1. APPLICABILITY

This Service Instruction applies to all AVStar manufactured servos (LFR-NNSS5, LFR-NNLS10 and other models listed in table 1) fitted with Fuel Inlet Strainers manufactured by AVStar. The Fuel Inlet Strainer part numbers are AV2537608 (size 5), AV2537610 (size 10).

2. REASON FOR PUBLICATION

To relay precautionary information about the Fuel Inlet Strainer by defining the inspection method and criteria to ensure an ideal strainer condition. The Fuel Inlet Strainer material is a sintered stainless-steel weave which bonds together tangent metal surfaces at their points of contact. This prevents the wires from loosening along the welded seam and cut edge. The seam edge of the cut screen may have some screen wires that do not appear to be completely attached.

3. TIMING AND INSTRUCTIONS FOR COMPLIANCE

3.1 **Next Scheduled Maintenance** As per the Lycoming Engine Operating manual the servo fuel inlet strainer is to be inspected following the first 25 hours of operation, and every 50 hours thereafter.

3.2 Inspection Method and Criteria

3.2.1 Disconnect fuel line from servo inlet fitting. Remove servo inlet fitting (installation torque 65-70 in lbs.) to gain access to the strainer.

3.2.2 Carefully remove the strainer for cleaning and inspection. Check the screen for distortion or openings in the strainer. The strainer should be replaced for either of these conditions.

3.2.3 Remove the O-ring positioned at the inlet of the fuel strainer. This O-ring must be discarded and replaced. The strainer can be cleaned in a solvent such as MEK or acetone. The strainer can also be cleaned in an ultrasonic cleaner if available.

******** NOTICE ********
At no point during the cleaning process should a brush or cloth, with wire, plastic, or fibered material be used for cleaning.

3.2.4 Following cleaning, dry the fuel inlet strainer using compressed air, not to exceed 30 psi. If the recommended cleaning methods do not result in a clean strainer, replacement is required.

3.2.5 Carefully inspect the seam of the fuel inlet strainer. Any strands of screen wire that are lying flat within the strainer seam area can remain as is. Any strands of screen wire that are protruding outside the strainer seam area by 2 mm (.08 inch) in length or more are not acceptable. If a loose wire is found that meets this criteria, it can be rectified by cutting and removing the end of wire to reduce the length to under 2 mm in length.

******** NOTICE ********
No mechanical manipulation of a loose wire is allowed. Pulling or bending the wire will damage the sintered bond and further damage the screen material, resulting in replacement of the strainer.

3.2.6 Once the fuel inlet strainer has been cleaned and meets all acceptable inspection criteria, install a new O-ring onto the strainer. Install into the servo inlet port, spring side first. Inspect the O-ring on the inlet fitting for any damage or cuts. If in question, replace the O-ring. Install and tighten the inlet fitting to 65-70 in lbs. Reattach the fuel inlet line in accordance with the engine manufacturers recommend torque.

3.3 Fuel Strainer / O-ring Replacement

3.3.1 For replacement of fuel inlet strainer and O-Ring components as indicated in section 3.2, use table 1 to determine part number(s).

3.3.2 When a fuel inlet strainer is found in a condition to not meet the inspection criteria established in section 3.2.2 or 3.2.4 it should be replaced. If a fuel inlet strainer is found to not comply with the inspection criteria established in section 3.2.5, the fuel inlet strainer can either be replaced or returned the manufacturer, AVStar Fuel Systems for warranty consideration.

3.3.3 A new fuel inlet strainer and O-rings can be procured from AVStar Fuel Systems or any AVStar authorized service center, as the fuel inlet strainer is a 100% replacement at overhaul.

4. REFERENCES

4.1 Part numbers for replacement Fuel Strainer and O-Rings.

Model Servo	Size	Fuel Inlet Strainer P/N	O-Ring P/N Fuel Strainer	O-Ring P/N Inlet Fitting
LFR-NNSS5	5	AV2537608	AV953541-10	AV951789
LFR-NMLH10	10	AV2537610	AV951392	AV951790
LFR-NNLH10				
LFR-NNLS10				
LFR-NNSH10				
LFR-NNSM10				

Table 1