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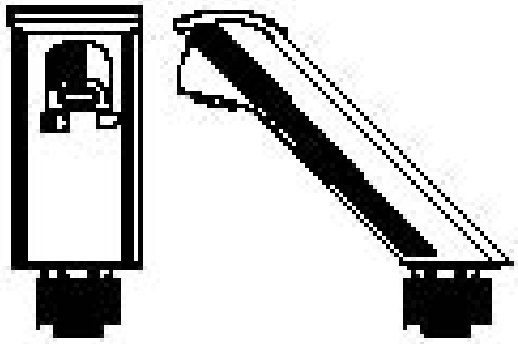


Maintenance & Repair Guide

INTERSAN

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

1. Cleaning the Cover of the Istronic

The cover 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

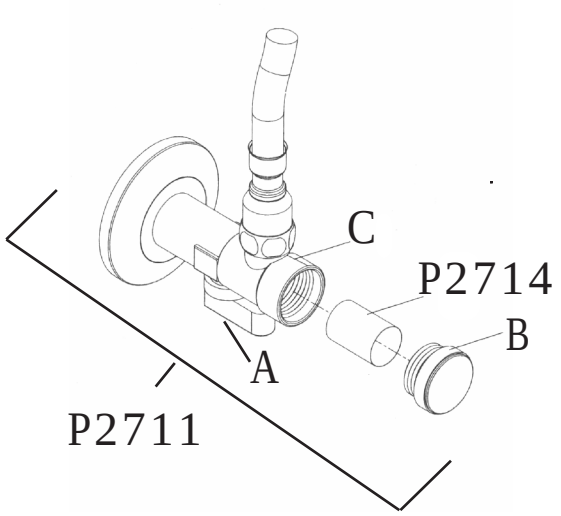
CAUTION: do not damage the sensor while cleaning

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 toe 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 Istronic;
- Remove the old battery and connect a new 9V lithium battery

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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	– Shut the water off to the control unit; – Using the special aerator key, remove the aerator nozzle and check for debris. If this does not solve the problem then ... – ... remove the flexible supply and inspect the water inlet side of the valve and water inlet screen for debris; – If those are also free of debris you will have to remove the control unit cover, and clean the valve.
Water is leaking from the unit	– Open the control unit (P2788) and ensure that the water tubing (P2787) is properly secured to fit to the compression collar fitting.
Unit will not activate	– Open the control unit and ensure that the sensor electronics wiring is connected securely. Also, ensure that the 9V lithium battery is properly connected.
Flow cycle is retriggering	– Sensor is damaged * Close stop ball valve * Remove cover of the faucet and security bracket (P470220) * Remove sensor assembly (P3110 or P3112) comprising sensor, microprocessor and solenoid connector
Soap flows back to soap bag	– Check valves do not shut off. Replace tube 3011 and SPCHV-W and SPCHV-B (soap check valves)

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.

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3. Cleaning the Solenoid Valve

Step 1: Disassembling the Central Components Unit from the body of the faucet and cleaning the strainer of the solenoid valve

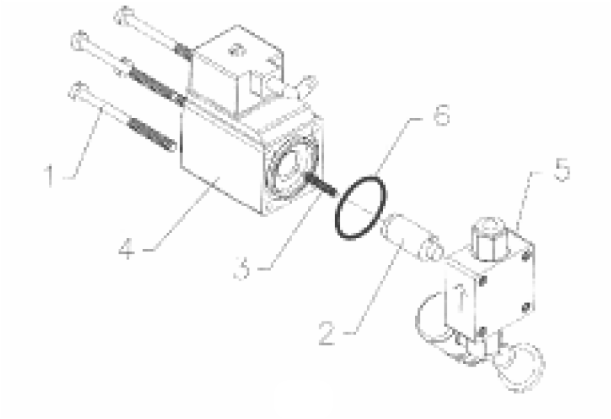
PROCEDURE:

- Close stop ball valve of the water supply;
- Remove the cover of the faucet;
- Lift Central Components Unit (P470210 - CCU) from its position by pushing the nozzle (P2929) inside its black plastic housing with one hand and by pulling the solenoid valve (P2975) with the other hand;
- Remove the stainless strainer screen (P2904) from the inlet of the solenoid valve and clean it. If the condition of the strainer screen is such that it could not have prevented a normal passage of water, continue with step 2.

Step 2: Cleaning the water passage of the solenoid valve

PROCEDURE:

- Remove the round head screw which attaches the solenoid valve (P2795) to the CCU(P470210);
- Lift the solenoid valve out its position;
- Remove the 4 round head screws (1) located on the top of the solenoid valve (black housing) and separate the electrical part of the valve from the water part;
- 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;
- Place back O-ring (6), which joins the electrical and the water part of the valve, in its groove around the core housing, and reposition the electrical part on the water part of the valve;
- Insert 4 round head solenoid screws (1) and tighten firmly;
- Replace the solenoid valve in its position in the CCU and secure both parts using the round head CCU screw.



Step 3: Replacing the Central Components Unit in the body of the Istronic Faucet

PROCEDURE:

- Position the CCU inside the body of the Istronic such that the coupling with the slip-joint (P470240) of the solenoid valve is already positioned inside the supporting shank;
- Push the CCU further down until the sensor receptor and nozzle match their respective positions in the body of the faucet;
- Make sure always to reposition the solenoid bracket;

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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 hold-off, no operation is possible.

3. Pressure Requirements

A normal water flow requires pressure ranges between:

Water Only	Water & Soap
min.: 14 psi (1 bar)	min.: 21 psi (1.5 bar)
max.: 85 psi (6 bar)	max.: 85 psi (6 bar)

4. Temperature Requirements

Make sure that the temperature of incoming water does not exceed 125^{o}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.

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