

## **Model BM-AIK2A Airframe Interface Kit Installation Example – Cirrus SR22 Wiring Harness for Battery Maintenance Chargers**

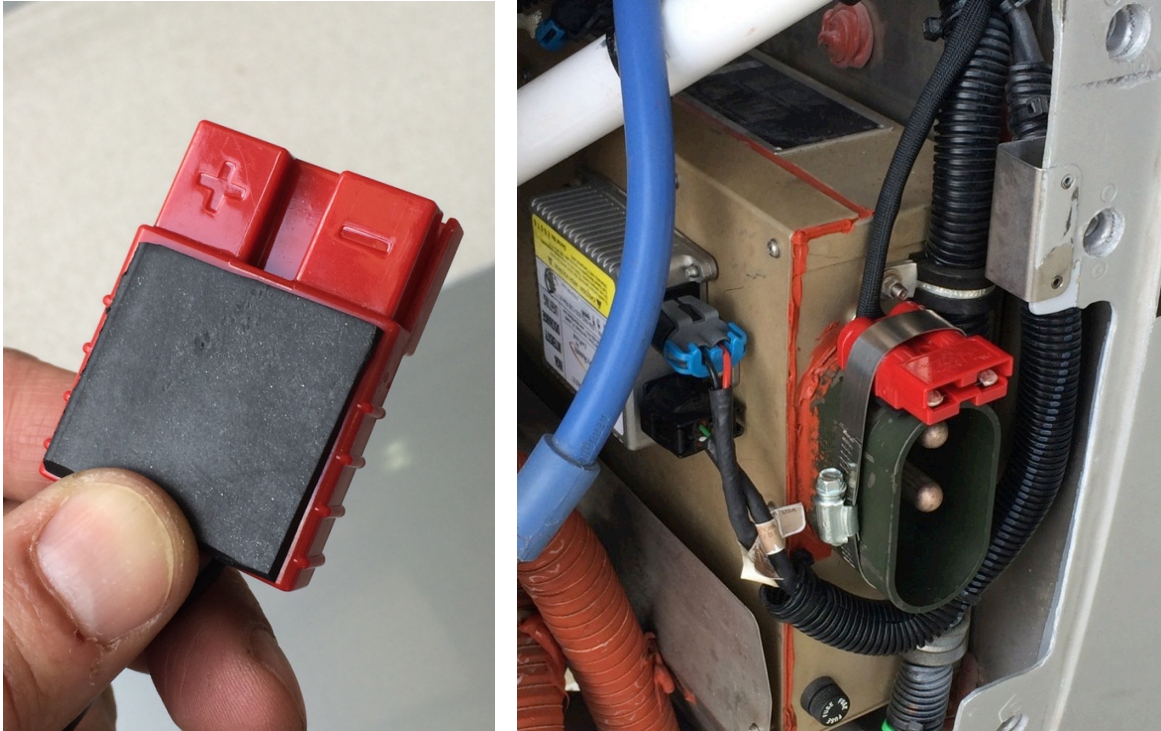
This installation example supplements the instructions for installing the BM-AIK2A battery maintenance charger harness kit. Please read the instructions with the kit completely before referring to this example. The kit instructions call for connecting to the ship's battery relay and an airframe ground, NOT directly to the battery. On the SR22, the connection will be to the Master Control Unit (MCU) which has connection studs for the battery cable (Battery 1) and ground. The exact configuration of your aircraft may vary from this example and require slight changes from these instructions.

- 1) This SR22 has 2 batteries – a main, cranking battery (BAT 1) located on the left firewall, and a second emergency backup battery aft of the passenger compartment. This installation is only for the main Battery 1.
- 2) A removable access panel for the external power receptacle is located at the top, left, aft portion of the lower cowling. Just above the external power receptacle is a rectangular area where the wiring kit's red SB50 plug will fit to provide convenient access for battery maintenance charging during hangar storage.



- 3) Begin by removing the upper and lower cowling assembly.

- 4) Assemble one end of the harness by soldering the wires into the SB50 contacts and inserting the contacts into the connector. Slide the fiberglass protective sleeve over the 2 wires and up to the plug.
- 5) Apply a small square of silicone baffle seal material to the flat side of the SB50 and secure the plug assembly atop the external power receptacle using a band clamp as shown below. The elastomeric dust cover for the plug is optional for this installation.



- 6) Route the sleeved harness wires up from the plug to follow the existing wire bundle over to the area of the MCU's terminals for Battery 1 battery and ground. The studs are on the inboard side of the MCU.
- 7) Assemble the fuseholder and connect one end to the MCU's Battery 1 stud using a ring terminal and re-cover with the insulating boot. Route the fuseholder assembly to make it accessible above the MCU and follow the existing wire bundle.
- 8) Trim the positive (red) harness lead to length and connect to the open fuseholder wire using the supplied butt splice. Secure wires and fuseholder to the existing wire bundle.
- 9) Route the ground wire (black) following the same path to the MCU ground stud and connect with ring terminal. Secure to wire bundle with ties.
- 10) Check continuity and polarity of harness at the SB50 connector with voltmeter.
- 11) Label SB50 connector "MAINTENANCE CHARGER."
- 12) Connect BatteryMINDER to aircraft and check for proper operation.
- 13) Perform cockpit electrical system test for normal operation.
- 14) Reinstall cowling and return aircraft to service with appropriate entry in airframe maintenance logbook to document installation as a Minor Alteration.



Finished installation with mating charger cable connected.