

L-180 Series

Wall Mounted Sensor Tap

lovair



Installation & Maintenance Guide

L-181

Battery
170mm

L-182

Mains
170mm

L-183

Battery
220mm

L-184

Mains
220mm

L-180

Tap Range

**Read and
save these
instructions**

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WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

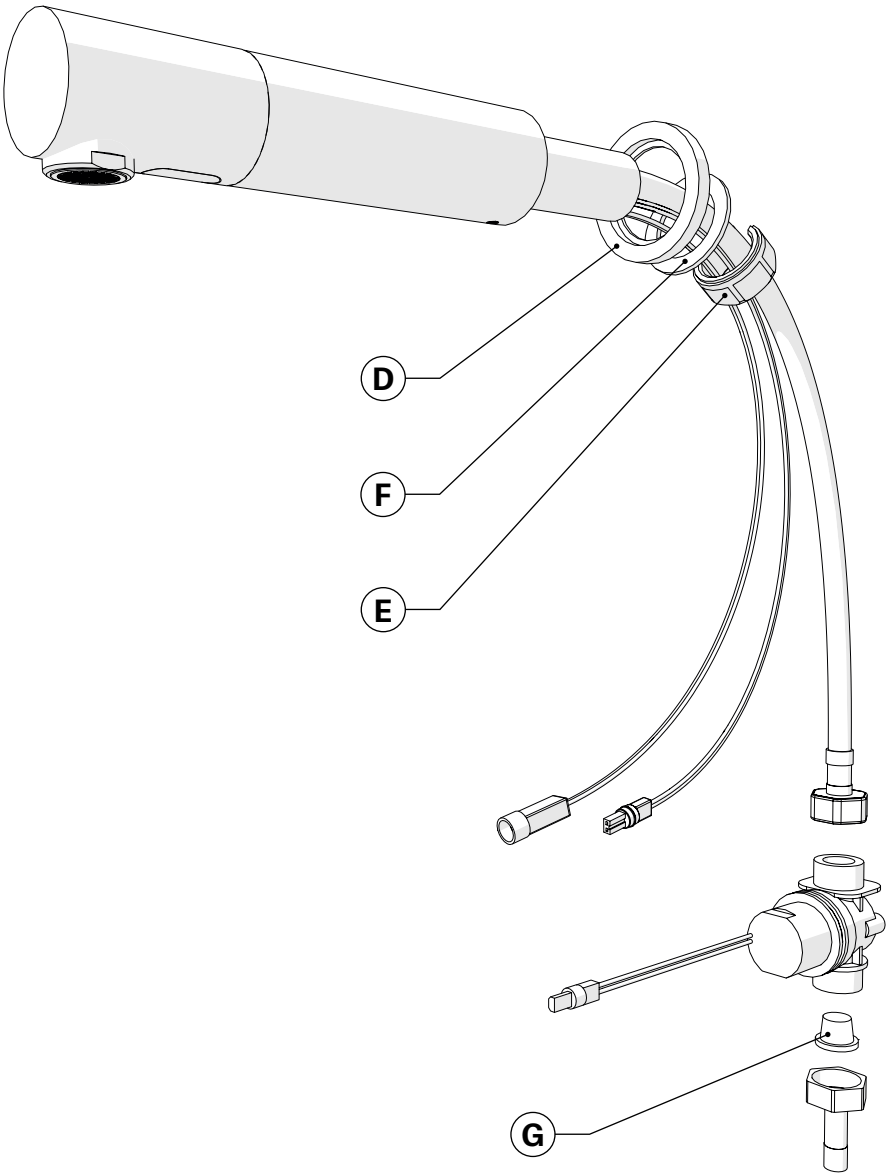
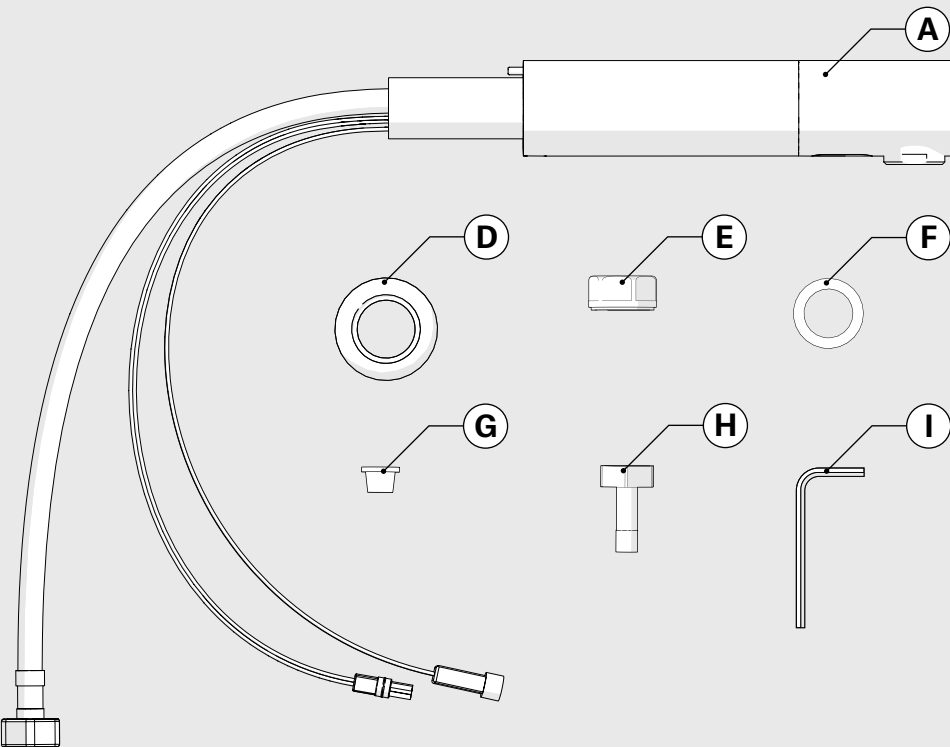
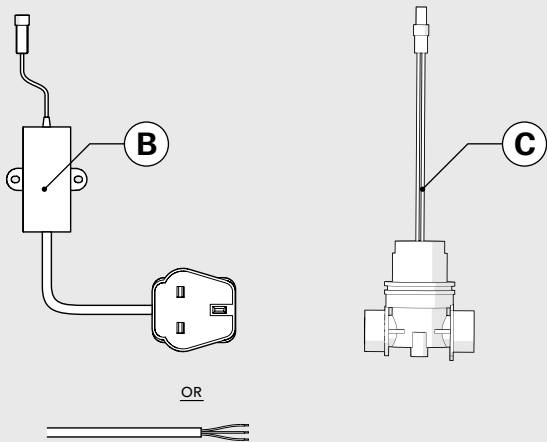
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer (see back page for more details).
- Replace batteries only with the same type and rating of batteries.
- Disconnect power supply before performing any maintenance on product.
- Ensure wiring is installed correctly before connecting to power supply (see installation instructions, page 6, for details).
- Keep plugs and receptacles dry.
- All plumbing is to be installed in accordance with applicable codes and regulations.

For more information contact:

Tel: +44 (0)161 482 7000 Email: technical@lovair.com

Box Contents

- A** L-180 head
- B** Power Supply
- C** Solenoid
- D** Wall Rosette
- E** Fixing Nut
- F** Washer
- G** Solenoid Filter
- H** Solenoid Adapter
- I** Hex Key



Technical Data

Mains power supply	110 - 240 V, IP68
Battery power supply	9V (6 x 1.5V AA), IP67
Fuse	3A fused spur to be connected to power supply transformer.
Pre-set sensor range	120mm (8 1/16")
Minimum sensor range	80mm (3 3/16")
Maximum sensor range	200mm (11 13/16")
Security time	90 seconds
Finishes	C (Chrome) / CS (Satin)
Weight	1.16Kg / 1.27Kg Excluding packaging
Size	170mm / 220mm Length
Flow Rates	4 litres per minute (1 GPM (US)) standard. 1.89 and 6 litres per minute (0.5 and 1.59 GPM (US)) also available.
Maximum water temperature	70 °C (158°F)
Recommended mains pressure	2-8 bar (29-116 PSI) static pressure (0.5 bar (7 PSI) min dynamic pressure)
Warranty	24 months from date of delivery

Before You Install

Power

The L-180 Tap system is provided with the means for either battery or mains power supplies.

Mains power supply systems are fitted with a UK plug as standard, a plugless option is available on request.

Changing the Battery

When the battery weakens the red indicator light inside the sensor will blink at a constant rate when the users hands are within the sensor range. The battery must be replaced within 2 weeks.

Battery operated systems utilise 6 x 1.5V AA batteries. See page 14 for instructions on how to replace the batteries.

Water Supply

Flush water supply lines thoroughly before installing the tap. Do not allow dirt, Teflon tape or metal particles to enter the tap. Shut off the water supply before installation.

Flow Rates

Different flow rates may need to be achieved. Lovair offer a number of flow regulators (See pages 4 and 27) which can be used in conjunction with the L180 tap system.

Access Requirements

Solenoids, isolation valves and transformers must be accessible at all times for servicing.

Mounting Location

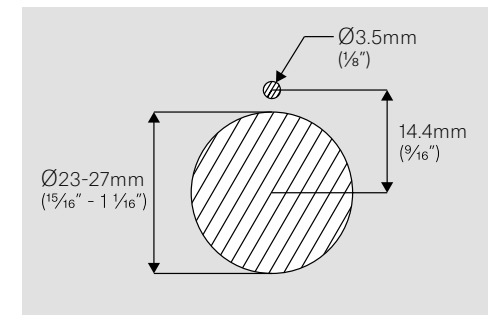
The L180 tap can be installed in to walls with a maximum thickness of 33mm (1 5/16").

Taps must be mounted in such a way that the spout should be a minimum of 300mm (11 13/16") from the sink to avoid reflection interference.

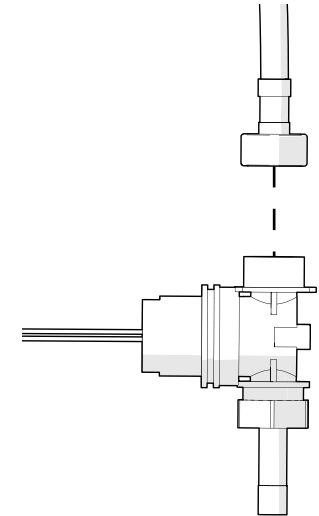
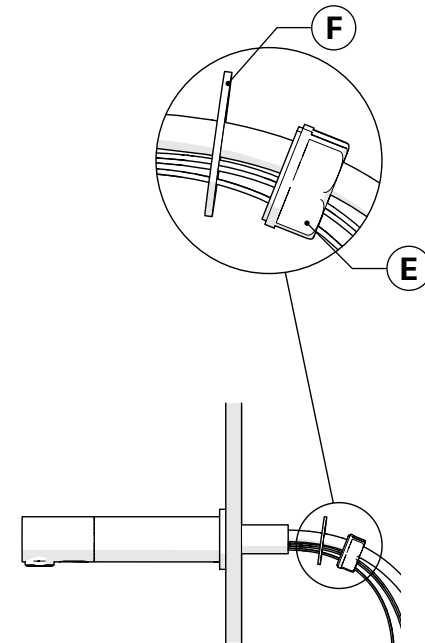
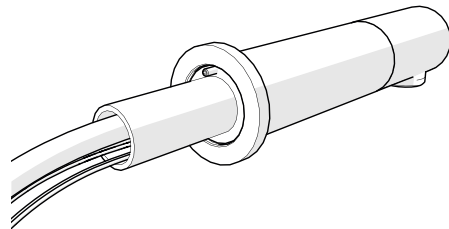
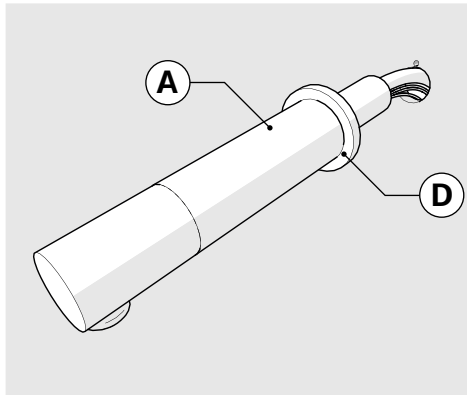
Taps should not be installed above highly polished surfaces to avoid reflection interference.

Ensure that holes and appropriate mounting points are created in accordance with the diagram below.

This fixture must be installed 150MM (6") away from other fixtures.



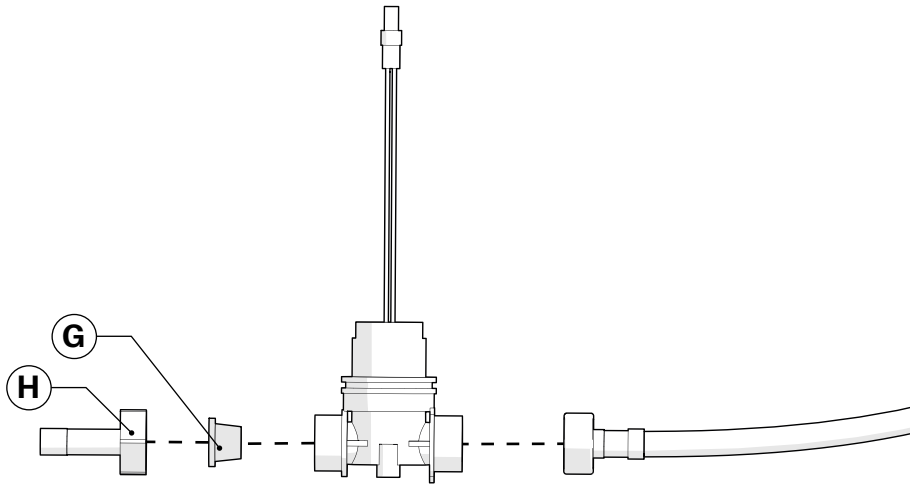
How to Install



1. Assemble the wall rosette (D) to the base of the tap (A). Insert the flexible hose, the cable and the base of the tap through a 23-27mm ($1\frac{5}{16}$ " - $1\frac{1}{8}$ ") hole in the wall.
2. Ensure the anti rotation pin is inserted in to the 3.5mm ($\frac{1}{8}$ ") hole so that the tap spout is angled pointing in the required direction.
3. Behind the wall push the washer (F) on to the tap base and attach the hexagonal nut (E) with the flat surface towards the wall.
4. Fit the end of the flexible hose on to the solenoid outlet. The solenoid outlet and inlet can be determined by the arrow on the solenoid showing the directional flow of water.



How to Install *(continued)*

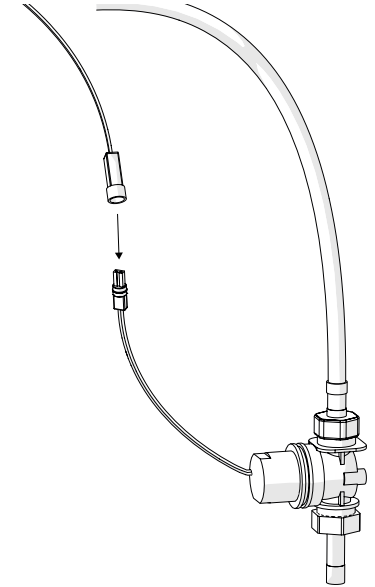


5. Ensure that the filter (**G**) and solenoid adapter (**H**) are assembled to the solenoid inlet with the filter between the adapter and the solenoid inlet.

6. Connect the solenoid to the mains water supply. Turn on the water supply and check for any leaks.

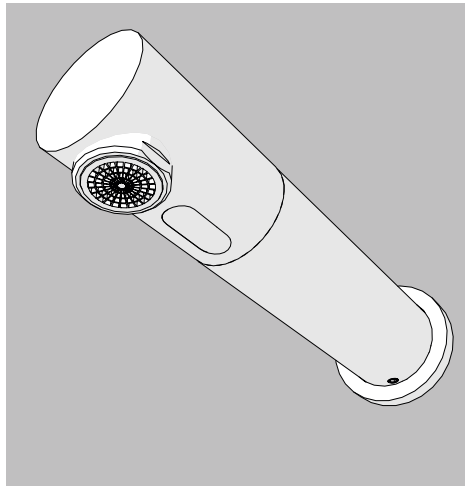
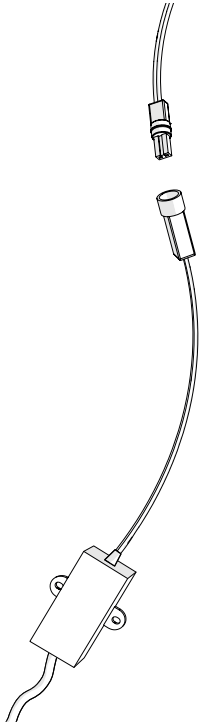


7. Before powering on the system remove the sensor protection label.



8. Connect the female connector from the tap to the solenoid connector.

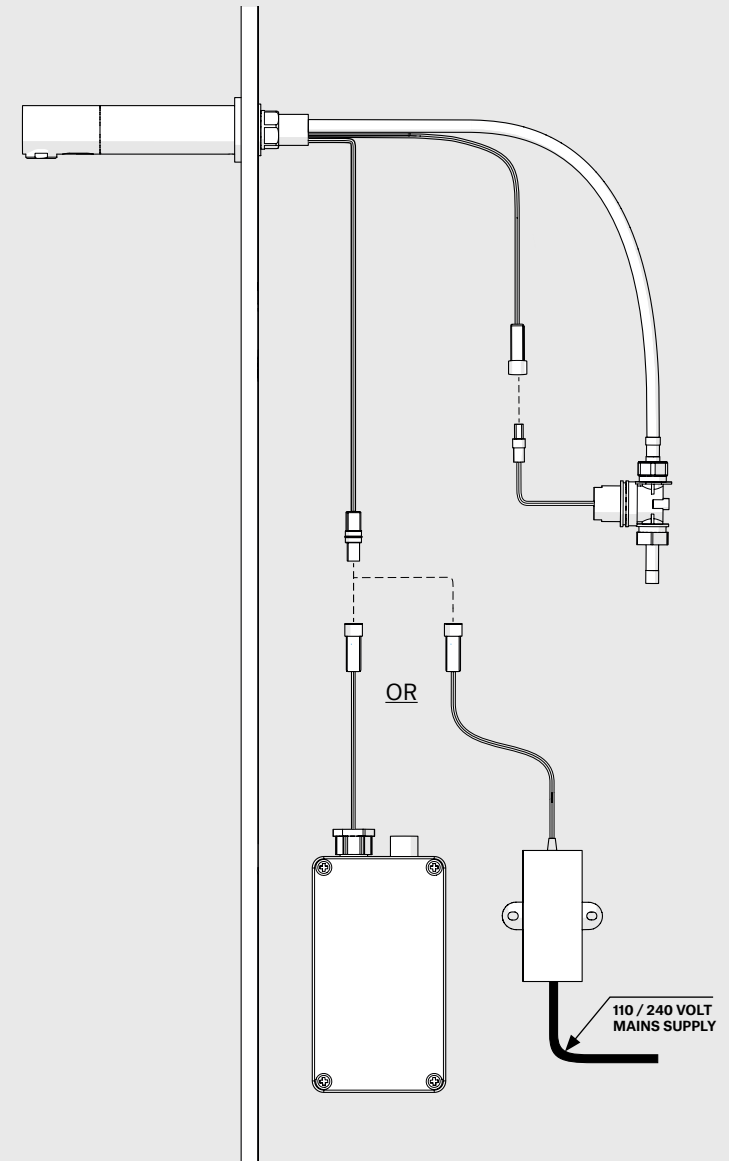
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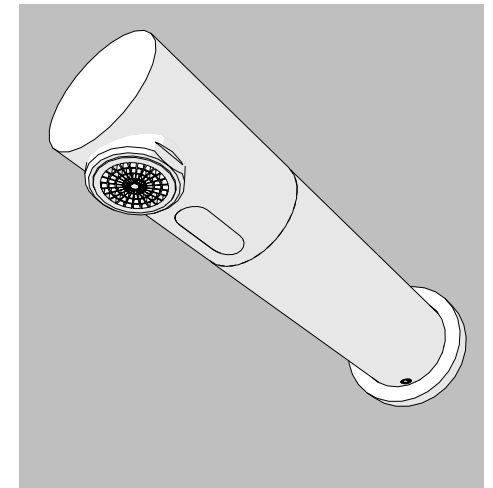
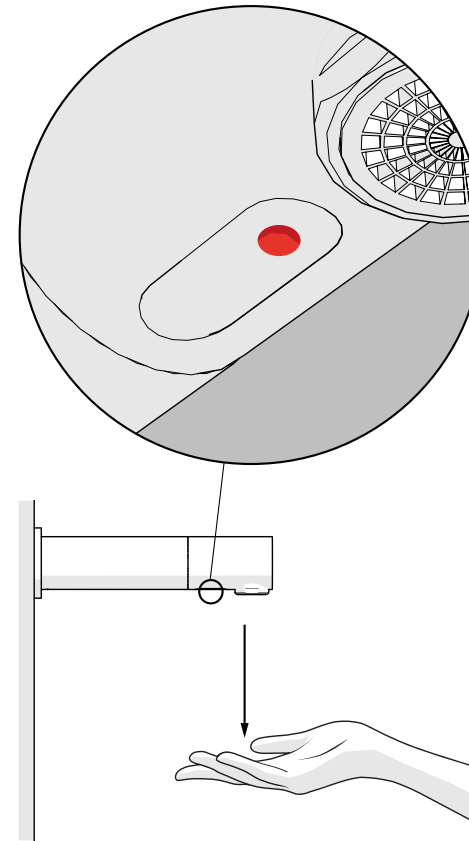
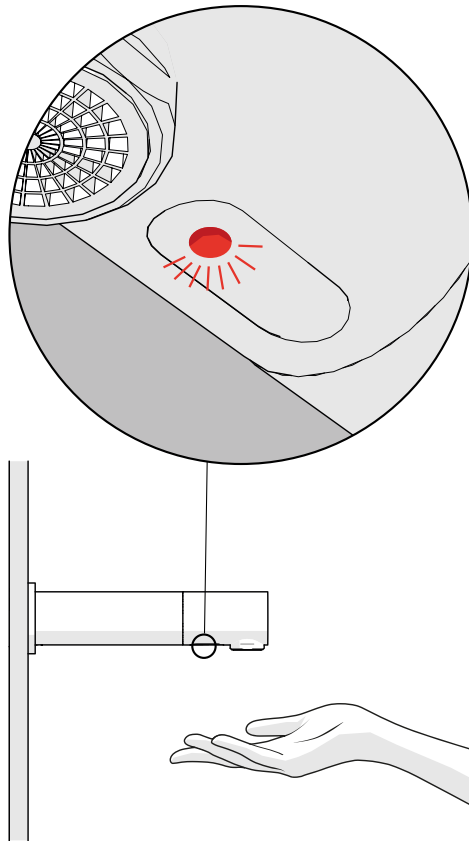
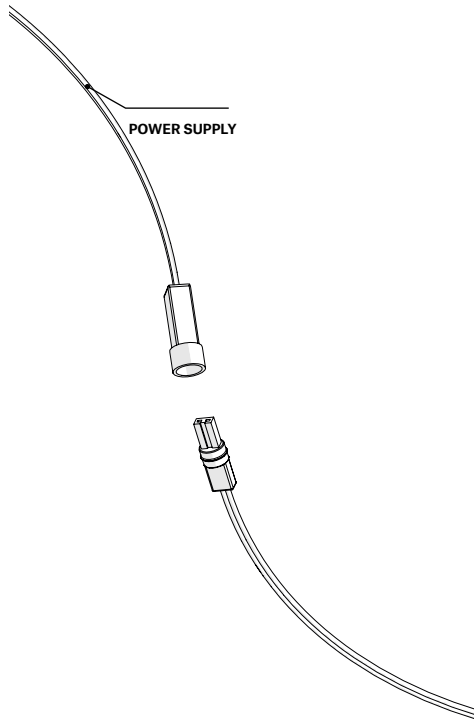
9. Connect the male connector from the tap to the battery pack or transformer box dependant on your power supply type. If you have a transformer box power supply, connect this to the main power supply and turn on the power.

10. Wait 5 seconds before activating the tap sensor to avoid entering the sensor range adjustment mode.

The Complete System

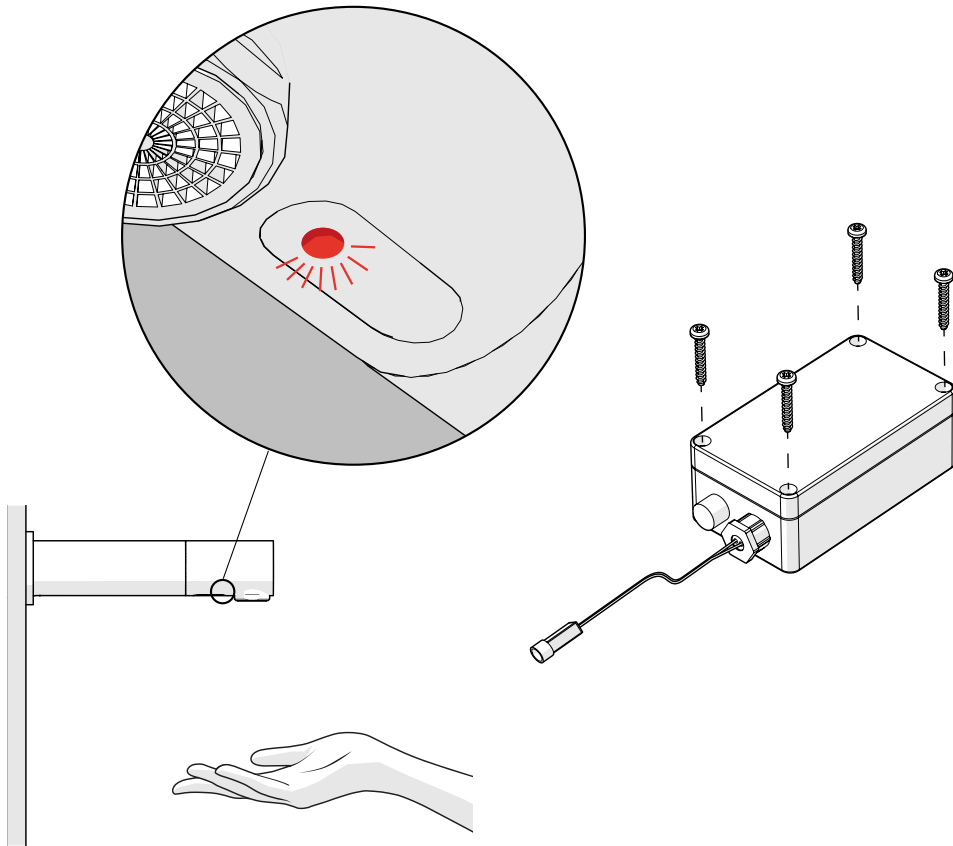


Resetting the Sensor



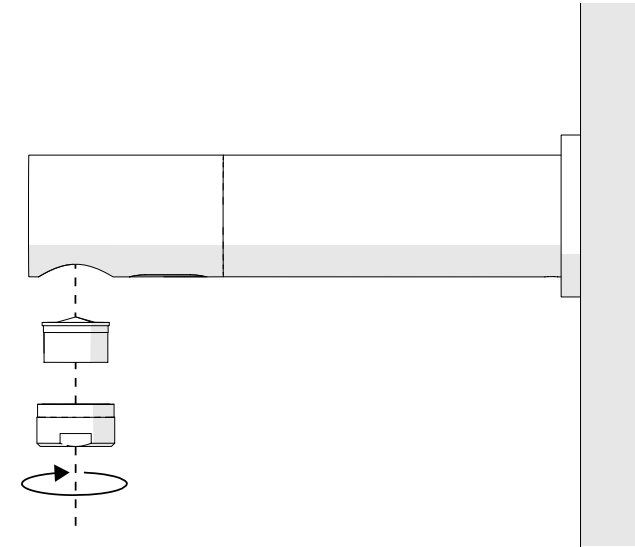
1. Firstly shut off the water supply. Disconnect the power supply, battery or transformer, from the sensor. Activate the sensor 3-4 times while the power is off. Alternatively, while the power is off make a short circuit between the positive and negative pins of the sensor connector using a suitable conductor.
2. Reconnect and turn on the power supply. Within 5 seconds of the power being on put your hand under the sensor positioned 5-10cm (2-4") from the sensor. The sensor should enter adjustment mode indicated by a slow flashing red light in the sensor.
3. Keep your hand in front of the sensor until the slow flashing turns to quick flashing. Then move your hand to the required distance from sensor and keep your hand there until the red light has stopped flashing.
4. When the red light has gone out the new distance is set. Reconnect water supply.

Changing the Batteries



1. When the battery weakens the red indicator light inside the sensor will blink at a constant rate when the users hands are within the sensor range. The battery must be replaced within 2 weeks.
2. Battery operated systems utilise 6 x 1.5V AA batteries. When these need changing, simply unscrew and remove the holder cover and replace the batteries (ensuring the correct polarity). Affix the cover and tighten the screws.

Changing the Aerator



1. Remove the aerator casing at the spout of the tap using a 22mm spanner.
2. Remove the aerator from the casing, ensure you also remove the rubber washer positioned between the aerator and spout. Insert the replacement aerator with the rubber washer in to the casing and screw this back in to the spout.

Changing and Cleaning the Solenoid and Filter

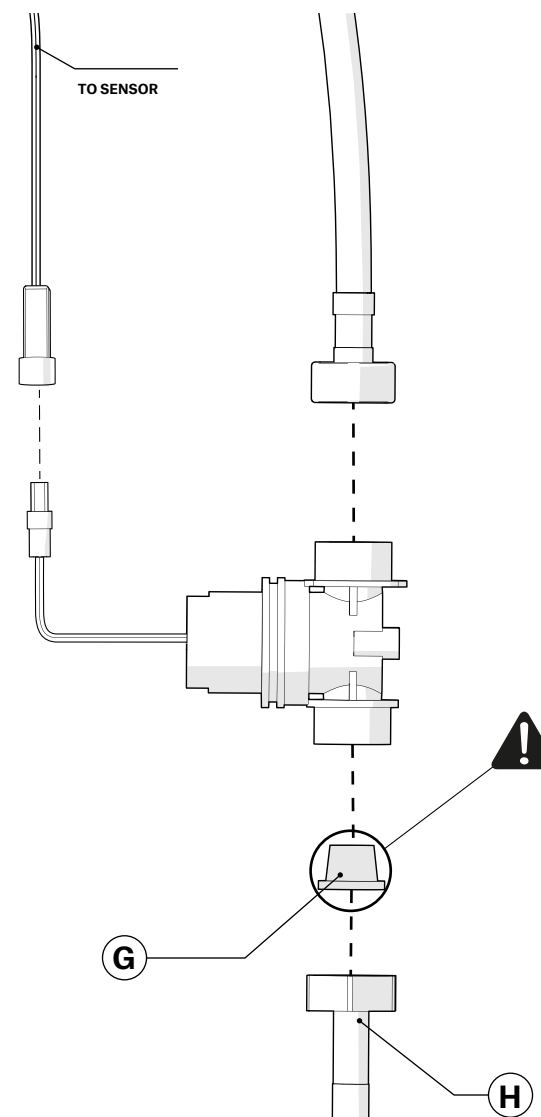
Changing the Solenoid

1. Firstly shut off the water supply.
2. Disconnect the solenoid cable from the sensor.
3. Disconnect the flexi-hose and the solenoid adaptor (**H**) from the solenoid. Make sure you remove the filter (**G**) from the faulty solenoid.
4. Take the replacement solenoid. Ensure that the filter (**G**) and solenoid adaptor (**H**) are assembled to the solenoid inlet with the filter between the adapter and the solenoid inlet.
5. Fit the end of the flexible hose on to the solenoid outlet. The solenoid outlet and inlet can be determined by the arrow on the solenoid housing showing the directional flow of water.
6. Restore the incoming water supply. Check that there is no water leakage.
7. Reconnect the solenoid wire to the mains power supply.

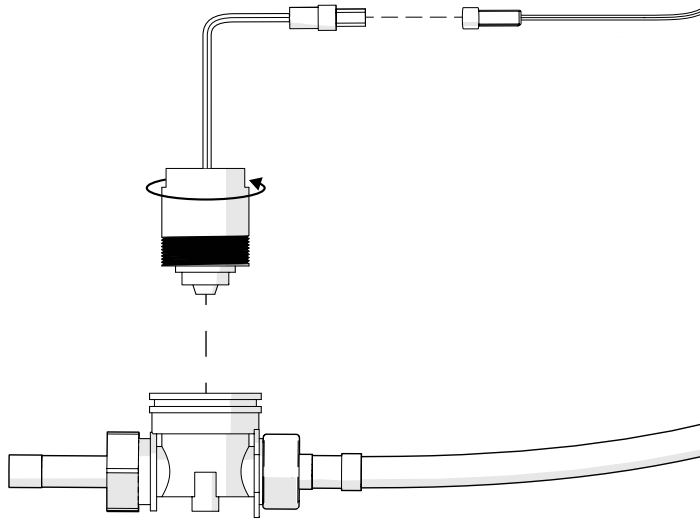
Cleaning/Replacing the Filter

The tap is provided with a stainless steel filter preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter is clogged.

1. Firstly shut off the water supply.
2. Disconnect the solenoid cable from the sensor.
3. Disconnect the solenoid adaptor (**H**) from the solenoid housing and locate the filter (**G**).
4. Wash the filter under running water to remove any debris.
5. Reassemble the parts as shown.
6. Restore the incoming water supply. Check that there is no water leakage.
7. Reconnect the solenoid wire to the mains power supply.

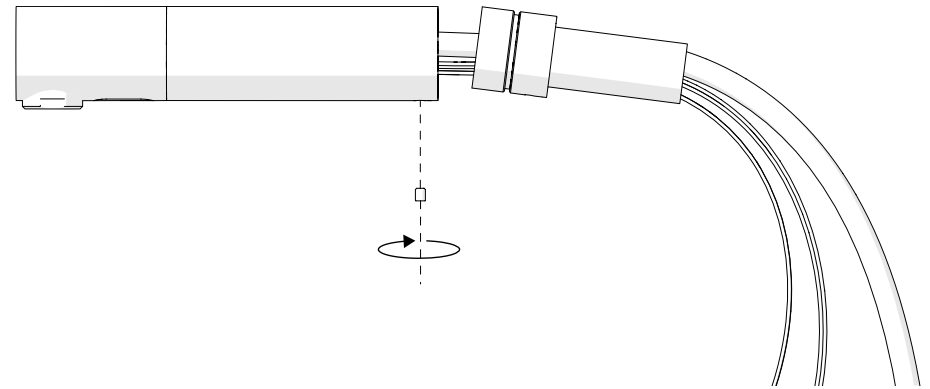


Changing the Solenoid Valve



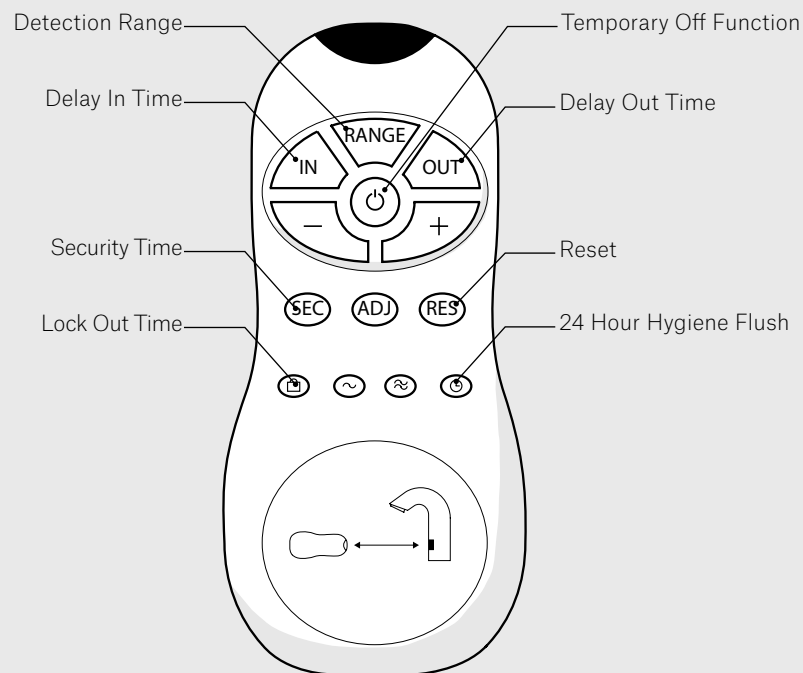
1. Firstly shut off the water supply. Unplug the solenoid from the mains power supply. Use a spanner to remove the solenoid valve.
2. Take the new solenoid valve and reassemble. Restore the incoming water supply. Check that there is no water leakage. Reconnect the solenoid wire to the mains power supply.

Changing the Flexi-hose



1. Remove the grub screw positioned on the underside of the tap using the hex key provided. Remove the tap stem as shown above.
2. By hand turn the flexi-hose clockwise to unscrew until free. Insert the replacement flexi-hose through the tap stem and up into the body of the tap and turn flexi-hose counter-clockwise to tighten. Insert the tap stem into the body and screw in grub screw.

Settings Adjustment - Remote Control



The remote control can be purchased separately if required to adjust a wider range of settings. The sensor distance can be set manually without a remote control see page 12 for instructions.

1. Shut off the water supply.
2. Hold remote control straight in front of the sensor at a distance of 150-200mm (6-8"). Choose the function you want to adjust by pressing one of the function buttons once.
3. After pressing the specified function button the sensor light should flash quickly. You can then use the + and - buttons to adjust the value from what is currently set to.

Detection Range

The detection range can be adjusted without a remote control, see page 12. Only if necessary, use the remote control to adjust the sensor detection range.

Press "RANGE" button. Wait until you see the sensor light flashing quickly. Press "+" button to increase the detection distance and "-" button to decrease the distance.

24 hour Hygiene Flush

This function is only available with compatible models. If your model has been programmed with a hygiene flush you can enable and disable this function using the remote.

Press 24 hour Hygiene Flush button. Wait until you see the sensor light flashing quickly. Press "+" button to activate this function and "-" button to deactivate.

Temporary Off Function

This function is ideal when performing any kind of activity in front of the sensor without operating the system, such as cleaning.

When the "Temporary Off" button is pressed once the tap will remain shut for 1 minute. To cancel this function and return to normal operation press the button once more.

Reset

This function restores all the factory settings except for the sensor range. If required, press the "Reset" button and without releasing it press the + button once.

Delay Out Time

This button allows modifying the water flow time after the user removes his hands from the tap. A delay out time close to 0 will save more water. An increased delay out time will make the user experience a more comfortable.

Press "OUT" button. Wait until you see the sensor light flashing quickly. Press "+" button to increase the delay out time and "-" button to reduce the time.

Delay in Time

It is recommended to change the delay in time for flush valves for urinals and toilets only. However if required, the delay time can also be modified in taps.

Press the "IN" button. Wait until you see the sensor light quickly flashing. Press the "+" button to increase the delay in time and the "-" button to reduce the time.

Security Time

The security time function can prevent continuous running of water due to reflections of vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut off automatically. To resume regular operation any obstruction must be removed.

Press the "SEC" button. Wait until you see the sensor light quickly flashing. Press the "+" button to increase the security time and the "-" button to reduce the time.

General Cleaning

Cleaning

Care and cleaning of chrome and special finishes.

DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives or the like.

Use of any prohibited cleaning or maintenance products or substances could damage the surface of the tap. For surface cleaning of the tap use ONLY soap and water, then wipe dry with a clean cloth or towel. When cleaning bathroom tiles, the taps should be protected from any splattering of harsh cleansers.

For solenoid filter cleaning instructions see page 16.

Warranty Information

1.1 The Supplier warrants that on delivery, and for a period of 24 months from the date of delivery (Warranty Period), the Goods shall:

- (a)** conform in all material respects with their description and any applicable Specification;
- (b)** be free from material defects in design, material and workmanship; and
- (c)** be of satisfactory quality (within the meaning of the Sale of Goods Act 1979) (the "Warranty")

1.2 Subject to clause 1.3, if during the Warranty Period:

- (a)** the Customer gives notice in writing to the Supplier during the Warranty Period within a reasonable time of discovery that some or all of the Goods do not comply with the Warranty;
- (b)** the Supplier is given a reasonable opportunity of examining such Goods; and
- (c)** the Customer (if asked to do so by the Supplier) returns such complete Goods to the Supplier's place of business at the Customer's cost, the Supplier shall, at its option,
 - i)** repair or
 - ii)** replace the defective Goods free of charge to the Customer, or in each case providing the parts free of charge and the Customer shall pay the full cost of any labour provided by the Supplier at the Supplier's then standard rate, or
 - iii)** refund the price of the defective Goods in full.

1.3 The Supplier shall not be liable for Goods' failure to comply with the warranty set out in clause 1.1 in any of the following events:

- (a)** the Customer makes any further use of such Goods after giving notice in accordance with clause 1.2;
- (b)** the defect arises because the Customer failed to follow the Supplier's oral or written instructions as to the storage, commissioning, installation, use and maintenance of the Good's, including without

limitation the installation guide for the Goods provided by the Supplier, or (if there are none) good trade practice regarding the same;

- (c)** the Goods are used on an electricity supply that differs from that stated on the rating plate;
- (d)** the defect arises as a result of the Supplier following any drawing, design or Specification supplied by the Customer;
- (e)** the Customer alters or repairs such Goods without the written consent of the Supplier;
- (f)** the damage or failure is of a consumable item including but not limited to plugs, batteries, lights, diaphragms and filters;
- (g)** the defect arises as a result of fair wear and tear, wilful damage, negligence, or abnormal storage or working conditions; or
- (h)** the Goods differ from their description as a result of changes made to ensure they comply with applicable statutory or regulatory requirements.

1.4 Except as provided in these clauses 1.1 to 1.7, the Supplier shall have no liability to the Customer in respect of the Goods' failure to comply with the Warranty set out in clause 1.1.

1.5 The terms implied by sections 13 to 15 of the Sale of Goods Act 1979 are, to the fullest extent permitted by law, excluded from the Contract.

1.6 The Warranty shall apply to any repaired or replacement Goods supplied by the Supplier for such part of the Warranty Period as is unexpired at the date of notification under clause 1.2(a).

1.8 The Warranty shall form part of the Contract between the Supplier and the Customer for the sale and purchase of the Goods and all defined terms shall have the meaning given to them in the Contract.

Troubleshooting

We are always looking to improve. If these did not solve your problem please contact us and we will endeavour to help.

Tel: +44 (0)161 482 7000

Email: technical@lovair.com

SYMPTOM	ISSUE	SOLUTION
No water coming out of the tap, sensor flashes continuously when user's hands are within the sensor's range.	Low Battery.	Replace batteries (see page 14).
	Range is too short.	Increase the sensor range (see page 12).
	Range is too long.	Decrease the sensor range (see page 12).
	Battery is completely used up.	Replace batteries (see page 14).
	Unit is in "Security Mode"	If the sensor is covered for more than 90 sec. the tap will shut off water flow. Remove obstruction to sensor.
Red light in sensor is flashing when user's hands are within the sensor's range.	Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
	Connectors between the electronic unit and the solenoid are disconnected.	Connect the electronic unit connectors to the solenoid.
	Debris or scale in the solenoid.	Unscrew top of solenoid from body, pull out the plunger and the spring from the solenoid and clean them. Use scale remover material if needed. When replacing the plunger, please make sure that the spring is in the vertical position.
	The central orifice in the solenoid diaphragm is plugged or the diaphragm is torn.	Clean the orifice or replace the diaphragm.
Water flow does not stop, sensor flashes when users hands are in the sensor's range.	The water supply pressure is higher than 8 bar.	Reduce the water supply pressure.
	Debris or scale in solenoid diaphragm.	Clean the orifice or replace the diaphragm.
Water flow does not stop, sensor does not flash when users hands are within the sensor's range.	Sensor is dirty or covered.	Clean or eliminate cause of interference.
	Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection.
Water flow diminished.	Filter or aerator is clogged.	Remove, clean and re-install.

Spare Parts & Accessories

SPARE PARTS

L7500002	Solenoid Valve
L07221009	Solenoid valve complete with housing
L07220144	Sensor kit for L180 series sensor taps pre-set 120mm (4 ¾")
L09510053	Flexi-hose - ½" BSP thread - 450mm (17 ¾")
L06530021	Transformer for sensor taps - IP67 – Female
L06522102	Transformer for sensor taps - IP68 – Female
L06530020	Battery Box for sensor taps - IP67 - Female - with batteries
L08510040	Aerator - Cascade 4 Litres Per Minute (1.0 GPM (US))

OPTIONAL ACCESSORIES

L06001012	Power splitter 2 Way - 1M-2F -1.5 metre (59")
L06001008	Power Splitter 3 Way - 1M-3F-1.5metre (59")
L06009016	Extension Cable 1 metre (39¾")
L06009032	Extension Cable 4 metres (157½")

OPTIONAL ACCESSORIES (CONTINUED)

L09510073	700mm (27 ⅞") Flexi-hose - ½" BSP thread
L07100005	Remote Control for sensor tap
L08510012	Aerator - 1.89 litres per minute (0.5 GPM(US))
L08510034	Aerator - 6 litres per minute (1.59 GPM (US))
L08510037	Aerator - 4 litres per minute (1.0 GPM (US))

Contact

GENERAL INFORMATION

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TECHNICAL SUPPORT

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FOR FURTHER CONTACT INFORMATION VISIT:

www.lovair.com/en/contact

