

# **BreatheSafe** | **InPress**

## Troubleshooting Guide

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## PRESSURISER

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## 1.0 Pressuriser

### 1.1 Motor not starting

- Check 15A main fuse
- Ensure adequate wiring size (4mm minimum) throughout harness
- Check no voltage drop from power supply to pressuriser
- Check wiring schematic (sections 4 and 5)
  - Ensure correct pinout for pressuriser and controller
- Ensure correct voltage (12V or 24V) to the pressuriser motor pin A (red wire)
- Ensure continuity to earth from motor pin B (black wire)
- Ensure signal voltage (1.6V – 10V) to pressuriser motor pin C (yellow wire)
- Test motor by powering Pin A & C simultaneously

### 1.2 Pressuriser noisy / running at full speed

- Check filter condition
- Check filter securely fitted
- Check doors and windows are closing properly
- Check cabin sealing (250+ Pa requirement for system max speed test)
- Check pressure sense tube is connected, clear of blockages with no kinks

### 1.3 Filter blocking quickly

- Check controller logs:
  - Settings -> Event Log
- Has pressure been maintained?
- Is the fan speed consistently high?

BACK		FIRST PAGE				NEXT PAGE
Date	Time	Press.	CO <sub>2</sub>	Temp	Fan	Event Description
02/02/21	02:26	0001	0000	Err	30	System Shutdown
02/02/21	02:27	0000	0000	Err	30	Override Switched OFF
02/02/21	02:27	0000	0000	Err	30	Override Switched ON
02/02/21	02:26	0000	0000	Err	30	System Shutdown
02/02/21	02:13	0000	0000	Err	100	Press. Unit Changed
02/02/21	02:13	0000	0000	Err	100	Press. Unit Changed
02/02/21	01:50	0000	0000	Err	100	Alarm Mute Cleared
02/02/21	01:45	0000	0000	Err	100	Buzzer Setting Changed
02/02/21	01:45	0000	0000	Err	100	Alarm Mute Activated
02/02/21	01:45	0000	0000	Err	100	Alarm Mute Cleared
02/02/21	01:40	0000	0000	Err	100	Alarm Mute Activated
02/02/21	01:40	0000	0000	Err	100	Runtime Reset
02/02/21	01:39	0000	0000	Err	100	Alarm Mute Activated

No, pressure is consistently below the setpoint with fan speed at 100%:

- There is significant leakage in the cabin or the filter has not been fitted correctly
- Cabin may need to be resealed (250+ Pa requirement for system max speed test)
- Check doors and windows are closing properly
- Refer to 1.3

Yes, pressure is usually at set point (50Pa) with fan below 100%:

- This is a recent issue
- Check filter
- Check doors and windows are closing properly
- Check pressure sense tube is connected & clear of blockages / no kinks

### 1.4 Blade fouling against plastic housing

- Full pressuriser replacement required, swap unit with a new one
- Return faulty unit to BreatheSafe HQ

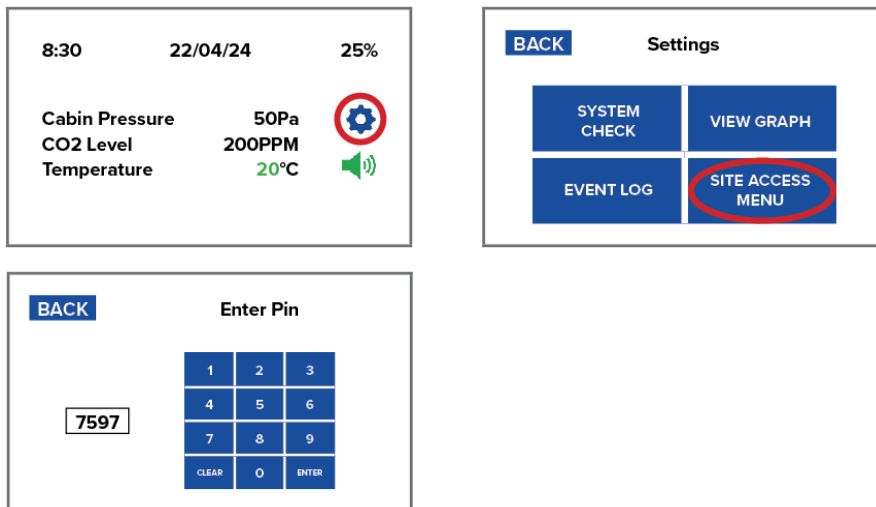
## 2.0 INPRESS TS Controller

### 2.1 Access Codes

Site Access: 7597

Factory Setup: Contact support

How to access controller settings:



### 2.2 “LOW-PRESSURE WARNING” - Controller showing low pressure

Does “Cabin Pressure” read above 0?

Yes:

- Check controller reads 0 Pa with door open.
- Disconnect sense pipe at both sides of joiner & ensure clear flow to external cabin, reconnect pipes securely.
- Check cabin sealing (250+ Pa requirement for system max speed test)
- Check filter.
- Check doors and windows are closing properly.
- Refer to 1.3

No, Cabin Pressure = 0:

INPRESS CONTROLLER

#### “LOW PRESSURE SERVICE MODE”

- Ensure doors and windows are closed.
- Ensure pressure tube running to exterior of cab is connected to port A on the controller.
- Ensure pressuriser is plugged in and running. If not, refer to section 1.1.

### 2.3 Negative Pressure Reading

- Check controller reads 0 Pa with door open.
- Disconnect sense pipe at both sides of joiner & ensure clear flow to external cabin, reconnect pipes securely.
- Zero sensor function as required.
- Ensure filter is securely in place
- Ensure pressure tube running to external of cab is connected to port A.
- Ensure outlet of pressuriser is ducted into cab.

### 2.4 CO<sub>2</sub> Error / Temperature Error

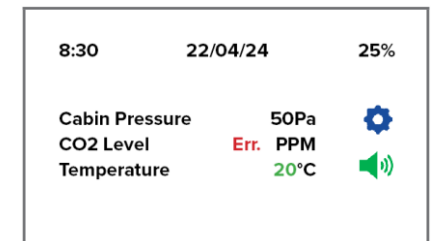
Is the CO<sub>2</sub>/Temperature sensor fitted?

No:

- Disable sensor in controller settings
- Access settings (See 2.1):
  - CO<sub>2</sub>: Settings -> CO<sub>2</sub> Setting -> Disable CO<sub>2</sub> Sensor
  - Temperature: Settings -> Next -> Temp. Setting -> Disable Temp Sensor

Yes:

- CO<sub>2</sub>: Unplug RJ45 cable from rear of controller and from CO<sub>2</sub> sensor. Inspect condition of cable to ensure undamaged. Wait 1 minute, reconnect.
- Temperature: Unplug 2-pin Deutsch plug from master loom connected to controller. Inspect condition of cable / plug to ensure undamaged. Wait 1 minute, reconnect.
- Power cycle unit



### 2.5 Service Interval / Check filter alarm

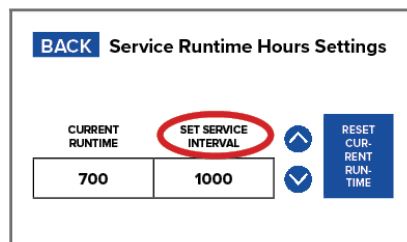
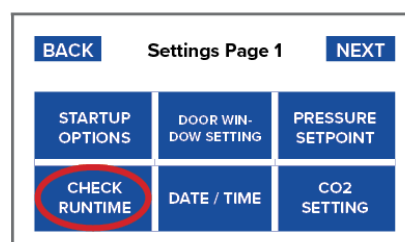
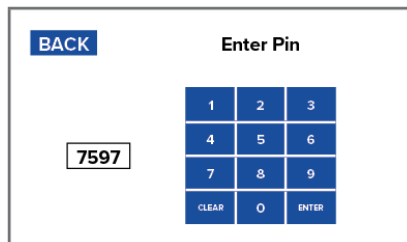
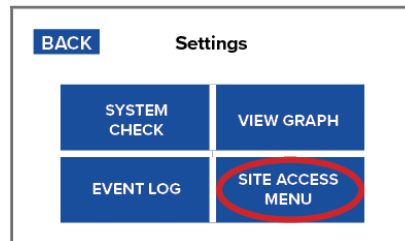
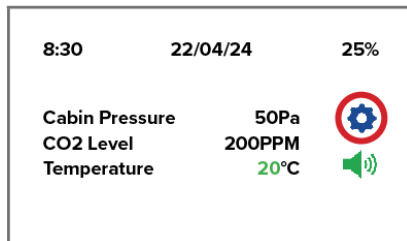
Has the pressuriser filter been replaced already?

No:

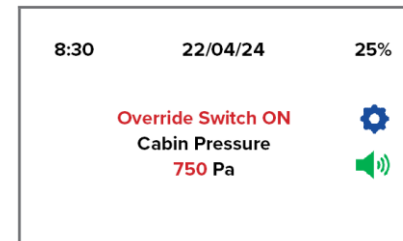
- Replace pressuriser filter then proceed to next step

Filter has been replaced:

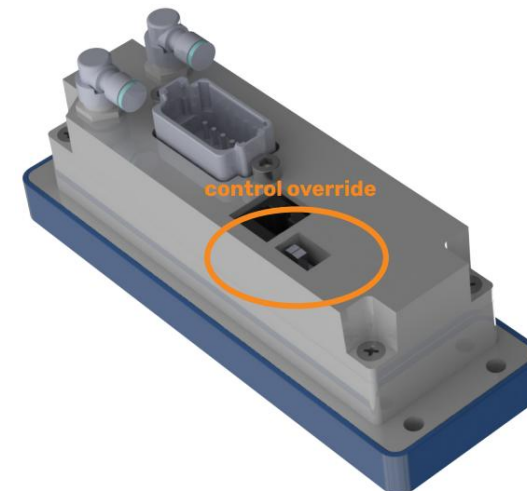
- Reset service runtime according to guide below



### 2.6 Override Switch ON



- Locate override switch on rear of monitor case
- Use pen/flathead to slide switch OFF.

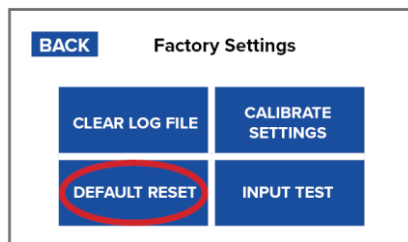
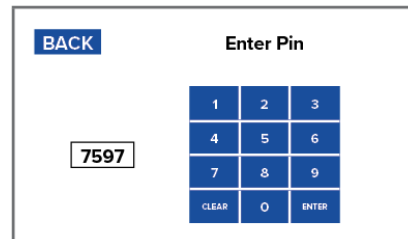
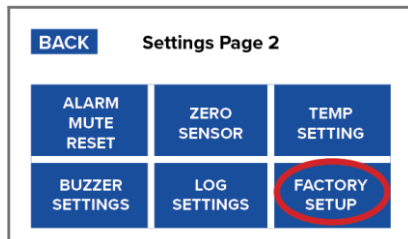


### 2.7 Display blank or frozen

- Ensure correct voltage (24V) to pin 1 (red wire)
- Ensure continuity to earth from pin 12 (black wire)
- Check unit serial number on rear of controller:
  - Units that display – “SW:143-35**144**” on start-up (or higher than “144”) have had both the PCB upgrade and are running the latest Software. Anything below “144” needs to be replaced and returned to BreatheSafe QLD

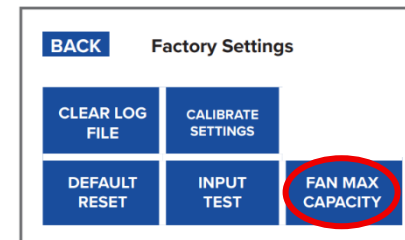
### 2.8 Display showing incorrect units (inH<sub>2</sub>O instead of Pa or °F instead of °C)

- Reset controller to factory defaults
- Ensure SW: 143-35-144 or greater (see 2.5)
- Access settings -> page two -> factory setup -> contact support for passcode -> default reset



### 2.9 High Current Draw

- Ensure new fresh air filter is in place.
- Carry out the “SYSTEM CHECK SET MAX” test, ensure reaches minimum of 250 Pa.
- Address cabin sealing and retest.
- Limit max current draw via fan max capacity.
- Contact support for passcode.



## 3.0 General

### 3.1 INPRESS Kit Wiring

WARRANTY

BreatheSafe Warranty: [Warranty - BreatheSafe](http://www.breathe-safe.com.au/warranty/) (www.breathe-safe.com.au/warranty/)

