

DSI™ J-Lock Mechanical Safety Interlock System

Survives the toughest operating environments



Improve uptime with the new DSI J-Lock System which replaces electrical switches with a “trapped key” mechanical safety system, eliminating exposed wiring and electrical troubleshooting of traditional safety interlock switches. The fully documented and tested J-Lock Upgrade Kit is now available for the DSI 714 and 624 waterjet portioning systems from JBT FoodTech.

Safety interlocks offer protection to machine operators and sanitation personnel by securing the correct position of machine guards and access panels. JBT FoodTech recognized the need for a more robust safety interlock system capable of surviving high pressure wash down, acidic and caustic cleaning chemicals, temperature cycling and time-pressured maintenance.

How Does It Work?

The system works by securing machine guards during operation. After installation of this upgrade, each guard has a mechanical actuator attached to it. When a guard is in the safe position, the actuator attached to the guard latches inside a mechanical interlock device. Once the actuator is latched inside the interlock, the two cannot be separated without an interlock key.

The interlock keys are stored in a special enclosure when the guards are all in a safe position. The presence of all keys in the enclosure indicates the machine is safe to run. The absence of any key disables operation of the machine.

The uppermost key in the enclosure interacts with an electrical circuit to disable machine operation. The other keys in the enclosure are mechanically latched to the top key. As such, there is only one electrical device to trouble shoot for multiple keys.

To open a guard, a key is removed from the enclosure, inserted into the interlock and rotated. Doing so allows the guard to be opened, separating the actuator and interlock and allowing access for maintenance or sanitation. When the actuator and interlock are separated, the key is captured in the interlock and cannot be removed.

To open all guards for sanitation, all keys are removed and placed in interlocks. To ready a machine for operation, all guards are closed, releasing the captured keys. The keys are placed in the key enclosure and the machine is ready to run.

What's Included?

The kit includes actuators, interlocks, keys, key enclosure, brackets, installation materials and documentation. Installation by experienced personnel is available.

The cost?

The cost of the kits depends on your specific needs. Contact your JBT FoodTech representative for an exact quotation as well as a calculation of your potential payback time. As always, we stand behind what we sell. One call gets it all.

What Are The Benefits?

The system improves uptime and reduces maintenance cost by:

- Eliminating exposed wires and electrical switches
- Implementing a mechanical solution that more people can successfully troubleshoot
- Simplifying the control circuit
- Securely capturing guards that may be vibrating or moving - eliminating nuisance trips
- Mounting in a location that prevents guard damage
- Providing a clear status for each guard
 - A key captured in interlock means the guard is not secure and equipment is not ready to run
 - All keys in the enclosure means equipment is ready to run

Options:

- Expert installation is available as an option

To learn more about these new offerings or other DSI upgrades, visit www.jbtfoodtech.com.

Part Numbers:

The part number for the 714 is 37-0204. The part number for the 624 is 37-0205.