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SERVICE BULLETIN

No. SB-AG-51

April 24, 2009

WIRE BUNDLE SHORT CIRCUIT

THIS SERVICE BULLETIN APPLIES TO THOSE AIRPLANES THAT
HAVE HINGED LOWER LEFT AND RIGHT INSTRUMENT PANELS:

AIRPLANES AFFECTED:

<u>MODEL</u>	<u>SERIAL NUMBERS*</u>
S2R	2578R & up
S2R-1340	R1340-011 & up
S2R-R3S	R3S-011 & up
S2R-1820	R1820-032 & up
S2R-G1	G1-001 & up
S2R-G5	G5-001 & up
S2R-G6	G6-001 & up
S2R-G10	G10-001 & up
S2R-T15	T15-020 & up
S2R-T34	T34-082 & up
S2RHG-T34	T34HG-101 & up
S2RHG-T65	T65HG-002 & up
S2R-T660	T660-101 & up

*Serial numbers listed above may be with or without the DC suffix.

REASON FOR PUBLICATION:

A case has been reported of the wire bundle to the lower right instrument panel chafing on the hinge screw, causing several short circuits (see Figures 51-1 & 51-2). No discernable smoke in the cockpit resulted, but the flap control circuit breaker popped intermittently, removing the ability to move the flaps. A number of other symptoms could occur, depending on which wires short, but none of them would cause a safety-of-flight concern. Several short circuits at the same time could, however, be disconcerting to a pilot not aware of the potential problem, especially if there was discernable smoke in the cockpit.

COMPLIANCE:

The inspection portion of this Service Bulletin must be complied with immediately upon receipt or before further flight. If necessary, Part A of the repair section of this Service Bulletin must be accomplished prior to further flight. Part B of the repair section is precautionary and should be complied with within one week or 10 flight hours, whichever comes first.

BY WHOM WORK WILL BE ACCOMPLISHED:

FAA licensed A&P mechanic or equivalent:

APPROVAL:

This Service Bulletin is FAA approved

MAN HOURS:

15 minutes for access and inspection, 1 to 2 hours to repair any chafed or shorted wires, 20 minutes to secure wire bundles, and 20 minutes to return the airplane to flight status, make the appropriate log book entry, and notify Thrush Aircraft, Inc. of Service Bulletin compliance.

SPECIAL TOOLS:

None

INSPECTION:

Unfasten the lower left and right instrument panel quarter-turn wing nuts (see Figure 51-3) and tilt the panels forward. While the problem found was behind the lower right instrument panel, the lower left one is hinged in the same manner, warranting inspecting it also.

Visually inspect wires and wire bundles in the vicinity of the outboard panel hinge (see Figures 51-1 through 51-5). Shorted wires will be obvious, similar to figures 51-1 & 51-2. Inspect for evidence of chafing of wires even if there are no short circuits. Rotate the panel back to the upright position and measure how close the wire bundle is to the center hinge screw. Check to see that the wire bundle is well tied off, while leaving enough slack to enable panel rotation.

If on either side there are no shorts or significant wire chafing, the wire bundles are well tied-off, and no wires come closer than 1/2" to the center hinge screw, then the inspection is complete. To complete compliance with Service Bulletin SB-AG-51 this inspection must be recorded in the airplane maintenance log and the compliance record mailed or transmitted back to Thrush Aircraft, Inc. If any of the above requirements is not met, repair per the REPAIR section will be necessary in order to complete the Service Bulletin.

There is no repetitive inspection.

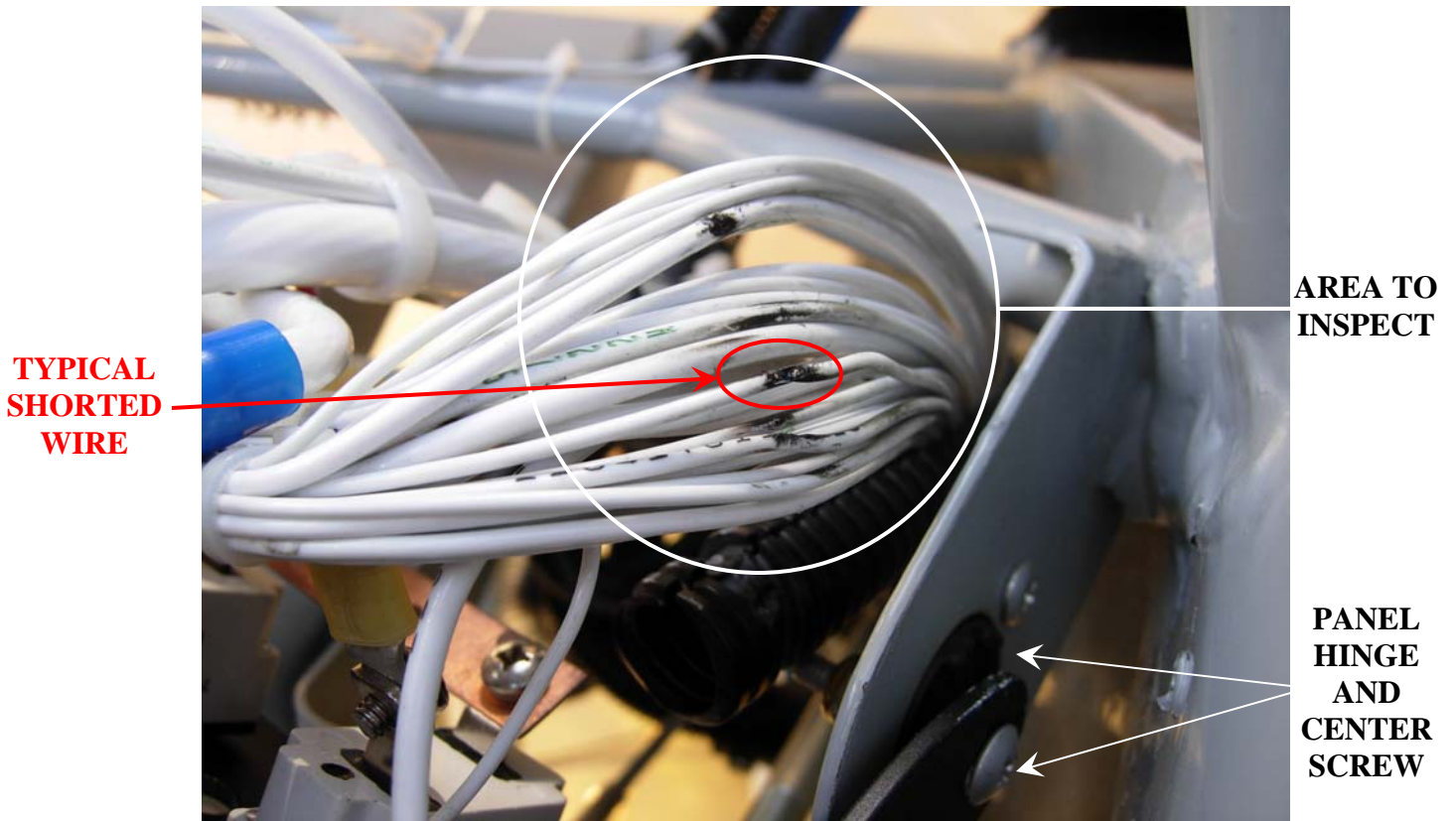


FIGURE 51-1: Shorted Wires Behind Lower Right Panel
View looking forward and inboard

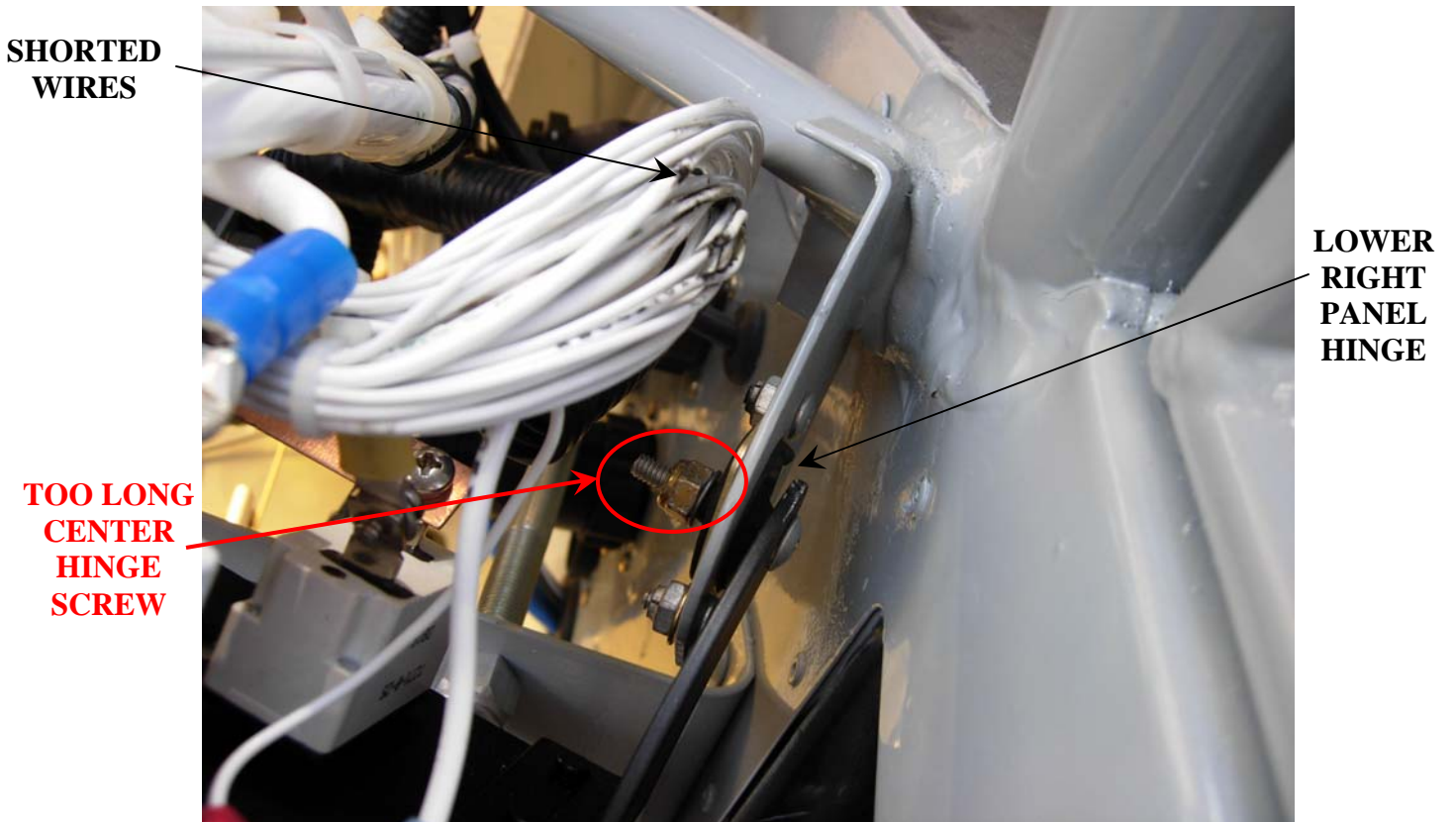


FIGURE 51-2: Too Long Hinge Screw that Shorted Wires

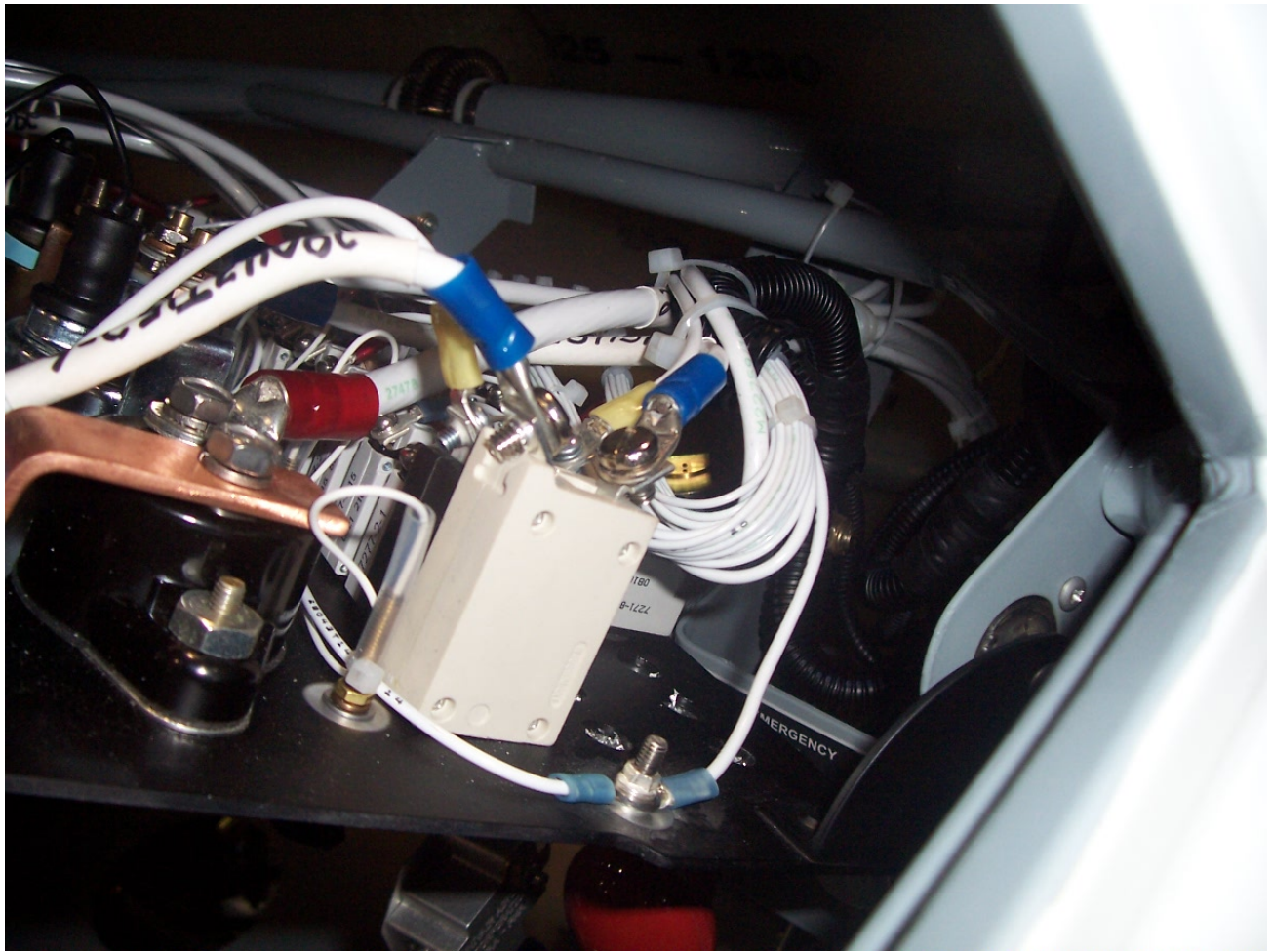


FIGURE 51-5: Properly Tied-off Wire Bundle

Service Bulletin SB-AG-51 Compliance Report

Aircraft S/N: _____ Aircraft Owner: _____
Aircraft Registration # _____ Address of Owner: _____
Airframe total time: _____ City & State: _____
Engine total time: _____ Zip Code or Province: _____
Date of Compliance _____ Physical location: _____
Complied with by: _____ Certificate #: _____
Signature: _____

PLEASE RETURN THIS REPORT ONLY AFTER THE SB IS COMPLETED

This response card may be mailed, Faxed to QC Manager at (229) 436-4856, or e-mailed to gmoreland@thrushaircraft.com.

Fold UP so address shows, tape & mail (Do Not Staple)

THRUSH AIRCRAFT INC.
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Return Address
