Steelpumps Troubleshooting Guides: Automatic and Manual Guides

Guide One: Automatic Versions

For manual versions see below. In case of further difficulty, please Contact Us.

X-AJE Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed Delivery pipe obstructed Non return valve obstructed Partially blocked impeller Insufficient voltage from supply	Clear Obstruction Clear Obstruction Clear Obstruction Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size
Pump does not run – no sound	No electrical supply Faulty control PCB Failed capacitor	Check electrical supply Return for service Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings seized	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive Disconnected Neutral or CPC (GFCI)	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI) Verify conductor integrity
Pump stops when outlet closed but does not restart	Slow leak on discharge hose Slow leak on valves/ballcocks on discharge line Faulty pressure switch Flow sensor blocked	Check hose, seal connections Pressure test Return for service Check flow sensor spins ok
Pump does not stop when outlet closed	Large leak on discharge hose Pump installed is manual not automatic Large leak from pump body (damaged flange, punctured pump body.	Pressure test Check model (X-AJE not X-JE) Return for service
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve seized	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV

	Impeller failed	Return for service
Pump stops when outlet closed and immediately restarts	Missing or faulty non return valve	Replace NRV
(cycling)	Failed main body seal	Return for service
Pump has reduced pressure	Damaged venturi	Return for service
	Partially blocked impeller	Return for service
	Insufficient voltage from supply	Check electrical supply for
		voltage drop (line impedance of
		L-N conductors) or check
		voltage drop calcs for cable size

X-AMO/X-AMV/X-AMV HF Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed Delivery pipe obstructed Non return valve obstructed Partially blocked impeller Insufficient voltage from supply Damage to diffuser cover due to water hammer	Clear Obstruction Clear Obstruction Clear Obstruction Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size Return for service, increase delivery pipe size or fit shock arrestor near pump
Pump does not run – no sound	No electrical supply Faulty control PCB Failed capacitor	Check electrical supply Return for service Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings seized	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive Disconnected Neutral or CPC (GFCI)	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI) Verify conductor integrity
Pump stops when outlet closed but does not restart	Slow leak on discharge hose Slow leak on valves/ballcocks on discharge line Faulty pressure switch Flow sensor blocked	Check hose, seal connections Pressure test Return for service Check flow sensor spins ok
Pump does not stop when outlet closed	Large leak on discharge hose Pump installed is manual not	Pressure test Check model (X-AJE not X-JE)

	automatic Large leak from pump body (damaged flange, punctured pump body.	Return for service
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve seized Impeller failed	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV Return for service
Pump stops when outlet closed and immediately restarts (cycling)	Missing or faulty non return valve Failed main body seal	Replace NRV Return for service
Pump has reduced pressure	Damaged venturi Partially blocked impeller Insufficient voltage from supply Damage to diffuser cover due to water hammer	voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size

X-A2CP Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed Delivery pipe obstructed Non return valve obstructed Partially blocked impeller Insufficient voltage from supply	Clear Obstruction Clear Obstruction Clear Obstruction Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size
Pump does not run – no sound	No electrical supply Faulty control PCB Failed capacitor	Check electrical supply Return for service Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings seized	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI)
	Disconnected Neutral or CPC	Verify conductor integrity

	(GFCI)	
Pump stops when outlet closed but does not restart	Slow leak on discharge hose Slow leak on valves/ballcocks on discharge line Faulty pressure switch Flow sensor blocked	Check hose, seal connections Pressure test Return for service Check flow sensor spins ok
Pump does not stop when outlet closed	Large leak on discharge hose Pump installed is manual not automatic Large leak from pump body (daamaged flange, punctured pump body.	Pressure test Check model (X-AJE not X-JE) Return for service
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve siezed Impeller failed	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV Return for service
Pump stops when outlet closed and immediately restarts (cycling)	Missing or faulty non return valve Failed main body seal	Replace NRV Return for service
Pump has reduced pressure	Partially blocked impeller Insufficient voltage from supply	Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size

Troubleshooting Guide Two: Manual Versions

X-JE Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed Delivery pipe obstructed Non return valve obstructed Partially blocked impeller Insufficient voltage from supply	Clear Obstruction Clear Obstruction Clear Obstruction Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size
Pump does not run – no sound	No electrical supply Failed capacitor	Check electrical supply Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings seized	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive Disconnected Neutral or CPC (GFCI)	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI) Verify conductor integrity
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve seized Impeller failed	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV Return for service
Pump has reduced pressure	Damaged venturi Partially blocked impeller Insufficient voltage from supply	Return for service Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size

X-MO/X-MV/X-MV HF Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed	Clear Obstruction
	Delivery pipe obstructed	Clear Obstruction
	Non return valve obstructed	Clear Obstruction
	Partially blocked impeller	Return for service

	Insufficient voltage from supply Damage to diffuser cover due to water hammer	Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size Return for service, increase delivery pipe size or fit shock arrestor near pump
Pump does not run – no sound	No electrical supply Faulty control PCB Failed capacitor	Check electrical supply Return for service Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings seized	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive Disconnected Neutral or CPC (GFCI)	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI) Verify conductor integrity
Pump does not stop when outlet closed	Large leak on discharge hose Pump installed is manual not automatic Large leak from pump body (damaged flange, punctured pump body.	Pressure test Check model (X-AJE not X-JE) Return for service
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve seized Impeller failed	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV Return for service
Pump has reduced pressure	Damaged venturi Partially blocked impeller Insufficient voltage from supply Damage to diffuser cover due to water hammer	Return for service Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size Return for service, increase delivery pipe size or fit shock arrestor near pump

X-A2CP Series

Problem	Possible Causes	Solutions
Pump has reduced water flow	Suction pipe obstructed	Clear Obstruction

	Delivery pipe obstructed Non return valve obstructed Partially blocked impeller Insufficient voltage from supply	Clear Obstruction Clear Obstruction Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size
Pump does not run – no sound	No electrical supply Faulty control PCB Failed capacitor	Check electrical supply Return for service Return for service
Pump does not run – humming sound	Failing capacitor Impeller blocked Motor/Bearings siezed	Return for service Return for service Return for service
Pump Trips RCD/GFCI	Water ingress to electrical compartment/motor Damaged cable Water ingress to isolator switch or junction box RCD/GFCI too sensitive Disconnected Neutral or CPC (GFCI)	Return for service Return for service Dry out junctions Ramp or No-trip test (10mA RCD, 2mA GFCI) Verify conductor integrity
Pump runs but does not pump water	Pump not primed (air) Leak in suction hose Severe blockage Non return valve seized Impeller failed	Prime pump and suction hose (fill with water) Check hose, seal connections Clear Obstruction Replace NRV Return for service
Pump has reduced pressure	Partially blocked impeller Insufficient voltage from supply	Return for service Check electrical supply for voltage drop (line impedance of L-N conductors) or check voltage drop calcs for cable size