

BreatheSafe

GENERIC INSTALL GUIDE

RS 20 COMPLIANT DUAL HEPA



Installation Instructions

This is a generic guide referencing fitment of the Dual HEPA system. Some fabrication of metal components may be required to adapt the kit in certain applications.



Ensure all OEM glass / panels are in place & door seals are in good condition.

Cabin needs to be clean & HEPA vacuumed prior to install.



If applicable remove seat & internal panels to access potential air leakage points / run any wiring looms.

Remove OEM Fresh air filter or pressuriser & discard.



Apply sealing measures to accessible leak points & open glands. E.g., adhesive foam tape.



Remove OEM recirculation filter cover



Discard OEM filter assy.



Remove fresh air flap entirely (if fitted).



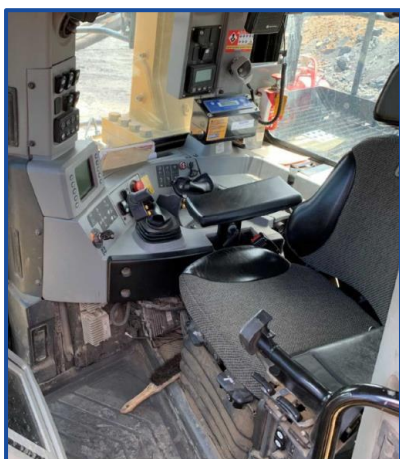
Sikaflex new BreatheSafe HEPA return air backing plate into place.

*Modification required in certain applications.



Secure filter & grille using knob.

(Use masking tape to hold in place temporarily while sealant sets).

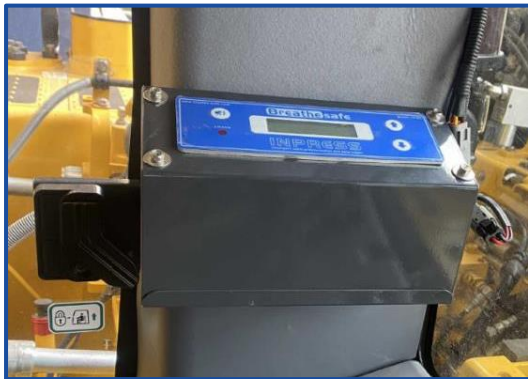


Refit inner console assy. Ensure all bolts are in place through floor to avoid leakage.





Solid mount controller in chosen suitable location by means of bolting / fixing in place.



*As per examples.

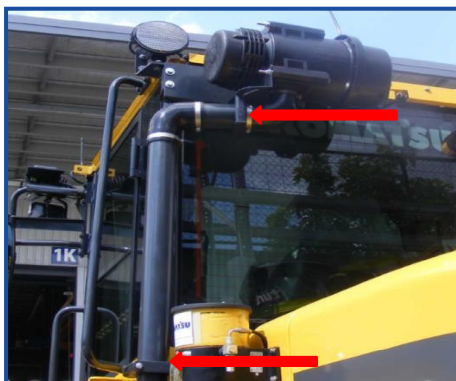
Ensure easily visible & not obstructing operator controls.



Affix filtration unit in desired location taking serviceability into account.

Custom mount plates may be required in certain applications.

*BreatheSafe recommends **not** drilling any part of the cabin structure.



Secure ducting with brackets, stauff clamps.

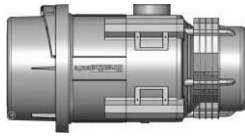
*Manufacture/ adapt as necessary.



Ensure filter can be removed & system is easily accessible for servicing.

Filtration unit must be correct orientation.





Locate the OEM fresh air filter inlet.



Remove cover & discard OEM filter.

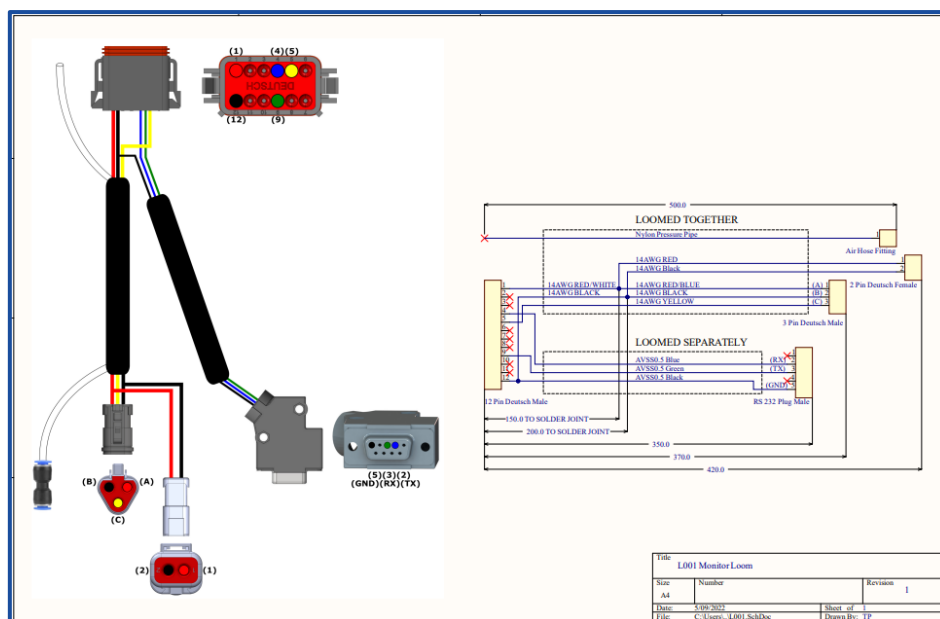
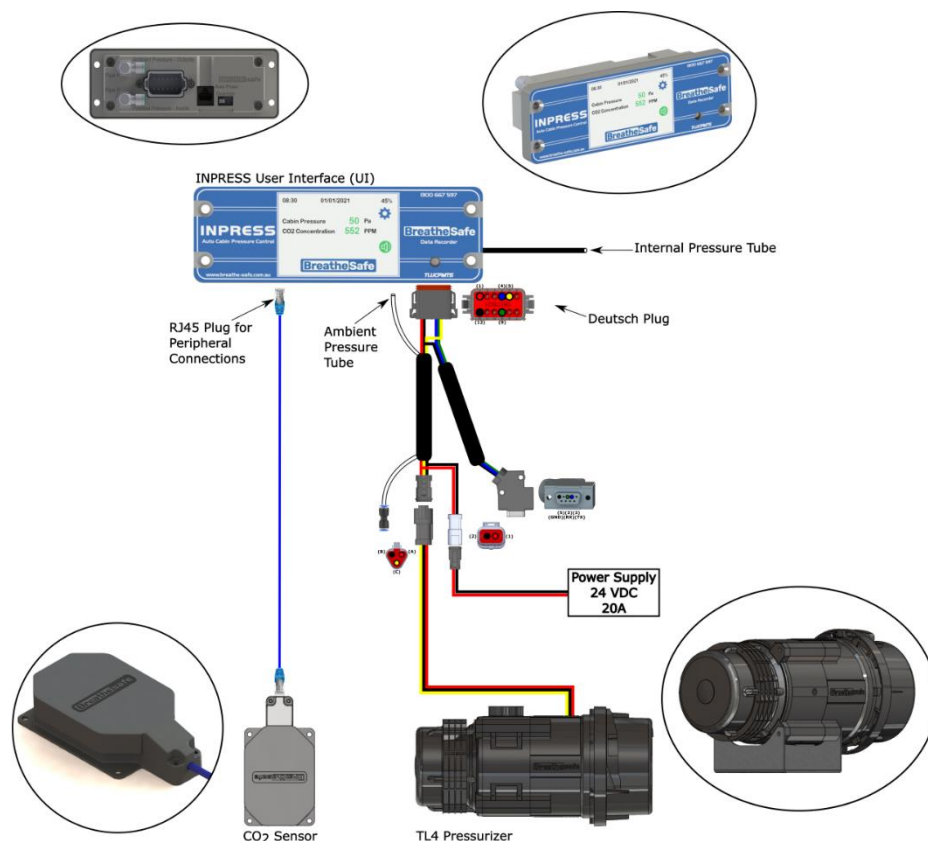


Fit an inlet spigot or custom duct to introduce the HEPA filtered air into the HVAC.



Example of ducting into OEM 3-inch fresh air inlet.

*Some engineering may be required.



Follow pressuriser wiring connections as per the diagram. Upgrade the OEM pressuriser circuit fuse & use existing pressuriser circuit to power the BreatheSafe system.

*Where necessary supply a new circuit. 25A fused supply live from ignition ensuring correct voltage.

Pipe A pressure sense port to route to atmosphere (outside of cabin). Face external end downward to avoid dust blocking the tube.

*Based on touch screen controller.

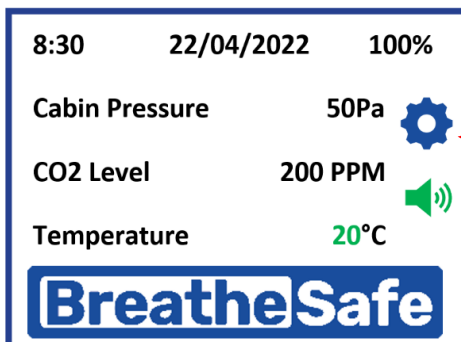


Carrying out a successful commissioning procedure:

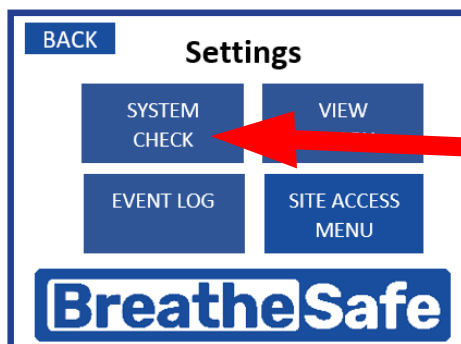
Begin full speed test mode as per below instruction.

Use hands to feel externally of the cabin to detect pressure leaks and apply seal measures until 250 pascals positive cabin pressure result is achieved or exceeded.

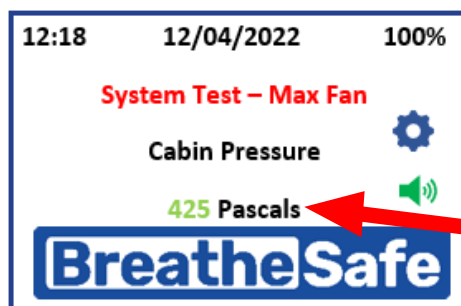
The system will not work efficiently if the cabin sealing process is not delivered correctly and not covered by warranty.



Press Settings icon



Press System Check box



Record / photograph the cabin efficiency result (Max Fan)

Complete commissioning form online. [Commissioning Form \(breathe-safe.com\)](https://breathe-safe.com)

COMMISSIONING PRESSURISED CABINS WITH BREATHESAFE INPRESS UNITS FITTED

The below instructions give a general guide to cabin sealing, testing and commissioning BreatheSafe variable speed pressurisation units (Clean cabin with HEPA vacuum).

1. Inspect the cabin and ensure all cover panels are in place and any holes are sealed with grommets, sealer, fit new door seals for used equipment, etc.
2. Sitting inside the cabin with the door open, turn on the ignition to power up the unit.
3. The pressuriser fan should power up to full speed, and the monitor should indicate 0 pressure (Allow ± 2 pascals wind gusts).
4. With the ignition on, close all doors and windows. If the cabin is adequately sealed, the monitor should indicate the set pressure of approximately 50 Pa (Pascals), or whichever pre-set has been chosen.
5. Once a pressure of approximately 50 Pa is confirmed, hold down the arrow button for approximately 10 seconds to run the fan speed at max speed. The display will indicate "MAX FAN SPEED" before showing the maximum cabin pressure.
6. INPRESS TL with Auto Pressure Control (5400 RPM) the cabin pressure should be above 250 Pa (the minimum is 250 pascals tested with a new TLF700EN HEPA filter). A result of 500 pascals is ideal.
7. If the above pressure is not achieved, leave the unit on full speed, and investigate for external leaks outside the cabin e.g., A/C outlets, drains, window & door seals, locks & hinges, etc.
8. If necessary, with the ignition on, controller on "MAX FAN SPEED", A/C blower OFF and all doors and windows closed, set off a smoke emitter inside the cabin (SWP attached).
9. Locate any air leaks around the cabin and re-test. If silicone sealant or similar is used, allow it to dry before retesting, as even slamming the door could push the seal back out.
10. Continue the sealing and testing procedure as above until a satisfactory outcome is achieved.

Fill out the record below and attach photo evidence of maximum pressure result and NANOZEN Real-time Dust Monitoring result to register for warranty.

PRESSURISER INSTALLATION RECORD

MACHINE TYPE:			
MODEL NUMBER:			
SERIAL NUMBER:			
DEALER / AGENT:		Ref:	
Fresh Air Filter:	TLF700EN / _____	Return Air Filter:	
Activated Carbon:			
OEM fresh air filter: (Discarded filter)		OEM recirculation filter: (Discarded filter)	
Max Pressure Result:		Pascals	Pressure Set Point:
			Pascals
Actual Cabin Pressure:		Pascals	Motor Capacity: (TLUCMPTL):
			% At Installation
Fresh Air Disconnected:	TICK YES		TICK NO
NANOZEN Real-time cabin test result: (Test any HVAC Cent to audit HEPA H14 pressuriser system)		Ug/m3	NANOZEN Real-time cabin test result: (Five-minute Breathing Zone test within an empty Cabin – closed door & windows).
			Ug/m3
Installer:			Date:
Notes:			



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