Hypertherm®

Valve lock kit

for HyPrecision pumps with redundant intensifiers

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One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers', success. We are always striving to become better environmental stewards; it is a process we care deeply about.

Safety

	Refer to the instruction manual. Read and understand all of the safety guidelines in this manual.
	Dangerous voltage
DANGER	To reduce the risk of serious injuries or death, wear approved protection and follow safety recommendations when working with electricity.
	 Personnel who work on deenergized machinery can be seriously injured or killed if the machinery is reenergized without permission.
4	 All personnel must respect lock-out devices. Only the person(s) who applied the devices shall remove them.
DANGER	 All personnel in an area where energy-control procedures are used must receive training regarding the energy-control procedure and the prohibition against removing a lock-out device.
	 Personnel who maintain and repair this machinery can be seriously injured or killed if hazardous energy is not properly controlled. Injuries can include burns, cuts, fractures, or electrocution.
WARNING	 Disconnect and lock out the electric power supply before opening the electrical enclosure or doing maintenance or repair procedures.
	Before doing maintenance or repair procedures:
	 Isolate all sources of electric, mechanical, hydraulic, pneumatic, chemical, thermal, and other energy with a lockable energy-isolating device that meets local and national requirements.
WARNING	 Relieve all water pressure from the pumps before starting maintenance or repairs.
	 Bleed down and lock out compressed air sources. Compressed air systems do not always depressurize when other power is disconnected.
	Obey all safety requirements and applicable safety laws and regulations.
	Coordinate preventive maintenance and repair activities with operations and safety staff.
	Personnel who maintain and repair this system must know how to use standard hand tools.
	Use proper tools for maintenance procedures. Some tools are designed to make the procedure easier and to prevent damage to the system.

Purpose

The ball values on the pump manifold should be locked out when not in use. This kit replaces some of the value handle hardware with a pair of plates that allow a lock to be used.

Required parts, tools, and materials Two LK20 Valve lock kits Adjustable wrench Flat-blade screwdriver

Do this task when the pump is not running.

- 1. Turn OFF the pump.
- 2. Turn OFF power from the primary utility source. Use standard lock out-tag out procedures.
- **3.** Turn OFF the water to the pump.
- 4. Make sure that the hydraulic pressure gauge shows 0.0 bar or 0 kPa (0 psi).
- **5.** Turn the valve handles on the pump manifold so that the front intensifier is on. Remember which direction the handle points.



6. Remove the valve handle.

Do not pry on the handle by putting a tool in the space at the end of the handle. Do not turn the handle on the square nut without the bolt and nut installed. These can cause a crack in the handle.



7. Discard the stopper plate. Keep the retaining ring.



8. Install the white plastic spacer.



9. Install the locking plate that has 1 lock hole.



The stop button on the valve fits into the notch on the side of the center hole of the locking plate.

10. Install the locking plate that has 2 lock holes. Find the marks on the square nut. Install the locking plate so that the lock holes are opposite the marks on the square nut.



11. Install the retaining ring on the square nut.



12. Install the valve handle so that it points in the same direction as it was initially.



Do not pry on the handle by putting a tool in the space at the end of the handle. Do not turn the handle on the square nut without the bolt and nut installed. These can cause a crack in the handle.



- **13.** Repeat steps 6 through 12 for the other valve handle.
- **14.** Turn ON the water to the pump.