## Assembly Instructions: Manawa Ora Ventilator

- Please Refer to drawings MO-GA001, MO-PID-001, MO-E-001, MO-E-002 for assembly detail. Steps below outline an overview of the assembly process.
- 1. Assemble pipe fittings and solenoid valves for inspiratory line as per MO-GA001. Take care to ensure thread tape is used on all male threads. Tighten fittings hand tight and then a further 3/4 turn or more using a spanner.
- 2. Assemble pipe fittings and solenoid valve for expiratory line as per MO-GA001. Take care to ensure thread tape is used on all male threads. Tighten fittings hand tight and then a further 3/4 turn or more using a spanner.
- 3. Lower expiratory line into housing. Mount tank fittings onto housing and expiratory line as per MO-GA001.
- 4. Lower inspiratory line into housing. Mount Tank fittings onto housing and inspiratory line as per MO-GA001.
- 5. Mount all sensors in T-junctions as per MO-GA001 & MO-PID-001. Ensure sensors are mounted using correctly modified 1" BSP blanking plugs.
- 6. Mount 'raspberry pi controller', '12V Relay Board', '12-5V DC-DC' converter and '230V AC 12V DC UPS' as per MO-E-001
- 7. Mount the above electrical controls into ventilator housing as per MO-GA001
- 8. Connect solenoid valves and flow sensors to 12V Relay Board as per MO-E-001 & MO-PID-001
- 9. Connect humidity and pressure sensors to 5V rail on Raspberry Pi Controller as per MO-E-002 & MO-PID-001
- 10. Once device has been fully assembled. Consult MO-ITP-001 for Factory acceptance testing