L-140

Deck Mounted Sensor Operated Tap

installation + maintenance

THE SPLASH LAB

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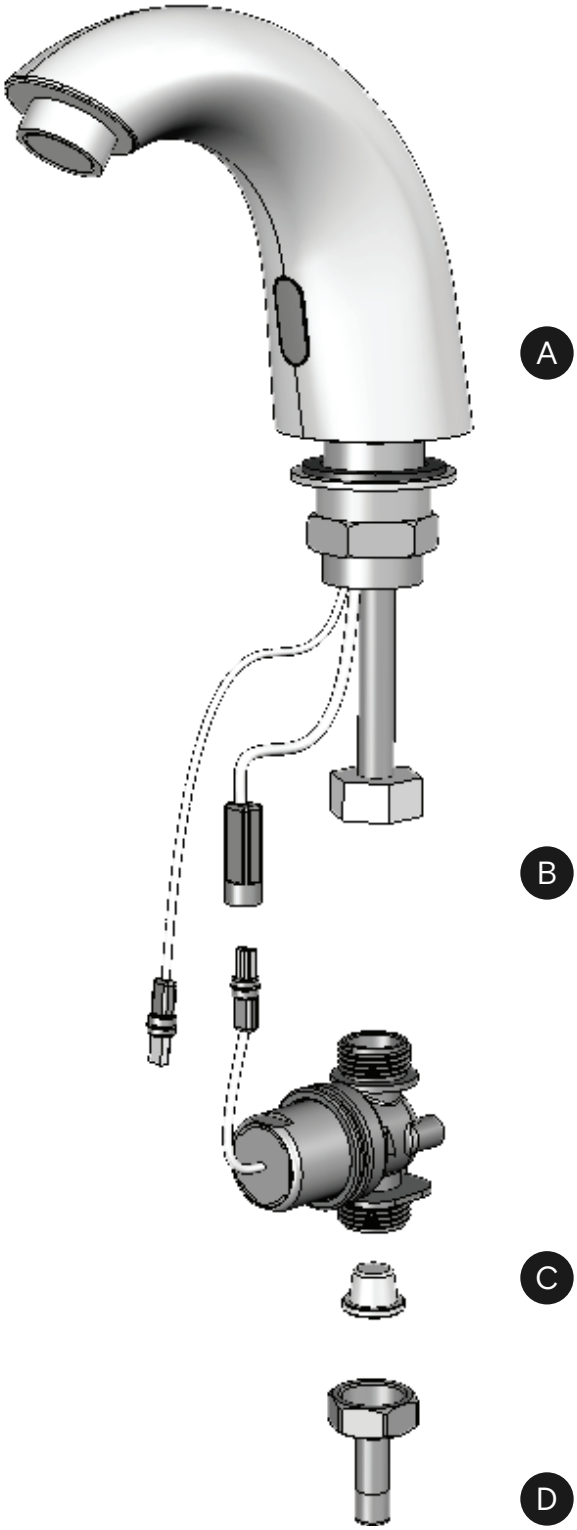
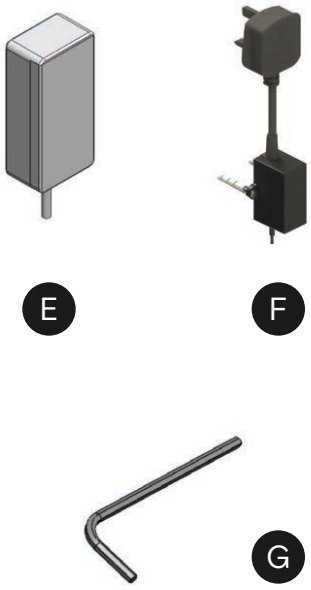
box contents

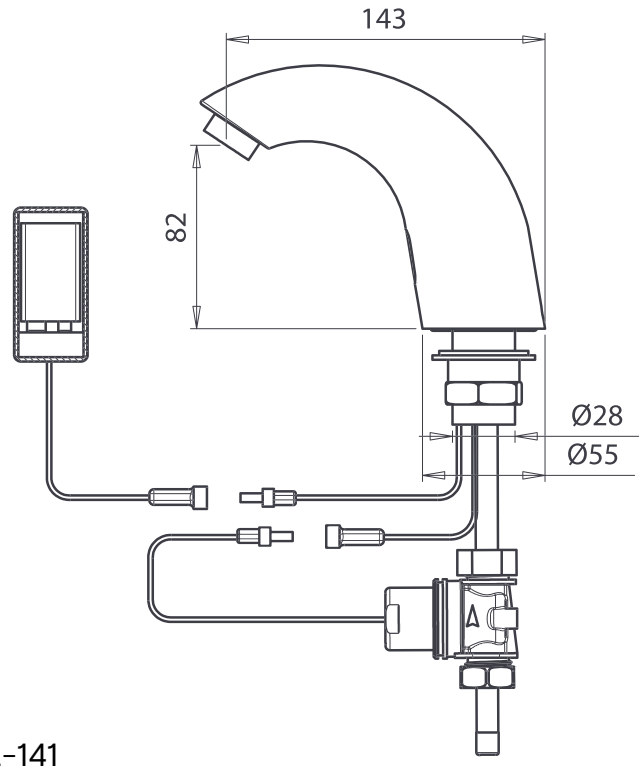




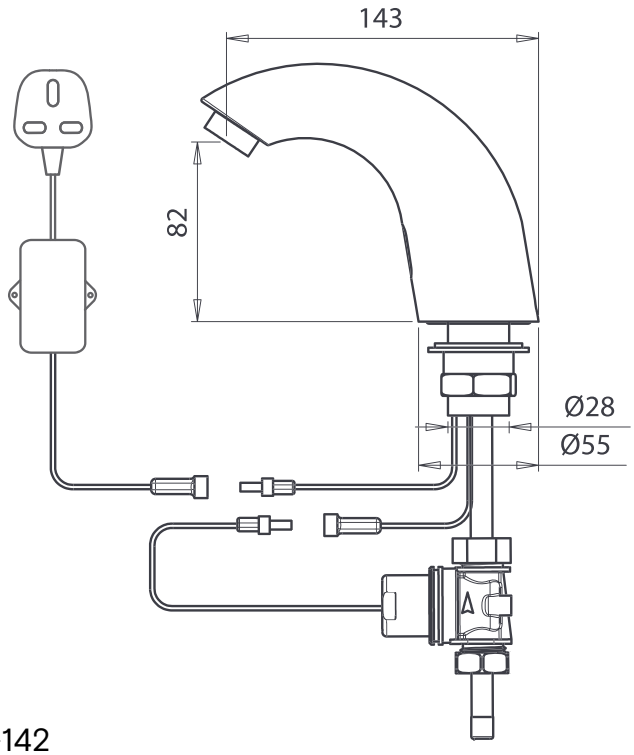
Note: You receive only either E or F
Transformer or Battery Version

A	Tap and attachments x 1
B	Solenoid and housing x 1
C	Filter x 1
D	Filter adapter x 1
E	Battery Box x 1 (L-141)
F	Transformer x 1 (L-142)
G	Allen key x 1

technical data



L-141



L-142

Power supply:	9V Battery or 9V Transformer
Recommended water pressure:	0.5-8.0 bar (7-116 PSI) Dynamic With water pressure of more than 8 bars, use a pressure reducing valve for reduction.
Preset sensor range:	200 mm Adjustable
Minimum sensor range:	80mm
Maximum sensor range:	300mm
Security time:	90 seconds
Hot water temperature:	Max 70° C

pre - installation information

Check contents

Separate all parts from the packaging and check each part with the pack contents section.

Pay attention to the different models variations.

Make sure all parts are accounted for before discarding any Packaging material.

If any parts are missing, do not attempt to install your L-140 sensor tap until you obtain the missing parts.

Warnings

Do not install the tap facing a mirror or any other electronic system operated by an infrared sensor.

To prevent reflection problems, it is recommended to keep a minimum distance of 1.50 metres between the tap and other objects.

Preparation for installation

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

Shut off water supply.

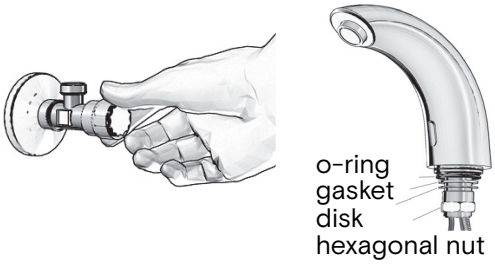
Preparation for installation

All plumbing is to be installed in accordance with applicable codes and regulations.

how to install

Step 1 - Remove all the mounting hardware

Shut off the water supply and remove the the hexagonal nut the washer and the gasket. Do not remove the o-ring from the base of the tap.

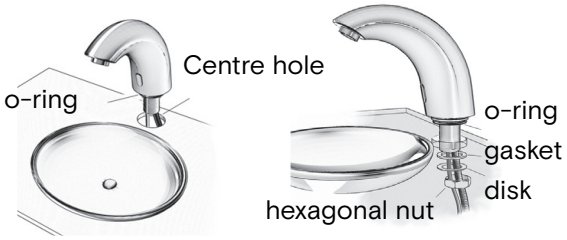


Step 2 - Install the tap

Place the tap in the o-ring into the hole in the deck or basin. Make sure the o-ring located between the deck or basin and the bottom of the tap.

Slide the gasket over flexible hoses.

Secure the tap to deck or basin with the hexagonal nut and the washer.



Step 3 - Connecting the water supply

Fit the fl exible pipe coming from the tap to the solenoid valve housing.

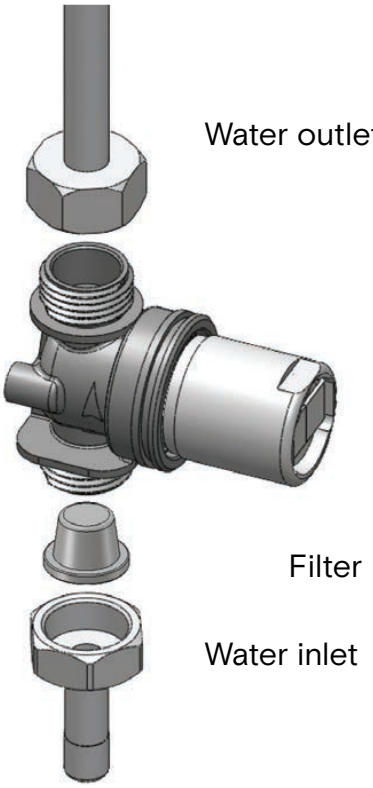
Important: Inlet and outlet should follow the indicating arrow on the solenoid housing.

Fit the water supply inlet to the adapter at the solenoid valve housing
Note: Make sure that the fi lter is assembled between the housing of the solenoid valve and the adapter.

Turn on the central water supply and the locked isolating valve.

Check for leaks.

Connect the water proof connector coming from the electronic unit to the solenoid valve connector and proceed to step 4.



Step 4 - Connecting the power source

For L-141

Connect the water proof connector coming from the electronic unit to the battery box.

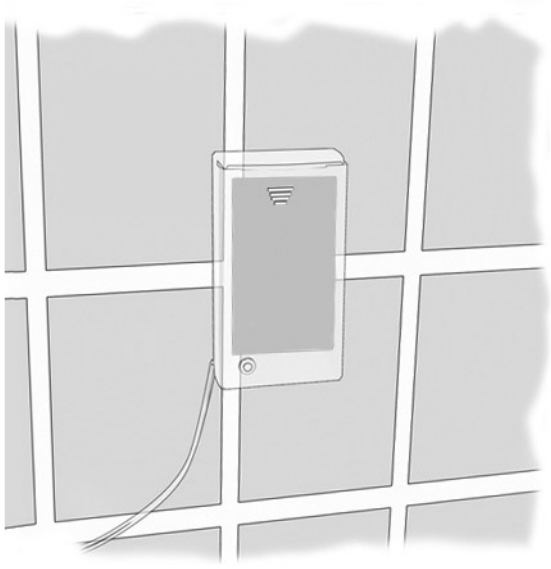
Install the battery box at the wall under the sink using the screws or the two sided adhesive foam tape.

For L-142

Connect the water proof connector coming from the electronic unit to the transformer.

Connect the transformer into the electricity supply. Important: In order to avoid entering into the adjusting mode, wait 10 seconds before you will operate the system.

Important: If the range is unsatisfactory, refer to the section titled “range adjustment”.



operation

The user is to activate the tap by placing their hands within the range of the infra-red sensor, to cause the solenoid valve to open for a preset time. The valve will close a set time after the user's hands have been removed from the detection range.

cleaning

Use a soft cloth or sponge with a mild solution of soapy water as part of the regular washroom janitorial routine. Do not use wire wool, abrasive or cream cleaners, or cleaning materials containing alcohol or acid as these will damage the surface finish. When cleaning surfaces in close proximity with harsh cleaning materials, the tap should be protected from any splashing.

maintenance

The tap should be regularly inspected and tested for correct function and performance. The in-line strainer filters fitted to the solenoid valve should be checked periodically to ensure that there is no debris or restriction to the water flow. This is particularly the case immediately after initial installation and in areas of hard water. It will be evident when it becomes necessary to check the filter, as the water flow will be reduced.

1. Isolate the water supply to the tap.
2. Disconnect the flexible hose from the solenoid valve.
3. Remove the filter, and check for any obstruction.
4. Rinse the filter under running water.
5. Reassemble the parts.
6. Turn on the water supply and check for any leaks.

With battery operated versions, (L141C), the 6x AA batteries will need to be replaced at 9 monthly intervals, assuming average usage of the tap. For taps in high-traffic areas, we recommend that the batteries are changed every 6 months. When the battery is weakening, the red LED in the sensor

1. Remove cover fixing screws from the battery box, and remove the cover.
2. Remove the old batteries, and insert the new ones observing the correct polarity.
3. Replace the cover, making sure that the O-ring seal is in place to maintain the IP67 rating of the enclosure. will flash at a constant rate when the user's hands are within the sensor range. The battery must be replaced within two weeks.

Spent batteries should be disposed of in accordance with the current WEEE regulations in force.

settings adjustment with remote control

Adjusting the settings with the remote control

If necessary, the sensor settings can be adjusted as following:
Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 15-20cm (6-8”). Choose the function you want
to adjust by pressing once on one of the function buttons. After pressing once on a specifi c function button, a quick fl ashing of the red light at the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every push will increase or decrease one level. After fi nishing the adjustment, turn the water supply back on.

remote settings

Detection Range: The sensor range is the greatest distance that an object can be away from the sensor to activate the tap.
The sensor is factory preset. To adjust the sensor range press + to increase detection range and – to decrease the detection range of the sensor.

Security time: The Security time, prevents continuous flushing of water due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut automatically. To resume regular operation any obstruction must be removed.
Press the SEC button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.

Delay in time: It is recommended to change the delay in time for flush valves for urinals or toilets only.
If required, the delay in time can be modified in taps as follows: Press the IN button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.

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 more comfortable.
If required, the delay out time can be modified as follows: Press the OUT button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.

Comfort flush: This function is for flushing the tap during maintenance works. This setting is activated by pressing the clock button to make water flow for 2 minutes. After 2 minutes the water will stop.
To activate the comfort flush, press the clock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the comfort flush or – to deactivate it.

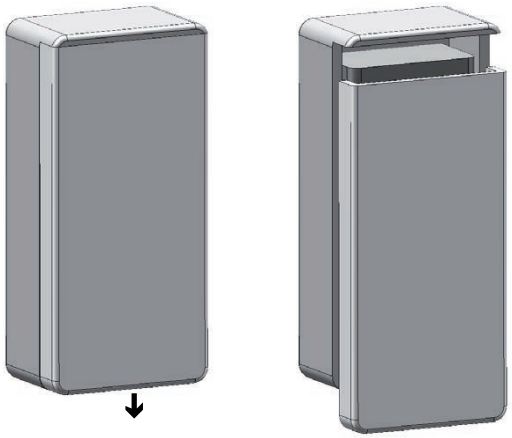
Temporary Off function: This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning).
Taps will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.

Reset button: This function allows the sensor to return to the original factory preset settings.
If required, press the Reset button and without releasing it, press the + button once.

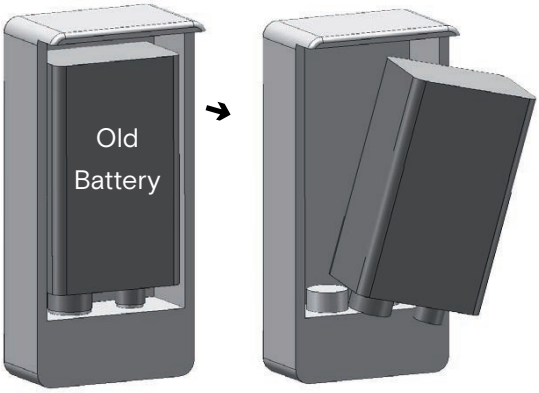
battery replacement

Battery models only

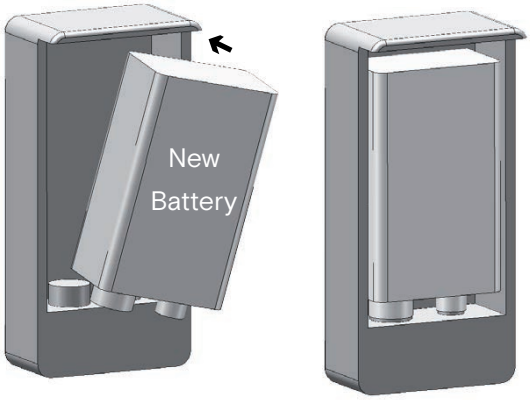
When the battery weakens, the red indicator light will blink at a constant rate. The battery must be replaced within two weeks.



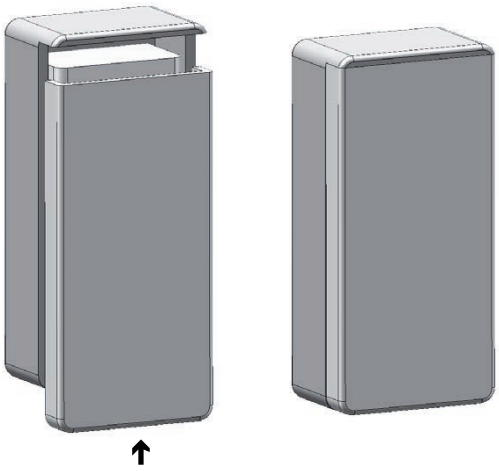
1. Carefully open the battery box.



2. Remove the old battery



3. Replace the used battery with a new 9V battery (Lithium recommended)



4. Close the box

Important: Spent batteries should not be disposed of with normal household waste. Contact your local authority for information on waste disposal and recycling.

Problem	Indicator	Cause	Solution
Water not flowing	Sensor flashes continuously when user's hands are within sensor range.	Low battery	Replace battery
	Red light in the sensor does not flash when user's hands are within sensor range.	Range is too short	Increase range
		Range is too long	Decrease range
		Battery is completely out of power	Replace batteries
		Tap is in 'Security Mode' (see note below)	
		Sensor is detecting reflection from basin or other source	Remove obstruction
	Red light in the sensor flashes once when user's hands are within range.	Connection between the sensor and the solenoid is disconnected.	Connect the sensor to the s olenoid
		Debris or limescale in solenoid valve.	Remove solenoid valve, pull out the plunger and spring and clean the parts under running water. If necessary, use a proprietary limescale remover. When replacing the plunger, ensure the spring is in the correct orientation
		The central orifice in the diaphragm is blocked or the diaphragm is damaged.	Clean orifice or replace diaphragm (Lovair part no L04500001)
		The water supply pressure is more than 8bar.	Reduce water supply pressure.
		The water supply pressure is under 8 bar and yet the pressure in the tap's body is higher. This situation could be caused by a sudden increase in the water supply pressure that the backcheck prevents from dropping, even after water supply pressure drops under 8 bars.	Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the supply to the tap.
Water flow does not stop from spout.	Sensor flashes once when user's hands are within range	Debris or limescale in diaphragm.	Clean orifice or diaphragm (see instructions below)
	Red light in sensor does not flash once user's hands are within sensor detection range	Sensor is dirty or covered	Clean sensor or remove o bstruction.
		Sensor is picking up reflections from the basin or other object	Decrease sensor detection range, and / or remove cause of reflection.
Water flow diminished		In-line filter / strainer is b locked	Remove, clean and replace the filter.
Water flow is intermittent		Sensor is picking up reflections from the basin or other object	Decrease sensor detection range, and / or remove cause of reflection.

trouble shooting

Troubleshooting Continued

As can be seen from the above, reflection can be a major reason for a tap mis-functioning. Every step should be done to prevent reflection hindering the correct function of the tap. This will often mean that high-visibility clothing should not be worn when commissioning and maintaining The Splash Lab sensor taps.

The solenoid valve is in a plastic housing between the main water supply and the flexible hose connecting to the tap. The valve can be inspected and cleaned as below:

1. Isolate the water supply to the valve.

2. Disconnect the electrical supply to the valve & unscrew the valve from the housing (an open ended or adjustable spanner will fit across flats moulded into the valve body).

3. Check the rubber diaphragm for any dirt & rinse. Also check (& clean if necessary) the valve seating in the solenoid valve housing.

4. Check that the magnetic plunger is correctly located & the small spring underneath it is in the correct orientation.

5. Refitting the valve is the reverse of removal.

6. Test tap for correct function.

spare parts list

Product Code	Product Name
L7000002	Solenoid valve
L07221009	Solenoid valve with valve housing
L04500001	Solenoid valve diaphragm
L09550036	Sensor tap flexi hose - 12 ” BSP thread - 450mm
L09510073	Sensor tap flexi hose - 12 ” BSP thread - 700mm
L06530021	IP67 rated transformer – 9V
L06522101	IP68 rated transformer - 9V
L06530020	IP67 rated battery box (for 6x AA batteries)
L08510040	Cascade aerator – 3.98 litres per minute (1 US gal per min)
L08510012	Cascade aerator - 1.89 litres per minute (0.5 US gal per min)
L08510034	Cascade aerator - 6 litres per minute (1.59 US gal per min)

If further information is required, contact Lovair technical team for more detailed guidelines.

warranty

We believe the future is personal. With a global mindset, we challenge conventional restroom norms via product innovation to create considered washroom solutions for corporate and educational spaces. We use rich raw materials, cutting-edge automation and considered washroom design to powerfully and positively influence the lives of people. We are The Splash Lab.

Demonstrating our commitment to quality and our belief in the strength of our designs, we can offer the following warranties.

The Splash Lab will warrant that its products will be free of manufacturing and material defects during normal use and environmental conditions as detailed below:

L-140 Deck Mounted Sensor Tap 1 year limited warranty

If a defect is found in normal use, The Splash Lab will, at their discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Non-operation of the product due to environmental conditions beyond our control, installation error, incorrect maintenance, water quality, fair wear and tear, incorrect or inappropriate installation, misuse and abuse is not covered by the warranty.

Proof of purchase (original sales receipt) must be provided to The Splash Lab with all warranty claims. The above warranty is valid for goods supplied within the United Kingdom.

For goods supplied outside of the United Kingdom, The Splash Lab will honor the above stated warranty periods for the parts only.

THE SPLASH LAB DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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