

# RANS

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**Assembly Alert:** 195  
**Date:** September 19 2024  
**Subject:** Uninstalled Fuel Cap Seal Degradation  
**Compliance:** Inspection  
**Models Affected:** All Models that use KSFS0007

**Insert Context here:**

It has been reported by a builder with a plus 5-year-old kit that during his first test flight of an S-20 equipped with the small .75gallon header tank a partial fuel starvation occurred due to large black particles. The source of the particles was the seal on the small header tank cap. The cap and seal were 5 plus years old prior to assembly. Neoprene seals have a suggested shelf life of 10 to 15 years depending on storage conditions. It is indefinite what caused the failure of this seal. The builder reported using only alcohol free 93 octane auto fuel. No degradation of seals in any size of header tank has been reported or observed within our demo planes at RANS.

**Action:** Inspection of header tanks cap (KSFS0007) seals should be performed prior to final assembly and contact with fuel. Inspect the seal for discoloration, pliability and cracks. If not flexible the seal may have dried out and not be safe for use. Replace prior to use with a fresh cap assembly if in doubt.

Thank you for your attention to this matter. Hopefully, we have not inconvenienced you to any great degree. Fly safe.

