

HTF 350, 500, 600 and HF-2 Series Oil Systems

Mokon Troubleshooting Guide | Models H2, H3, H4, H5, H6, H7, H8 AND HF



Problem	Possible Cause	Corrective Measure
System will not start	System unplugged/power off	Plug system in/turn power on
	Improper power source wiring	Check wiring (electrical schematics) and correct
	Blown fuse at power supply	Replace and check for ground/shorted condition
	Blown control circuit fuse	Replace and check for ground/shorted condition
	Improper voltage	Measure incoming voltage. Correct if necessary.
	High temperature safety switch	Verify normally open contact at room temperature. Replace if necessary.
	Process purge switch (if supplied) in neutral position	Switch to "Forward" position
Run pilot light does not go on	System unplugged/power off	Plug system in/turn power on
	Blown fuse at power supply	Replace and check for ground condition
	Blown control circuit fuse	Replace and check for ground condition
	Bulb burned out	Replace bulb
System runs momentarily and shuts off	Low discharge pressure	Hold start button in until pressure on the discharge gauge builds to above 10 psi
	High temperature safety switch	Verify normally open contact at room temperature. Replace if necessary.
	Motor starter thermal overloads tripped due to motor overload	Reset overload; verify amp draw; compare to motor nameplate.

For more information, refer to complete operation and installation instructions in manual or consult Mokon factory.



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Problem	Possible Cause	Corrective Measure
Pressure will not build up	Incorrect pump rotation	Check and correct motor rotation
	Entrapped air	Vent air from process loop high points
	Pump relief valve stuck open	Check valve for proper operation. Remove and clean if necessary.
	Check valve stuck open	Clean or replace as required
	Inadequate fluid level	Check that sight glass reads at least ½ full. If not, add fluid.
	Pump needs adjusting (does not apply to 350 Series)	Refer to manual for proper procedure to perform thrust bearing adjustment
	No fluid in the pump	Prime the pump
	Reservoir tank valve closed (on some models only)	Open valve
Pressure surges erratically and system will not hold temperature	Entrapped air	Vent air from process loop
	Inadequate fluid level	Check that sight glass reads at least ½ full. Add fluid as required to bring level to at least ½ full.
	Suction line leak	Locate and repair leak
	Contaminated fluid (water)	Drain and replace fluid
Extreme pressure build up	Plugged flow paths, inadequate circulation through process and connecting lines. Plugged strainer.	Locate restriction. If plugged, clean thoroughly. Use DELF Clean or DELF Clean Ultra as required.
		Clean strainers
Loss of pressure and volume output	Zone pump needs adjusting (does not apply to 350 Series)	Refer to manual for proper thrust bearing procedure
	Faulty pressure gauges	Verify gauges. Replace if necessary.
	Inadequate fluid level	Check that sight glass reads at least ½ full. Add fluid as required to bring level to at least ½ full.
	Cooling valve stuck open	Verify valve operation. Clean or replace if necessary.
	Pump relief valve stuck open or misadjusted	Verify valve operation. Clean or replace if necessary.
Temperature climbs beyond setpoint	Heater contactor stuck closed	Verify operation. Replace if necessary.
	Temperature controller needs to be auto tuned	Either tune manually or perform an autotune on controller. Consult manual for proper procedure.
	Faulty temperature sensor	Identify blown fuse and replace as required

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Problem	Possible Cause	Corrective Measure
System does not reach and/or hold temperature or slow response after changing temperature setting	Blown heater fuses	Drain/replace fluid
	Bad heater element	Verify element does not have an open circuit. Replace as required.
	Controller not tuned properly	Consult manual for proper autotune procedure
	Unit undersized	Consult with a Mokon application engineer to verify sizing requirements
	Loose electrical connections	Verify all connections are tight
	Bad temperature sensor	Replace as required
	Cooling valve stuck open	Clean or replace as required
Reservoir tank overheating	Inadequate fluid level	Check that sight glass reads at least ½ full. If not, add fluid.
	Water not flowing through heat exchanger	Verify water source is on. Verify flow path through heat exchanger is not plugged.
	Cooling valve stuck open	Clean or replace as required
	Undersized heat exchanger for application	Consult with a Mokon application engineer to verify sizing requirements
	Relief valve stuck open	Clean or replace as required
Noisy pump	Entrapped air	Vent air from process loop high points
	Pump needs adjusting (does not apply to 350 Series)	Refer to manual for proper trust bearing adjustment
	Pump needs alignment	Refer to manual for proper alignment procedure
	Worn coupling and/or grommet between pump and motor	Replace as required
	Faulty temperature sensor	Replace as required
	Lack of grease in pump bearing	Grease pump at least every 500 hours

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