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PolAIR V70
High Pressure Fogging

Preventative maintenance will keep high pressure fogging systems working better, longer.

Consider the following steps as you begin the cleaning and maintenance process:

- Switch off pump at the main before starting maintenance.
- Check filter housings for leaks.
- Check filter for cleanliness. Discard dirty filter cartridges. Never wash and reuse them.
- On new systems, change crankcase oil after first 50 hours of operation, then 500 hours, then every 1000 hours of operation.
- Required adjustments to the system pressure can be made by adjusting the brass nut on the pump unit's pressure regulator.

To prepare the fogging system for use:

- ☐ Remove the end-of-line auto-flush valve. Open the manual valve at the end of each nozzle line.
- ☐ Open the main water supply and check that pressure does not exceed 3 Bar. Install a pressure reducer, if needed.
- ☐ Switch on the machine in manual mode to rinse the network of nozzles and removed impurities.
- ☐ Switch off the pump and water supply after rinsing nozzle lines.
- ☐ Re-attach the auto-flush valve. Close manual valves at the end of lines.
- ☐ Restart the machine in manual mode.
- ☐ After a few seconds, check that all nozzles are functioning properly. If spray pattern is not uniform, clean or replace nozzles.
- ☐ Using the pressure gauge built into the pump outlet, check the operating pressure is 70 Bar +/- 10%.
- ☐ Pressurize the system and check all pipe fittings are secure.
- ☐ Maximum system pressure is achieved when the automatic drain valves are closed.
- ☐ For other operational issues, see "Troubleshooting" in your PolAIR V70 Manual.

Throughout the hot weather season, we recommend following a maintenance schedule.

Daily:

- ☐ Check system for leaks. Check inlet pressure does not exceed 2-3 Bar.

Weekly:

- ☐ Observe nozzle operation. Clean any debris build-up from exterior of nozzle orifice with a nozzle cleaning brush while the system is in operation.

Monthly:

- ☐ Check that drain valves seal completely when the system is fully pressurized and drain for several seconds when the system shuts off. If they do not, remove the valves and inspect for debris around the spring or plunger.
- ☐ Check filter cartridges. If the 0-100 (0-7 Bar) supply gauges show a 10 PSI (0,7 Bar) differential between them, the primary (5 micron) filter cartridge should be changed. If the differential persists, the 1 micron filter should be replaced.
- ☐ Oil pressure regulator with lightweight oil.
- ☐ Inspect gauges and replace if faulty.

Yearly:

- ☐ If replacement nozzles are required, be sure to install using the proper torque tool (3.62 Nm). Take care not to over tighten, as this will strip the nozzles.

Activities	At delivery	At each operating cycle	Daily	Weekly	Monthly
Check operation of all controls	X	X			
Check the oil level inside the pump; top up with standard 15W40 oil, if necessary	X	X		X	
Check the water operating pressure using the pressure gauge built into the machine's pump outlet. The reference value is 70bar ± 10%		X	X		
Check that the nozzles are clean. If necessary, clean or replace them.		X	X		
Check that all safety systems are functioning properly: the machine must cut out if there is no water (close the water inlet cock and run the machine).		X		X	
Check that the water filters are clean		X			X
Check the pump seals: check that there is no water dripping from the pump head		X			X
Unscrew the end-of-line valve(s) and run the machine in manual mode for a few minutes.		X			

Date	Service Performed	Initials

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