

ENWARE-ORAS ELECTRA INTEGRATED WALL SENSOR SPOUT

Installation and Maintenance Instructions

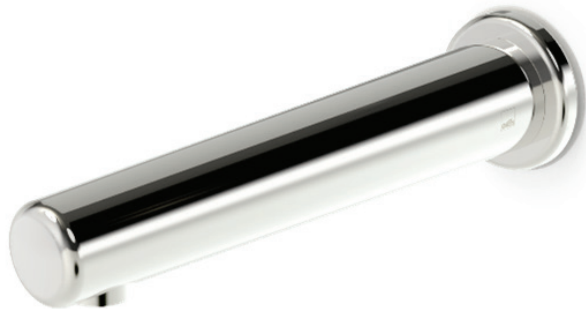
ENM6186

Integrated Wall Sensor Tap
Battery Operated with 185mm Spout



ENM6187

Integrated Wall Sensor Tap
Battery Operated with 235mm Spout



I00302_Mar19

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technical data

Inlet Connection	15mm (1/2") BSP Female
Recommended Working Pressure	100 – 500kPa*
Recommended Temperature	Cold / Warm up to 43 °C*
Maximum Temperature (For Disinfection Purposes)	70 °C*
Flow Rate	5.5 lpm
Sensor Range	Approx. 150mm ^ (Adjustable 100 - 200mm)
Intelligent Afterflow Period	3 seconds ± 1 second ^ (Adjustable 1 - 8 sec ± 1 sec)
Maximum Continuous Flow Period	120 seconds ^ (Adjustable 10 - 300 sec)
Automatic Flush	OFF ^ (Can be set to flush at intervals 12/24/48/72 hrs, for period 10 - 600 sec)
Protection Class	IP55
Power Supply	Lithium Battery AA 1.5V x 2

^ Settings are Factory Default, adjustable with Magnetic Key

installation compliance

* Enware products are to be installed in accordance with the Plumbing Code of Australia (PCA), AS/NZS3500 and the manufacturer's instructions. Installations not complying with PCA, AS/NZS 3500 and the manufacturer's instructions may void the product and performance warranty provisions.

Reference should also be made to the Australasian Health facility Guidelines (AusHFG), ABCB Regulations and Local Building Codes when considering the choice of, and the installation of these products.

Thermostatic Mixing Valves and Pressure Reduction Valves may be required to comply with maximum temperature and pressure requirements.

NOTE: Enware Australia advises:

1. Due to ongoing Research and Development, specifications may change without notice.
2. Component specifications may change on some export models.



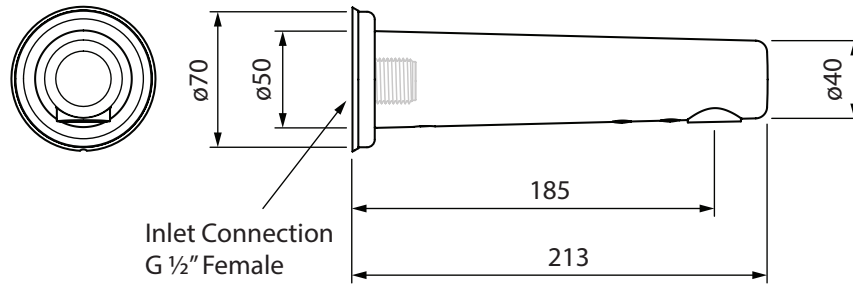
Enware Tapware is manufactured to the exacting WaterMark standard AS/NZS 3718



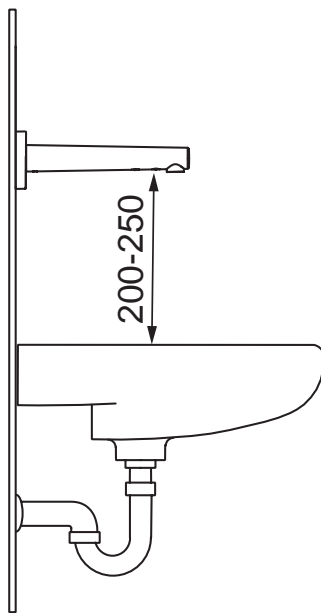
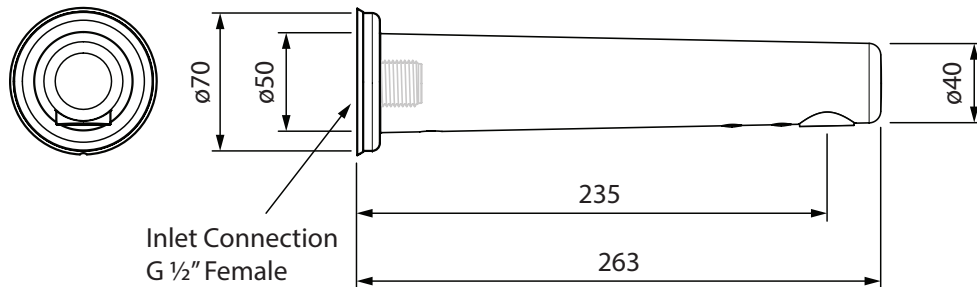
Enware-Oras Electra Tapware is supplied with WELS 6 Star 5.5lpm Water Efficiency Rating as standard.

dimensions

ENM6186



ENM6187

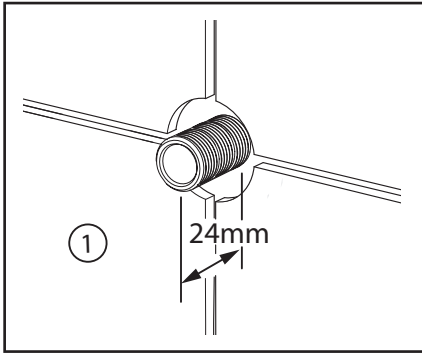


Recommended Installatoin Height:
200mm - 250mm from top of basin

before installation

- Before proceeding with installation ensure all operating and dimensional specifications are suitable for the intended installation.
- Ensure all supply lines are flushed thoroughly to remove debris prior to the installation of this product as per AS/NZS 3500.1. Debris in Solenoid valve may void warranty.

installation



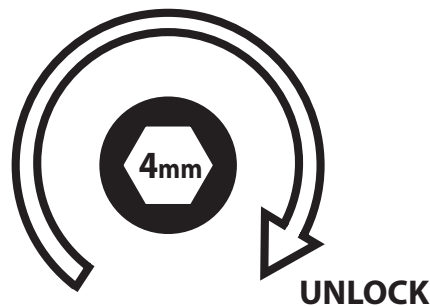
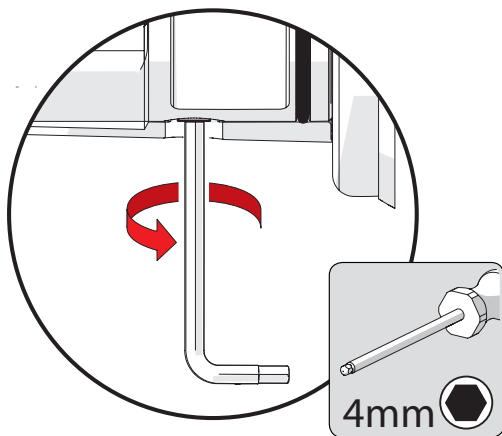
1. Prepare 1/2" BSP male thread connection for inlet. Allow for 24mm of thread protruding from finished wall.
2. Flush the water supply line. Ensure there is no debris or contaminants such as dirt, thread tape, sealants or pipe offcuts in the water supply that could clog up the electronic components in the tap.



3. Dismantle base body from chrome spout. To do this, use a 4mm Allen key screw on the larger grub screw that's holding the chrome spout in place, and rotate it **clockwise** until it stops. This disengages the grub screw from the chrome spout.



NOTE: The grub screw does not come out, it stays inside the brass base body.



Then, loosely screw in a 1/2" thread fitting onto the female thread of the base, and by pulling on the fitting, pull out the base assembly.

Be careful not to pull too quickly: the sensor cable is still attached to the solenoid.



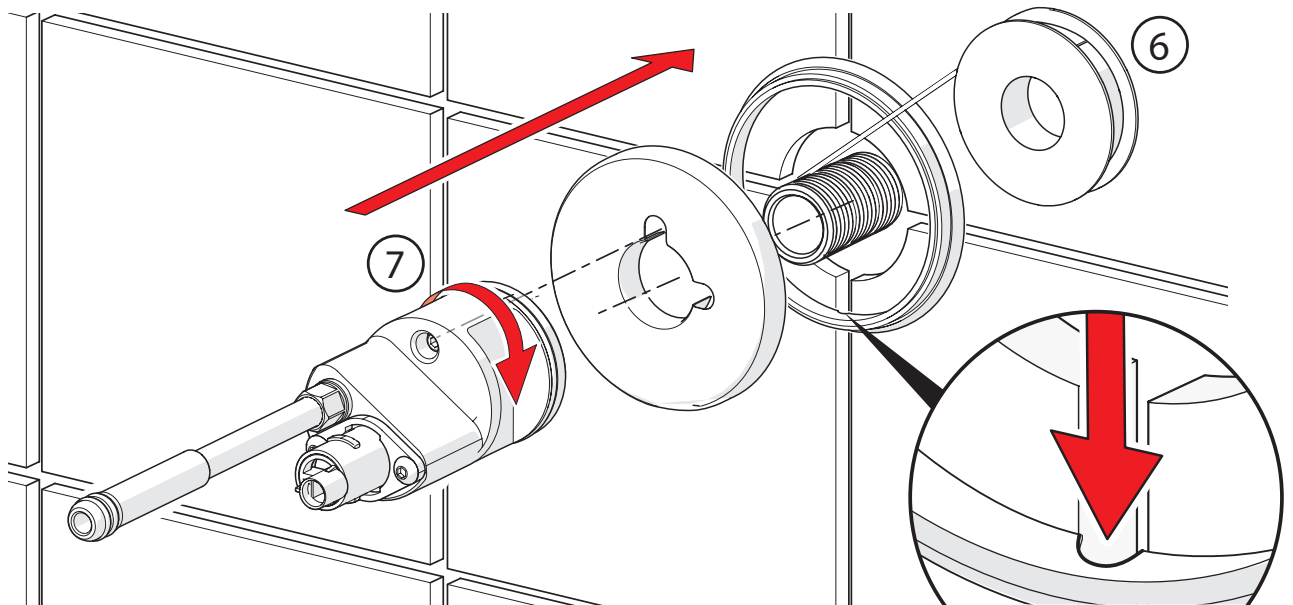
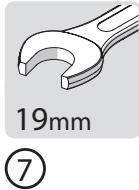
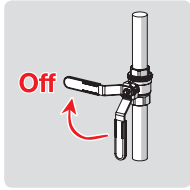
4. Disconnect sensor cable from solenoid.



5. Put wall flange and appropriate colour indicator onto wall. (Clear, Blue for cold, or Yellow for warm water supply.) Take care to align the holes on the wall flange as shown.

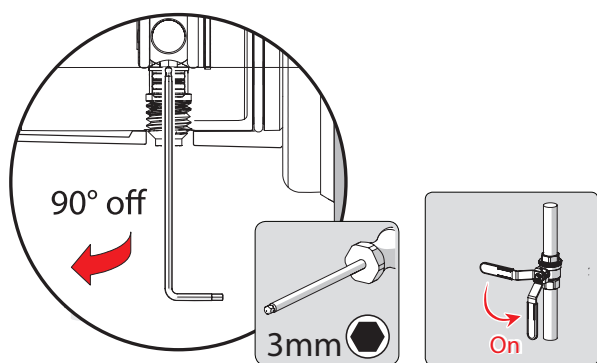
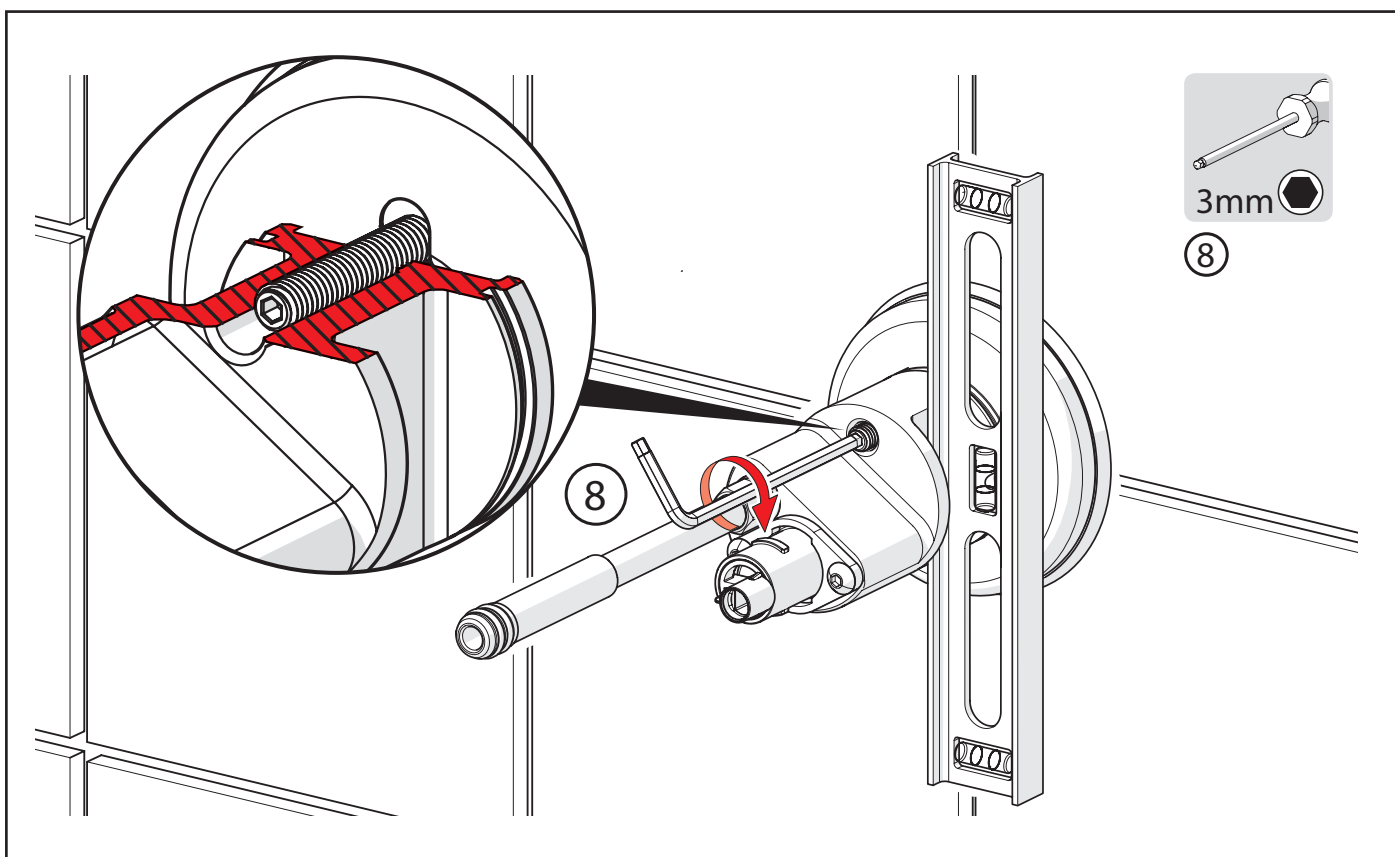


6. Apply thread sealant onto male thread on wall
7. Screw on the base assembly. Ensure the base sits straight up, as shown.





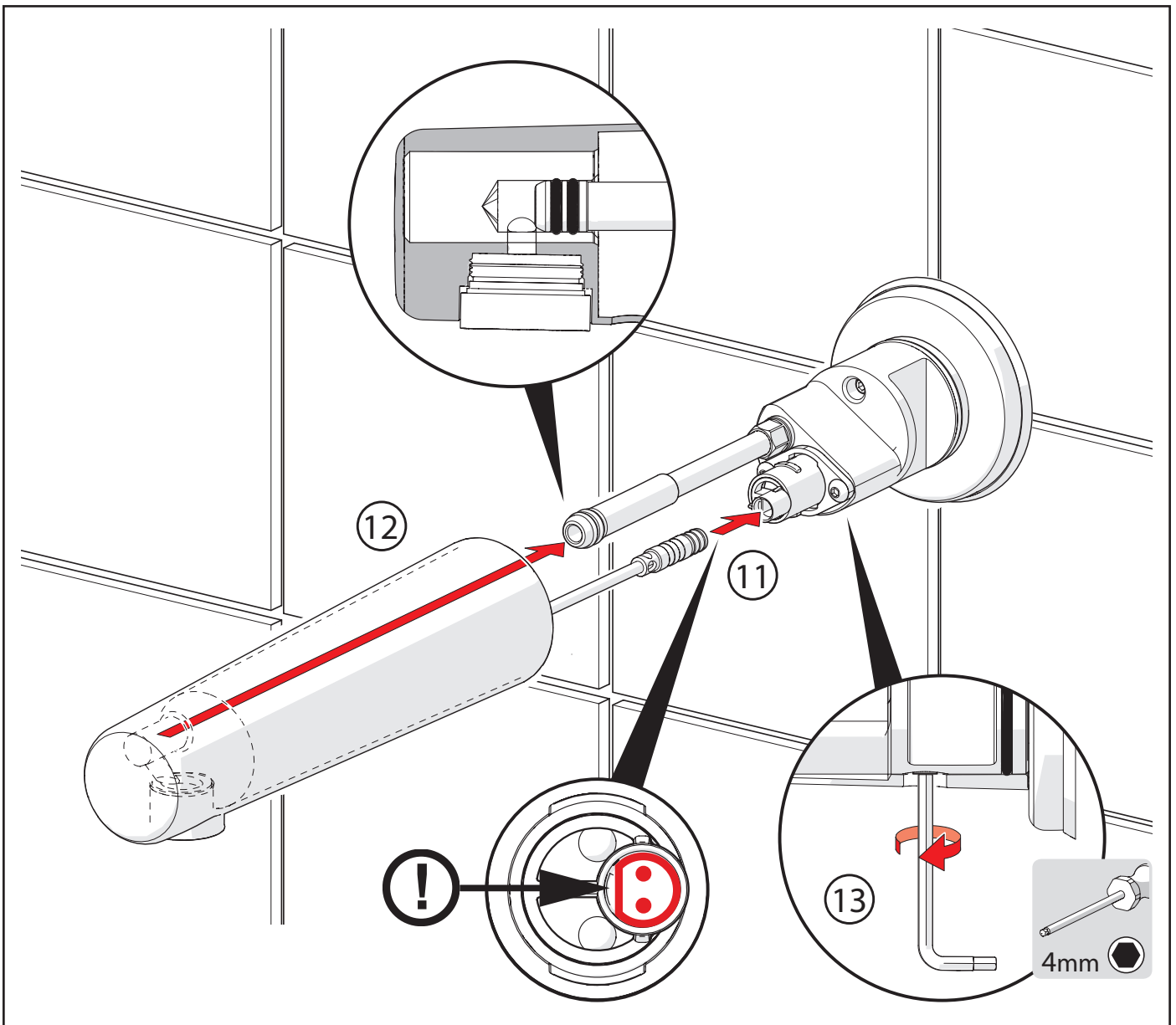
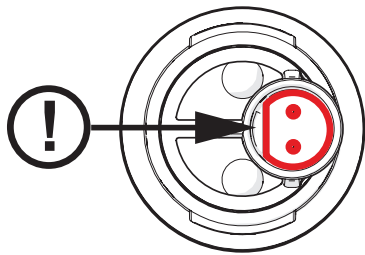
8. Using a 3mm Allen key, screw in the set screw to lock the base and flange into place. This prevents them from turning. Do not over-tighten the set screw.



9. Using a 3mm Allen key, rotate the isolation valve key 90 degrees to ensure isolation valve is OFF.
(The hex slot for isolation valve is located inside the 4mm grub screw).
10. Turn water supply on, and check for leaks on the thread joint.



11. Hold the chrome spout, and plug the sensor connector cable to solenoid. **Note the orientation of the cable connection - the white marking aligns with the rib marked on the solenoid.** (the flat face of the connector is facing the left.)
12. Slowly push the chrome spout onto base body, **taking care not to pinch the wires** and aligning the inlet tube with the chrome spout. Push firmly but slowly until the chrome spout comes to a stop, with the chrome spout completely covering the brass base body.



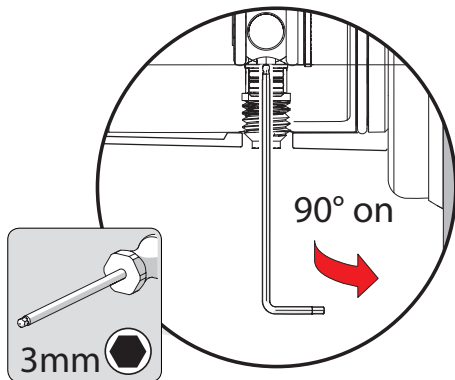


13. To lock the chrome spout in place, unwind the grub screw with a 4mm Allen key, gently turning anti-clockwise until it comes to a stop. Ensure spout is aligned in the centre and that you can turn the grub screw **one and a half turns**. If not, rotate the chrome spout slightly and align it with the grub screw.

Unwind the grub screw further anti-clockwise until it is finger-tight with the Allen Key, to lock the chrome spout in place. Do not over-tighten grub screw.



14. Turn isolation key 90° to turn ON water supply.



15. Peel off the black sticker covering the sensor lens.
16. Activate sensor to test operation of the sensor tap.
17. The tap is now ready for use.

operating instructions



TO TURN ON

Place hand under spout. Water turns ON.

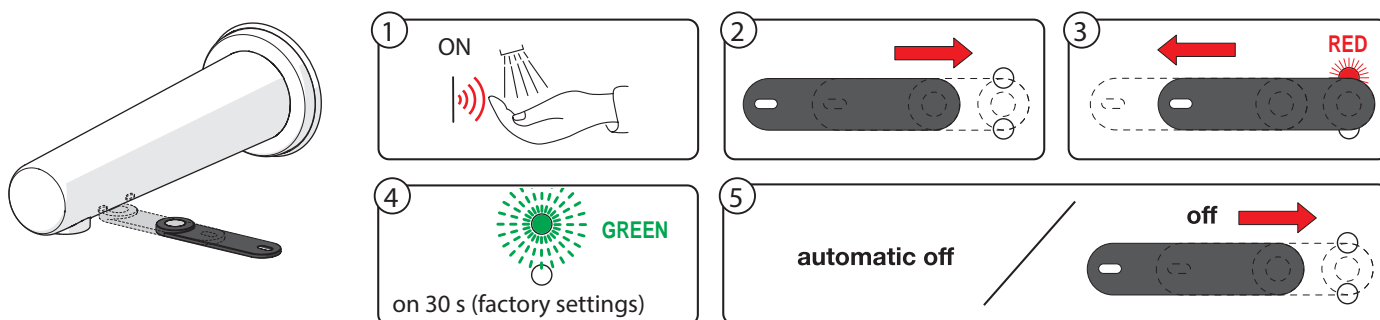
TO TURN OFF

Pull hand away from spout. Water turns OFF.

Once sensor is activated, water runs for a minimum of 3 seconds*. Maximum run time per activation is 2 minutes* for continuous use.

*The sensor factory settings such as run time and sensor range can be changed using Magnetic Key. Refer to "Changing the Sensor Program".

cleaning mode



Cleaning mode disables sensor activation for 30 seconds[^], during which time cleaning can be carried out without unexpectedly turning the tap on. It is a handy way to deactivate the sensor for a short time, besides turning water off at the isolation or covering the sensor lenses.

To activate cleaning mode:

Activate the sensor, then place the Magnetic Key in between the two sensor lenses, with the magnet side up, so that the magnet touches the chrome body. Place the Magnetic Key there for 1 second, and as soon as the red light turns on, remove Magnet Key. Green light will start to flash, indicating the cleaning mode has been activated.

Cleaning mode ends automatically after 30 seconds[^], or it can be stopped by placing the Magnetic Key on the sensor again for 2 sec.



Red or Green LED can be seen reflecting off the back of a hand

[^] Duration of cleaning mode can be changed to 15 sec, or 60 sec. Refer to instructions in "Changing the Sensor Program".

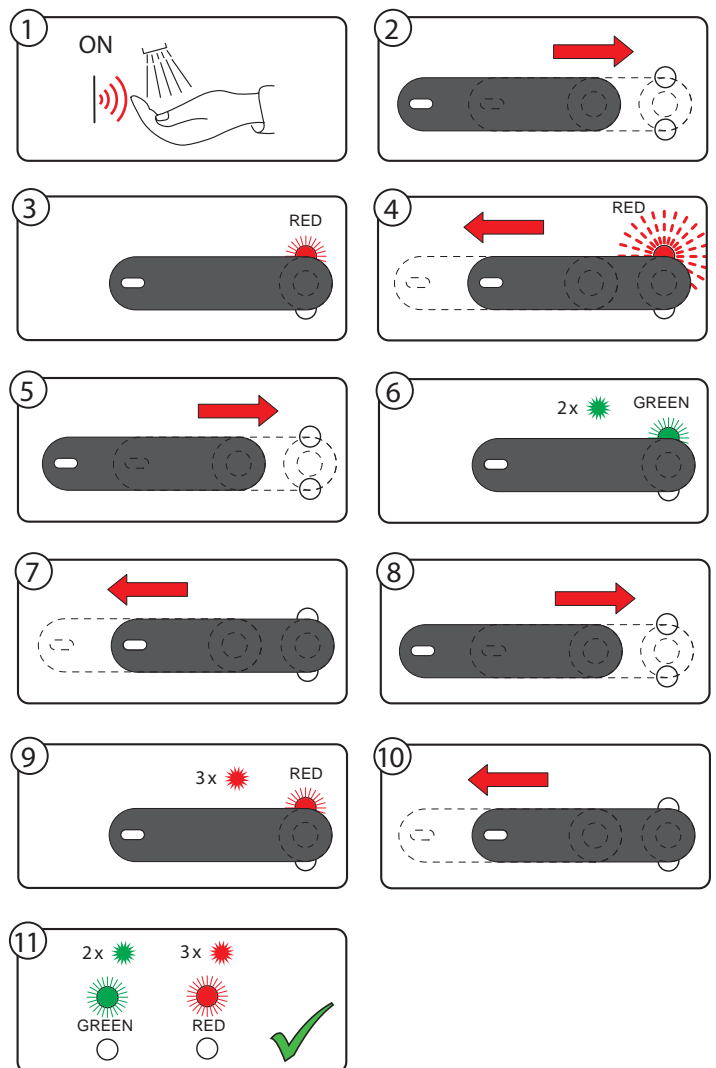
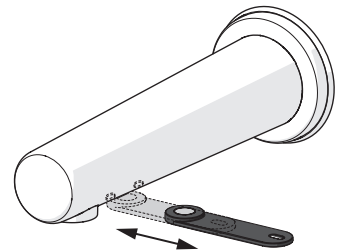
changing the sensor program

Sensor program setting can be changed using the Magnetic Key, for the following options:

- Sensor Recognition Range: ~ 100/ 150/ 170/ 200mm (Factory set ~ 150mm)
- Intelligent Afterflow Period: 1/ 2/ 3/ 4 /8 sec ± 1 sec (Factory set 3 sec ± 1 sec)
- Maximum continuous flow period per activation: 10/ 30/ 60/ 120/ 300 sec (Factory set 120 sec)
- Automatic flush after last activation: Off/ 12/ 24/ 48/ 72 hours (Factory set - Off)
- Automatic flush run time: 10/ 30/ 60/ 120/ 180/ 240/ 300/ 600 sec (factory set 30 sec)

SENSOR PROGRAM SETTING PROCEDURE
















1. Turn tap on by activating the sensor.
2. While the tap is on, place Magnetic Key in between the sensor lenses, with the magnet side up so that it touches the chrome spout.
3. Red Light turns on in the sensor lens. Keep the Magnetic Key there for 5 seconds, until the red light starts to blink.
4. At this point, take the Magnetic Key away from sensor. The red light will turn off. Sensor has now entered Programming Mode.
5. After a few seconds, place Magnetic Key on the sensor again.
6. This time, a green light turns on and off repeatedly.
7. Keep the Magnetic Key on the sensor and wait, until the green light turns on and off the desired number of times according to the desired program, then move the key away. (e.g. 2 blinks = green program 2 on the table)
8. Wait for a few seconds, then place Magnetic Key on the sensor again. This time, red light turns on and off repeatedly.
9. Keep the Magnetic Key on the sensor and wait, until the red light turns on and off the desired number of times according to the desired program. (e.g. 3 blinks = red program 3 on the table)
10. Then move the key away.
11. To confirm that the new program has been set, the sensor will blink back to you the number of green light and red light of the new program setting. The tap has successfully finished programming.



Note:

- If tap is not activated first, the sensor will not enter Programming Mode.
- Both green and red programs need to be entered, otherwise the sensor will not re-program.
- If the programming is not successful, or if there is no activity for more than 5 seconds after entering Programming Mode, the sensor will blink for 2 seconds and exits the Programming Mode.

SENSOR PROGRAM TABLE

		1 x 	2 x 	3 x 	4 x 	5 x 	6 x 	7 x 	8 x 
Factory settings	1 x 	x	-	-	-	-	-	-	-
Max. flow period	2 x 	10 sec	30 sec	60 sec	120 sec	300 sec	-	-	-
Automatic flush	3 x 	Off	12 h	24 h	48 h	72 h	-	-	-
Automatic flush period	4 x 	10 sec	30 sec	60 sec	120 sec	180 sec	240 sec	300 sec	600 sec
Cleaning mode	5 x 	15 sec	30 sec	60 sec	-	-	-	-	-
Intelligent afterflow period	6 x 	1 sec	2 sec	3 sec	4 sec	5 sec	6 sec	7 sec	8 sec
Recognition range	7 x 	~ 100mm	~ 150mm	~ 170mm	~ 200mm	-	-	-	-

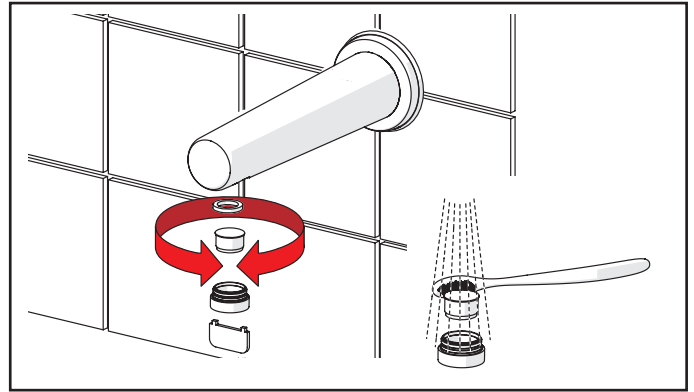


Red or Green LED can be seen reflecting off the back of a hand

maintenance

Aerator should be cleaned periodically as required.

Unscrew the aerator using aerator key, and rinse out the aerator. Replace the aerator if necessary. Screw the aerator back on using aerator key.

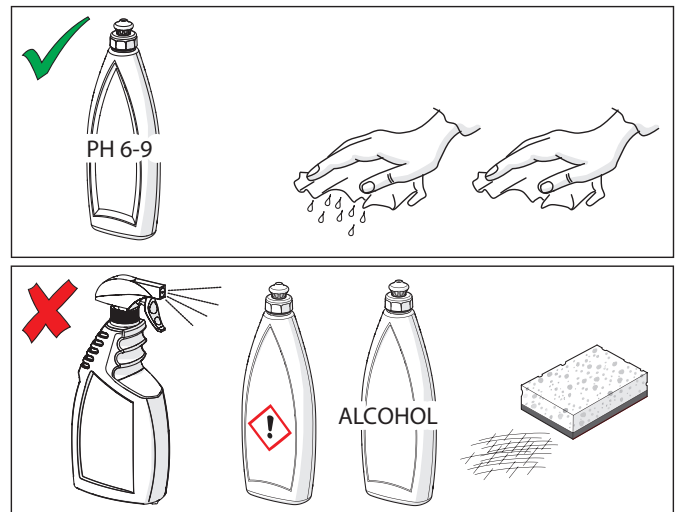


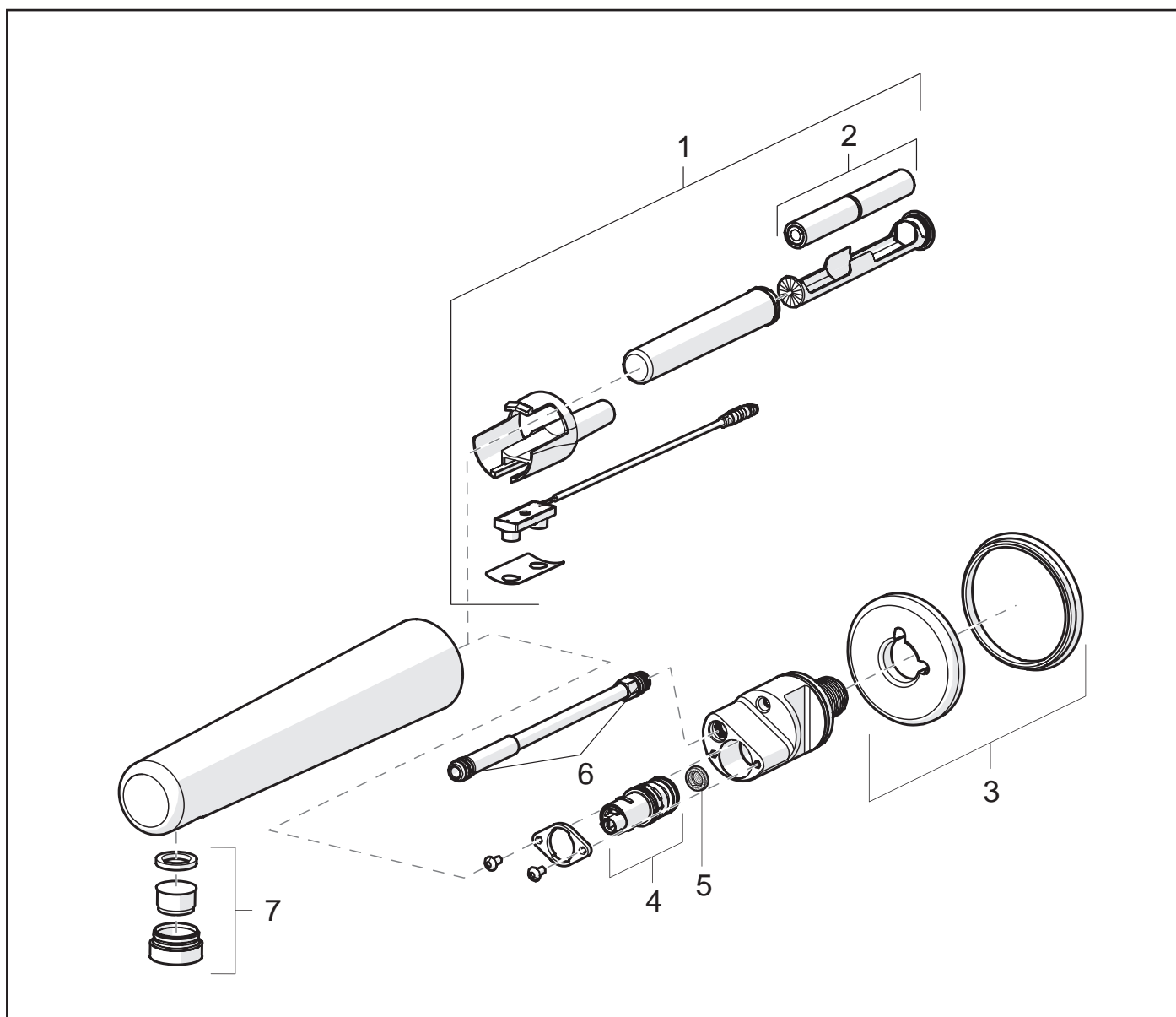
cleaning

Enware Product should be cleaned with a soft damp cloth using only mild liquid detergent or soap and water. Do not use cleaning agents containing a corrosive acid, scouring agent or solvent chemicals.

Do not use cream cleaners, as they are abrasive. Use of unsuitable cleaning agents may damage the surface. Any damage caused in this way will not be covered by warranty.

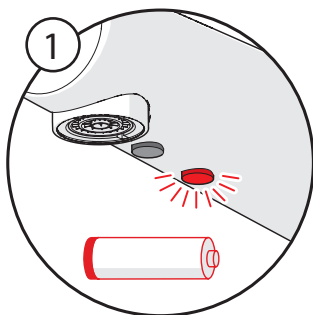
If re-greasing O-rings, always use a silicon based potable water approved lubricant such as Hydroseal 'O' Ring Lubricant or Molykote 111 silicone based grease.



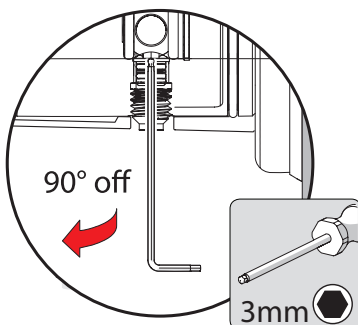
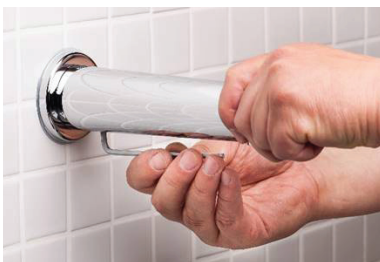


	DESCRIPTION	SALES CODE
1	Sensor kit 3V (Excludes batteries) - 602395V	ENMS253
2	AA 1.5V Lithium Battery x2	
3	Cover plate and colour indicator pack - 602399V	ENMS248
4	Solenoid valve 3V - 602388V	ENMS249
5	Mesh Strainer - 602396V	ENMS250
6	Inlet O-rings (10 in pack) - 158170/10	ENMS251
7	Aerator 6lpm and key - 198692	ENMS220
	Aerator key - Anti Vandal	672282

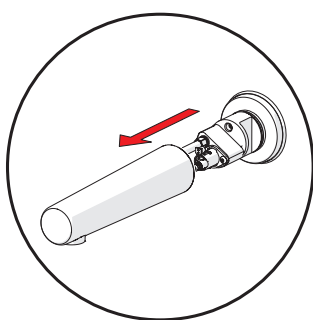
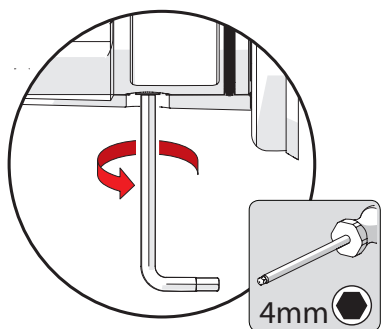
changing the battery



1. If the red light blinks repeatedly, it indicates the battery is running low, or has run out.



2. Turn water supply off, by turning isolation key 90 degrees with a 3mm Allen key, or turning off the main water supply to the tap.



3. Using a 4mm Allen key, turn the grub screw **clockwise** so that it screws into the base body. (Note: the grub screw does not come out.) This disengages the chrome spout from the base body. Slowly but firmly pull out the chrome spout.



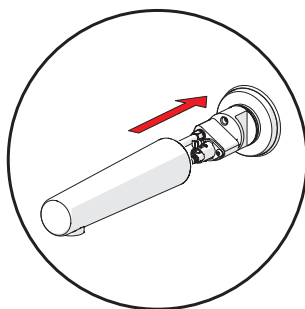
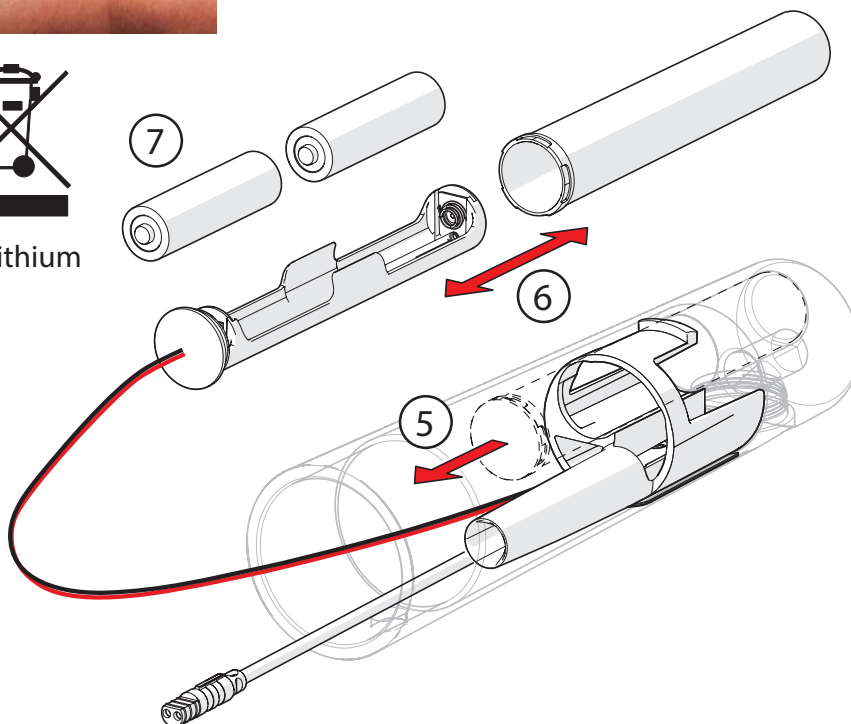
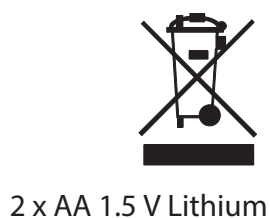
4. Disconnect sensor cable from solenoid.



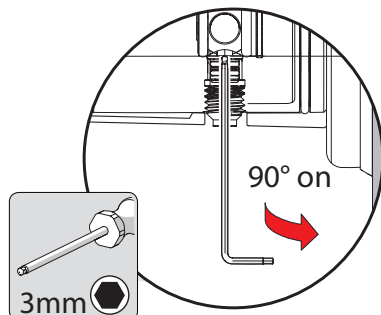
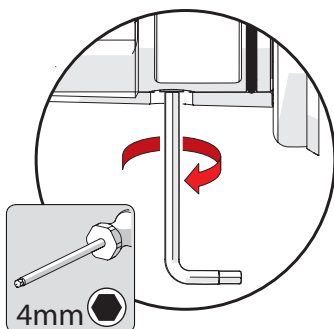
5. From within the chrome spout, pull out the battery casing



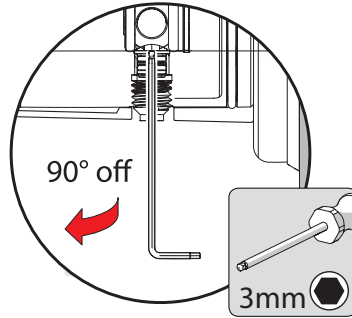
6. Pull out the cap from battery casing, and replace batteries with 2x AA 1.5V Lithium batteries



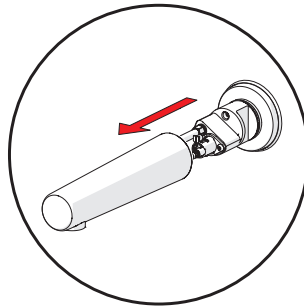
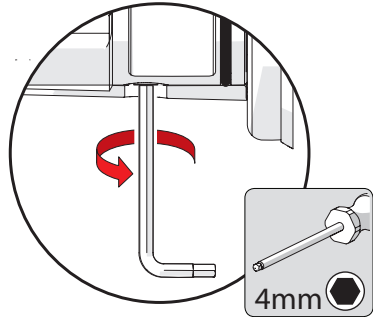
7. Close the battery casing and place back into the chrome spout.
 8. Install the chrome spout back onto base body.
- Follow Installation Instruction steps 11 to 14, on pages 9 and 10.**



changing / cleaning the solenoid valve or mesh filter



1. Turn water supply off, by turning isolation key 90 degrees with a 3mm Allen key, or turning off the main water supply to the tap.



2. Using a 4mm Allen key, turn the grub screw **clockwise** so that it screws into the base body. (Note: the grub screw does not come out.) This disengages the chrome spout from the base body. Slowly but firmly pull out the chrome spout.

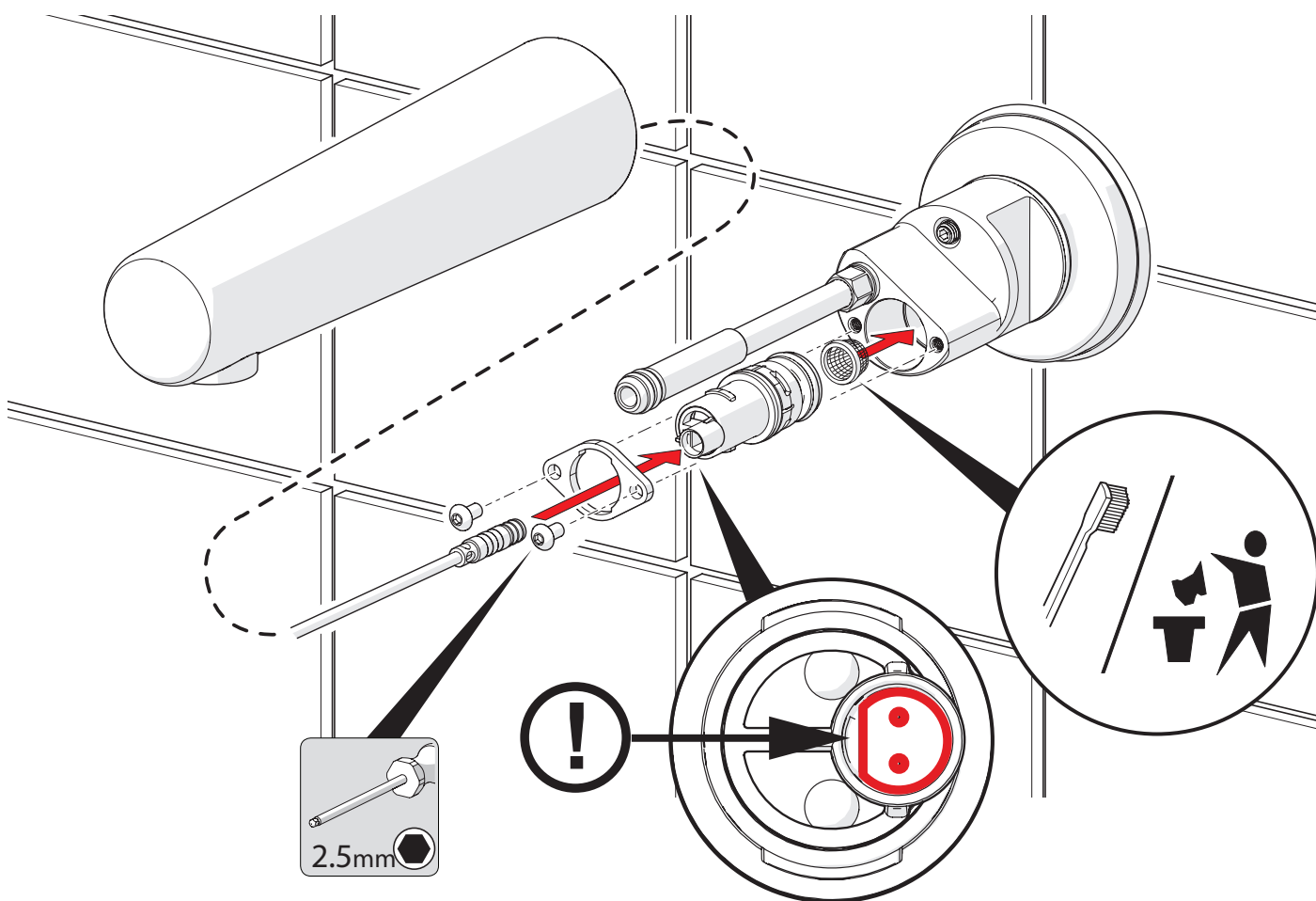


3. Disconnect sensor cable from solenoid, and keep the chrome spout aside.
4. On the brass base body, use a 2.5mm Allen key to unwind two screws holding the solenoid lock plate.
5. Pull out the solenoid from brass body. Mesh strainer is located on the bottom of solenoid.
6. To clean the mesh strainer, take off strainer from the bottom of solenoid using a small, sharp tool. Rinse the strainer and place back onto the solenoid. Replace the solenoid or the strainer with a new one if necessary.



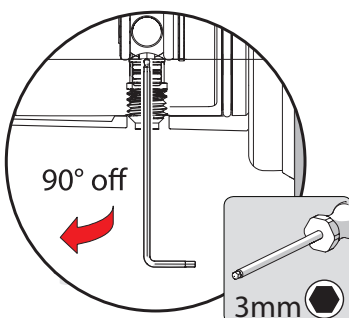


7. Install the solenoid back onto brass base body. Take note of the direction so that the flat face of the connector is facing the left. (Solenoid lock plate can be used as a tool to turn the solenoid valve.)
8. Install the solenoid lock plate back on.

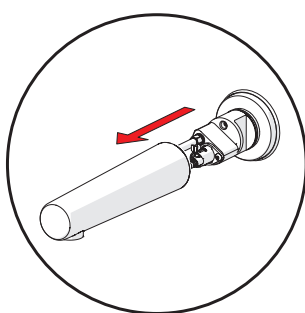
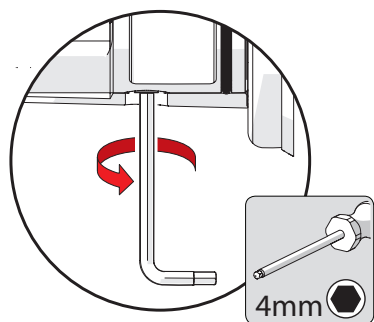


9. Install the chrome spout back onto base body.
Follow Installation Instruction steps 11 to 14, on pages 9 and 10.

changing the sensor



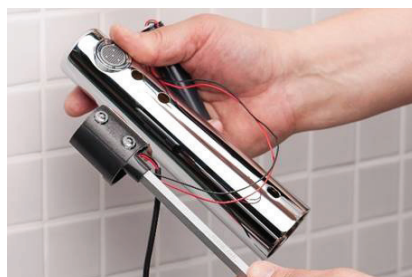
1. Turn water supply off, by turning isolation key 90 degrees with a 3mm Allen key, or turning off the main water supply to the tap.



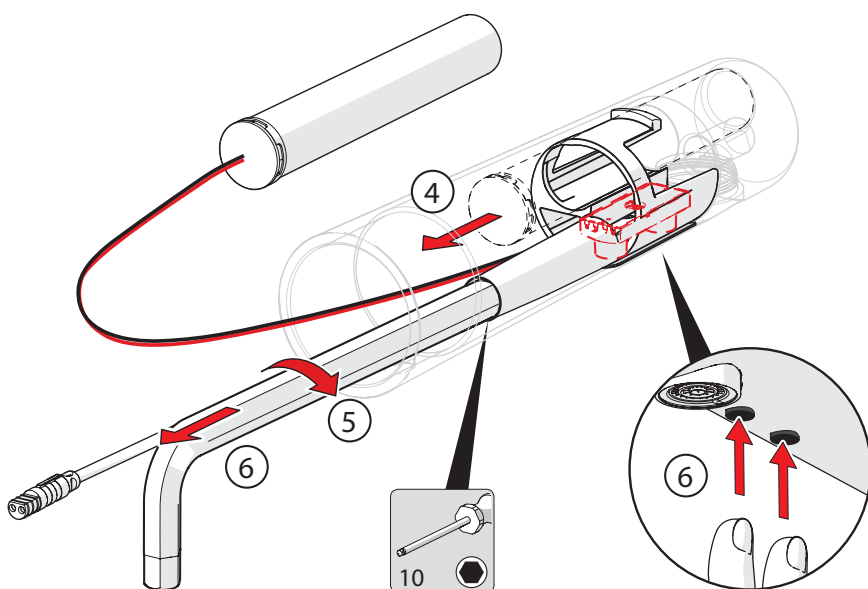
2. Using a 4mm Allen key, turn the grub screw **clockwise** so that it screws into the base body. (Note: the grub screw does not come out.) This disengages the chrome spout from the base body. Slowly but firmly pull out the chrome spout.

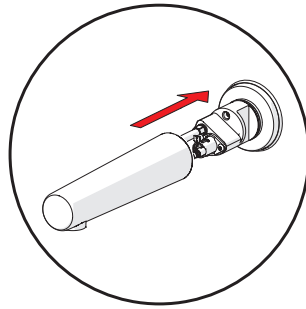
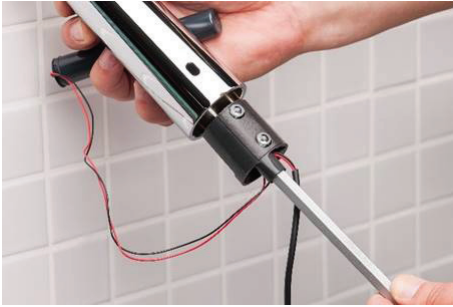


3. Disconnect sensor cable from solenoid.
4. From within the chrome spout, pull out the battery casing.



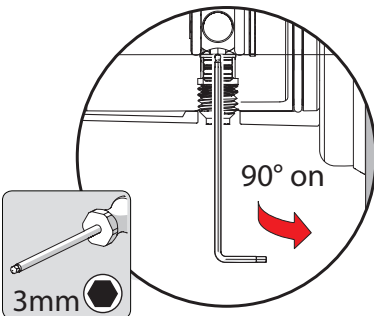
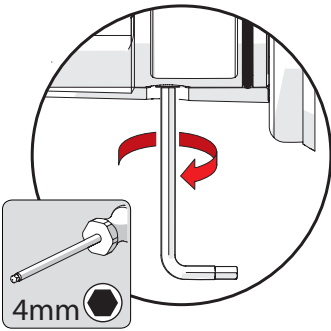
5. Insert a 10mm Allen key into the sensor housing. Push the sensor lenses in from the outside of chrome spout, and at the same time, twist the sensor housing to release the sensor from chrome spout. Pull the sensor housing out of the chrome spout.





6. Replace the sensor with a new one.
7. Place the sensor housing back into the chrome spout. Take care not to scratch the sensor lenses against the brass surface of the spout.
8. Place battery casing back into the chrome spout. Arrange the wires away from the water inlet connection so that they will not be in the way when putting the spout back onto the brass base.
9. Install the chrome spout back onto base body.

Follow Installation Instruction steps 11 to 14, on pages 9 and 10.



troubleshooting

FAULT/SYMPTOM	CAUSE	RECTIFICATION
Leaking or dripping water from outlet	Solenoid has debris caught in the mechanism	Remove solenoid and inspect solenoid for debris. Remove debris and/or replace solenoid if damaged.
	Supply water pressure is too high	Check water pressure and install a pressure reduction valve if greater than 500 kPa.
	Solenoid valve is damaged	Replace Solenoid valve.
No water flow from tap	Water supply turned off at the main, or at the isolation valve on the tap	Turn water supply on.
	Battery has run out	Replace batteries.
	Electronic component failure – solenoid valve, sensor, or battery	Replace batteries, then check that the red light turns on in the sensor lens when batteries are connected, or when Magnetic Key is placed as per the Programming instructions. If it does, the problem is likely to be with the solenoid. If not, sensor may be faulty. Replace components as required.
Water is leaking from base of tap body	Solenoid valve is damaged or o-rings are worn	Remove solenoid and inspect. Replace solenoid if damaged.
	Chrome spout is not fully engaged onto brass base body	Ensure internal components are aligned and that chrome spout is fully engaged into base body, being careful not to pinch any electronic cables. Ensure grub screw can be turned one and a half turns to lock the chrome spout in place. Follow installation instruction steps 11 - 17 on pages 9 - 10.
	Solenoid valve loose in body	Ensure solenoid valve is secure in tap body.
	Inlet connection o-rings are worn	Replace inlet o-rings.

Constant flow of water	Solenoid valve is damaged or solenoid has debris caught in the mechanism	Remove solenoid and inspect solenoid for debris. Remove debris and/or replace solenoid if damaged.
	Electronic component failure – solenoid valve/ sensor/ battery	Replace batteries, then check that the red light turns on in the sensor lens when batteries are connected, or when Magnetic Key is placed as per the Programming instructions. If it does, the problem is likely to be with the solenoid. If not, sensor may be faulty. Replace components as required.
	Battery has run out	Replace batteries.
	Sensor is constantly activated by an object in front of sensor	Remove interfering object out of sensor range, or reduce sensor recognition range.
Tap turns on randomly or erratically	Sensor beam interference by reflections off highly reflective surfaces	Remove interfering object. Adjust sensor range by reprogramming the sensor to a shorter distance.
	Incompatible lighting or electrical interference in the environment	Remove interference. Adjust sensor range by reprogramming the sensor to a shorter distance.
Battery only lasts a few weeks or days	Sensor has been permanently damaged	Replace sensor and battery. (A new battery typically lasts between 2 to 5 years, depending on frequency of use).
Sensor red light constantly blinks	Battery is low, or has run out	Replace batteries.
Water stops slowly – long after flow period greater 1 second if hands have been in sensor range for longer than 5 seconds	Solenoid has debris caught in the mechanism	Remove solenoid and inspect solenoid for debris. Remove debris and/or replace solenoid if damaged.
Low flow from tap	Debris caught in flow path	Remove aerator, solenoid and mesh strainers, then inspect and clean pathway.

For further assistance, contact the Enware Service Team on 1300 369 273.

Enware Australia Pty Limited (ACN 003 988 314) ("we" or "us") warrants that this product (also referred to as "our goods") will be free from all defects in materials and workmanship for 3 Years* from the date of purchase. Our liability under this warranty is limited at our option to the repair or replacement of the defective product or part, the cost of repair of the defective product or part or the supply of an equivalent product or part, in each case if we are satisfied the loss or damage was due to a defect in the materials or workmanship of the product or part. All products must be installed in accordance with the manufacturer's instructions, the PCA, and AS/NZS3500 including any other applicable regulatory requirements.

making a claim

To make a claim under this warranty you must notify us in writing within 7 days of any alleged defect in the product coming to your attention and provide us with proof of your purchase of the product and completed the Online Product Service and Warranty Form available on website www.enware.com.au.

All notifications and accompanying forms must be sent to us marked for the attention of the Enware Australia Pty Limited, 9 Endeavour Road, Caringbah NSW 2229. We can also be contacted by telephone (1300 369 273) or by email (info@enware.com.au).

Your costs in making a claim under this warranty, including all freight, collection and delivery costs, are to be borne and paid by you. We also reserve the right at our cost to inspect any alleged defect in the product wherever it is located or installed or on our premises.

*3 Years conditional warranty: 2 years Oras parts and labour warranty from the date of purchase. After 2 years an additional 1 year Enware replacement part warranty is applicable to the electronics and sensor only. This extended parts only warranty is applicable to Oras Electronics products purchased within Australia.

exceptions

This warranty does not apply in respect of any damage or loss due to or arising from:

- a) Failure by you or any other person to follow any instructions for use (including instructions and directions relating to the handling, storage, installation, fitting, connection, adjustment or repair of the product) published or provided by us;
- b) Failure by you or any other person responsible for the fitting, installation or other work on the product to follow or conform to applicable laws, standards and codes (including the AS/NZ 3500 set of Standards, all applicable State and Territory Plumbing Codes, the Plumbing Code of Australia and directions and requirements of local and other statutory authorities); or
- c) Any act or circumstance beyond our control including faulty installation or connection, accident, abnormal use, acts of God, damage to buildings, other structures or infrastructure and loss or damage during product transit or transportation.

other conditions

Except as provided or referred to in this document, we accept no other or further liability for any damages or loss (including indirect, consequential or economic loss) and whether arising in contract, tort or otherwise. Any benefits available to you under this warranty are in addition to any non-excludable rights or remedies you may have under applicable legislation, including as a "consumer" under the Australian Consumer Law. To that extent you need to be aware that: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



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