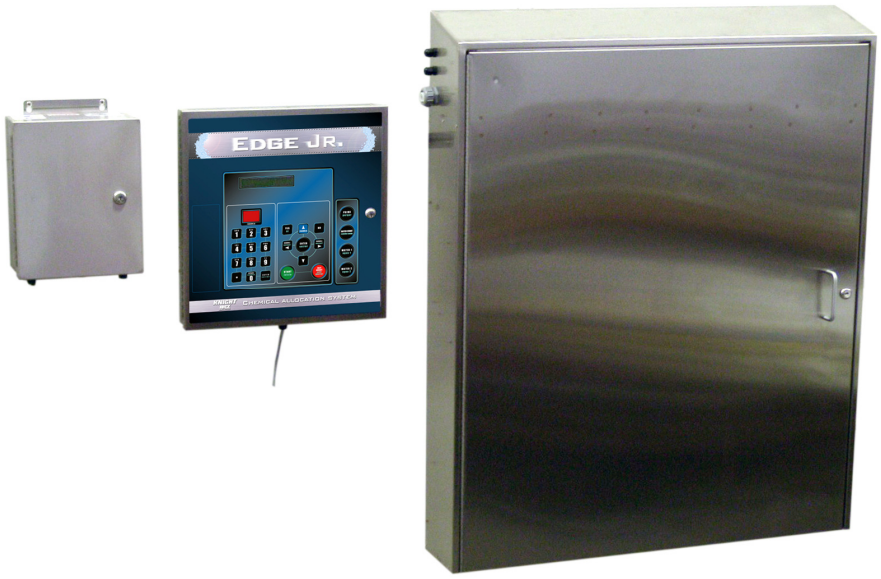
KNIGHT

IDEX CORPORATION



ILCS EDGE Jr EDP
Installation Manual

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CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (MSDS) of chemical mfrs.

CAUTION: To avoid severe or fatal shock, always disconnect main power when servicing the unit.

CAUTION: When installing any equipment, ensure that all national and local safety, electrical, and plumbing codes are met.

SYSTEM OVERVIEW

The ILCS EDGE Jr (Intelligent Liquid Control System) is an automated chemical control system that accumulates critical usage data of chemicals used for cleaning in food plants. Using the very latest concepts in process control technology, the ILCS EDGE Jr provides key benefits:

- **Ease of Operation:** ILCS EDGE Jr eliminates messy drum pumps and the need to lift heavy drums of chemical that can splash hazardous chemicals or spill on the ground. Pre-determined formulas can be dispensed into a gerry can or other container.
- **Cost Control:** ILCS EDGE Jr does more than just dispense chemicals. It gives all users the opportunity to get real control of every aspect of day-to-day operation.
- **Safety:** The system limits the worker from coming in contact with concentrated cleaners by automatically dispensing products into standard containers to use throughout the food plant.
- **Environmental Safety:** By dispensing directly to a product container the system limits spillage or waste. Chemical concentrations and volumes are computer controlled to eliminate waste and guarantee the exact amount of product used for each cleaning process.
- **Main Control:** The ILCS EDGE Jr control panel allows direct programming of the system at the keypad, and also stores report information. PC interface to the control panel expands the data management capabilities.

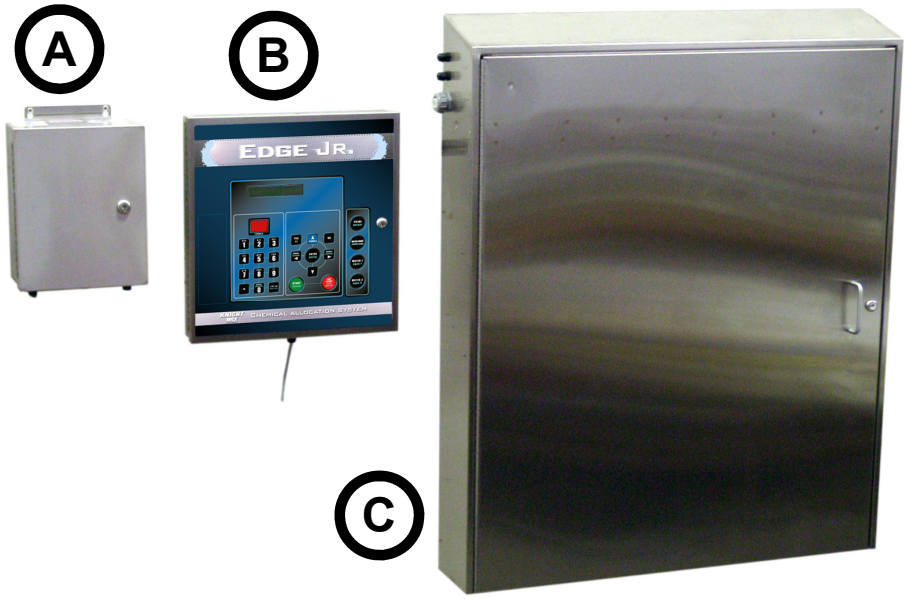
SYSTEM COMPONENTS

See the diagram on the following page for identification of the system components listed below.

(A) Power Supply: Isolates high voltage system operating power from the control box. The power supply box contains a transformer and electrical noise filter for added protection.

(B) Control Box: Contains all system electronics and is the main command center for operation. The keypad allows programming of all system operating parameters and entry of access codes for batch dispensing. The system can also be equipped with an optional proximity card reader for convenient and secure access code entry.

(C) Pump Cabinet: EDP pumps are available in 1.5 GPM and 3.2 GPM flow rates. Also housed inside the control box are the optional flush manifolds and water flush valves (used for diluting and blending chemicals with water). The system has two separate water flush solenoids and dual manifolds to prevent cross-contamination of non-compatible chemicals.



PRE-INSTALLATION

Before the equipment is installed, you should survey the installation site thoroughly. Listed below are some of the factors to consider when picking your location.

- ☑ Work Area — the unit should be mounted in a centralized area to work areas.
- ☑ Chemical location — unit should be mounted close to the chemical tanks.
- ☑ Mounting surface — ensure there is a sturdy wall (or panel) with enough space for all system components and routing of chemical tubes and cables.
- ☑ Electrical — requires 115 VAC or 230 VAC power source (depending on model) 20 amp service recommended.
- ☑ Water Service — system requires ambient water service to flush manifold (if so equipped). Recommended minimum 25 PSI flow pressure.
- ☑ Familiarize yourself with all applicable safety, electrical, and plumbing codes.

CONTROL BOX & POWER SUPPLY INSTALLATION

(1) Mount the joggle bracket to the wall at a height that all users can access and read the display screen. Use the hardware in the accy kit or other appropriate hardware for the mounting surface.

(2) Hang the control box unit on the joggle bracket. Secure the control box to the wall with provided hardware.

(3) Mount the power supply box in close proximity to the control box unit.

(4) Connect main power from a suitable breaker to the power input terminal block inside the power supply box, and per local wiring codes.

(5) Connect power from the power supply box to the appropriate terminals on the main control board inside the control box using the cable provided (see wiring diagram for details).

(6) Connect water supply — hardware not provided. Unit has 8-port manifold standard and can be equipped with additional 4-port manifold option.

PUMP CABINET INSTALLATION

Before installation, choose a mounting location for the chemical pumps that is as close as possible to the chemical containers.

(1) Mount the pumps as close as possible to the chemical supply and no more than 10 ft above the chemical containers.

(2) Connect braided tubing between the barb fitting on the suction (right) side of the pump and the barb fitting on the chemical pickup tube. Use stainless steel hose clamps to secure the tubing to the fittings.

(3) Install braided tubing between the barb fitting on the discharge (left) side of the pump and the corresponding port on the manifold. Use stainless steel hose clamps to secure the tubing to the fittings.

(4) Insert pickup line into appropriate chemical container.

(5) Prime all chemical pumps. This can be done with manual prime buttons on the POB board or the control panel of the ILCS EDGE Jr system.

LABEL CHANGE PROCEDURE

(1) Shut off power to the system.

(2) Remove screws that hold the LFP circuit board to the front panel of the control box.

(3) Disconnect ribbon cable from the LFP circuit board.

(4) Use 2 of the screws to temporarily hold the board onto the front panel while changing the label.

(5) Carefully remove old label. Start by prying up on a corner with a sharp edge blade. Use of a heat gun may be helpful to loosen the adhesive.

(6) Clean old adhesive from the front panel with alcohol in preparation for adhering the new label.

(7) Carefully remove the backing paper from the new label. Route the ribbon cable through the slot in the front panel and adhere the label in place using the keyhole and LFP window for proper alignment.

(8) Push out any air bubbles that may have gotten trapped while attaching the new label. Work from the middle region of the label to outer edges.

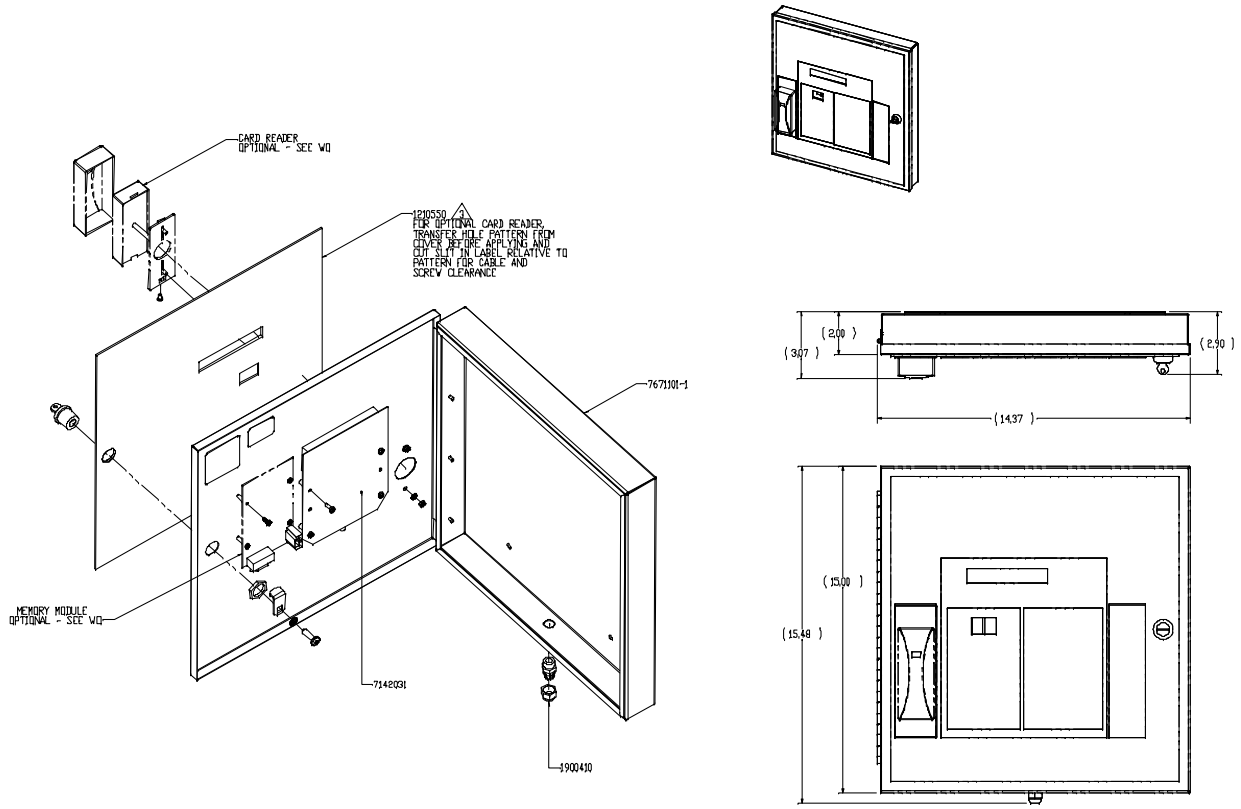
(9) Remove the 2 screws that were temporarily holding the LFP circuit board in place and attach the ribbon cable.

(10) Re-attach the LFP circuit board back on the front panel using all mounting screws.

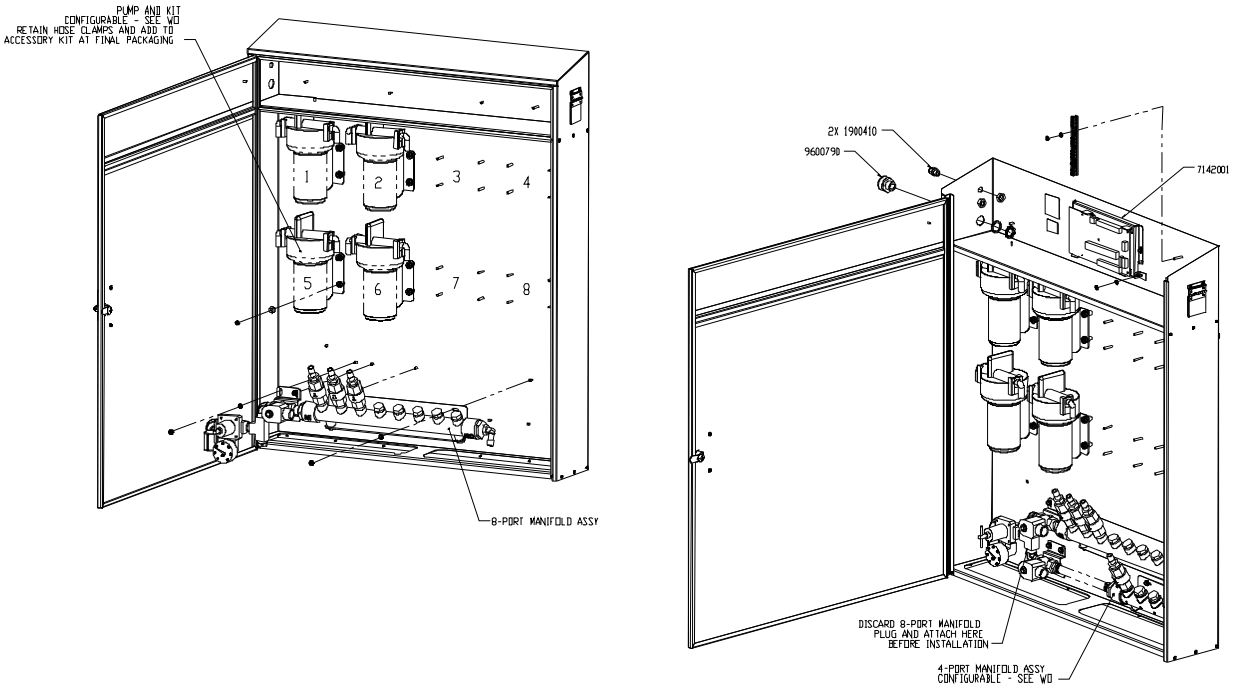
(11) Turn power to system back on.

(12) Test each button of the new label to ensure proper function.

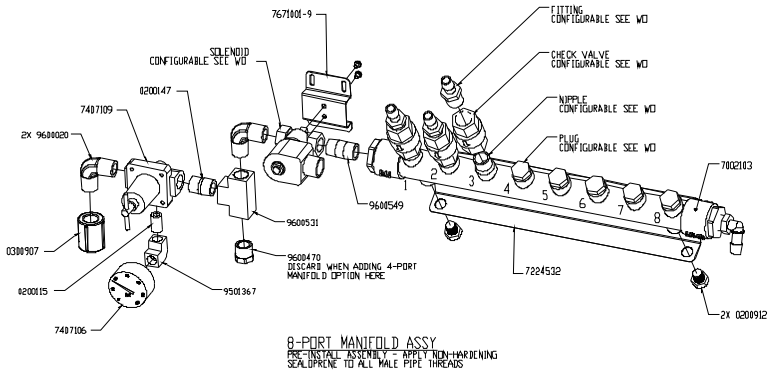
CONTROL BOX DIAGRAM

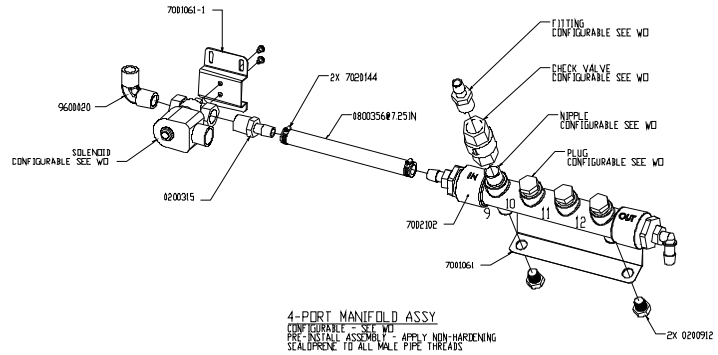


PUMP CABINET DIAGRAM

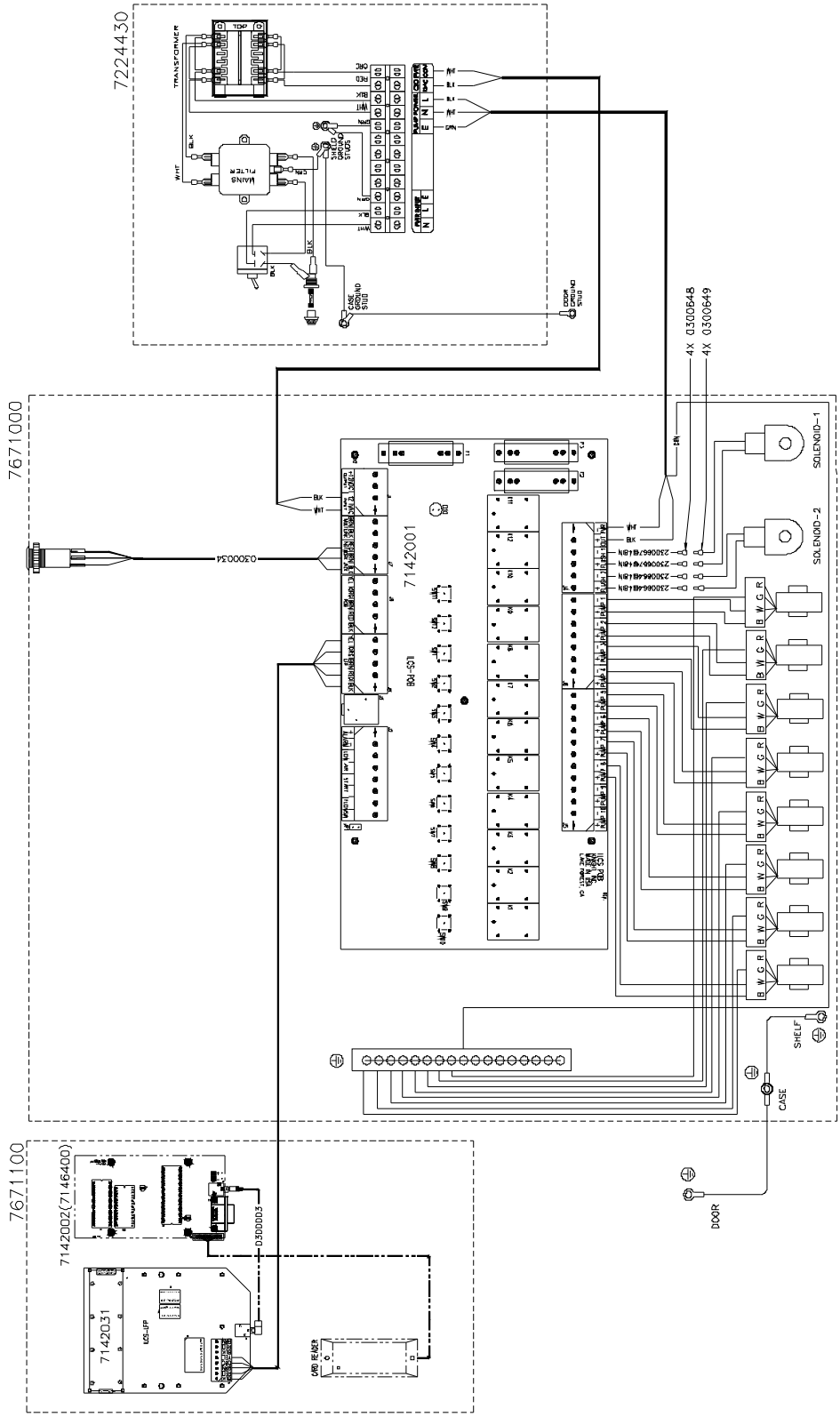


FLUSH MANIFOLD DIAGRAM





SYSTEM WIRING DIAGRAM



DISCLAIMER

Knight LLC does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight LLC. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user, Knight does not accept any liability in such circumstances.

WARRANTY

All Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE year. All electronic control boards have a TWO year warranty. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as “O” rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

FOOTNOTE

The information and specifications included in this publication were in effect at the time of approval for printing. Knight, LLC reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation whatsoever.

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