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SERVICE BULLETIN

FUEL SERVOS INSTALLED IN AN UPDRAFT CONFIGURATION

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1. APPLICABILITY

This Service Bulletin applies to AVStar manufactured RSA-5AD1 and RSA-10AD1 servos mounted in an updraft configuration

2. REASON FOR PUBLICATION

There have been occasional reports of servo equipped engines that exhibit one or more of the following characteristics - gradually deteriorating idle, difficulty starting and/or cold engine acceleration performance. These engines may have the servo mounted in an updraft, or nearly updraft configuration. Close inspection of the servo may reveal oily contaminant in the bore of the servo that is green/blue in color. It is also possible for this contaminant to migrate into the air section of the regulator.

3. TIMING FOR COMPLIANCE

3.1 **AT THE OWNER'S DISCRETION – but recommended if the oily has accumulated around the slots in the venturi**

4. PROCESS FOR COMPLIANCE

4.1 Inspection Instructions

4.1.1 Ensure that the bore of the servo is clearly visible in order to determine the extent of the rectification work required. If practical, the servo can be inspected in situ after removal of the air intake duct.

4.1.2 Remove the two (2) taper screws and the one screw/washer assembly that retain the venturi. They are located along the body of the servo on the side opposite to the servo regulator.

4.1.3 Taking great care to avoid any damage to the four (4) impact air tubes, place both thumbs inside the venturi and pull the venturi out of the servo body

4.1.4 Inspect the “O” rings and the cavities on the outer diameter of the venturi to determine if there is any oily contaminant present

4.2 **If NO oily contaminant is found**

4.2.1 The “O” rings should be removed and the venturi thoroughly cleaned and dried. New “O” rings should be pre-lubricated with ASTM #5 oil (applied very sparingly) and then installed onto the venturi. The venturi should then be re-installed into the bore of the servo. Ensure that the impact tubes are facing out of the servo bore and align the threaded hole with the hole in the body and re-install the screw and washer. Torque the screw to 15-20 in-lb (1.69-2.26 N-m).

4.2.1.1 “O” Ring Part Numbers

RSA-5AD1 P/N AV951437

RSA-10AD1 P/N AV2526429

4.2.2 Install the two (2) taper seat screws and tighten to 30-40 in-lb (3.39-4.52 N-m). Safety wire all three screws together using 0.025” diameter aircraft stainless steel lock wire to MS20995-C25

4.3 **IF OILY CONTAMINANT IS FOUND**

4.3.1 Return the servo complete to AVStar or an AVStar approved overhaul and repair facility for cleaning and flow re-calibration to approved specifications

5. REFERENCES

5.1 Field Service Manual – RSA-5AD1 (latest revision)

5.2 Field Service Manual – RSA-10AD1 (latest revision)