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TUB154
PC BOARD AJUNC 3
INSTALLATION INSTRUCTIONS

NOTE REGARDING THE AJUNC 3 BOARD CALIBRATION
The AJUNC 3 Board must be calibrated and to do so, it will require many of the tools and materials included in the RPI Diagnostic Smart Kit® (RPI Part #TUK108). *If using the OEM test kit, use the components corresponding to RPI tools mentioned below.*

INSTALLATION INSTRUCTIONS
1) Turn the sterilizer power off and unplug the unit from the electrical source.
2) Remove the cover and put aside any hardware for use later in these instructions.
3) Disconnect all connectors located on the AJUNC 3 board. It is recommended to label each connector as it is disconnected for easy reassembly.
4) Remove the nut, screw, and grounding cable in the bottom right corner of the AJUNC 3 Board and save for later use in Step #7.
5) Pinch the board standoffs while pulling the board away from the chassis to release the board.
6) Place the new AJUNC 3 Board over the standoffs and press into place.
7) Reinstall the retained screw, grounding cable, and nut from Step #4 in the bottom right through hole on the new board.
8) Reinstall the connectors from Step #3 ensuring to follow the label system laid out previously in Step #3. The new AJUNC 3 Board is now ready to calibrate. ***See CALIBRATION INSTRUCTIONS*** prior to reinstalling the cover.

CALIBRATION INSTRUCTIONS
(See Figure 1 for initial setup)
This procedure needs to be done anytime the AJUNC 3 Board is replaced. All tools and equipment part numbers listed are from the Diagnostic Smart Kit® (RPI Part #TUK108). *If using the OEM test kit, use the components corresponding to RPI tools mentioned below.*

1) Temperature Gain Adjustment Procedure
a) Connect the Test Point Board (RPI Part #TUB109) using the Ribbon Cable (RPI Part #TUC117) to the JP14 connector located on the front of the AJUNC 3 Board.
b) Connect the Simulator (PT100) (RPI Part #TUT114) to the JP11 connector (located on the back of the board) using Harness No. 1 (RPI Part #TUH111).
c) On the simulator, select 32°F (0°C).
d) Connect the negative probe of a voltmeter to TP25 and the positive probe to TP26 on the Test Point Board.
e) Plug the sterilizer into the electrical source and turn the sterilizer power on.
f) Using the Trim Pot Adjustment Tool (RPI Part #RPT460), adjust Pot 4 on the AJUNC 3 Board so the voltmeter reads -5.1 mv DC (negative 5.1 mv DC).
g) On the Simulator, select 273°F (134°C).
h) Connect the negative probe of the voltmeter to TP1 and the positive probe to TP7 on the Test Point Board.
i) Using the Trim Pot Adjustment Tool, adjust Pot 5 on the AJUNC 3 Board so the voltmeter reads +2.385 volts DC.

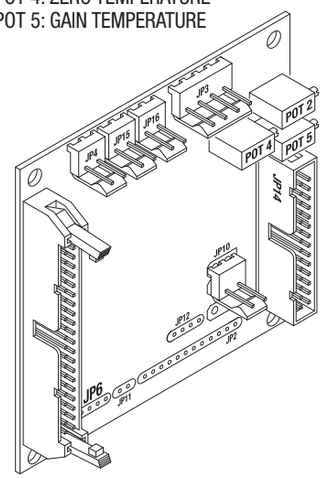
2) Pressure Zero Adjustment Procedure
a) Plug the unit into the electrical source and make sure the unit is in the off position.
b) Press and hold in the door switch. Turn the power on and hold the door switch for approximately 5 seconds.
c) The unit automatically sets the display to zero.

3) Pressure Gain Adjustment Procedure
a) Connect the Test Point Board (RPI Part #TUB109) using the Ribbon Cable (RPI Part #TUC117) to the JP14 connector on front of the AJUNC 3 Board.
b) Connect the positive probe of a voltmeter to test point TP4 and the negative probe to TP1 on the Test Point Board.
c) Using the Trim Pot Adjustment Tool (RPI Part #RPT460), adjust Pot 2 on the AJUNC 3 Board until the voltmeter reads 500mv DC (+/-5mv).
d) If the front panel display changed from zero (set during the zero adjustment procedure above) to any other value, close the sterilizer door and start an unwrapped cycle. As the pressure rises within the chamber from room pressure to 30 PSI, the voltage reading should rise from 500 mv DC (set in step c above) to 1.5 volts. While the cycle is running, it should be noted that each one-pound change in pressure should be approximately equal to 0.033 mv DC.
e) If the readings on the voltmeter are correct but the display is inaccurate then the Display Board (Predg) may need to be replaced.

4) Final Check
a) Turn the sterilizer power off and unplug the unit from the electrical source.
b) Disconnect the Ribbon Cable and the Test Point Board from the AJUNC 3 Board.
c) Open the connection that leads to the pressure transducer and connect the Test Pressure Gauge (RPI Part #TUG110) in-line with the pressure transducer ***(see figure 2).*** Check for leaks at the Test Pressure Gauge connections.
d) Place a Max Register Thermometer (RPI Part #RPT113) into the tray inside the sterilizer.
e) Close the sterilizer door and start an unwrapped cycle.
f) Note the maximum temperature that is displayed on the sterilizer's front display panel and that the display pressure matches the gauge during the run. This should be checked periodically throughout the cycle.
g) At the end of the cycle, verify that the maximum temperature displayed is equal to the maximum temperature registered on the thermometer.
h) Turn the sterilizer power off and unplug the unit from the electrical source.
i) Disconnect the Test Pressure Gauge and reconnect the tubing.
j) Replace the top cover and install any removed hardware.
k) Retest the final assembly repair by running an additional cycle before returning the sterilizer to service.

FIGURE 1 - ***Initial Setup***

Close up view of AJUNC 3 Board (RPI Part #TUB154)
POT 2: GAIN PRESSURE
POT 4: ZERO TEMPERATURE
POT 5: GAIN TEMPERATURE



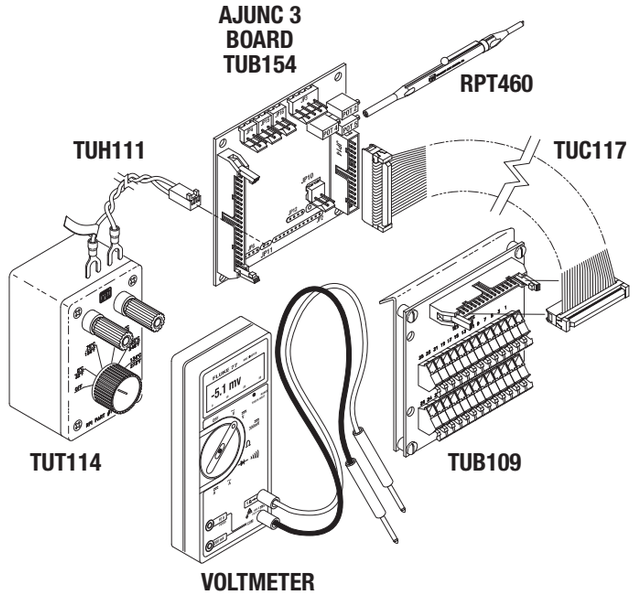


FIGURE 2 - ***Test Pressure Gauge (RPI Part #TUG110)***

Open the connection that leads to the Pressure Transducer and connect the Test Pressure Gauge (RPI Part #TUG110) in-line with the Pressure Transducer.