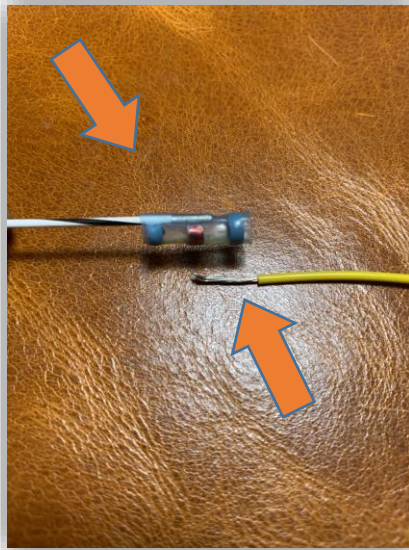




DOCUMENT TYPE: Service Bulletin **NAME:** SB-GOAT-20220525 – Solder Sleeve & Wiring Issue

INSPECTION STATUS: **HIGHLY RECOMMENDED**

SERVICE STATUS: **HIGHLY RECOMMENDED**



APPLICABILITY: All Goats equipped with a Gen1 Wire Harness

ISSUE REPORTED: Solder Sleeve melt-able ring remains “unmelted” & therefore leaves wiring circuit either ungrounded or lacks connectivity for purpose.

MANNER / SOURCE: Reported from fleet via Safety Forms submitted on the Wild Sky Website.

FREQUENCY: This issue has occurred on 2 separate Goats & therefore becomes a publication.

FACTORY FINDINGS & COMMENTS: (Photos Available Below) Based on the exhibits submitted, we can only surmise that the Solder Sleeve(s) was/were heated to the point that the plastic portion & sealant of the Solder Sleeve was melted - but the actual ring of melt-able solder did not. The solder sleeve must melt completely to fuse the wires & achieve connectivity. Proper grounding of the electrical system is necessary to shut the engine OFF – or render it unstartable. This is especially important when the prop is rotated for maintenance or for purging the oil circuit prior to starting engine after a period of nonuse.

FACTORY INSTRUCTIONS / RECOMMENDATION:

Certification Required: Owner or Higher (Avionics Technician, Factory Pro or LSR-M is recommended)

Inspection Description: At a minimum, inspect all Solder Sleeves for complete melting of the Solder Ring. They can be, but not always, used on the following systems:

- a.) Lighting Coil & Mag Circuit / Kill Switches
- b.) Grounding Circuit
- c.) Instructor Kill Switch (Location of Reported Issues)

- d.) Custom Instrumentation, Avionics or Communications requiring Grounding Circuits to prevent interference.

Service/Replacement Description: We suggest using an Avionics Technician because they will know exactly what they're looking for & how to separate the wires enough to inspect, heat & confirm melting / connectivity for purpose. See photos below for familiarity.

COMPLIANCE STANDARD SITED:

FAA/ASTM Compliance Standard: ASTM F2425

COMPLIANCE DOCUMENT SITED:

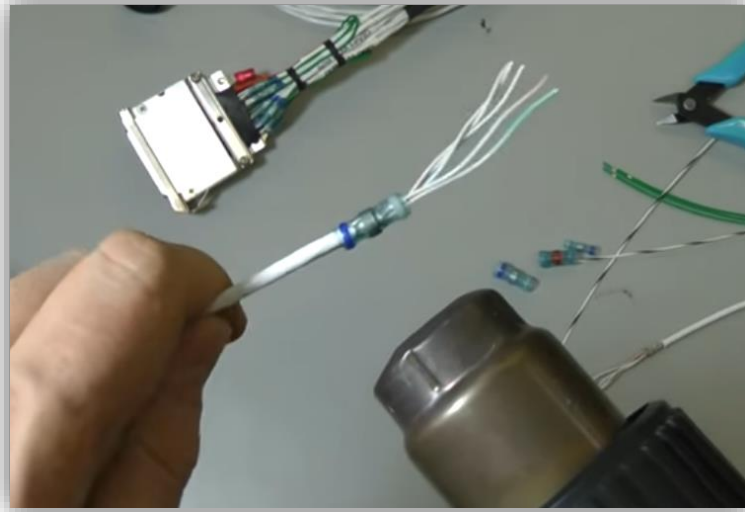
WILD SKY LLC CONTINUED AIRWORTHINESS SYSTEM, Chapter 7, Section 4: "It is the owner's responsibility to read and comply with all maintenance and continued airworthiness instructions provided by Wild Sky, LLC. It is the responsibility of each aircraft owner to provide current contact information to Wild Sky, LLC in order to facilitate distribution of relevant safety of flight information. The owner of a Wild Sky, LLC aircraft shall notify Wild Sky, LLC in writing as soon as practicable, when discovery is made of a safety of flight issue or a significant service difficulty. The owner may use the safety reporting form in the Pilots Operating Handbook, the Maintenance Manual - or fill out the form on the company website www.wildskyaircraft.com. The owner of a Wild Sky, LLC aircraft shall be responsible for complying with all notices requiring mandatory corrective action. Wild Sky, LLC shall determine what costs, if any, Wild Sky, LLC is responsible for with regards to this mandatory action, and shall not be responsible for any other costs incurred arising out of this action." These requirements are contained in the Wild Sky, LLC Goat Aircraft Operating Instructions "Owners Responsibility" section.

LEGAL: To obtain satisfactory results, procedures specified in this publication must be accomplished with accepted methods in accordance with the prevailing maintenance standards & legal regulations in the country of applicability. Wild Sky LLC cannot accept any responsibility for the quality of work performed by the owner or technician in accomplishing the requirements of this publication.

SUPPORTING DOCUMENTATION & PHOTOS:



PHOTO 1: This is the issue found in the field. You can see that while the Plastic Sleeves and Sealant at ends of the Sleeves appear melted, the Melt-able Solder Rings are NOT "melted" to create connectivity for purpose. To be clear, these Solder Sleeves in the photo are not correct. No "Red" should be visible.



YouTube Video: <https://www.youtube.com/watch?v=uhRCUAYoSXg>

VIDEO 1: If you have never heard of a Solder Sleeve, this video is a good introduction.

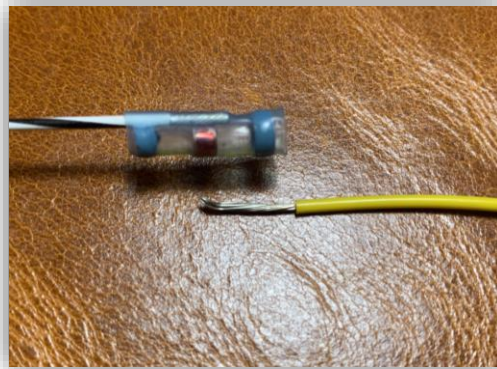


PHOTO 2: Solder Sleeve ready to attach Prepped Wire - Solder Sleeve (Left) / Prepped Wire (Right)



PHOTO 3: Prepped Wire Inserted into Solder Sleeve

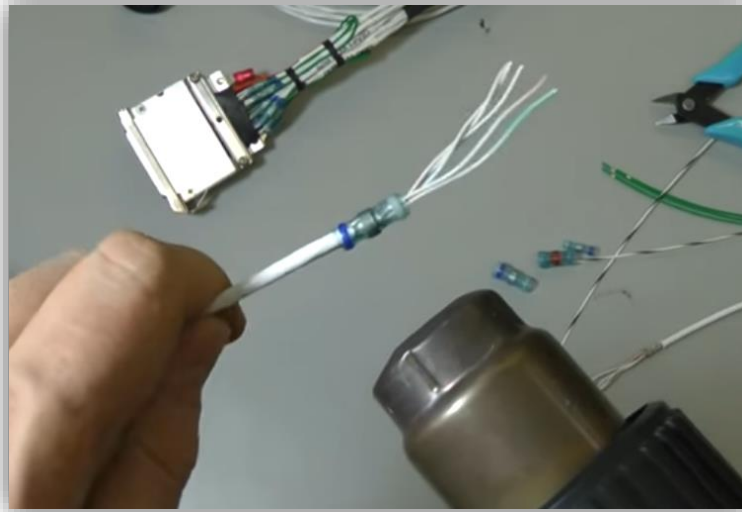


PHOTO 4: Solder Sleeve being heated to point where Meltable Ring must melt.



PHOTO 5: Solder Sleeve with Meltable Ring now “melted”. Clearly, the “ring” visible as a shade of red in the prior photos has liquified & become the solder/binder creating connectivity between the 2 wires. The red dye is no longer visible.