

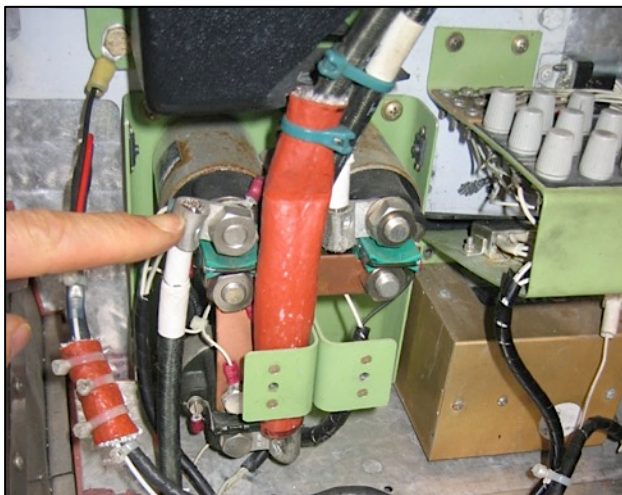
## Enhanced Flight Model BM-AIK Airframe Interface Kit for **BatteryMINDER**® Maintenance Charger Installation Example: Piper PA-46-500TP Meridian

Many Piper Meridians (serial numbers 4697256-4697525) came factory-equipped with a connector for a full-time maintenance-type battery charger inside the RH cowling access door. A BatteryMINDER can be used with these aircraft by simply adapting the charger's output from its SAE "trailer plug" to a blue Anderson SBS50. Audio Authority provides an inexpensive adapter harness for this purpose, [Model SAE2-SBS50](#).

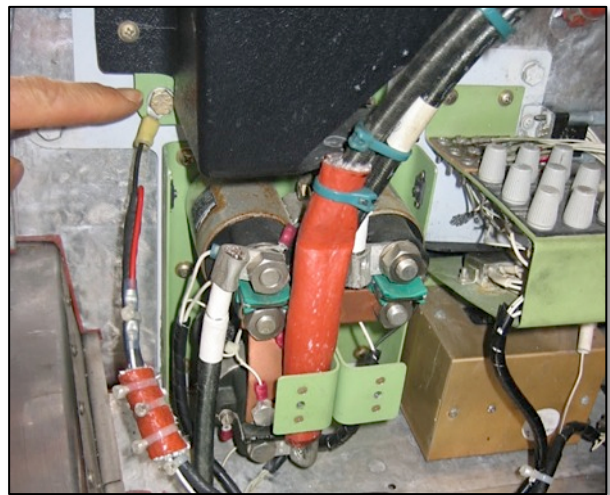
For Meridians with serial numbers before and after the above range, our [BM-AIK](#) provides a kit of aviation grade components, eligible for installation as a minor alteration, to provide a quick-connect battery access for maintenance charging. Generally, the harness is installed at the battery contactor (same as the factory location) with a red Anderson SB50 connector mounted to its cover. Connection directly to the aircraft battery is NOT recommended.

Please read the general [instructions supplied with the BM-AIK](#) kit first, and then supplement with these details specifically for the Piper Meridian.

- 1) Open battery compartment access cover and disconnect ship battery connector.
- 2) Open cowling RH access door. Remove the metal cover to expose the battery contactor/relay.
- 3) Take the 2-wire harness from the kit and mount the red Anderson SB50 plug to the relay cover using standoffs of approximately 0.30" height to provide adequate clearance for the removable insulating dust cover. (Standoffs not supplied with kit. Use standard aviation hardware.)
- 4) Route the harness wires through the cover using rubber grommets to protect wiring.
- 5) Attach fuse holder assembly to positive harness lead and trim harness to length for positive ( + ) connection to battery relay and negative ( - ) connection to airframe ground as shown below.



**Battery Connection** – Relay with cover removed, finger points to positive relay connection.



**Ground Connection** – Black harness wire connects to an airframe ground.

- 6) Check continuity and polarity of harness at the SB50 connector with voltmeter.
- 7) Label SB50 connector "MAINTENANCE CHARGER."
- 8) Reinstall battery relay cover.
- 9) Reconnect battery to aircraft.



**Finished Installation** – Red SB50 with insulating dust cover removed, mounted to battery relay cover with 0.30" standoffs. Fuse holder inside. Positive lead connected to battery relay, negative to airframe ground.

- 10) Connect BatteryMINDER to aircraft and check for proper operation.
- 11) Perform cockpit electrical system test for normal operation.
- 12) Make appropriate entry in airframe maintenance logbook to document installation and return aircraft to service. (See example in BM-AIK instructions.)

Photographs courtesy of Skytech, Inc. – Piper dealer and service center. [www.skytechinc.com](http://www.skytechinc.com)