

Standard Instant-Set Spray System TROUBLESHOOTING GUIDE

SPRAY GUN V2.1

<i>PROBLEM</i>	<i>CAUSES</i>	<i>SOLUTION</i>
No coating flow and coating pump is NOT cycling	Spray tip is clogged	De-pressurize, remove tip and clean
	Gun passages are clogged	Disassemble gun; clean and re-lubricate
	Coating hose is clogged	Remove gun from the hose; verify if coating will flow through only the hose. If hose is clogged, clean or replace.
	Pump is clogged	Remove hose from the coating pump; connect small tube and test flow. If pump is clogged, disassemble and clean.
	A valve is off	Find closed valve and open
No coating flow, pump is cycling	Empty drum of material, air sucked into system	Submerge pick-up tube in new material; cycle air out of system by pulling trigger until coating flows
	Clogged pick-up tube or filter	Clean pick-up tube and cycle air out of system
Pistons will not actuate on (move backwards)	Pressure too low at the cart	Increase "Air" regulator (center dial) on the cart to at least 70 psi
	Air is leaking from the handle	Disconnect air line; remove small back cap from handle; remove spring; pull out handle valve stem; check all 3 small o-rings, replace as needed; re-lubricate and re-assemble.
	Lack of lubrication or clogs	Disassemble gun; clean gun; apply SuperLube to both pistons, all valve stem seals, and spacers. Replace valve stem seals if damaged or deteriorated.
Pistons will not actuate off (move forwards)	Springs are damaged	Remove back-cap and replace springs
	Clogs at the valve stem seals	Disassemble gun; clean gun; Replace valve stem seals if damaged or deteriorated. Re-lubricate and re-assemble.
	Handle valve stem is stuck	Disconnect air; remove small back cap from handle; remove spring; pull out handle valve stem; check all 3 small o-rings to ensure they are in the proper grooves of the stem, replace as needed; re-lubricate and re-assemble.
Pistons "stick" off or on during spraying	Lack of lubrication	Disassemble gun; clean gun; apply SuperLube to both pistons, all valve stem seals, and spacers. Replace valve stem seals if damaged or deteriorated.
	Valve stem seals are not in position or damaged	Disassemble gun. Replace valve stem seals if damaged or deteriorated. Re-lubricate.
Air is leaking from handle with the trigger off	Handle valve stem o-rings are not in place or damaged	Disconnect air; remove small back cap from handle; remove spring; pull out handle



		valve stem; check all 3 small o-rings to ensure they are in the proper grooves of the stem, replace as needed; re-lubricate and re-assemble.
No Catalyst flow and catalyst pump is NOT cycling	Valve closed	Check all valves; open if closed
	Spray tip clogged	Remove and clean
	Kink/bend in the hose	Check the hose for any kinks in the accelerator tube cutting off flow
No Catalyst flow and catalyst pump is cycling	Empty bucket/barrel and air has been sucked into line	Submerge catalyst pick-up tube in catalyst; hold trigger until all air exits the line
	Leaking fitting or tube	Check hoses, pump, and push-lock connections for leaks
Coating or Catalyst leaking from tips	Front seal worn or damaged	Remove and replace
	Tips are not tight	With air connected to the handle, pull trigger to actuate pistons; while trigger is pulled, tighten the tip caps by hand until snug. Turn tips to proper direction.

COATING PUMP

PROBLEM	CAUSES	SOLUTION
Pump is not cycling	Lack of air supply	Check air supply to rig, should be minimum 140 psi; increase pressure on the Coating regulator to 100 psi
	Clogged pump	Depressurize system; disassemble pump and clean
	Clogged hose or gun	Close all valves and disconnect hose from pump; attach small rubber tube and test if pump will flow with no restriction.
	Damaged internal system	In-depth pump repair needed; contact RST for assistance
Pump cycling rapidly, lack of pressure at the gun	Coating supply level below pick-up tube	Air has been sucked into system; submerge pick-up tube in coating and hold trigger until all air is cleared from the hose
	Clogged pick-up tube/filter	Clean or replace filter; clear all air from the hose
Pump is cycling, but won't hold pressure on the regulator	Lack of or restricted air supply	Check air supply to the rig, should maintain 140 psi at the back of the cart while pumping
	Partially clogged pump or hose	Disassemble and clean; replace as needed
Pump leaking coating	Damaged or worn o-rings	Disassemble pump; replace o-rings at the ball check valves as needed
	Not properly tightened	Re-tighten all nuts
	Damaged diaphragm	Replace



CATALYST PUMP

PROBLEM	CAUSES	SOLUTION
Pump is not cycling	Lack of air supply	Check air supply to rig, should be minimum 140 psi; increase pressure on the Catalyst regulator to 65 psi
	Clogged pump	Depressurize system; disassemble pump and clean
	Other	In-depth pump repair or replacement needed; contact RST for assistance
Pump cycling rapidly, lack of pressure at the gun	Catalyst supply level below pick-up tube	Air has been sucked into system; submerge pick-up tube in catalyst and hold trigger until all air is cleared from the hose
	Clogged pick-up tube/filter	Clean or replace filter; clear all air from the hose
Pump is cycling, but won't hold pressure on the regulator	Lack of or restricted air supply	Check air supply to the rig, should maintain 140 psi at the back of the cart while pumping
	Partially clogged pump or hose	Disassemble and clean; replace as needed; check for kinks in hose or loose connections
Pump leaking catalyst	Damaged or worn fittings	Disassemble pump; replace fittings as needed or replace pump
	Not properly tightened	Re-tighten
	Damaged diaphragm	Replace pump

OTHER ISSUES

PROBLEM	CAUSES	SOLUTION
Coating film not building up properly	Wrong spray tips	Larger tip (i.e. 4008) is always on the Coating side; smaller tip (i.e. 5002) on the Catalyst side
	Improper spray tip angles	Both tips should be parallel to one another
	Catalyst tip wrong direction	The Catalyst tip should be positioned so the spray fan angles into the Coating fan when spraying
Spray fans are fingering or not spraying a proper spray fan	Tips damaged or partially clogged	Remove and replace; or clean
	Lack of air pressure	Check air source. Pressure into the cart should maintain at least 140 psi while spraying and Coating pressure set to at least 100 psi on the regulator.

