



CATEGORY: Instrumentation
PART NUMBER: 495713
BULLETIN NUMBER: CFR SB 072820-2
SUPERSEDES: n/a
DATE: July 28, 2020
ROUTE: Distributor/End User

PRODUCT APPLICABLE TO:	TEST METHOD:
<input checked="" type="checkbox"/> F-1/F-2 Combination	D 2699, D 2700
<input type="checkbox"/> F5 Cetane	D 613
<input type="checkbox"/> Supercharge	D 909
<input type="checkbox"/> Accessories	
<input checked="" type="checkbox"/> Tools	
<input checked="" type="checkbox"/> Technical Publications	

SUBJECT: XCP RTD Calibration Instructions

The Octane XCP panel with new software upgrade 4.1.1 and newer will have the ability to calibrate each RTD channel within the software. Once the user has upgraded to 4.1.1 software revision or newer the calibration will be contained in the QC Utility section from the main menu screen. In order for customers to have 4.1.1, users must be upgraded to Windows 7 HMI or newer.

Instructions for RTD Offset Adjustments

1. Before proceeding, please be sure to acquire the RTD Calibration Simulator, CFR part number 495713, and read these instructions carefully. When the calibration procedure is finalized you will need to perform the Mixture Temp Calibration (**MON only**).
2. Make sure engine is **not running**, DCU is powered up and ready and HMI application is running. From the Main Menu Screen, navigate to **QC Utility** screen.

3. Set RTD calibration device **CFR Part Number 495713** to the following settings seen on screen. Complete instructions can be found with the unit:



See Figure 1

Temp units = °F

RTD PT100 (x= 3850)

SET

Knob control

- Pressing knob twice displays the setting screen
- rotating knob selects setting
- pressing knob changes setting
- rotating knob to EXIT then pressing knob saves settings.

Figure 1

4. Make sure connector probes are in correct positions on the simulator. See figure 2

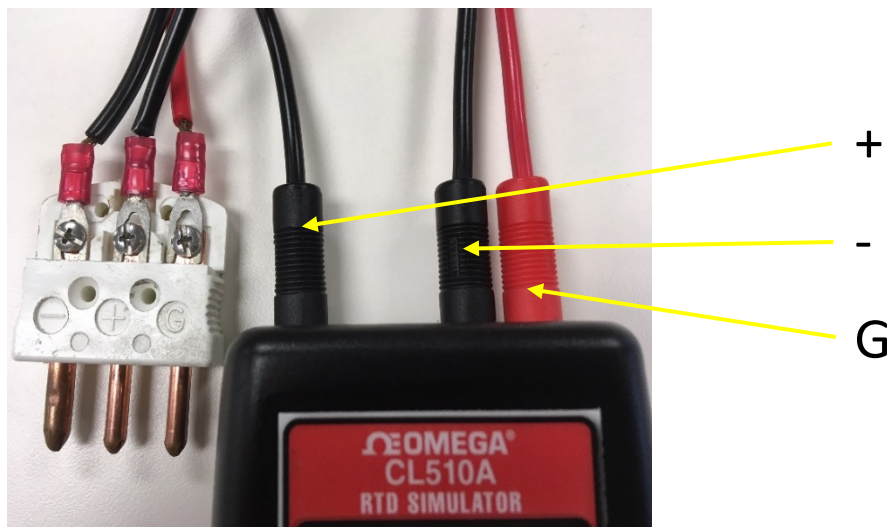


Figure 2



- From the main menu display in the XCP software choose “QC Utility” which will bring you to the QC Utility page shown below.

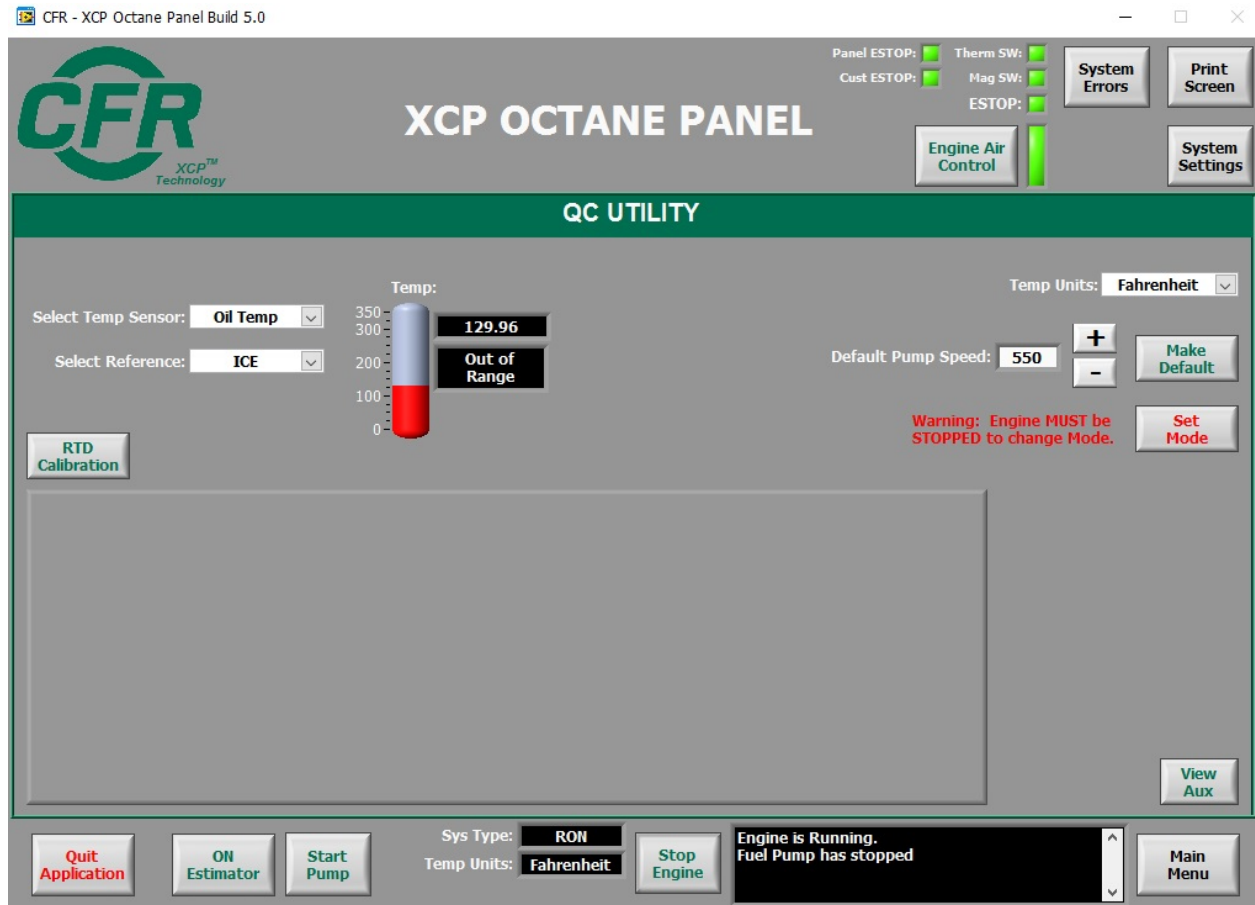


Figure 3

- Press RTD calibration button circled in yellow. See figure 4 This will then display a password text box. The default password is **password1** unless it has been changed by the site Mgmt.
- Enter Password

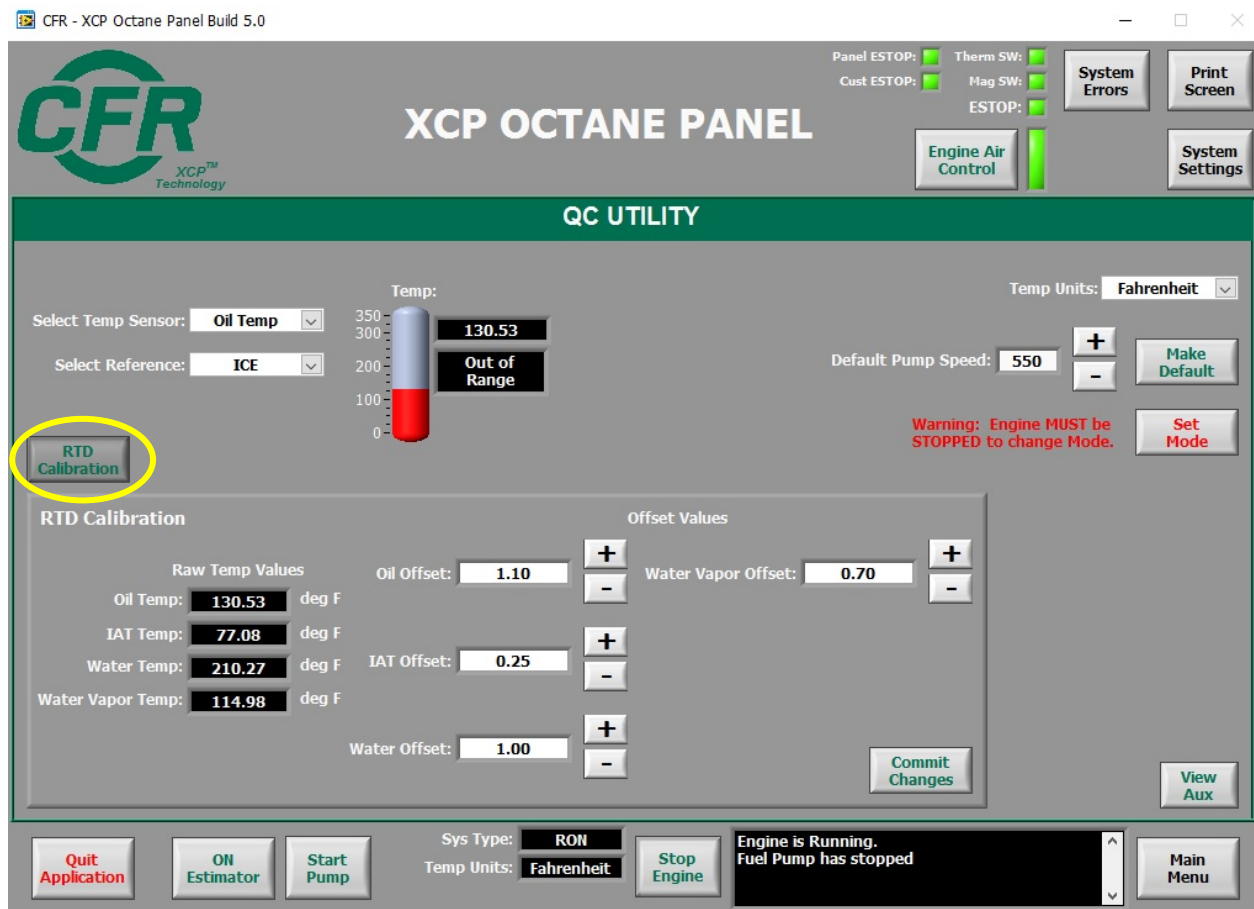


Figure 4

- The above RTD calibration box screen will appear showing the raw temp values and the offset values.
- Unplug Fuel Mixture RTD. (MON only)
- Plug in RTD simulator to the bulkhead female RTD jack for the mixture RTD. Set the simulator to 300° F.



11. Adjust Fuel Mix offset until mixt temp indicator reads 300 degrees F +/- 2 °F.
12. Unplug RTD Simulator and replace Fuel Mix RTD.
****NOTE: Be sure to install the RTD male connector correctly into the female bulkhead jack as they are polarized.**
13. Unplug Oil RTD and replace with the RTD simulator set to 120°F.
14. Adjust Oil offset until oil temp reads 120 degrees F +/- .2 °F.
15. Unplug simulator and replace oil RTD.
16. Unplug Inlet air temp RTD and plug in RTD simulator set to 130 ° F.
17. Adjust Inlet air temp offset until indicator reads 130 degrees F +/- .2°F.
18. Unplug simulator and replace air temp RTD.
19. Unplug water temp RTD and replace with simulator set to 212°F.
20. Adjust water temp offset until indicator reads 212 degrees F +/- .2 °F.
21. Unplug simulator and replace water RTD
22. Unplug water vapor RTD and replace with simulator set to 160°F.
23. Adjust offset till indicator reads 160 degrees F +/- .2 °F.
24. Unplug simulator and replace water vapor RTD.
25. Once all RTD channels have been done press “**Commit Changes**” and follow prompts on screen.
26. This finalizes the temperature offsets and you can return to the main menu.
27. For MON units the operator will now need to perform a mixture manifold calibration.

For any additional questions or concerns, please contact your local CFR Distributor.

Best Regards,

Dan Bemis
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