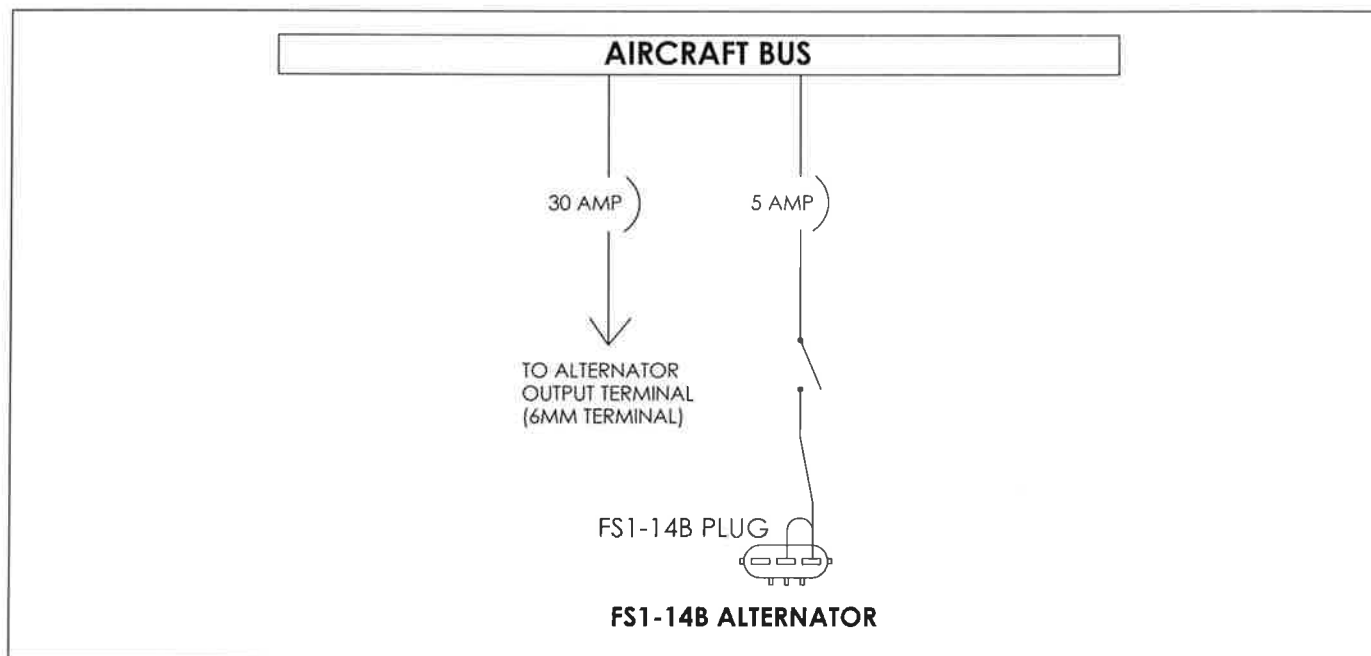


## FS1-14B INSTALLATION INSTRUCTIONS

### READ AND THOROUGHLY UNDERSTAND ALL OF THE INSTALLATION INSTRUCTIONS BEFORE BEGINNING INSTALLATION OF THIS KIT.

1. Clear and clean the surface of the engine vacuum pad base where the FS1-14B is to be mounted. Retain the 4 sets of washers and nuts.
2. Mount the FS1-14B with attached gear assembly and supplied gasket # MS9134-01 to the engine.
3. Ensure that alternator drive gear meshes with the AND 20000 gear without forcing or binding.
4. Ensure the FS1-14B base mounts flush to the engine mount area.
5. Install 4 flat washers, the new lock washers and the nuts that were removed in step 1.
6. Hand tighten nuts evenly and check that the alternator fits flush against the pad without any force or binding.
7. Tighten the mounting nuts to the torque specified by the engine manufacturer.
8. Refer to the Wiring Diagram and install output (B+) wire and torque to 50 inch Lbs. **Ensure that the output wire is of sufficient size to carry more than 30-Amps and that it is connected to the aircraft buss through a 30-Amp circuit breaker. Refer to AC43.13-1B for acceptable methods, techniques and practices if needed.**
9. Wire the Enable/ Field plug as shown on the installation drawing. **THE ENABLE WIRE MUST BE WIRED TO A 5-AMP MAX CIRCUIT BREAKER.**
10. Check the security of all wiring and ensure that there is no interference with any control movement.
11. Start the engine and check for any oil leaks or abnormal sounds. Stop the engine immediately if any are noticed and correct the condition before proceeding.
12. With engine running at 1700 RPM measure the bus voltage with a calibrated volt meter to verify bus voltage is 14.2 +/- .3 volts. Turn on Landing Light and observe that the voltage remains at 14.2 +/- .3 volts.
13. Complete: Log Book Entries. FS1-14B Weight = 6.0 LBS.



## **Operating Instructions**

(FS1-14B)

### **Basics:**

1. A fully charged battery reads approximately 12.8 volts.
2. The flyS.A.F.E. FS1-14B alternator charges at approximately 14.2 volts.
3. Vacuum driven alternators turn at a lower RPM than those driven by belt. Expect the FS1-14B's power production to start at approximately 1200 RPM.
4. Ensure electrical loads do not exceed 30A at cruise rpm
5. Monitor electrical loads and bus voltage

## **Maintenance Instructions**

### **Annual Inspections:**

1. Visually inspect for damage & clean the surface.
2. Check regulated voltage is within limits 14.2 +/- .3 Volts.

### **1000-Hour Intervals:**

1. Repeat: Annual / 100 Hour Inspection
2. Remove Field Brush assembly and inspect brushes for excess wear. Replace Brush assembly if brushes extend less than .250" from edge of brush holder.
3. Replace shear coupling.