

REMARK:

Side channel blowers are designed not only for conveying air but also for generating pressure and vacuum.

If the conveyed medium contains solid particles or other pollutions, these can be removed by installing a filter on the intake side. Attention should be given either to a careful and regular cleaning or replacement of clogged filter, otherwise the performance can not be guaranteed.

 **DO NOT EVER RUN THE BLOWER WITHOUT AIR FILTER !**

6. Cleaning of the machine

After the completion of application the machine should be cleaned.

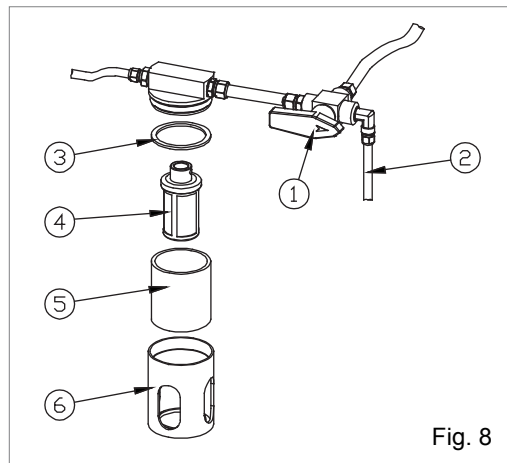


Fig. 8

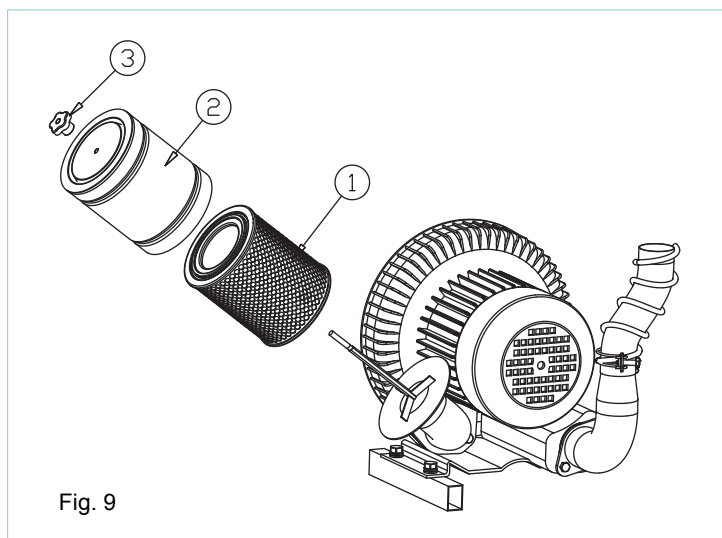
6.1 cleaning of solution tank

- The tank can be emptied easily by turning the solution tap lever (fig. 8-1) parallel to drainage hose (fig. 8-2).
- After empty the solution tank rinse it with clean water
- Make sure not to leave any medium inside the tank after cleaning

6.2 cleaning of the solution pipe system

- If the solution tank is running empty, the pipe system will be blown empty as well.
- If wettable powders have been applied, please flush the system by filling in a small amount of clean water, then keep the machine running.
- The solution filter (fig. 8-4) can be checked from outside as long as the glass cover (fig. 8-5) is transparent. If not, dismantle by turning counter-clockwise the glass cover holder (fig. 8-6) and wash out the filter strainer. Before assembling it back, check if the gasket (fig. 8-3) is in correct position.

6.3 cleaning of air filter (side channel blower)



After approx. 20 hours of operation the air filter (fig. 9-1) should be cleaned.

To check and clean, loosen knob nut (fig. 9-3) and pull off housing (fig. 9-2). Pull off filter and blow clean from outside parallel to the folds of the paper filter. Finally blow from the inside to the outside. Clogged or damaged filters must be replaced.

The life time of the blower depends entirely on the cleanness of the air filter.

7. Maintenance

The machine requires almost no maintenance. The side channel blowers are equipped with sealed groove ball bearing which do not need lubrication. The grease filling is sufficient to the whole service life of the bearing.

Please remember that even small solid particles e.g. sand can damage the blower or lead to blockage of the rotor resulting in an expensive repair.

7.1 Spare part

When ordering spare parts, please state clearly the machine's serial number, part or pos. no., description as per drawing and spare part list attached.

8. Trouble shooting

Only qualified electrician is allowed to do the work at electrical equipment.

8.1 Timer indicator lamp does not light.



Disconnect the mains plug before opening the control box. Do not touch electric parts in the control box while the machine is connected to the power supply for checking.

- Check the mains supply first.
- Check if the thermal overload relay is activated.

8.2 Motor does not run.



Before checking, disconnect the mains plug.

- check the mains supply first.

- check if you can turn the motor at the ventilator fan easily.

If you can turn the motor easily while mounted, there is an electric defect and the motor has to be replaced.

If you can not turn the motor, the motor has to be disassembled and checked:

- if there are damages at the bearing.
- if the blower impeller is in contact with the blower housing, in this case we would recommend to replace the motor blower.

8.3 System of solution flow

8.3.1 Throughout no flow, too low or uneven

Possible causes

- If the system does not permit a larger throughout
- Solution nozzle or solution hose are clogged
- Solution hose leaks
- Check solenoid valve for free passage, choked or defective

Actions

- clean solution filter
- clean nozzle or hose
- replace new hose
- clean or replace

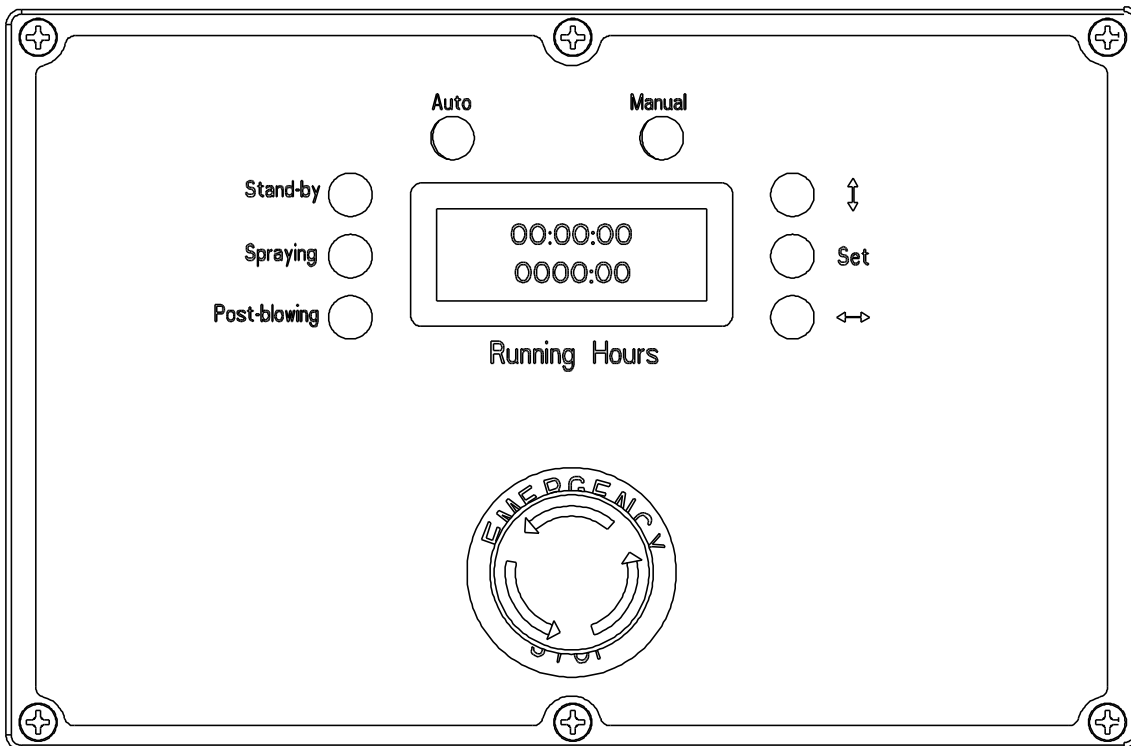
8.3.2 Pressure in the solution tank is too low

- Check the pressure gauge (fig. 1-11), start the equipment and check pressure (appr. 180mbar.)

If pressure is too low, take off cover and cap, check cover gasket and cap seal and replace carefully if necessary, fit cover and cap back to solution tank.

- Check pressure tube connection from blower outlet to solution tank.
- Check air hose for leakage.

9. Setting of timer

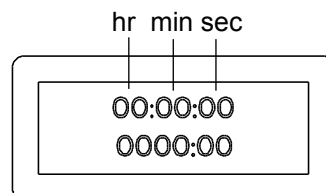


9.1 Auto-Mode:

Press the auto button to activate the auto-mode.

To set the "Stand-by" timing:

- (1) Press stand-by button, the stand-by button light will flash at the same time, the time display hour will flash.
- (2) By pressing the \leftrightarrow to select hour, minute, second.
(when selecting the min., the min. display light will flash.)



- (3) By pressing the \updownarrow to set you necessary time.
(for hour 00 to 19, min. 00 to 59, sec. 00 to 59)
- (4) Press set button to confirm your time setting, at the same time the stand-by button light will be off.

Repeat the above steps to set the "Spraying" timing and "Post-blowing" timing.

9.2 Auto-Mode Operation:

- Press the “auto” button, the light will be on; press it the second time, “stand-by” light will be on. At the same time, the time display starts to count down. When the time goes to zero, spraying function starts, following will be switched simultaneously.
- “spraying” light is on
- air blower is on
- solution solenoid valve is on
- time display counts down

The machine is spraying at the moment.

When the time display on “spraying” counts down to zero, the machine will be switched automatically to “post-blowing” function, following will take place:

- “post-blowing” light is on
- air blower keeps going on
- solution solenoid valve is off
- time display keeps counting down

Air blower will be cut off automatically then the machine stops functioning when the “post-blowing” time counts down to zero.

Intermediate stop:

You can make intermediate stop during auto-mode operation by pressing auto button. The time display will stop.

To continue the programme, just press “auto” button. Time display will be running on.

9.3 Manual-Mode Operation:

- Press the “manual” button, the light will be on; press it the second time, the machine starts to run and spray.

Following will be on without time control:

- air blower is on
- solution solenoid valve is on

Only when you press again the “manual” button or “Emergency/Stop” button will the machine be stopped.

9.4 Running Hour:

When the air blower is running (auto-mode or manual-mode”), hour clock starts to record the machine’s running time which will be accumulated (can not be reset).

