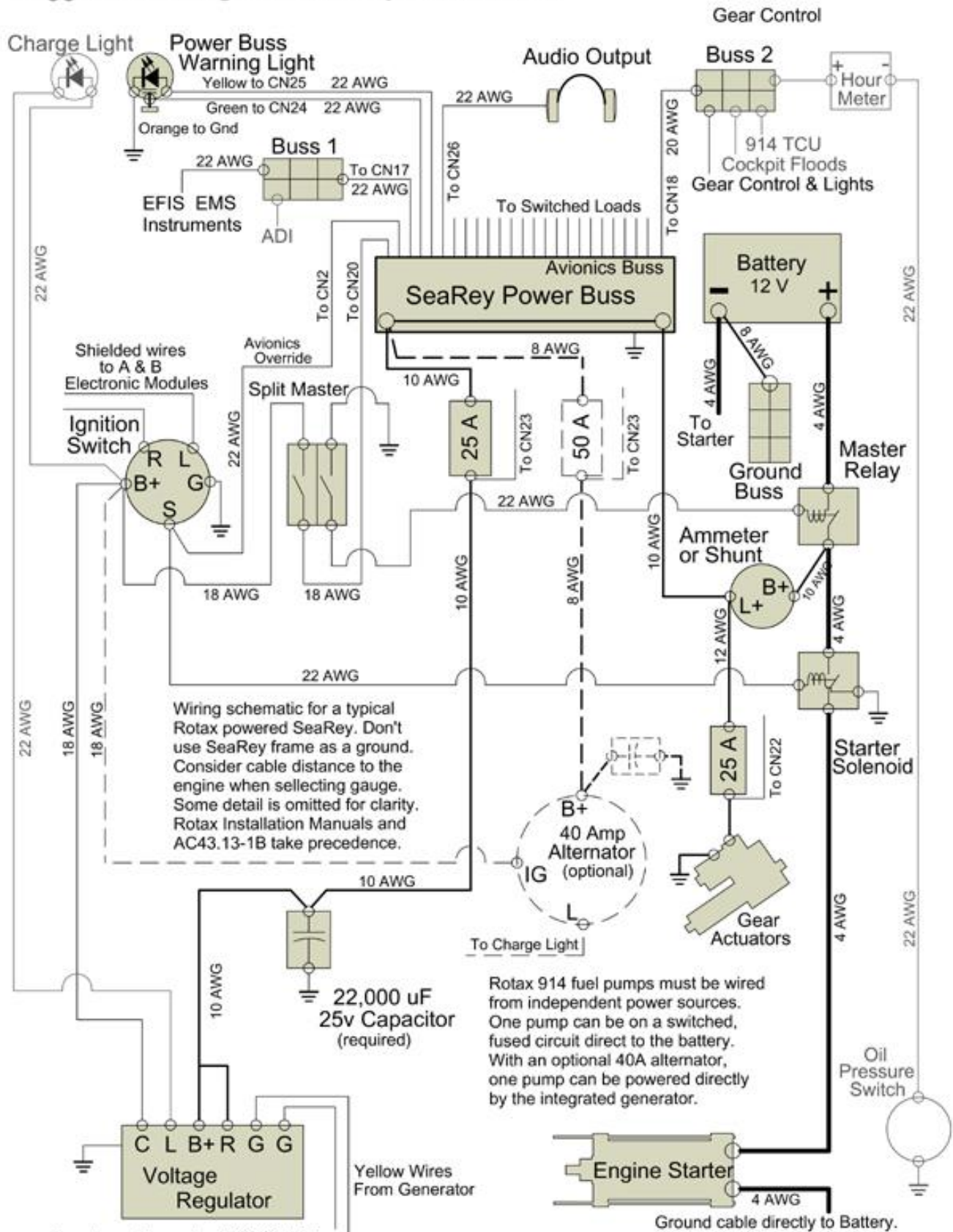
A new 2075A feature uses the warning light and voice annunciator system to monitor system voltage. If the generator voltage exceeds 16v, power is automatically removed from the regulator control circuit. A related installer-selectable 2075A feature automatically removes control circuit power to the regulator any time the master switch is turned off. This option can replace a split master switch function (ensuring that the left regulator control switch is off whenever the right battery master switch is off.)

Weighing only 13 oz. and measuring 7.19” x 3.38” x 1.88” high, the Power Buss module can be mounted behind the panel with only the warning light visible in the cockpit. The system’s 18 PTC’s provide an economical replacement for heavier circuit breakers. The sophisticated electronic audio alert system removes the requirement for a separate (difficult to read and interpret) circuit display module. On power up the SeaRey Power Bus automatically tests all circuits. Pressing the red warning light also tests the system with a “Test OK” annunciation.

The Power Buss provides the following annunciations for protected and monitored circuits:

EXTERNAL CIRCUITS (external CB required)	SPECIAL CIRCUITS (C Lead - voltage sensing)	SWITCHED CIRCUITS (other aircraft systems)	AVIONICS BUSS (master switch optional)
“Generator”	“Regulator” - 3 amp	“Bilge Pump” - 3 amp	“GPS” - 5 amp
“Landing Gear”		“Trim” - 5 amp	“Intercom” - 3 amp
	SWITCHED CIRCUITS (aircraft lighting)	“Heater” - 3 amp	“Transponder” - 3 amp
SPECIAL CIRCUITS (switched by Master Relay)	“Panel Lights” - 3 amp	“Flaps” - 5 amp	“Gear Alert” - 3 amp
“Buss One” - 5 amp	“Strobes” - 7 amp	“Fuel Pump” - 5 amp	“Radio” - 3 amp
“Buss Two” - 5 amp	“Nav Lights” - 7 amp		“Aux Avionics” - 7 amp
	“Landing Lights” - 11 amp	Other ANNUNCIATIONS	
		“Test OK” and “High Voltage”	

Suggested Wiring with SeaRey Power Buss



Drawing not to scale 15/03/09 JRD