

Layton Hydraulic Hand Pump Check Sheet

Trouble	Probable Cause	Remedy
Hand pump is actuated. No response at cylinder.	<ul style="list-style-type: none"> A. No fluid in reservoir. B. Shut off valve (Not Closed) C. Suction check not in pump. (part no. 500-009) D. Suction Check leaking past ball. 	<ul style="list-style-type: none"> A. Fill reservoir with hydraulic fluid. B. Close shut off valve. (part no. 500-035) C. Install suction check (part no. 500-009) D. Replace suction check (part no. 500-009) with new check.
Hand pump is actuated-when released from the down position handle returns to up right position.	<ul style="list-style-type: none"> A. Pressure check is leaking. Not sealing allowing pressure fluid back into piston. 	<ul style="list-style-type: none"> A. Replace pressure check (part no. 500-044)
Hand pump is actuated-cylinder slowly bleeds off.	<ul style="list-style-type: none"> A. Lose hose or fitting. B. Fluid Leaking past pressure check (part no. 500-044) returning handle to upright position. C. Fluid leaking past packing in cylinder. D. Bad seal in shut off valve. 	<ul style="list-style-type: none"> A. Check all hose connections and fittings in circuit being operated for leakage. B. Replace pressure check (part no. 500-044) C. Replace packing and check cylinder for wear. D. Replace shut off valve. (part no. 500-035)
When system is operated and shut off valve is released-fluid blows out breather in reservoir.	<ul style="list-style-type: none"> A. Reservoir has been over filled when all cylinders are full of fluid. 	<ul style="list-style-type: none"> A. Fill Reservoir when cylinders are closed.
Hand pump piston is actuated; system operates slow, oil bleeds out top of barrel.	<ul style="list-style-type: none"> A. Packing on piston is damaged. 	<ul style="list-style-type: none"> A. Replace packing on piston and barrel seal. (SEE SERVICE KITS) <p>Note: Before reassembly inspect barrel and piston for any scratches or other damage that would destroy new packaging-if damage is found replace barrel and piston if required.</p>
Hand pump handle is actuated-handle is pulled up, when released returns to down position.	<ul style="list-style-type: none"> A. Suction check (part no. 500-009) is not opening far enough to allow enough oil into piston. 	<ul style="list-style-type: none"> A. Replace suction check (part no. 500-009) also check for any dirt in system that could lodge under a ball in a check valve.
After replacing components in hand pump, check valves still fail to close and loads on cylinders are bleeding off.	<ul style="list-style-type: none"> A. System contains dirt. 	<ul style="list-style-type: none"> A. Disassemble complete system. <ul style="list-style-type: none"> 1. Cylinders 2. Hose and Fittings 3. Hand pump Clean all components and Reassemble system. <p>Note: During reassembly of unit check all lines and fittings making sure there are no obstructions to effect the operation of the system.</p>