SERVICE BULLETIN 16

Service Bulletin #: SB16
Title: Sensor Interface Unit (SIU) CHT Recalibration

1. Planning Information

1.1 Effectivity/Compatibility

This Service Bulletin applies to all Avidyne Sensor Interface Units with the following hardware part number:

Part Number
200-00031-000

1.2 Concurrent Requirements

None

1.3 Reason

Improves the calibration of inputs from the cylinder head temperature (CHT) sensors. This will improve the accuracy of CHT values displayed by the optional Emax engine instrumentation software on the EX5000C Multi-Function Display. The original calibration data can cause the displayed CHT values to be higher than actual by between 20 and 50 degrees F.

1.4 Description

This service bulletin describes the procedure for updating the CHT calibration data internal to the SIU. This update cannot be applied in the field - the SIU must be returned to the original equipment manufacturer (OEM) for modification. The OEM will return the updated SIU within 5 days of receipt at no charge. For an expediting fee of $185, the OEM will provide an updated exchange SIU prior to receipt of the original unit

1.5 Compliance

This Service Bulletin is applicable to the Avidyne Sensor Interface Unit installed in Cirrus aircraft and is accomplished on condition of the SIU "Mod Status" for the upgrade of CHT calibration data. Proper calibration data is indicated by the presence of a Mod 1 marking on the outside of the SIU.

To determine the current SIU "Mod Status", remove the aluminum kickplate on the bottom of the copilot-side instrument panel. The SIU is mounted on the panel side of the kickplate. Compare the label graphic on the SIU with the following figures:

SENSOR INTERFACE UNIT — MODEL SIU
AVIDYNE PN 200-00031-000

No Mod Applied

Note that there are no Mod Status blocks appearing below the "Avidyne PN" line.

SENSOR INTERFACE UNIT — MODEL SIU
AVIDYNE PN 200-00031-000
MOD: 1■ 2■ 3■ 4■ 5■ 6■ 7■ 8■ 9■ 10■
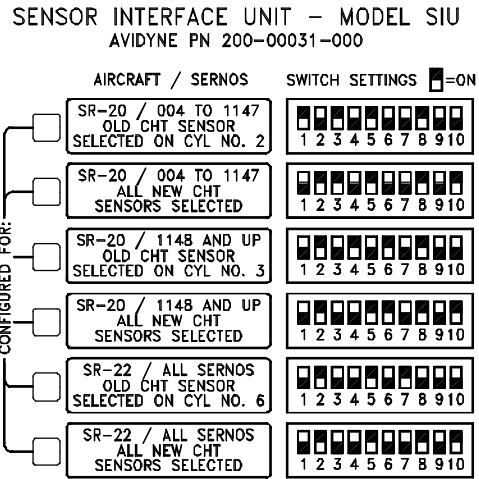
Numbered Mods Applied

Note the "Mod. Blocks" appearing below the "Avidyne PN" line. All modifications are indicated by a mark in the corresponding "Mod. Block."
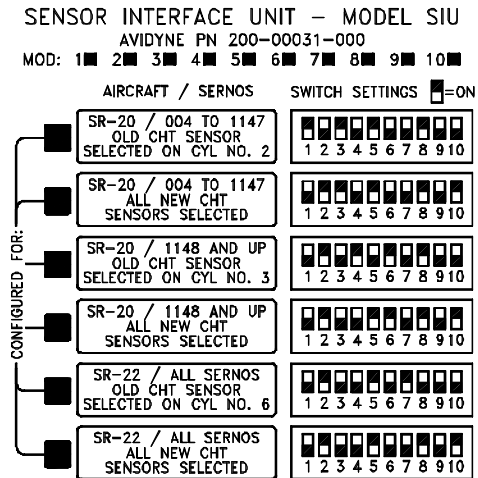
This Service Bulletin applies if an SIU mod status is determined to be either:

- "No Mod Applied": no mod blocks are present on the SIU label, or

- "Mod 1 Not Accomplished": mod blocks are present on the SIU label but Mod 1 is not indicated.

1.6 Approval

The accomplishment instructions contained in Section 3 are FAA approved.

1.7 Labor Time

Removal and reinstallation of the SIU should take one person approximately 60 minutes.

1.8 Weight and Balance

No change.

1.9 Electrical Load Data

No change.

1.10 Software Accomplishment

None.

1.11 Reference

None.

1.12 Publications affected

None.

2. Material – Cost and Availability

All SIUs removed for accomplishment of this Service Bulletin must be returned to Moritz Corporation, 608 Elephant Road, Perkasie, PA 18944. Units will be modified and returned within 5 working days. There is no charge for this service or for return shipping.

Alternatively, a pre-modified exchange unit can be sent prior to removal of an SIU from the aircraft. Moritz will charge an expediting fee of $185 for this service.

NOTE: An RMA (Return Material Authorization) must be obtained from Moritz Corporation prior to returning any units. Units sent without an RMA will not be accepted.

3. Accomplishment Instructions

3.1 Obtain RMA

1. _____ Contact Joyce Arnold at Moritz Corporation at 215-249-1300 to obtain a Return Material Authorization (RMA) and shipping instructions.

3.2 Remove SIU

1. _____ Remove the aluminum kickplate from below the copilot-side instrument panel. The SIU is mounted on the panel side of the kickplate.

2. _____ Remove the cable connectors attached to J900 and J901 of the SIU.

3. _____ Remove the SIU from the aluminum kickplate.

4. _____ Remove the two screws holding the small metal cover just below the printed label on the top of the SIU. Record the settings of the exposed DIP switches and replace the cover.

3.3 Reinstall SIU

1. _____ Remove the two screws holding the small metal cover just below the printed label on the top of the SIU. Confirm that the DIP switches are in their original configuration and replace the cover.

2. _____ Reattach the SIU to the aluminum kickplate.

3. _____ Reattach the cable connectors to J900 and J901 of the SIU.

4. _____ Reinstall the aluminum kickplate below the copilot-side instrument panel.

4. Update Validation

4.1 Confirm SIU Operation

1. _____ Power on the EX5000

2. _____ Ensure that the message "SIU NOT COMMUNICATING" does not appear.

3. _____ Follow normal procedures to prepare for engine start, and start aircraft engine.

4. _____ Turn the EX5000 display select knob to display "Engine"

5. _____ Confirm normal indication of all engine parameters.