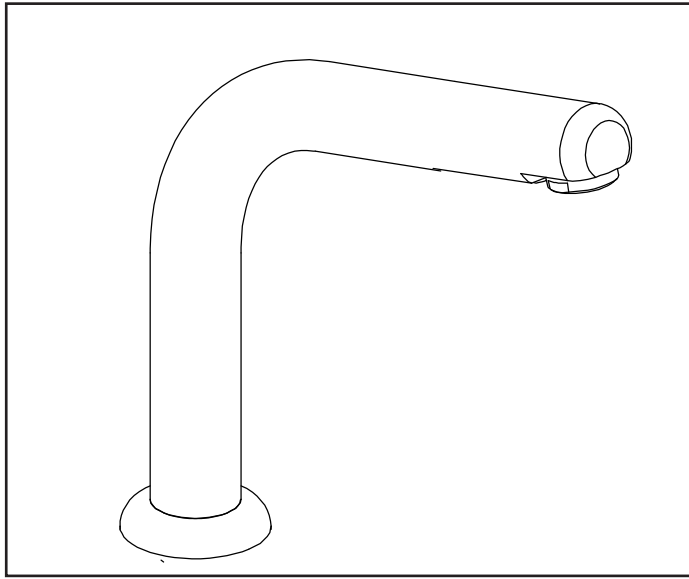


# SANTRONIC



## Maintenance & Repair Guide



INTERSAN MANUFACTURING COMPANY  
1748 W. Fillmore St. - Phoenix, Arizona 85007 - Tel 602.254.3101 - Fax 602.254.1776

### 1. Cleaning the Cover of the Santronic

The cabinet is made of stainless steel. When cleaning the cover, observe the following instructions:

- Clean the surface with a cloth soaked in neutral detergent
- Finish wiping using a dry cloth. NEVER use abrasive cleansers, they will damage the surface of the cover,
- Do NOT steam the faucet

**CAUTION:** do not damage the sensor while cleaning

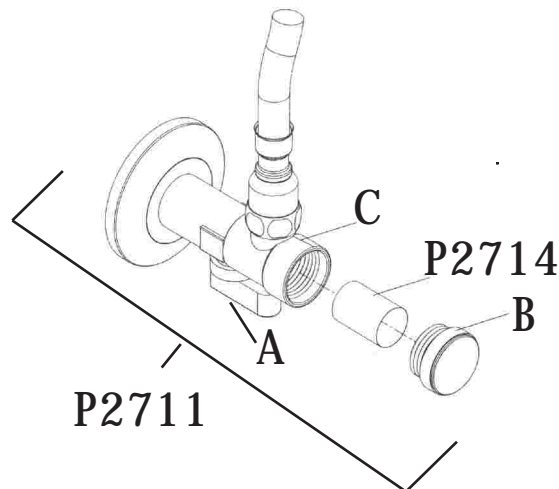
### 2. Cleaning the Strainer Screen of the Stop Ball Valve

Regularly clean the strainer screens of the stop ball valves (P2711)

**PROCEDURES:**

- Close the stop ball valve (A) and remove its strainer cap (B) by turning it counter clockwise;
- Remove the strainer screen (P2714) which is positioned inside the strainer cap (C) and clean it. If the strainer screen has accumulated large amounts of lime deposits, put it in vinegar to dissolve the lime deposits;
- Reposition the strainer screen inside the strainer cap and secure the stop ball valve.

**Note:** Make sure not to damage the strainer screen, replace it when necessary



### 3. Battery Replacement

**PROCEDURE:**

- Remove the cover of the Santronic electronics box located underneath the lavatory;
- Remove the old battery and connect a new 9V P3100 lithium battery.

**1. Preliminary**

Failures of an electronic system due to a micro chip or micro processor, a sensor or other parts inherent to an electronic detection system are usually difficult to determine by a customer in general. All checks and procedures described hereafter, however, can easily be performed by non technicians as well. It is therefore necessary to **follow all the steps** which are related to the specific problem **in correct order** before one can absolutely be sure that the cause of the problem is due to a non-user serviceable part. Moreover, these parts have proven to be very reliable. Always make sure to **replace all components in their original position** after each manipulation.

**2. Specific Problems/Possible Causes**

Problem	Solution –
Unit beeps continuously when activated	This sound is emitted to indicate that it is time for the 9V lithium battery to be changed.
Unit clicks when activated but the water does not run	<ul style="list-style-type: none"> <li>– Shut the water off to the control unit;</li> <li>– Using the special aerator key, remove the aerator nozzle and check for debris. If this does not solve the problem then ...</li> <li>– ... remove the flexible supply and inspect the water inlet side of the valve and water inlet screen for debris;</li> <li>– If those are also free of debris you will have to remove the control unit cover, and clean the valve.</li> </ul>
Water is leaking from the unit	<ul style="list-style-type: none"> <li>– Remove the cover of the Santronic electronics box and ensure that the water tubing (P2788) is properly secured to fit to the compression collar fitting (P2470 &amp; P2787) .</li> </ul>
Unit will not activate	<ul style="list-style-type: none"> <li>– Open the control unit and ensure that the sensor electronics wiring is connected securely. Also, ensure that the 9V lithium battery is properly connected.</li> </ul>
Flow cycle is retriggering	<ul style="list-style-type: none"> <li>– Sensor is damaged Open the control unit and gently unscrew the sensor connector in a counter clockwise direction and pull apart the lead from the sensor. Remove sensor assembly from the spout by removing the P2031 then the P471130. Note: You may want attach a string or wire to pull the wire back. Reassemble in the reverse order.</li> </ul>

If you have used the trouble shooting above, and find that you are still having problems with the unit, please contact Intersan's Customer Service Department at 1-800-999-3101.

## 3. Cleaning the Solenoid Valve

**Step 1:** Disassembling the Central control box for cleaning the strainer of the solenoid valve

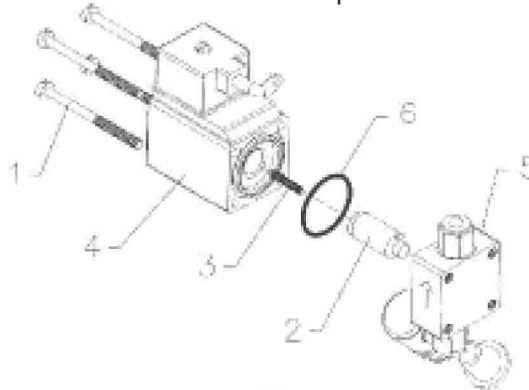
**PROCEDURE:**

- Close stop ball valves of the water supply;
- Remove the cover of the control box;

**Step 2:** Cleaning the water passage of the solenoid valve

**PROCEDURE:**

- Remove the 4 round head screws (1) located on the top of the solenoid valve (black housing) and separate the coil of the valve from the water body;
- Remove core (2) and core spring (3) from the core housing (4);
- Clean core, core spring, core housing and water outlet (5) of the solenoid valve;
- Replace core spring inside core housing, and reposition both elements inside the core housing (core spring first) such that core and core spring are retained by the magnet inside the solenoid valve;
- Replace the o-ring (6), which joins the electrical portion of the valve to the water, in the seat around the core housing, and reposition the coil on the brass water body of the valve;
- Insert 4 round head solenoid screws (1) and tighten firmly;
- Reinstall reversing the step one order.
- Remove the stainless strainer screen (P2904) from each inlet of the control box and clean it. If the condition of the strainer screen is such that it could not have prevented a normal passage of water, replace and continue with step 3 if the water still is not operational.



**Step 3:** Replacing the Central Components Unit in the control box.

**PROCEDURE:**

- Position the CCU inside the body of the security bracket so the solenoid valve lead is already positioned to connect to the solenoid valve (P2795);
- Push the CCU further down into the security bracket and connect to the solenoid valve lead with the wire towards the brass. Tighten the screw securely.
- Make sure always to reposition the solenoid valve;
- Finally, test and replace the cover of the control box;

## 1. Operation

The infrared sensor transmits a signal to the microprocessor upon sensing the user's hands within the sensitivity field, activating a solenoid valve that instantly initiates a controlled flow of water. The sensor only reacts to a change in temperature caused by the radiation of a user's hands within a 3-dimensional detection field.

### IMPORTANT

The detection system does not respond to objects in general, but only to human warmth: always activate the system with hands, not with objects, etc.

## 2. Water Flow Cycle

- **Activation:** The valve is opened immediately upon sensing hands in the detection field.
- **Duration of waterflow:** 2 different water flow cycles exist:
  - MINI-cycle: the water flows minimum 5 and maximum 30 seconds. When the user has finished before 30 seconds, the solenoid valve closes in 1.5 seconds and stops waterflow.
  - MAXI-cycle: the water flows minimum 8 seconds and continues for as long as hands remain present in the detection field. After a continued absence of detection for 3 seconds, the valve closes.
- In between 2 water flow cycles, an interval of 2 seconds prevents system abuse. During this short

## 3. Pressure Requirements

A normal water flow requires pressure ranges between:

Water Only

min.: 14 psi (1 bar)

max.: 85 psi (6 bar)

## 4. Temperature Requirements

Make sure that the temperature of incoming water does not exceed 125°F in case an external thermostatic mixing valve is used: a too high temperature may cause incorrect functioning of the solenoid valve due to lime deposits.

## 5. Battery

The Istronic is supplied with a 9V lithium battery which assures a life of 5 to 7 years at 4000 uses per month. To ensure availability of sufficient power to perform all the programmed functions, a buzzer warning indicates the need for battery replacement. Depending upon the actual number of uses, this phase will last for 10 to 14 days.