

ELECTRICAL SYSTEM SCHEMATIC

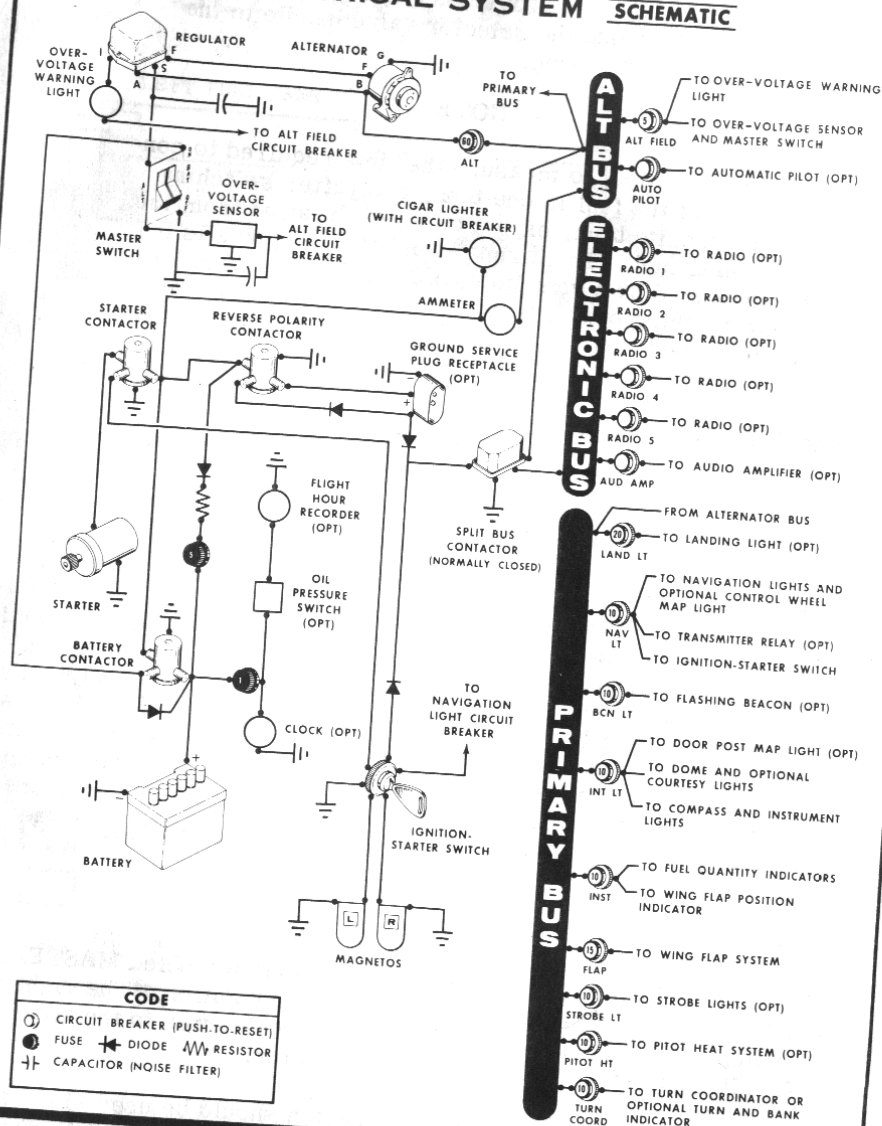


Figure 2-3.

switch, when placed in the OFF position, removes the alternator from the electrical system. With this switch in the OFF position, the entire electrical load is placed on the battery. Continued operation with the alternator switch OFF will reduce battery power low enough to open the battery contactor, remove power from the alternator field, and prevent alternator restart.

AMMETER.

The ammeter indicates the flow of current, in amperes, from the alternator to the battery or from the battery to the aircraft electrical system. When the engine is operating and the master switch is ON, the ammeter indicates the charging rate applied to the battery. In the event the alternator is not functioning or the electrical load exceeds the output of the alternator, the ammeter indicates the discharge rate of the battery.

OVER-VOLTAGE SENSOR AND WARNING LIGHT.

The aircraft is equipped with an automatic over-voltage protection system consisting of an over-voltage sensor behind the instrument panel and a red warning light, labeled HIGH VOLTAGE, under the oil temperature and pressure gages.

In the event an over-voltage condition occurs, the over-voltage sensor automatically removes alternator field current and shuts down the alternator. The red warning light will then turn on, indicating to the pilot that the alternator is not operating and the aircraft battery is supplying all electrical power.

The over-voltage sensor may be reset by turning the master switch off and back on again. If the warning light does not illuminate, normal alternator charging has resumed; however, if the light does illuminate again, a malfunction has occurred, and the flight should be terminated as soon as practical.

The over-voltage warning light may be tested by momentarily turning off the ALT portion of the master switch and leaving the BAT portion turned on.

CIRCUIT BREAKERS AND FUSES.

The majority of electrical circuits in the airplane are protected by "push-to-reset" circuit breakers mounted on the instrument panel. Ex-