

COMPOS X adjustments



1- Gas supply hose & Power Cord

Plug the power cord and gas supply hose to their respective ports in the back of Compos X.

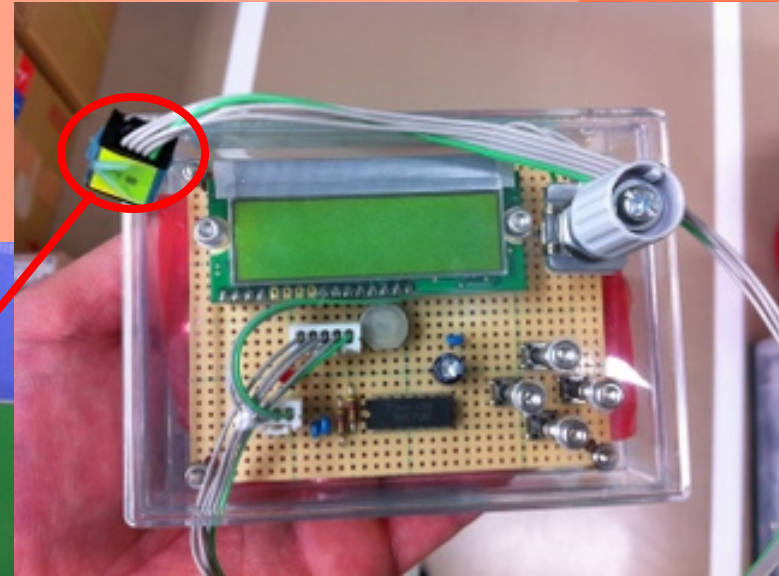
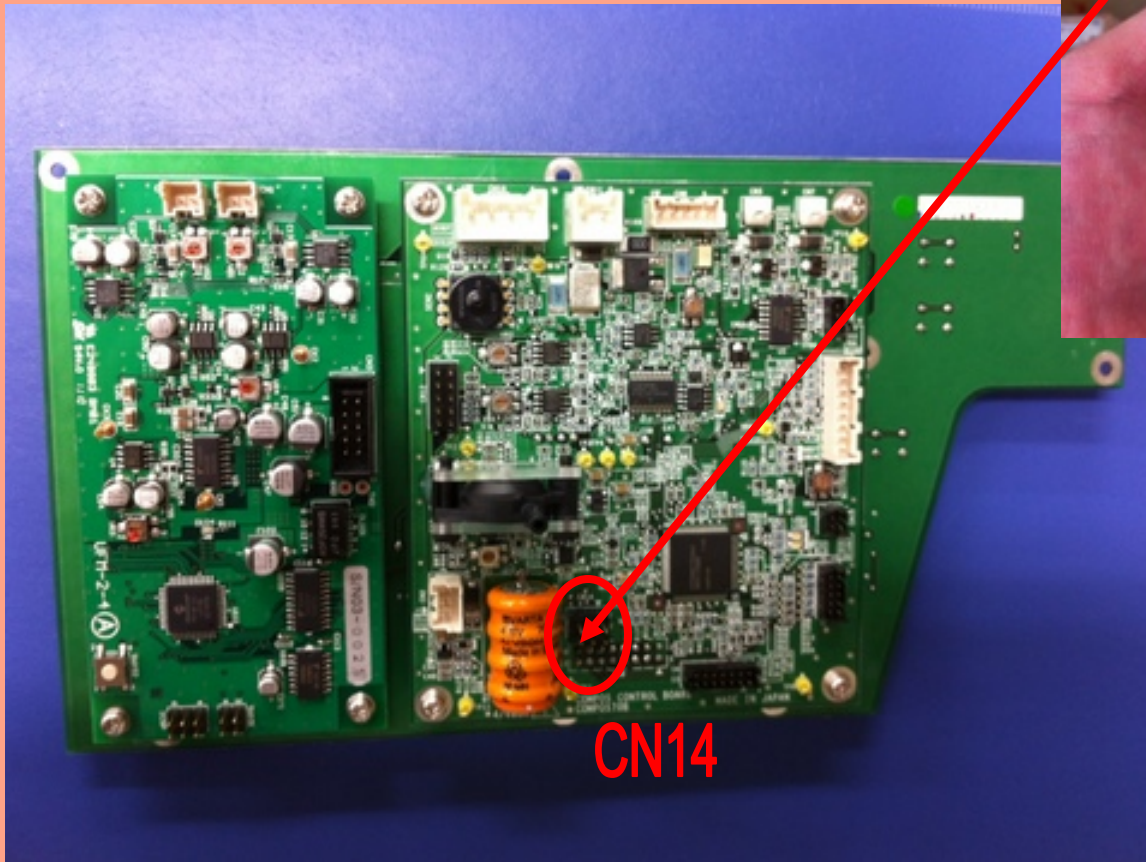


Power Cord

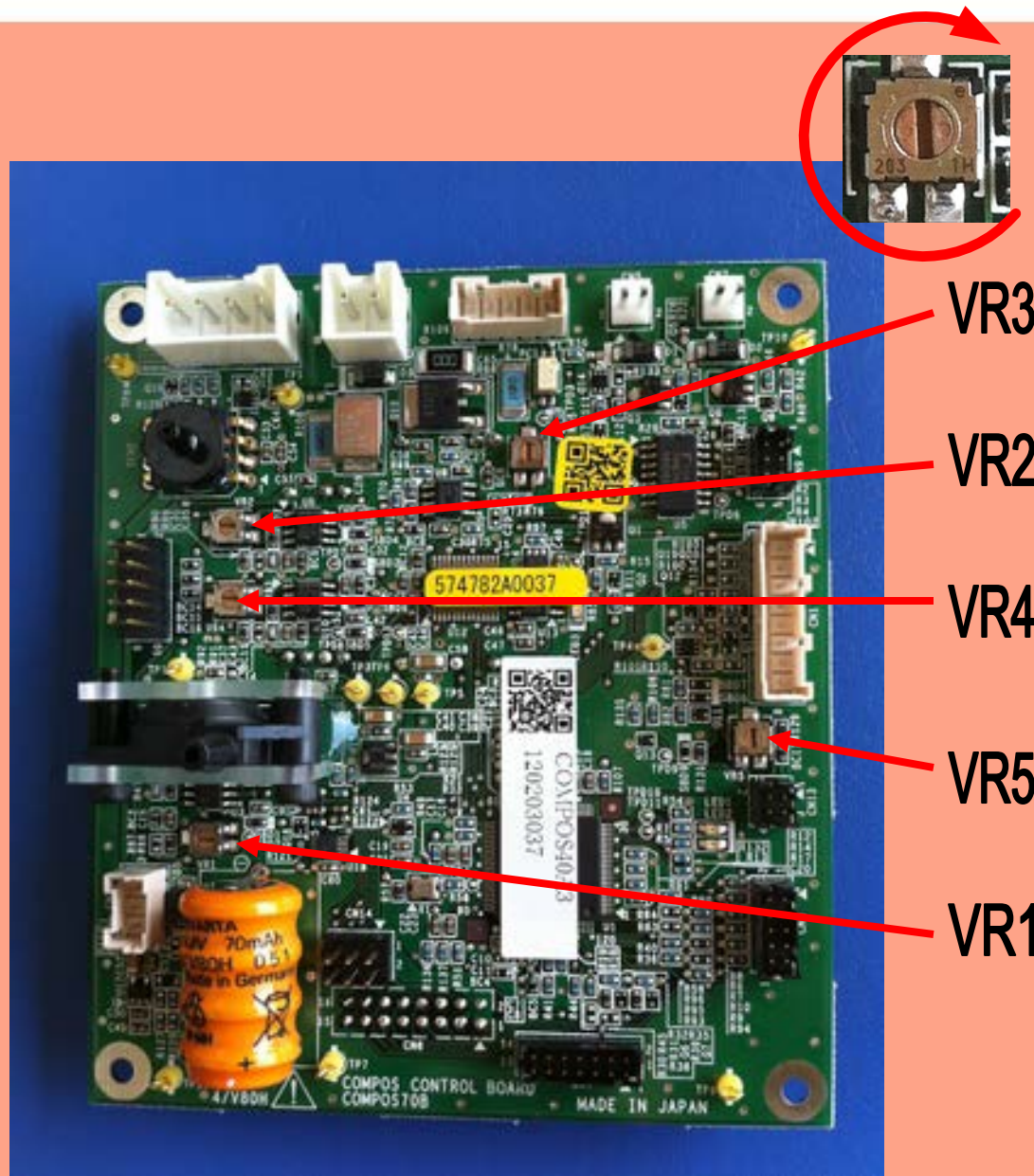
Gas supply hose

2- Jig Setting

Plug the jig cable to the connector CN14 in the control board.



3- VR1, VR2, VR4 & VR5



Make sure the VR1, VR2 and VR4 are in vertical position, adjusted in clockwise motion.

VR5 is for alarm volume adjustment.

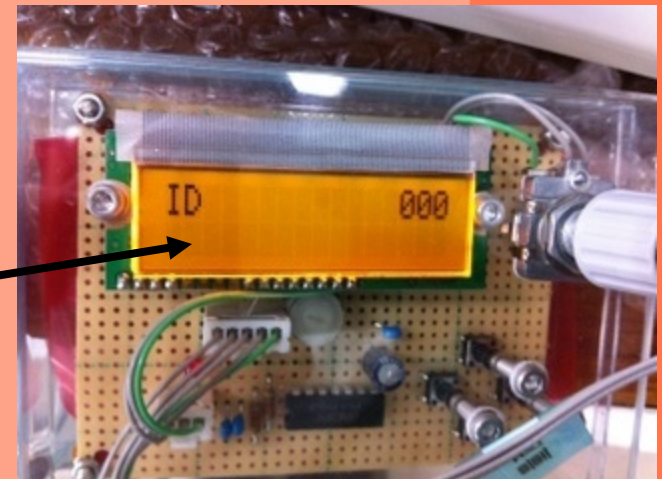
VR1	EP valve working pressure
VR2	Monitor line sensor
VR3	EP valve voltage
VR4	Flow sensor
VR5	Alarm volume

4- Supervisor Mode



Turn the mode switch to monitor mode while pressing “mute” and “select” buttons together.

Jig panel will display (ID 000).



5- Flow Sensor Reset

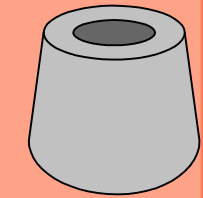
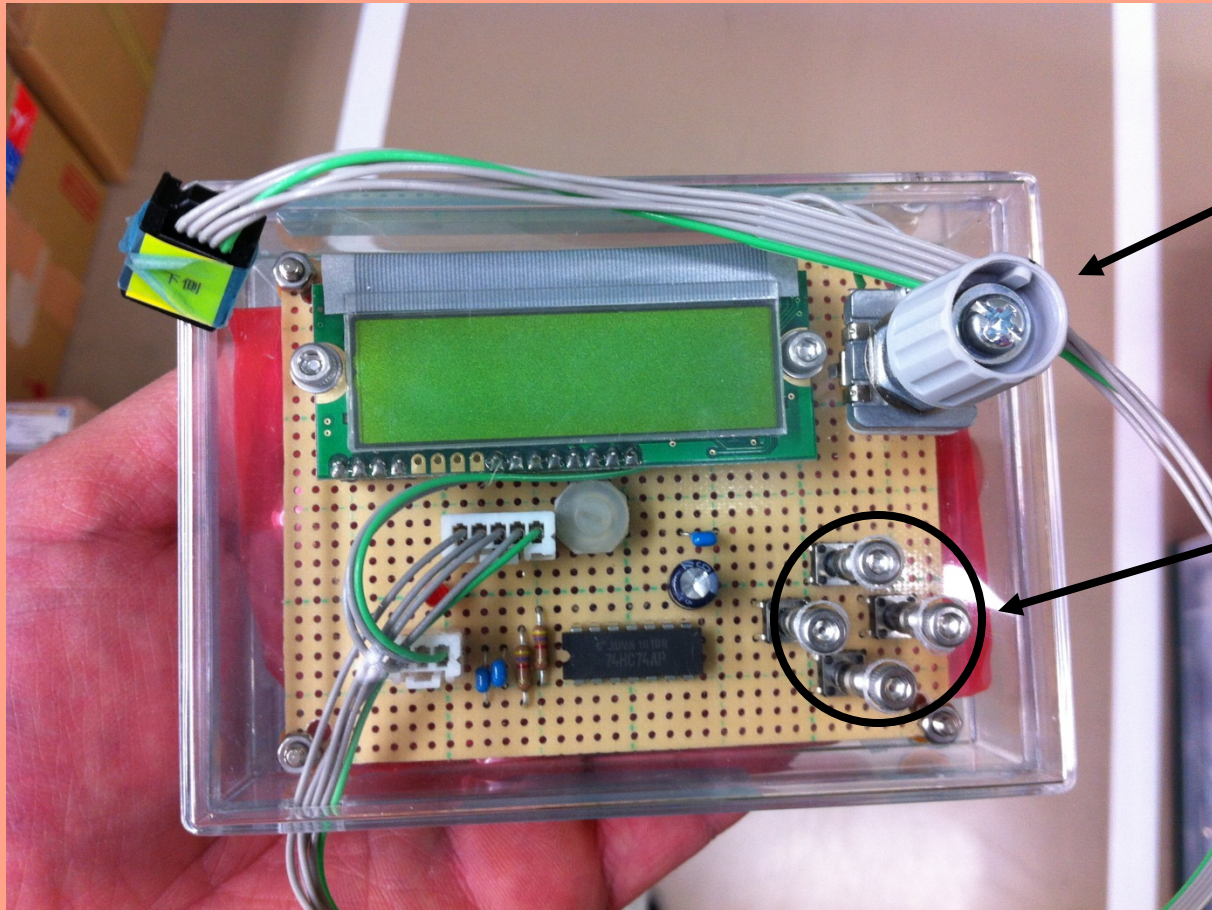
To reset the flow sensor, press the SW102 button located in the sensor board for one second.

The green LED must turn ON after pressing SW102.

SW102



6- Jig



ADJUST KNOB

UP (selection)



BACK



ENTER



DOWN (selection)

7- SERIAL EDIT



Push enter button to start on supervisor mode menu to go to (SERIAL EDIT) panel.



Select item to change and press enter button again to start changes by using the adjust knob.

Use the enter button to select the next item and confirm the adjustment at the end.

8- ALL RST (reset)



Push select button (Up/Down) until the panel shows (ALL RST).

Push enter button to apply the reset.



ALL RST will reset the EP and solenoid valves operated data.

10- Prm_Reset



Back on (ID 000) panel again, use the select button until (CALIBRATION) is displayed, push enter button then use the select button until (Prm_Reset) panel is displayed.



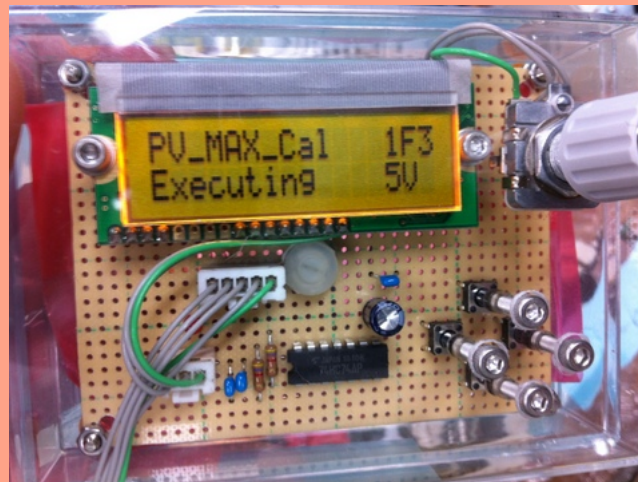
Push enter button to apply the reset.

This mode will reset all calibration parameters.

11a- PV_MAX_Cal

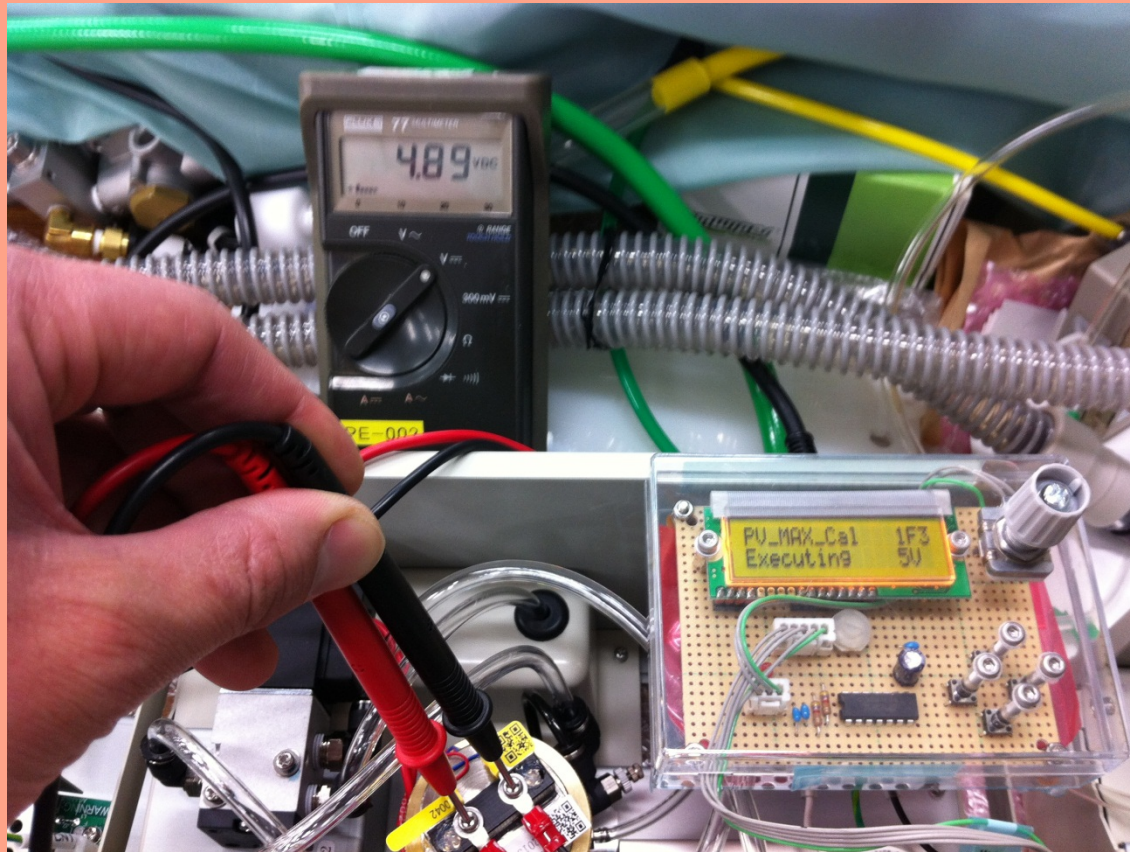
After confirm (Prm_Reset),
it automatically goes to
(PV_MAX_Cal) mode.

Push enter button twice
until (Executing 5V).



11b- PV_MAX_Cal (VR3)

On (Executing 5V) panel use a tester on the EP valve poles and adjust the voltage at the control board's VR3 until it reaches 5V. **DO NOT PRESS ENTER BUTTON YET.**

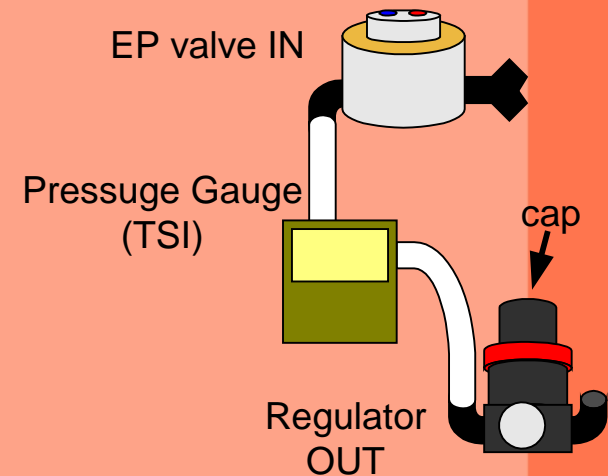
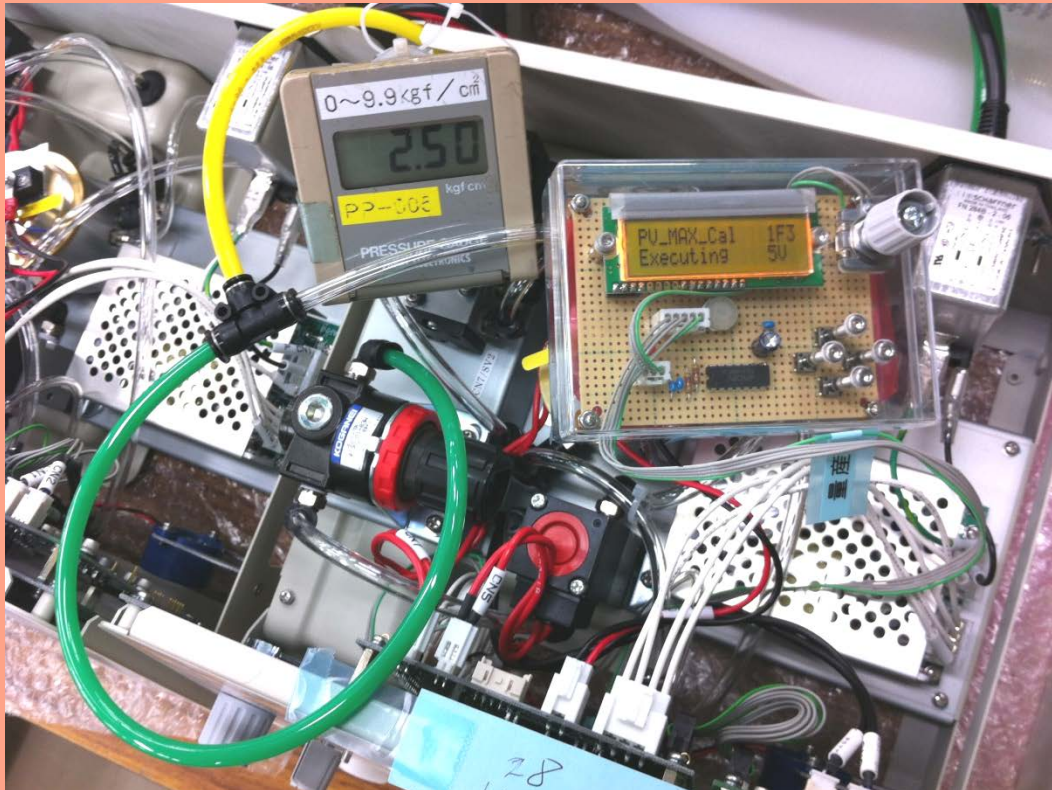


VR3



11c- PV_MAX_Cal (Regulator)

On (Executing 5V), set a pressure gauge (TSI) between the regulator OUT port and EP valve IN port then adjust the regulator until 2.50kgf/cmH₂O (unlock it by pulling up the cap, make adjustment, push down to fix). Push enter button after finish adjustment.



12- Wrk_Prs_0Cal



After confirm (PV_MAX_Cal), it automatically goes to (Wrk_Prs_0Cal).

Push enter button to apply “zero” calibration. To confirm press enter button again.



13- Press_0Cal



After confirm (Wrk_Prs_0Cal)
it automatically goes to
(Press_0Cal).

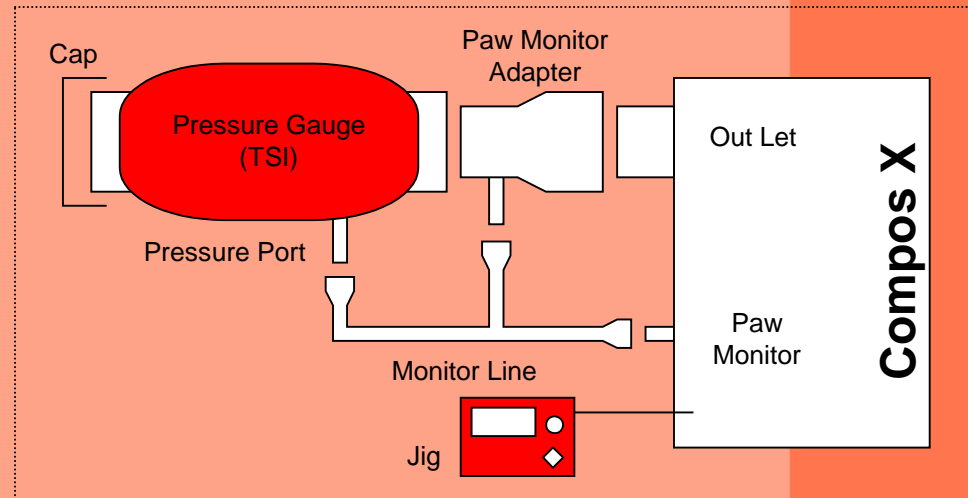
Push enter button to apply
“zero” calibration. To confirm
press enter button again.



14- Pressure gauge (TSI) at monitor line



Set a pressure gauge to the monitor line.



15- Press_30Cal / Press_60Cal

Press_30Cal



After confirm (Press_0Cal) it automatically goes to (Press_30Cal). Push enter button once, to activate it then adjust the pressure by increasing the voltage (30cm at the pressure gauge).

Push enter button once to adjust values smaller than 0.10V.

Push enter button again to confirm.

It automatically goes to (Press_60Cal).

Apply the same process to adjust it.

Press_60Cal



The Jig will adjust the voltage amount at the EP in order to control the pressure checked at the pressure gauge.

16- Flow_0Cal



After confirm (Press_60Cal), it automatically goes to (Flow_0Cal).

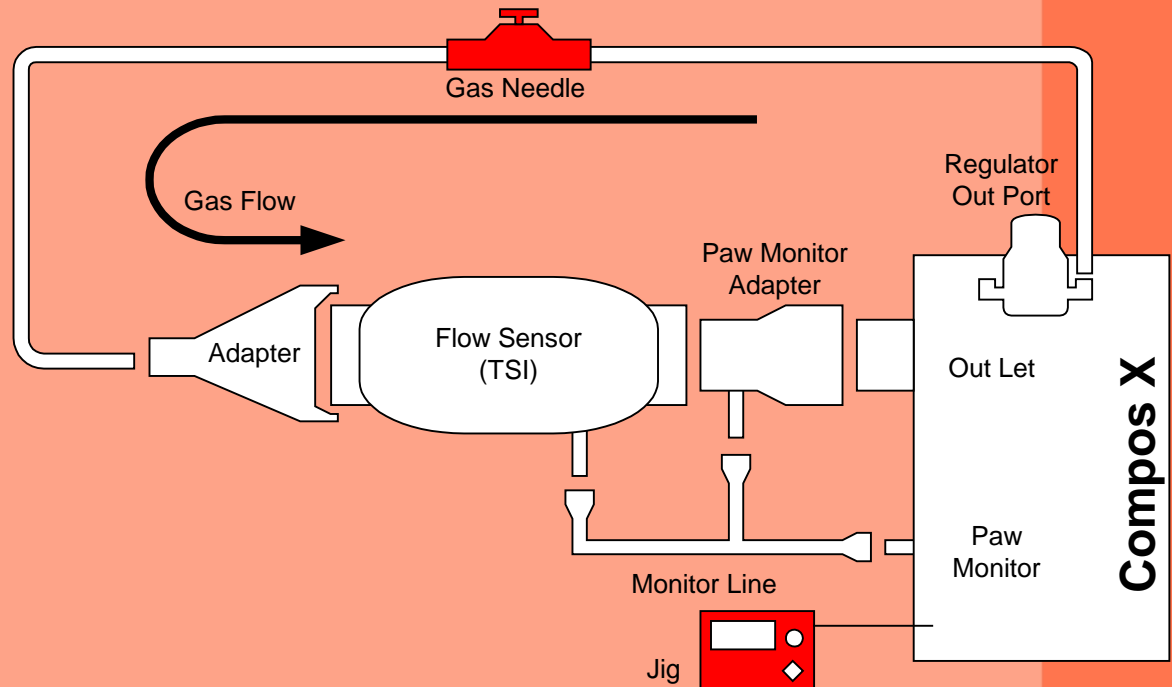
Push enter button to apply “zero” calibration then once again to confirm the data.

17- Flow Sensor (TSI)

Set a tube from regulator's out port to the end of the flow sensor (TSI), with a gas needle in between.



Gas will flow from the regulator's out port to the flow sensor through the tube and be regulated at the gas needle.



18- Flow Calibration



After confirm (Flow_0Cal) it automatically goes to (Flow_03Cal). Push enter button to apply the calibration.

Check the flow rate at the flow sensor (TSI) and adjust it to 3L/min by using the gas needle.

Push enter button to confirm the calibration.

This same type of calibration will be applied for 6, 9, 12, 15, 20, 30, 40 and 50L/min that will be selected by confirming the previous calibration.

Range	
Flow_03Cal	$3 \pm 0.05 \text{L/min}$
Flow_06Cal	$6 \pm 0.05 \text{L/min}$
Flow_09Cal	$9 \pm 0.05 \text{L/min}$
Flow_12Cal	$12 \pm 0.10 \text{L/min}$
Flow_15Cal	$15 \pm 0.10 \text{L/min}$
Flow_20Cal	$20 \pm 0.10 \text{L/min}$
Flow_30Cal	$30 \pm 0.10 \text{L/min}$
Flow_40Cal	$40 \pm 0.10 \text{L/min}$
Flow_50Cal	$50 \pm 0.10 \text{L/min}$

19- PV_Cal



After confirm (Flow_50Cal) it automatically goes to (PV_Cal).

Use a cap in the flow sensor and reconnect the regulator output to EP valve IN port.

Push enter button to apply the auto-calibration (tests 1 to 51).



20- Breathing Circuit Compliance



Set the breathing circuit to the Compos X, use a cap instead of the test lung.

Turn the mode switch to monitor mode while pressing “mute” and “auto set” buttons together.



Turn the adjust button until PIP panel shows the value 11.



Push select button to start the compliance calibration.