FS1-14 p/n 41189 Regulator/Brush Assembly Replacement Instructions

1. Remove the nut and output post insulator.

2. Remove the rear cover.

3. Remove the four screws holding the brush assembly. Make sure to note the lengths and locations of each screw.

4. Remove brush block assembly. ~~Make sure the brushes do not fall inside the alternator.~~

5. Inspect slip ring for damage, grooves or carbon build-up.

6. Clean with de-natured alcohol and lightly polish with a very fine Scotch-Brite pad.

7. Clean debris out from inside of alternator with compressed air.

8. Inspect brushes for chipping and damage to the spring, cap and wire.

~~9.~~ Inspect brushes from block assembly and inspect for excess wear.

10. Replace brushes if they extend less than .250” from the edge of the case.

11. Reinstall the brush assembly mounting screws. Torque to 16 inch-pounds.

12. Reinstall rear cover.

13. Install output insulator and retaining nut. Torque to 35 inch-pounds.

14. Verify alternator spins freely then remove the retaining wire from the brush block. The brushes should snap against the slip ring.

15. Verify rotor resistance as approximately 4- to 8-ohms on a 12 volt alternator or 8- to 12-ohms on a 24 volt unit.

16. Check resistance by slowly turning the rotor by hand.

17. Reinstall and test the alternator per the aircraft manufacturer’s maintenance manual.