

TOTALFLOW[®] *Technical Bulletin 58*

6713 FCU Onboard Analog Input #2 Calibration

Totalflow Technical Bulletin

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6713 FCU Onboard Analog Input #2 Calibration

1. Purpose:

To describe the inaccurate mapping of the "onboard" Analog Input #2 calibration found in the 6713 FCU W/O EXIO using EPROM 2015489-001 through 2015489-008 and in the 6713 FCU W/EXIO using EPROM 2015490-001 through 2015490-009.

2. Description of problem:

In the 6713 FCU's with the above EPROM's, when attempting to calibrate the "onboard" Analog Input #2, the VCB map was misdirected. This caused the Analog Input #1 to be re-calibrated whenever the Analog Input #2 was calibrated.

3. Solution:

The problem is corrected in EPROM 2015489-009 or newer for 6713's W/O EXIO and EPROM 2015490-011 or newer for 6713's W/EXIO. When installing the –009 or the –011 EPROM, it is not necessary to do a cold start. Powering down the FCU, installing the appropriate EPROM and powering the FCU back up (warm start) will activate the fix; but it will be necessary to type the "LUI" command (load user interface) command from the "terminal" screen. This will copy the corrected ROM based user interface table to RAM. It is not necessary to type the "LUI" command if a cold start is done when installing the appropriate EPROM in the FCU.



STEPS TO PROGRAM "LUI" COMMAND

Procedure for Loading User Interface:

- 1. Connect laptop to FCU
- 2. Enter Terminal Emulation mode as described below
- 3. Type "LUI" then (ENTER) NOTE: This command loads the "User Interface" from the EPROM
- 4. Exit term mode
- 5. Disconnect the PCCU Data Cable from the FCU
- 6. Reconnect the PCCU Data Cable to the FCU for Console Mode
- 7. Enter Console Mode as described below
- 8. Calibrate Analog Inputs

Procedure for set up and usage of Terminal Emulation Mode

Local protocol hardware is only supported via an RS-232 interface. Default port settings are 2400 baud, 8 data bits, 2 stop bits, no parity.

Entering "TERM (ENTER)" or "term (ENTER)" initiates the Terminal Interface Mode. Disconnecting the local port connector terminates Terminal Interface Mode



To *read* data using Local Terminal Interface commands, type the command letters in either upper or lower case. Hit the Enter key (ENTER). The FCU will respond with the current value for the appropriate data item.

To *write* data, type the command letters in either upper or lower case, followed by '=', then the value to be assigned to the associated data item. Then hit the Enter key (ENTER).

EXAMPLE: To set the specific gravity to 0.5678, the command would be "g=0.5678(ENTER)".

It is important to remember that this protocol does NO range checking or validation on data entered. Invalid data will generate invalid results.

Commands for entering Console mode in a 6713:

Type CODE= (enter the 2nd level security code) then press enter. NOTE: Type CODE in all capitals; there will not be any return characters after enter is pressed. Cursor will go back to under the "c" of "code". To verify communication with the FCU, type "TF" then press enter. The character returned should be a "y" for "yes, communication is established with the fcu" and "n" for communication is not established with the fcu. Then type "cons" and press enter. "Cons" is not case sensitive.