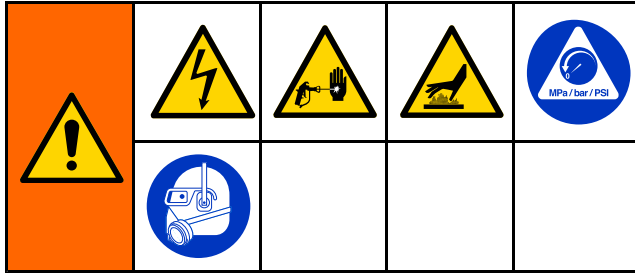


# Reactor 2 Hydraulic - Troubleshooting - Hose Heat

Troubleshooting

## Hose Heat System



Before performing any troubleshooting procedures:

1. Follow [Pressure Relief Procedure, page 48](#).
2. Turn main power switch OFF.
3. Allow equipment to cool.

Problem	Cause	Solution
Hose heats but heats slower than usual or it does not reach temperature.	Ambient temperature is too cold.	Relocate hoses to a warmer area or recirculate heated fluid through the hose.
	FTS failed or not installed correctly.	Check FTS, see <a href="#">Check RTD Cables and FTS, page 60</a> .
	Low supply voltage.	Verify line voltage. Low line voltage significantly reduces power available to the hose heat system, affecting longer hose lengths.
Hose does not maintain temperature while spraying.	A and B setpoints too low.	Increase A and B setpoints. Hose is designed to maintain temperature, not to increase it.
	Ambient temperature is too cold.	Increase A and B setpoints to increase fluid temperature and keep it steady.
	Flow too high.	Use smaller mix chamber. Decrease pressure.
	Hose was not fully preheated.	Wait for hose to heat to correct temperature before spraying.
	Low supply voltage.	Verify line voltage. Low line voltage significantly reduces power available to the hose heat system, affecting longer hose lengths.

# Reactor 2 Hydraulic - Troubleshooting - Hose Heat

## Troubleshooting

Problem	Cause	Solution
Hose temperature exceeds setpoint.	A and/or B heaters are overheating material.	Check primary heaters for either an RTD problem or a failed element attached to RTD, see <a href="#">Electrical Schematics, page 94</a> .
	Faulty FTS connections.	Verify that all FTS connections are snug and that pins of connectors are clean. Unplug and re-plug RTD wires, cleaning off any debris.
	Ambient temperature is too high.	Cover hoses or move to a location with a lower ambient temperature.
	Hose insulation over the FTS location is damaged.	Replace damaged insulation.
Erratic hose temperature.	Faulty FTS connections.	Verify that all FTS connections are snug and that pins of connectors are clean. Unplug and re-plug FTS wires along length of hose, cleaning off any debris.
	FTS not installed correctly.	FTS should be installed close to end of hose in same environment as gun. Verify FTS installation, see <a href="#">Repair Fluid Temperature Sensor (FTS), page 61</a> .
Hose does not heat.	FTS failed.	Check FTS, see <a href="#">Repair Fluid Temperature Sensor (FTS), page 61</a> .
	FTS not installed correctly.	FTS should be installed close to end of hose in same environment as gun. Verify FTS installation, see <a href="#">Repair Fluid Temperature Sensor (FTS), page 61</a> .
	Loose hose electrical connections.	Check connections. Repair as necessary.
	Circuit breakers tripped.	Reset breakers (CB11 and/or CB15), see <a href="#">Repair Circuit Breaker Module, page 62</a> .
	Hose zone not turned on.	Turn on hose heat zone.
	A and B temperature setpoints too low.	Check. Increase if necessary.

# Reactor 2 Hydraulic - Troubleshooting - Hose Heat

*Troubleshooting*

Problem	Cause	Solution
Hoses near Reactor are warm, but hoses downstream are cold.	Shorted connection or failed hose heating element.	With power off, check the hose resistance with and without the whip hose attached. With the whip hose attached, the reading should be less than 3 ohm. Without the whip hose attached, the reading should be OL (open loop). See <a href="#">Check Hose Wires, page 60</a> .
Low hose heat.	A and B temperature setpoints too low.	Increase A and B setpoints. Hose designed to maintain temperature, not increase temperature.
	Hose temperature setpoint too low.	Check. Increase if necessary to maintain heat.
	Flow too high.	Use smaller mix chamber. Decrease pressure.
	Low current; FTS not installed.	Install FTS, see operation manual.
	Hose heat zone not turned on long enough to reach setpoint.	Allow hose to heat up, or preheat fluid.
	Loose hose electrical connections.	Check connections. Repair as necessary.
	Ambient temperature is too low	Relocate hoses to a warmer area or increase A and B setpoints.