



## Homogenizer Trouble Shooting Guide

SYMPTOM		CAUSE	REMEDY	
<b>MAIN MOTOR</b>	Does not start or stops suddenly	Blown fuse	Replace the fuse	
		Overload switch has released	Adjust the overload relay	
		Too low oil pressure	Adjust the oil pressure	
		Defective LOP switch	Check the correct function	
	Gets too hot/ amps too high	Incorrect motor connection	Correct the motor connection	
		Main voltage differs from the motor connection	Provide correct main or motor voltage	
		Too high ambient temperature	Provide sufficient motor cooling	
<b>CAPACITY</b>	Drops or varies	Belts sliding	Tighten belts	
		Product is too viscous	Increase the feed pressure	
		Belts sliding	Tighten belts	
		Suction or discharge valves dirty or worn	Clean or replace the suction and discharge valves	
		Air included in the product	Remove the included air	
		Air included in the liquid cylinder	Vent the liquid cylinder	
		Too high product temperature	Cool the product or increase the feed pressure	
	Plunger packing or gaskets are worn	Replace the plunger packing or gaskets		
	<b>HOMOGENIZING PRESSURE</b>	Drops or varies	Soil build up between the valves	Shut off the HVA pump, then start the cleaning process
			Broken spring caught between the valves or spring slipped out of the spring groove	Remove all parts of the broken valve spring and fit new springs
Air included in the cylinder block			Vent the cylinder block	
Suction or discharge valves dirty or worn			Clean or replace the suction and discharge valves	
Plunger packing or gaskets are worn			Replace the plunger packing or gaskets	
Defective pressure gauge			Replace the pressure gauge	
Product is too viscous			Increase the feed pressure	
Belts sliding			Tighten belts	
Out of reach		Micro-Gap® placed upside down	Refit the valve according to instruction	
		Too low actuator pressure	Adjust actuator pressure	
<b>HOMOGENIZING EFFICIENCY</b>	Is insufficient	Homogenizing valves are dirty or worn	Clean or replace the homogenizing valves	
		Product was not correctly prepared	Alter the product composition or preparation	
<b>MICRO-GAP® VALVE SPRINGS</b>	Slipping from spring groove	Too few valve plates	Check to see that the correct number of valves were reinstalled. Check with SPX for correct number of valves	
<b>INSUFFICIENT CLEANING</b>	Of Micro-Gap® homogenizing valve	Cleaning process with operating HVA pump	Shut off the HVA pump before starting the cleaning process	
		Cleaning process is too short	Longer cleaning process	
		Too low flow rate of water during cleaning process	Run homogenizer throughout process cycle. Do not cycle homogenizer	

<b>HYDRAULIC MOTOR</b>	Does not start or stops suddenly	<b>Blown fuse</b>	<b>Replace the fuse</b>
		Overload switch has released	Adjust the overload relay
		Too high homogenizing pressure	Check the process and control
	Gets too hot	Too low feed pressure	Check the process and control
		Incorrect motor connection	Correct the motor connection
		Main voltage differs from the motor connection	Provide correct main or motor voltage connection
<b>HYDRAULIC PRESSURE</b>	No hydraulic pump pressure	Too high ambient temperature	Provide sufficient motor cooling
		Moto not started	Start motor
		Unloading valve is OFF	Activate unloading valve
		Unloading valve damaged	Replace unloading valve
		No or low hydraulic oil level	Refill hydraulic oil and check for leaks
	Too low hydraulic pump pressure	Pump damaged	Replace pump unit
		Regulation valve not adjusted	Adjust regulation valve
	No hydraulic pressure to actuator	Oil temperature too high (>45C)	Add cooling
		Pump worn	Replace pump unit
		No control signal to amplifier	Adjust control signal
		Amplifier scale too low	Adjust amplifier scale
	Too low hydraulic pressure to actuator	No unit pressure	Increase unit pressure
		Worn homogenizing valves	Replace valve with new or reground set
		Control signal to amplifier too low	Adjust control signal
		Amplifier scale too low	Adjust amplifier scale
		Too low unit pressure	Increase unit pressure
	Hydraulic pressure fluctuates	Air included in the product	Remove the included air
		Plunger packing or gaskets are worn	Replace the plunger packing or gaskets
		Suction or discharge valves dirty or worn	Clean or replace the suction and discharge valves
		Unstable or too low feed pressure	Stabilize or increase the feed pressure
Air in hydraulic system		Bleed the hydraulic system	
<b>PRODUCT RELIEF VALVE</b>	Release	Too high operating pressure	Check process and replace damaged parts
		Pressure spikes	Call SPX FT service
		Out of adjustment	Call SPX FT service
	Leaking	Seat, ball or spring damaged	Replace damaged parts
<b>ABNORMAL NOISE</b>	Power end	Loud knocking sounds caused by wear or damage of mechanical connections	Check mechanical connections
	Gear	Metallic noise caused by insufficient lubrication	Check oil for particles and water. Clean gear box and fill in new oil
	Pipes	Shaking/vibrations due to heavy flow or pressure pulsations	Improved feed and discharge conditions. Install pulsation dampening device(s)
	Homogenizer valve	High frequency loud noise due to imperfect guiding of the valve	Improve valve guidance or replace valve guides
	Valve housing	Pump valve springs damaged	Replace pump valve springs
		Air in the product	Remove air from product
		Insufficient filling of cylinders	Increase feed pressure

Still having problems with your homogenizer? Give M.G. Newell a call.

We have technicians on hand to help with calibrations, repair and preventative maintenance. Contact your local account representative or one of our offices near you.

<b>Greensboro Division</b>	<b>Louisville Division</b>	<b>Nashville Division</b>
1-800-334-0231 336-393-0100	1-800-459-7475 502-459-7475	1-855-749-4820 615-822-3030