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**KNIGHT**  
**IDEX**  
IDEX CORPORATION



**UP-1100VS / UPL-1100VS**  
**Instruction Manual**

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CAUTION: The UP1100VS / UPL1100VS system has high voltage connected to the transformer. Always disconnect main power when servicing the unit.

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## **INSTALLATION**

- (1) Mount the unit on a wall in a convenient location near the dishwasher and not more than three feet from the final rinse line. A mounting bracket is available for mounting the unit on top of the dishwasher if desired.
- (2) NOTE: Mounting the unit on the side, on the back, or on the vents of the dishwasher may cause thermal overload and damage or hinder the performance of the unit. Do NOT mount the unit in the direct path of steam. This can short circuit and permanently damage the unit.
- (3) Check the available input voltage of the unit. Application of incorrect voltage will permanently damage the unit and is not covered under warranty.
- (4) Remove power from the dishwasher.
- (5) Connect power leads to the proper terminals on the wiring barrier. Wire the system in a manner that will ensure that chemicals will be dispensed during the rinse cycle. Rigid or flexible conduit, installed in accordance with local electrical codes, should be used to ensure safety and continued operation.

## **UP-1100VS PUMP CONNECTIONS**

- (1) Install 1/4" tube x 1/8" NPT rinse injection fitting into the side or bottom of the dishwasher rinse line between the rinse solenoid valves and the rinse jets. Drill a 11/32" hole and tap to 1/8" NPT. Use of a saddle clamp may be desired on copper rinse line for better support. Saddle clamps can be used if required.
- (2) Install 1/4" O.D. poly tubing between the discharge (right) tube side of the peristaltic pump and the injection fitting using the 1/4" poly compression nuts.
- (3) Install 1/4" O.D. poly tubing between the suction (left) tube side and the pickup tube provided. Be sure to draw tubing through the end of the pickup tube.

## **UPL-1100VS PUMP CONNECTIONS**

- (1) Install chemical injection fitting into wall of the washtank.
- (2) Install discharge tubing between the discharge (right) side of the peristaltic chemical pump and the chemical injection fitting.
- (3) Install suction tubing between suction (left) side of the peristaltic chemical pump and the pickup tube provided.
- (4) Be sure to draw tubing through the end of the pickup tube.

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## **OPERATION**

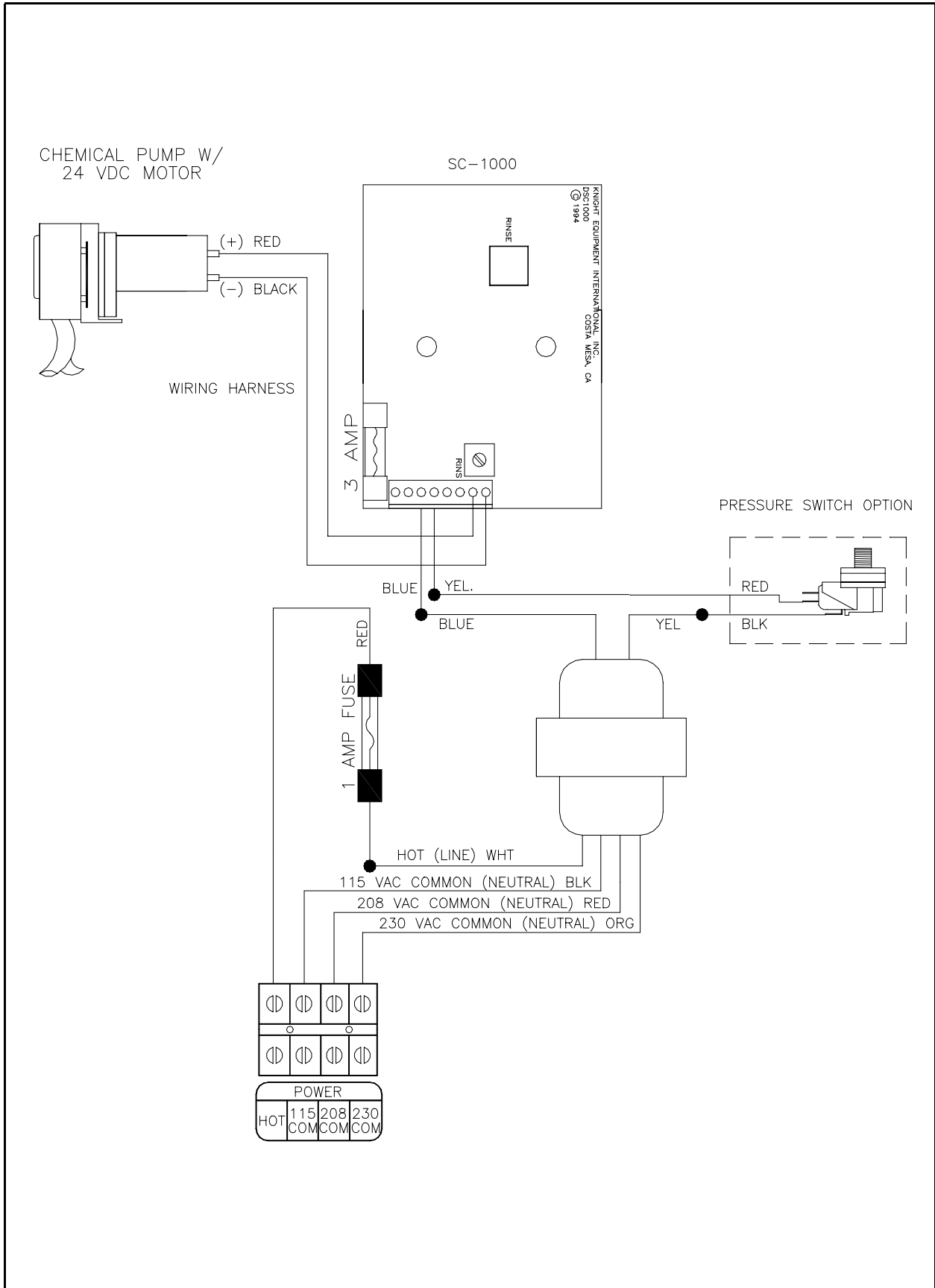
The unit will activate when a pressure switch closes or when an electrical signal is received from a signal source on the dishwasher.

The POWER light is on continuously when power is present on the circuit. The FEED light will blink when the pump is feeding chemical. To adjust the speed of the pump, turn the speed control clockwise to increase speed and counterclockwise to decrease speed. The circuit board is configured with a momentary prime switch to prime the pump. When the prime switch is pressed and held, the pump will run at its maximum speed. When the switch is released the pump will stop running. Press the switch long enough to draw chemical into the line. Power must be present at the board for the prime switch to operate.

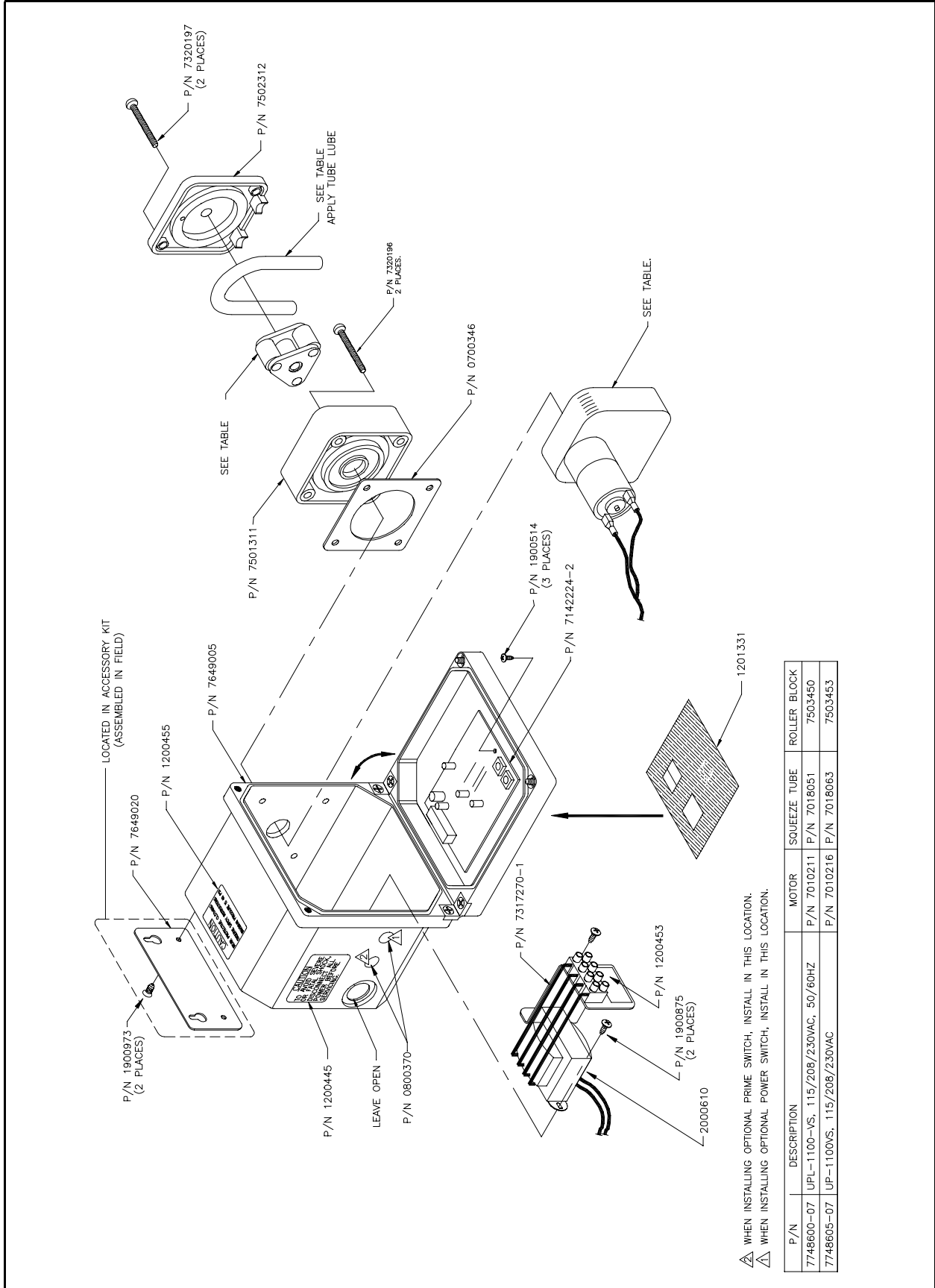
## **PROBELESS DETERGENT (UPL-1100VS)**

Set the charge amount by adjusting the SPEED CONTROL adjustment on the detergent control board. The pump will run when the signal is energized and will feed a consistent amount of detergent into the wash tank. To vary the amount of detergent product dispensed, adjust the SPEED CONTROL adjustment clockwise to increase and counter-clockwise to decrease.

# WIRING DIAGRAM



# ASSEMBLY DIAGRAM



P/N	DESCRIPTION	MOTOR	SQUEEZE TUBE	ROLLER BLOCK
7748600-07	UPL-1100-VS, 115/208/230VAC, 50/60HZ	P/N 7010211	P/N 7018051	7503450
7748605-07	UP-1100VS, 115/208/230VAC	P/N 7010216	P/N 7018063	7503453

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**NOTE**

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## DISCLAIMER

Knight Inc. 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 Inc.

## 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.

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