

Troubleshooting table – PT series wellpoint dewatering pumps

WARNING

In the event of a malfunction or abnormal operation, shut off the pump immediately to prevent a dangerous situation and/or damage to the unit. Below a list of “possible causes” with suggestions how you can easily solve the issue.

Problem	Possible cause	Solution
No flow while the pump and drive are running	Wellpoint system is not properly installed or leaking	Check the wellpoint system and eliminate the leaks
	The leather piston cups are dry and have shrunk	Fill the pump housing with water
	The leather piston cups are totally worn out	Replace the leather piston cups
	Too much iron or lime deposit in the pump housing / in the stone catcher	Clean the pump and stone catcher properly
	Ice build-up around in the pump housing / stone catcher <i>(normally the engine will not start running)</i>	Thaw the pump
	Vacuum regulator valve on the stone catcher is not set or malfunctioning	Adjust the valve to max 8.5 meter on the vacuum gauge. Or replace the valve
Problem	Possible cause	Solution
Insufficient flow while the pump and drive are running	Wellpoint system is not properly installed or leaking	Check the wellpoint system and eliminate the leaks
	The leather piston cups are worn	Replace the leather piston cups
	Too much air leaking along the gland packing (stuffing box)	Tighten the gland follower so that one (1) drop of water leaks every five (5) seconds
	Too much iron or lime deposit in the pump housing / in the stone catcher	Clean the pump and stone catcher properly
	Vacuum regulator valve on the stone catcher is not set	Adjust the valve to max 8.5 meter on the vacuum gauge
	Pump speed is too low	Increase diesel engine RPM or motor speed (VFD)
	Incorrect direction of rotation <i>(only electric drive pumps)</i>	Reverse direction of rotation <i>(only electric drive pumps)</i>

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Problem	Possible cause	Solution
Thumping noise in the pump	Vacuum build-up is extremely high (close to full vacuum)	Adjust the vacuum regulator valve on the stone catcher to max 8.5 meter on the gauge
Problem	Possible cause	Solution
Pump is demanding abnormal amount of power (drive is overloaded)	Pump speed is too high	Decrease diesel engine RPM or motor speed (VFD)
	Incorrect direction of rotation (<i>only electric drive pumps</i>)	Reverse direction of rotation (<i>only electric drive pumps</i>)
Problem	Possible cause	Solution
Diesel engine stops immediately after starting (cold start)	Back pressure in the discharge line	Disconnect the suction and discharge lines. Start the diesel engine and let it warm up for five (5) minutes. Then try again.
Problem	Possible cause	Solution
Diesel engine will not start	No fuel is reaching the engine	First check the fuel level in the tank. In addition check the fuel connections/filters
	Self-priming fuel pump is not working	Check the in-line fuse or replace the fuel pump
	Mechanical engine oil pressure protection is off. (due to running out of fuel or low engine oil pressure)	Activate the mechanical oil pressure shut down device (red handle) and start the engine
	Insufficiently charged battery	Check the battery or contact the service department if necessary

Note

For other pump/drive malfunctions contact BBA Pumps service department.