

Troubleshooting Guide for AR Diaphragm Pumps

Problem	Cause	Solution
Pump does not prime properly	Intake circuit not airtight	Tighten, repair, or replace hoses and fittings as necessary
	Distributor switching lever on 'Pressure' setting	Move distributor switching lever to 'Bypass' setting
Pump does not require the required pressure	Seat and plate of intake and delivery valves worn	Replace worn valves
	Nozzles worn or too large in diameter	Replace worn nozzles and use nozzles of a suitable diameter
	Restriction in intake circuit	Remove the restriction from the circuit
	Intake filter fouled	Clean the filter cartridge
Pressure gauge needle wobbles, pressure throbbing	Intake circuit not airtight	Clean or replace intake and delivery valves
	Residual air left inside pump	Discharge the air by opening a ball valve connected to delivery side with the pump in operation
	Valve plate stuck to its seat	Tighten, repair, or replace hoses and fittings as necessary
	Pressure accumulator deflated	Inflate accumulator to correct pressure
Uneven flow of liquid to nozzles	Pressure accumulator deflated	Inflate accumulator to correct pressure
Increased noise and simultaneous drop in oil level (pump cavitation)	Restriction in intake circuit	Remove the restriction from the circuit
	Intake filter fouled	Clean the filter cartridge
	Pump drawing in liquid from too low a level	See 'Pump Intake Conditions' section in manual
Oil on pump body or base	Oil seal on pump shaft is worn	Replace worn oil seal
	Oil pressure inside pump is too high	Restore correct oil level in tank
Pump uses too much oil (oil flows from delivery port) OR oil has a milky grey color (water/oil emulsion in tank)	One or more of the diaphragms have ruptured	Stop using the pump and replace the diaphragms