



ANDERSON-NEGELE

Technical Guide

AJ300/CT8V Vat Pasteurization System Calibration

Prior to completing a calibration of the VAT system, the following must first be performed:

1. Notify Regulatory personnel of adjustment
2. Receive Regulatory approval to remove tamper evident health authority seals
3. Move Enable Shunt to unlocked position
4. Enable program and calibration menus

In order to perform a complete system calibration it is required to place both CT8V sensors in a well agitated temperature bath along with a certified reference thermometer at a stable temperature comparable to the pasteurization process. Record the readings from the reference thermometer, both CT8V displays and the AJ recorder displays.



AJ300 Calibration

Performing Input Correction (ICor) – Step 1 of System Calibration Process

Perform input corrections to match the AJ300 recorder displays with a master reference thermometer. (You may also refer to page 26 of AJ310 manual for instructions on this process)

In order to perform the input corrections you will need to access the program menu so it must be turned on in the enable mode (Refer to Enable Mode Shunt/Menu Guide).

1. To enter the program menu press the scroll key repeatedly until “Prog” appears on the left display
2. With “Prog” on the display press the down key 3 times to display “Icor”
3. With “Icor” on the display press the scroll key to display the present value
4. Press the up/down keys as needed to raise/lower the present value by the amount necessary to match the AJ product temp display with the reference thermometer.
5. After adjusting the icor value press the scroll key 1 time to display “AL1”
6. With “AL1” on the display press the down key repeatedly until “Icor” appears on the right display
7. With “Icor” on the display press the scroll key to display the present value
8. Press the up/down keys as needed to raise/lower the present value by the amount necessary to match the AJ air space temp display with the reference thermometer. After adjusting the icor value press the scroll key 1 time to display “AL1”
9. With “AL1” on the display press the up arrow to display “Prog” on the left display
10. With “Prog” on the left display press the scroll key repeatedly to display “oPEr” or “Ctrl”
11. With “oPEr” or “Ctrl” on the display press the down key to return to operating mode.

Verify AJ display values now match the reference thermometer. If values do not match record the readings and repeat the input correction process to match all readings.

Performing Pen Calibration (Cal 9) – Step 2 of System Calibration Process

Perform Cal 9 Pen calibration to match the AJ300 recorder pens with recorder displays and master reference thermometer. (You may also refer to page 34 of the AJ310 manual for instructions on this process)

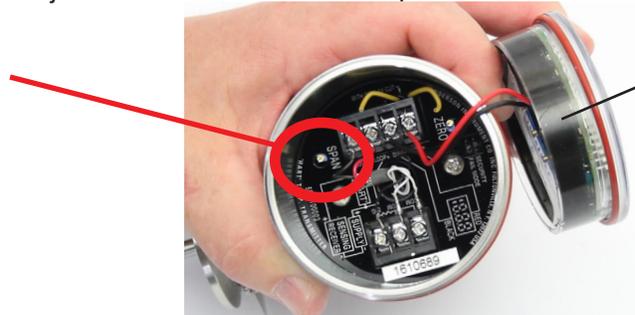
In order to perform the pen calibration you will need to access the calibration menu so it must be turned on in the enable mode (Refer to Enable Mode Shunt/Menu Guide).

1. To enter the calibration menu press the scroll key repeatedly until “CAL” appears on the left display
2. With “CAL” on the display press the down key to display “CAL 1”
3. With “CAL 1” on the display press the scroll key repeatedly until “CAL 9” is displayed
4. With “CAL 9” on the display press and hold the down key with one finger, press the scroll key with another finger and then release both keys at the same time to display “PEN 1”
5. With “Pen 1” on the display press the scroll key one time
6. The red pen will drive towards the center of the chart paper, “PENL” will appear on the display and eventually the chart will begin to rotate
7. As the chart is rotating press the up/down keys as needed to adjust the red pen so it is exactly on the 90F line (for 90-190F chart) – Once the red pen is adjusted properly press the scroll key 1 time
8. The red pen will drive towards the outer area of the chart paper, “PENH” will appear on the display and eventually the chart will begin to rotate
9. As the chart is rotating press the up/down keys as needed to adjust the red pen so it is exactly on the 190F line (for 90-190F chart) - Once the red pen is adjusted properly press the scroll key 1 time – The red pen will park at the 140F line and “PEN 1” will appear on the display
10. With “Pen 1” on the display press the down key 1 time to display “PEN 2”
11. With “PEN 2” on the display press the scroll key one time - The green pen will drive towards the center of the chart paper, “PENL” will appear on the display and eventually the chart will begin to rotate
12. As the chart is rotating press the up/down keys as needed to adjust the green pen so it is exactly on the 90F line (for 90-190F chart)
13. Once the green pen is adjusted properly press the scroll key 1 time – The green pen will drive towards the outer area of the chart paper, “PENH” will appear on the display and eventually the chart will begin to rotate
14. As the chart is rotating press the up/down keys as needed to adjust the green pen so it is exactly on the 190F line (for 90-190F chart)
15. Once the green pen is adjusted properly press the scroll key 1 time – The green pen will park at the 140F line and “PEN 2” will appear on the display
16. With “PEN 2” on the display press the up key 2 times to display “CAL”
17. With “CAL” on the display press the scroll key repeatedly until “OPER” or “Ctrl” is displayed
18. With “OPER” or “Ctrl” displayed press the down key to return to operating mode

CT8V Sensor Calibration – Step 3 of System Calibration Process

Adjust the CT8V product and airspace sensors to match the AJ recorder and master reference thermometer

1. Unscrew the display retaining rings on the CT8V product and air space sensors
2. Gently remove the displays from the sensor housings leaving all wires connected
3. Locate the “Span” adjustment screws on the black pucks inside the CT8V housings



Display Puck

Do NOT adjust CT8V display pucks – Adjustment is made to top black puck inside CT8V housing as described below

4. Using a small instrument screwdriver adjust the “Span” screws for the product and airspace sensors as needed to match the sensor display readings with the AJ recorder and master reference thermometer.

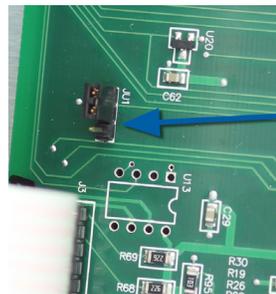
At this point the AJ recorder displays, pens and CT8V displays should all match each other along with the

master reference thermometer. This completes the system calibration and you may proceed to the “System Lockout for Health Authority Seal”

System Lockout for Health Authority Seal

Lockout the vat system in preparation for the health authority seals to be installed.

1. In order to properly lockout the system you will first need to enter the enable mode and turn all menus “oFF” (Refer to Enable Mode Shunt/Menu Guide)
2. Once the menus have been turned “oFF” you will need to place the enable mode shunt into the locked position.

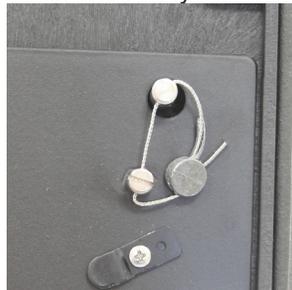


Lockout Shunt
(JU1)

-Upper position

- Enable Mode
locked out

3. The system is now locked out and ready for the health authority seals to be installed.



Recorder Seal



Sensor Seal