

## SERVICE BULLETIN

### PITTS SPECIAL

**DATE:** April 1993      **SERVICE BULLETIN - No. 20**  
Engineering Aspects are  
FAA approved.

**SUBJECT:**                      Ammeter Fluctuation

**MODELS AFFECTED:**        Pitts S-2B/S-2S

**TIME OF COMPLIANCE:**      At Owner's Discretion

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It has been reported that some aircraft equipped with the ElectroSystems Inc. VSF7203A Voltage Regulator and OS75-14 Overvoltage Relay have been experiencing a continual fluctuation or pulsing of the ammeter needle when the alternator is on line. The cause may be the sensitivity of the VSF7203A to a difference in ground potential between it and the alternator. This difference in potential results from degradation of the ground path between the units. This can be caused by a buildup in oxides, dirt, oil, etc., between ground path contact points such as engine ground strap to frame.

Aviat has been advised by ElectroSystems Inc. that in most cases the fluctuation can be eliminated by wiring a direct ground connection between the alternator case and the overvoltage relay ground. (See Figure 1.) Use a minimum #18 AWG wire, length 53 inches with Sta-Kon 18RA-8 terminals or equivalent on each end. Route additional wire through the existing wire bundle.

If this does not cure the problem the OS75-14 Overvoltage Relay is suspect and should be replaced.

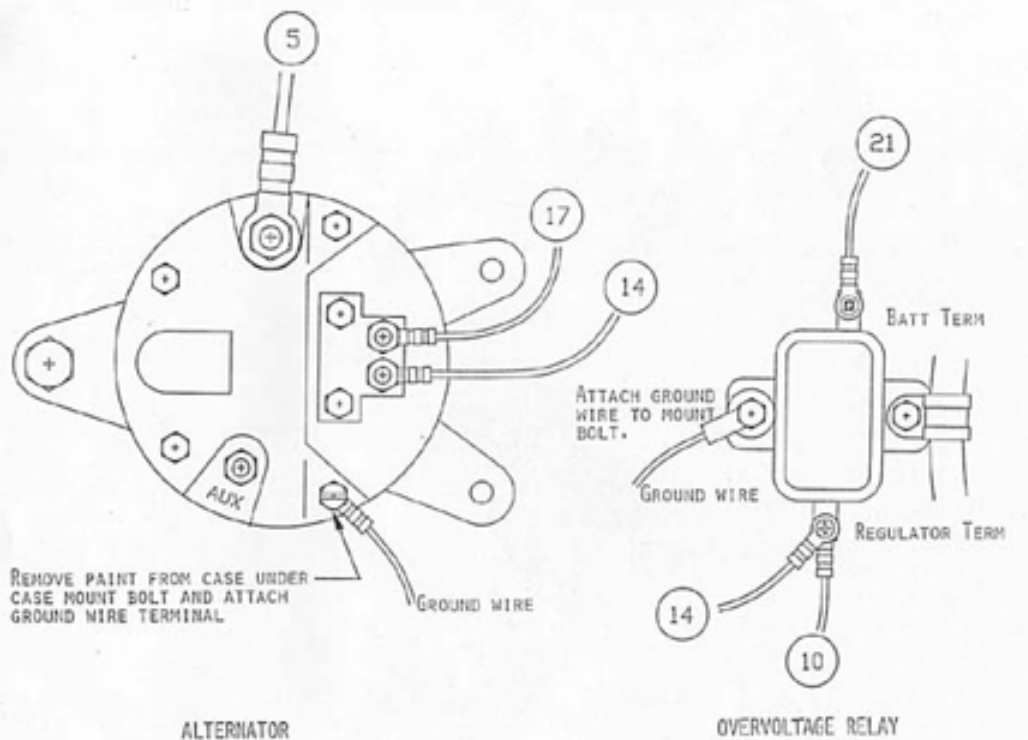


FIGURE 1.