

# Wascomat / Aqua Clean

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## TECHNICAL INFORMATION

### TI-1051B

#### **INSTRUCTIONS FOR INSTALLING X-10 BASED ELECTRONIC PRICE REDUCTION SYSTEM ON WASCOMAT EMERALD SERIES WASHERS**

**WARNING:** THESE TECHNICAL INSTRUCTIONS ARE INTENDED TO ASSIST QUALIFIED, EXPERIENCED SERVICE PERSONNEL ONLY! IMPROPER SERVICING OF MACHINERY MAY RESULT IN HAZARDOUS CONDITIONS, PERSONAL INJURY, AND LOSS OF LIFE OR PROPERTY. PERSONS NOT TRAINED, AND PERSONS UNFAMILIAR WITH WASCOMAT LAUNDRY MACHINES, SHOULD REFER SERVICING TO QUALIFIED PERSONNEL.

**MACHINES AFFECTED:** All EMERALD SERIES coin-metered machines.

**PARTS REQUIRED:** 098787 X-10 receiver assembly, 115 V - 1 per 115V washer  
098751 X-10 receiver assembly, 220 V - 1 per 220V washer  
098808 X-10 timer OR 098764 deluxe timer - 1 per installation  
098747 Coupler / repeater, 3 PH delta with hi leg, 1 ph 220V  
OR 098767 Coupler / repeater, 3 phase wye (1 per installation)

#### **DESCRIPTION**

The X-10 based electronic price reduction system provides fully programmable switching between normal and discount vend pricing on Wascomat's Emerald Series washers. Since the system uses the electrical power lines to carry its control signals, separate wiring (which is otherwise required to support this feature) is completely eliminated. A timer/transmitter, located in a secure area of the facility, sends ON and OFF control signals out over the AC power lines. These signals are detected by an X-10 receiver located inside each washer. An electrical contact in the receiver closes and opens in response to the commands sent by the transmitter, in turn enabling and disabling the price reduction feature. Each receiver module is equipped with "address" switches, providing the flexibility to schedule promotional pricing for any machine (or group of machines) at any time. Note that the X-10 system simply turns the washer's alternate pricing feature on and off. Vend prices and discount percentages are still programmed at the washer itself, and can be customized for the size of machine, and cycle being used (refer to the washer's Operating and Maintenance Manual for price programming information).

#### **READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION!!**

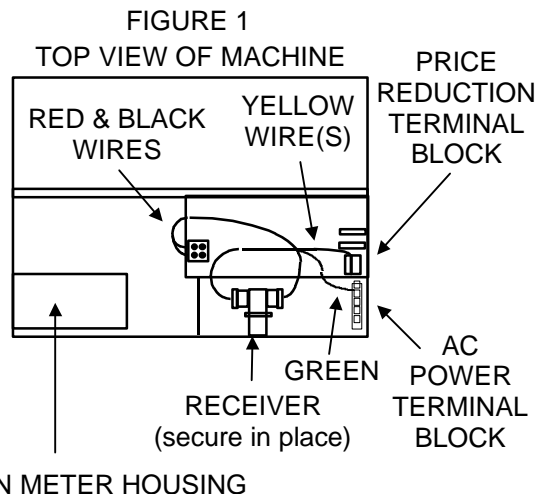
#### **INSTALLATION INSTRUCTIONS:**

##### **I. Receiver Installation**

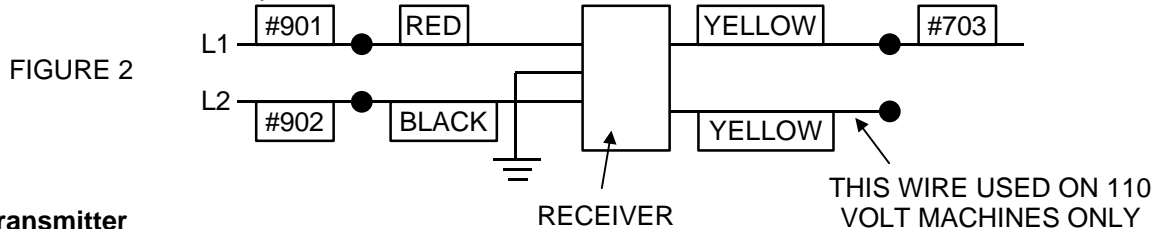
1. **DISCONNECT ELECTRICAL POWER FROM THE MACHINE.**
2. Remove the top panel of the machine.
3. Plug the X-10 receiver into the female receptacle provided in the kit. On 220 Volt units, also plug the pre-wired male plug into the X-10 receiver's female receptacle.

Place the receiver assembly into the control tray of the washer, oriented so that the rotary switches for HOUSE CODE and UNIT CODE are easily accessible. Secure the receiver in place with the cable tie supplied.

4. Connect the RED wire, from the receiver assembly, to that terminal on the two-position terminal block which has wire #901 on its other side.



5. Connect the BLACK wire, from the receiver assembly, to the remaining vacant position on the two position terminal block.
6. Connect the GREEN wire, from the receiver assembly, to the ground wire terminal on the incoming power terminal block at the rear of the machine.
7. Connect one YELLOW wire, from the receiver assembly, to that screw terminal on the price reduction terminal block which has wire #703 on its other side. On 110 Volt systems only, connect the remaining YELLOW wire, from the receiver assembly, to the remaining terminal on the price reduction terminal block. Verify all wiring with figure 2 below.
8. Use cable ties to neatly bundle the newly installed wires, taking care to keep them away from sharp edges.
9. Choose a random HOUSE CODE and UNIT CODE, and set the receiver switches accordingly. The house code should be set to the same letter on every receiver, unless multiple transmitters are being used. When using timer 098808, the unit code MUST BE SET TO 1, 2, 3 or 4. When using timer 098764, any unit code value may be used (1 through 15). **These switches must be in the same position on washers whose prices will be changed at the same time.** Record the switch settings you use in each washer, as this information will be needed for programming the X-10 transmitter (see programming instructions with transmitter).
10. Replace the top panel of the machine.
11. Restore electrical power to the machine.



## II. Transmitter

Two transmitters are available for the X-10 electronic price reduction system. The basic model (# 098808) is a 115 Volt, table-top timer/transmitter, which provides up to two ON/OFF cycles per 24 hour period, for a maximum of 4 unit codes. Using this transmitter, the same ON/OFF events are repeated each day of the week. The unit plugs into a standard 115 Volt wall outlet.

The deluxe transmitter (#098764) is a 115 Volt, wall mounted, 7 day programmable timer. This model offers the flexibility to program different price reduction schedules for each day of the week, and supports all of the receivers' 15 available unit codes.

**IMPORTANT NOTE:** In each installation, a coupler / repeater must be installed to insure that all machines "see" the timer's transmitted signal. For 3 phase delta with hi leg (split-phase system) or 220V single phase power systems, use 098747 connected to the low voltage legs and neutral. Refer to installation instructions provided with the unit. For 3 phase wye, use 098767. For other distribution systems, contact the Wascomat Service department.

## IV. System Test

Follow the instructions in the washer's Operating and Maintenance Manual to program alternate prices, as desired.

Test the system using the timer / transmitter's manual transmission feature (see timer instructions) to verify that each washer receives the transmitted signal and displays the programmed alternate price when desired.

Program the timer / transmitter for your alternate pricing schedule (see timer instructions).

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