ENWARE-ORAS ELECTRA INTEGRATED WALL SENSOR SPOUT
Installation and Maintenance Instructions
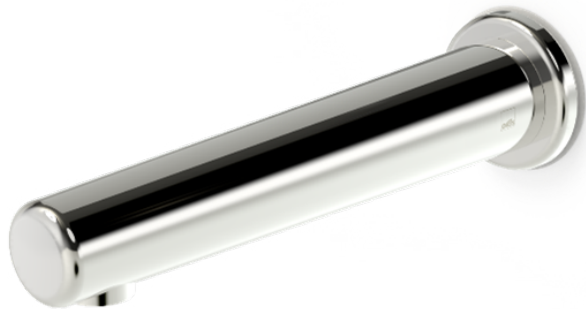
ENM6186

Integrated Wall Sensor Tap
Battery Operated with 185mm Spout

ENM6187

Integrated Wall Sensor Tap
Battery Operated with 235mm Spout

≋ENWARE

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 ^
Intelligent Afterflow Period	3 seconds ± 1 second ^
Maximum Continuous Flow Period	120 seconds ^
Automatic Flush	OFF ^
Protection Class	IP55
Power Supply	Lithium Battery AA 1.5V x 2

^ Settings are factory default, adjustable via Bluetooth access to sensor program

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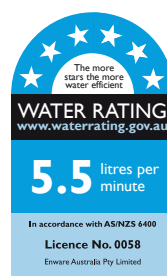
Thermostatic Mixing Valves and Pressure Reduction Valves may be required to comply with maximum temperature and pressure requirements.

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.
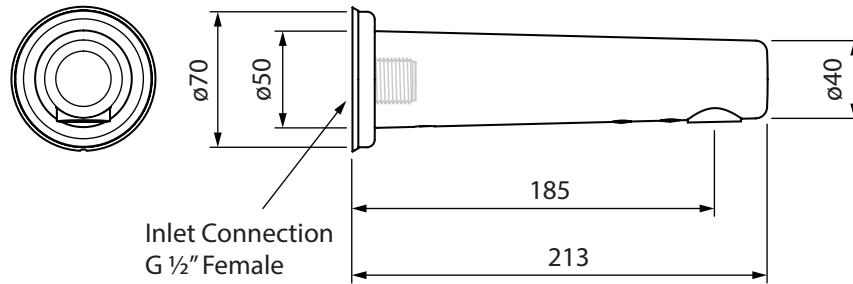
WaterMark
AS/NZS3718
WM 40054

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

WATER RATING
www.waterrating.gov.au
The more stars the more water efficient
5.5 litres per minute
In accordance with AS/NZS 6400
Licence No. 0058
Enware Australia Pty Limited

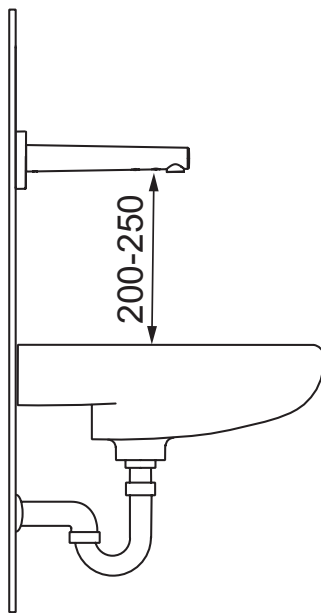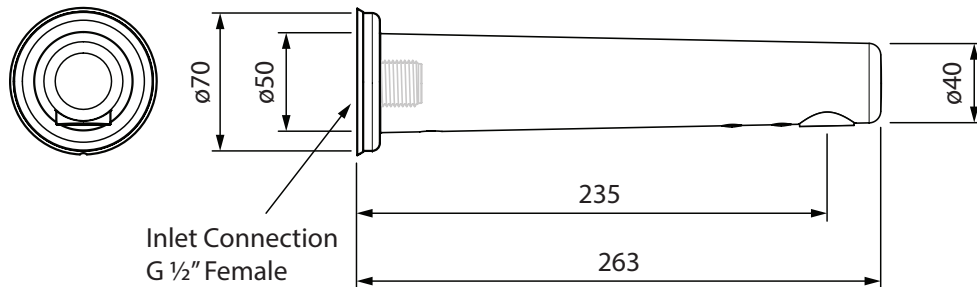Enware-Oras Electra Tapware is supplied with WELS 6 Star 5.5lpm Water Efficiency Rating as standard.

dimensions

ENM6186

Ø70 Ø50 Ø40

185

213

Inlet Connection
G ½" Female

ENM6187

Ø70 Ø50 Ø40

235

263

Inlet Connection
G ½" Female

200-250

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
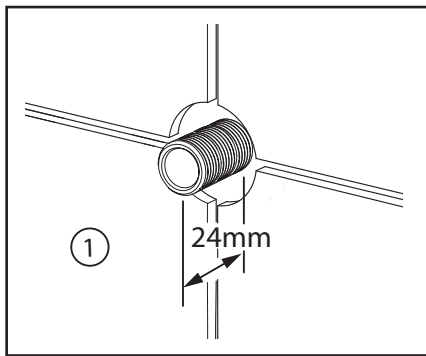
1. Prepare 1/2" BSP male thread connection for inlet. Allow for 24mm of thread protruding from finished wall.

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.**

UNLOCK
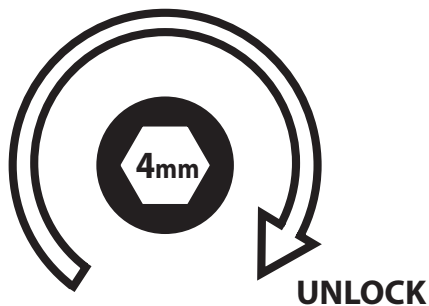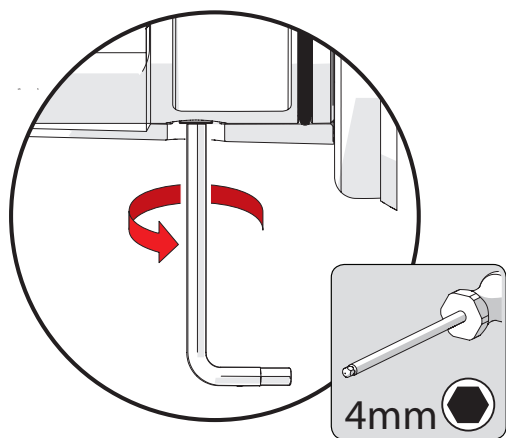
Then, loosely screw in a 1/2" thread fitting onto the female thread of the base, and by pulling on the fitting, pull out the base assembly.
Be careful not to pull too quickly: the sensor cable is still attached to the solenoid.
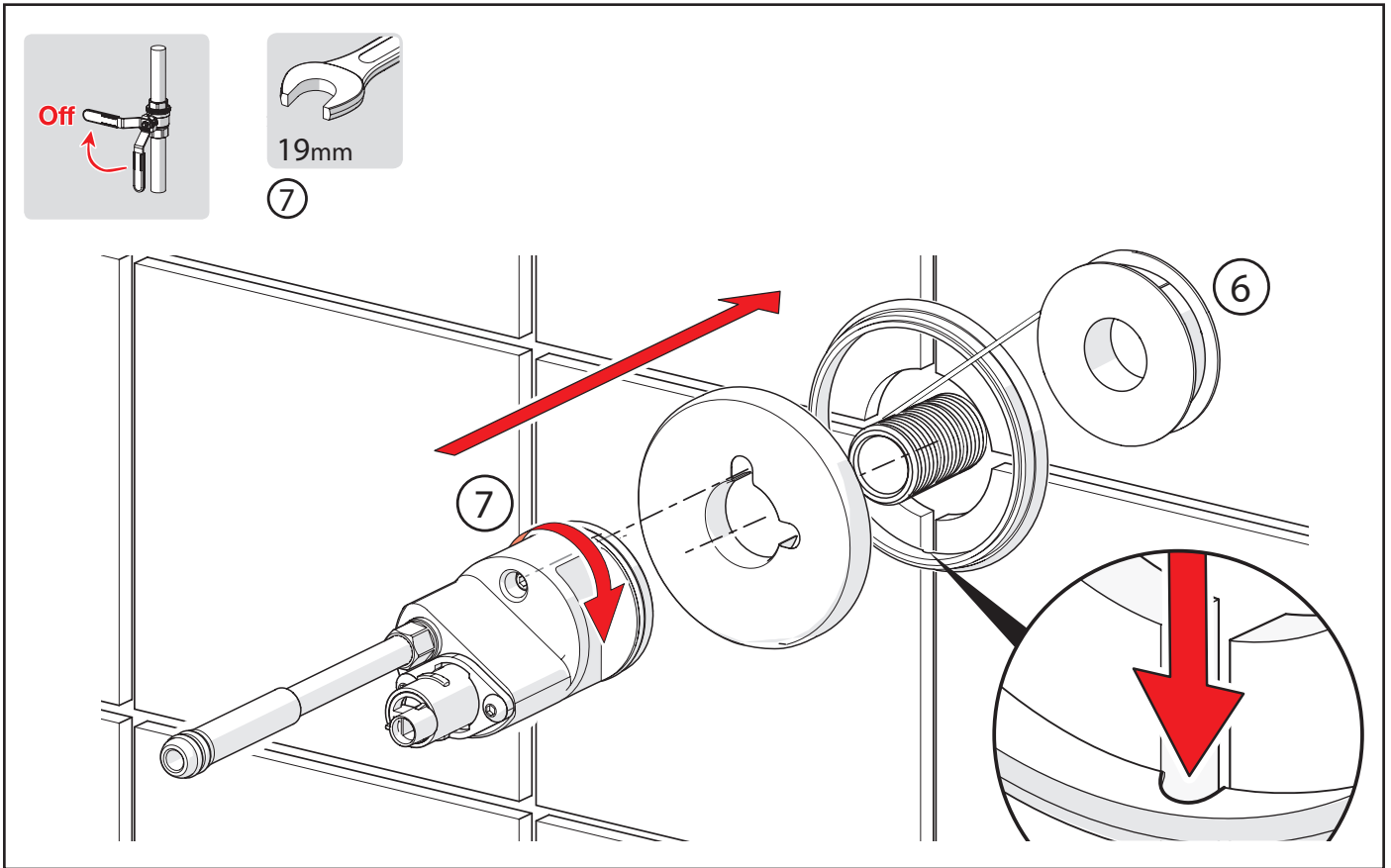
4. Disconnect sensor cable from solenoid.

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.
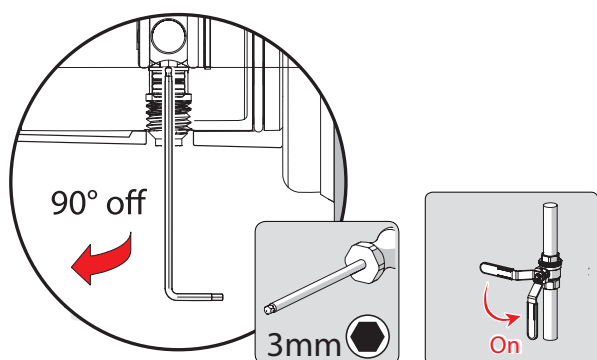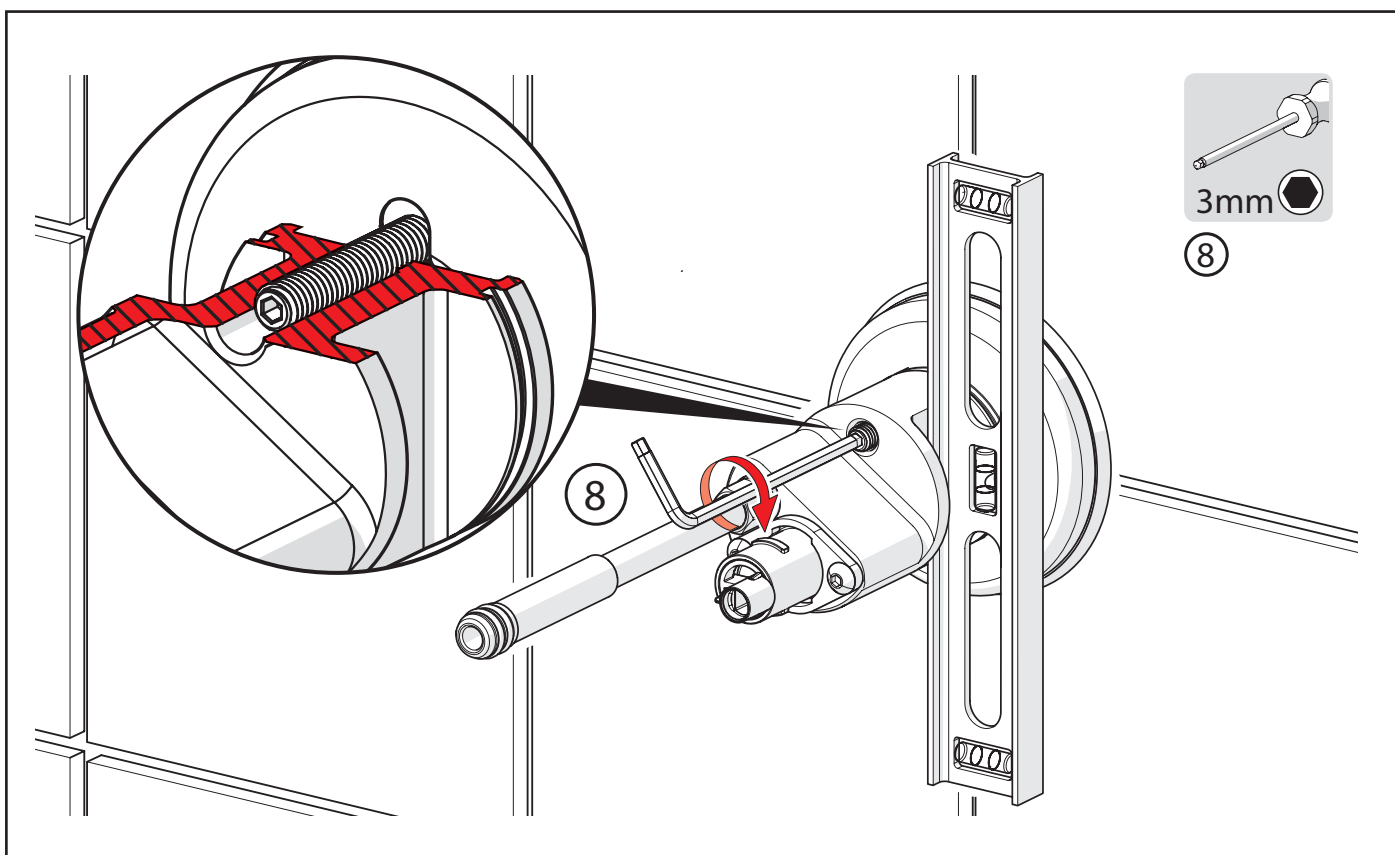

6. Apply thread sealant onto male thread on wall

7. Screw on the base assembly. Ensure the base sits straight up, as shown.

Off

19mm

⑦

⑦

⑥

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.


3mm ⬡

⑧

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.

90° off

3mm ⬡

On

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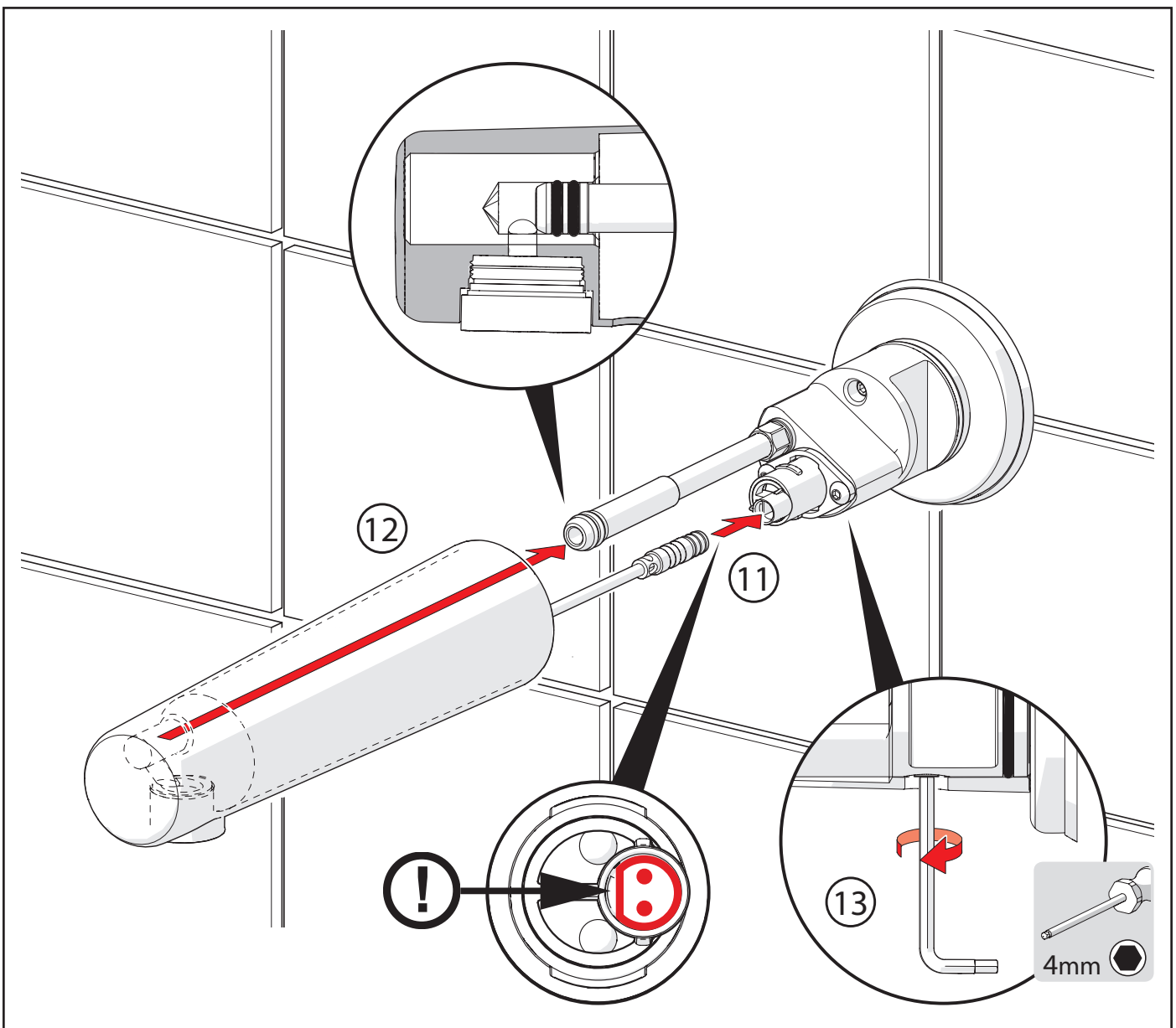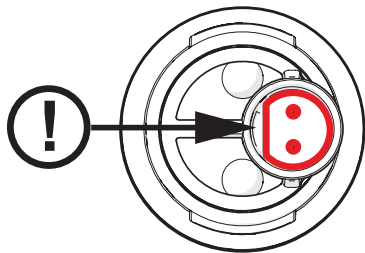
13. To lock the chrome spout in place, unwind the grub screw with a 4mm Allen key, gently turning anti-clockwise until it comes to a stop. Ensure spout is aligned in the centre and that you can turn the grub screw **one and a half turns.** If not, rotate the chrome spout slightly and align it with the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

90° on

3mm
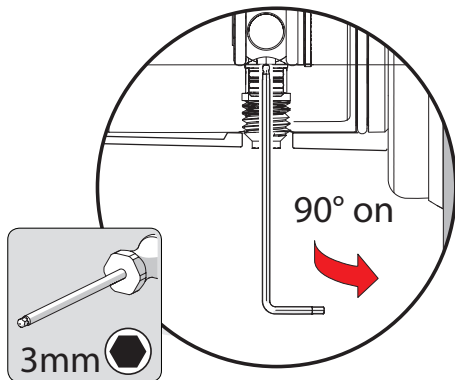
15. Peel off the black sticker covering the sensor lens.
16. Activate sensor to test operation of the sensor tap.
17. The tap is now ready for use.

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 via access to the sensor program. Refer to "Sensor Program" instructions next page.

cleaning mode
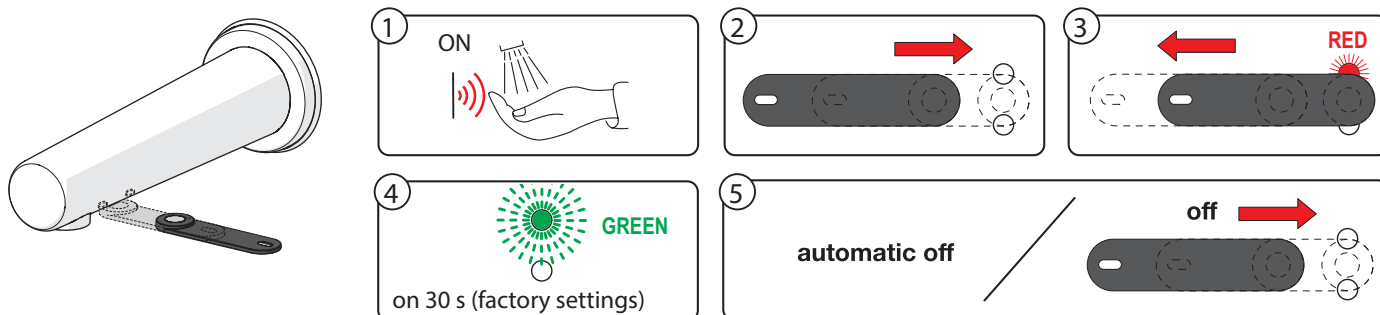
Cleaning mode disables sensor activation for 30 seconds^, during which time cleaning can be carried out without unexpectedly turning the tap on. It is a handy way to deactivate the sensor for a short time, besides turning water off at the isolation or covering the sensor lenses. Cleaning mode can be activated using Magnetic Key (sold separately), or via Bluetooth access to the sensor.

To activate cleaning mode using Magnetic Key:

Activate the sensor, then place the Magnetic Key (sold separately - *ENMS260*) 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.

^ Duration of cleaning mode can be changed to a longer time setting. Refer to "Sensor Program" instructions next page.

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

sensor program

The sensor has a built-in program that can be accessed using the Oras App on a mobile device, to monitor or adjust the sensor program. (Available on sensors with Bluetooth® connectivity.)

Through the Oras App, you can:

- Identify the Bluetooth® sensors in the vicinity
- Access all important product information and adjust current settings with secure password access
- Set periodic automatic flushing to avoid water becoming stagnant
- Turn the tap on or off remotely
- Turn the tap off for a set time, for cleaning
- Report the product information and settings made directly to your email
- Keep track of the remaining battery life
- Monitor water consumption

HOW TO USE THE ORAS APP

1. Download the Oras App from the App Store in an iOS device, or from the Google Play store in an Android device.
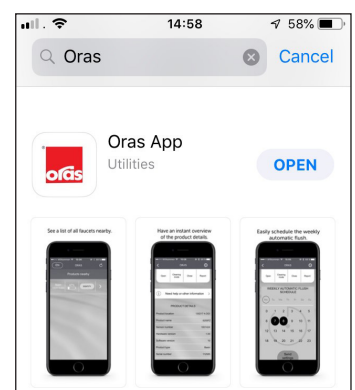
2. Turn on the Bluetooth® wireless connection in your smart phone or tablet settings.

3. Open the Oras App. All Bluetooth® compatible tap sensors in the vicinity will be listed automatically.
(If the product is not listed, check that the sensor tap has power turned on or the battery plugged in.)

4. Select the desired sensor and access the settings through your phone or tablet device.
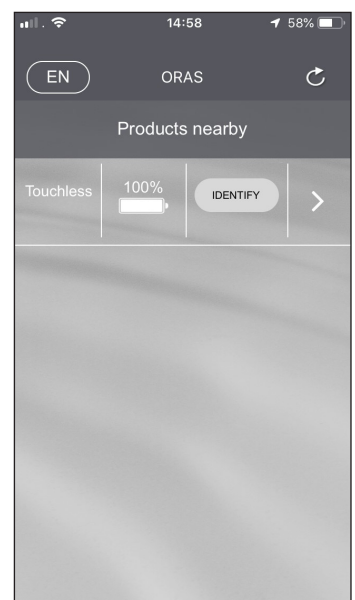
The Bluetooth® trademark and logos are property of Bluetooth SIG, Inc., and their usage is licensed for Orasgroup. Other brands and trade names are property of the respective owners. Apple, the Apple logo, iPhone, iPad, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. Google Play and the Google Play logo are trademarks of Google Inc.

The first page shows details about the sensor.

For explanation on the information listed, see the explanation page (press the (i) button on the App).

To access Command Buttons and Sensor Program Settings, contact Enware Technical Services on **1300 369 273**, or email **oraspassword@enware.com.au**, for access password.

COMMAND BUTTONS

Use the command buttons to open or close the tap using the App, or activate Cleaning Mode (turns off the sensor for a set period of time to allow for cleaning, indicated by green pulsing light indicator on sensor). Report function sends the sensor information to your email.

HOW TO CHANGE THE SENSOR PROGRAM SETTINGS

1. To access the sensor function program, press the settings button .

2. Enter the password. (Contact Enware for default password, or your selected password if already registered).

3. Change the settings as desired.
   Once the settings are set in the App, send the settings to the sensor tap. (Press the "Send settings to product" button.)

4. Activate the sensor tap several times for the new settings to come into effect.

For explanation on the program settings listed, see the explanation page (press the (i) button on the App), or refer to next page.
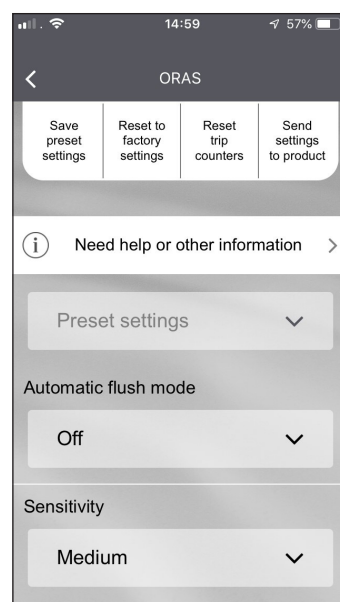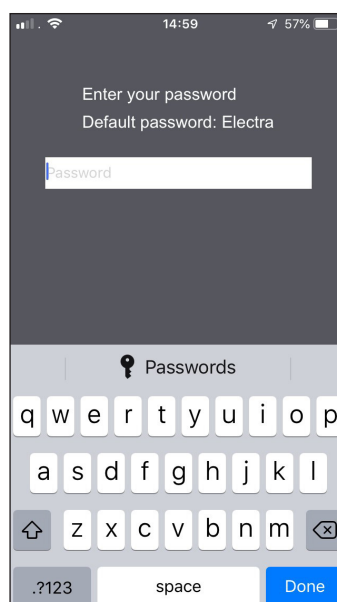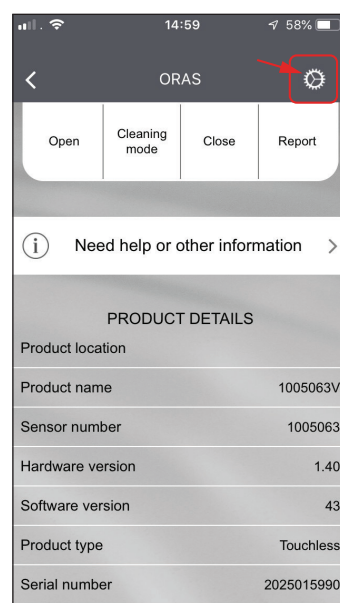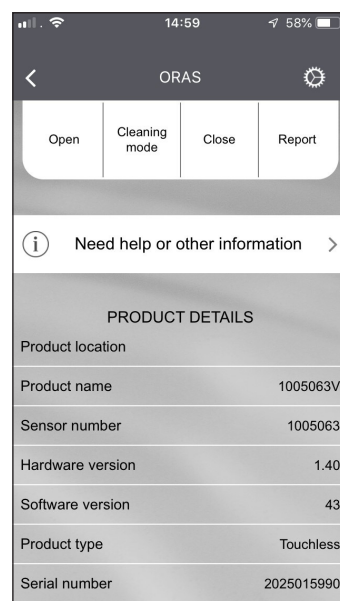
sensor program settings

Automatic Flush Mode:
Can set the tap to turn on by itself periodically to flush the water in the line, to prevent the water becoming stagnant. [Set the flush duration (s) and interval (hrs or weekly schedule). Default setting is OFF.]

Sensitivity:
Reduce the sensitivity (Low) if bright lighting or environmental disturbance is affecting sensor function. Increase the senstivity (High) if sensor is not detecting the user well. [Set to High, Medium or Low.]

Max IR power:
Reduce the maximum power of sensor if sensor malfunctions due to the sensor picking up the basin bowl or objects at a far distance. [Settings 0=20%, 1=40%, 2=60%, 3=80%, 4= 100%]

Max Flow Time:
Set the maximum length of time the water can run for per activation while the user is in the sensor range. If the water runs for longer than this time, the sensor goes to Vandalism state and turns off. It will stay closed until the object in the sensor range is removed, and the sensor will return to normal mode.
[Set the time from 2 to 1800 seconds.]

Manual Flush Time:
Set the maximum length of time the water can run for per activation when activated by the App using a mobile device. [Set the time from 1 to 1800 seconds.]

Cleaning Mode Time:
Set the length of time the tap will be turned off for Cleaning Mode (activated by the App using a mobile device, or by Magnetic Key). [Set the time from 2 to 1800 seconds.]

After Flow Time:
Set the length of time the tap runs for after user moves hand away from sensor range.
[Set from 1 to 20 seconds.]

Intelligent After Flow Mode:
Turn on to allow the sensor to control and vary the After Flow Time down to 1 sec depending on how long the user is inside the sensor range. (In addition to normal After Flow mode)

Open Distance (Sensor Range):
Set the sensor detection range. [Settings: Short - reduces the sensor range distance by -20%; Optimal - factory setting; Long - increases sensor range distance by +20%.]

Operation Mode:

- **Automatic (Auto Sense)** - Tap turns on and stays on as long as the user is within sensor range, up to the max flow time. Turns off when the user is out of sensor range.

- **Hand shower** - Short swing activates hand shower mode. The waterflow stops after the max flow time or when a hand is again in the sensor range. If a hand is in the range longer than 1s, it activates the Automatic mode.

- **Manual ON/ AUTO OFF** - If hand is within sensor range for longer than Activation Delay Time, the tap turns on and runs for the fixed duration of the maximum flow time without interruption. Set the Activation delay time from 1 to 20 seconds.

- **ON/OFF (On Demand Sensor)**: Hover hand in front of sensor to turn the tap on. Stops after max flow time, or if hand is again in the sensor range. (Not suitable if sensor is located below spout.)

Flow Rate For Consumption Calculation:
Set the flow rate of the tap outlet to monitor water consumption. [Set from 0.1 up to 40 l/min.]

Product Location:
Enter the name of your choice to identify the location of the tap.

Password:
Set the password of your choice to limit access to the settings by others (e.g. for public places).

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.
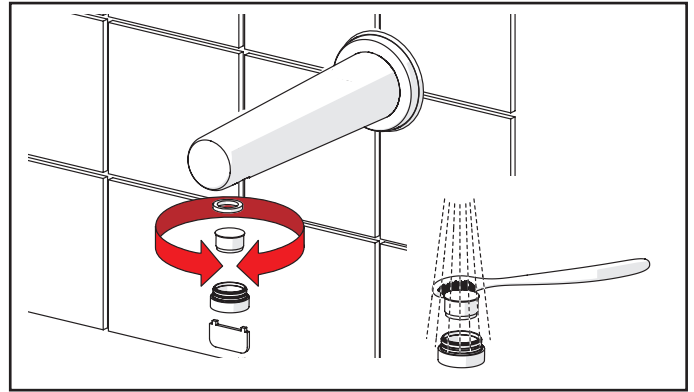

cleaning

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.
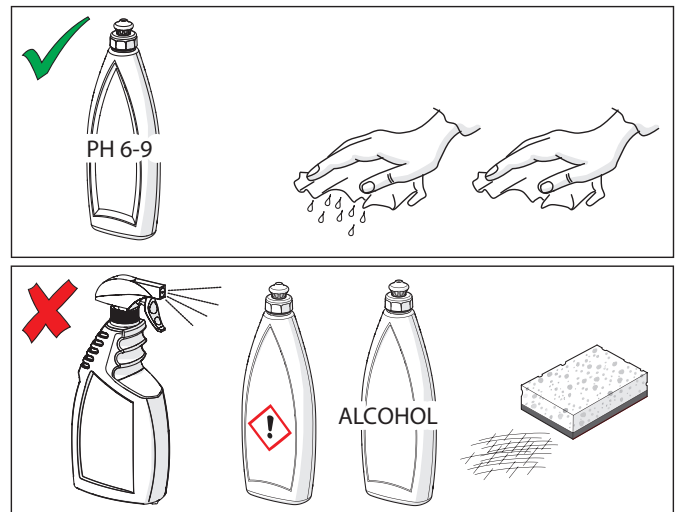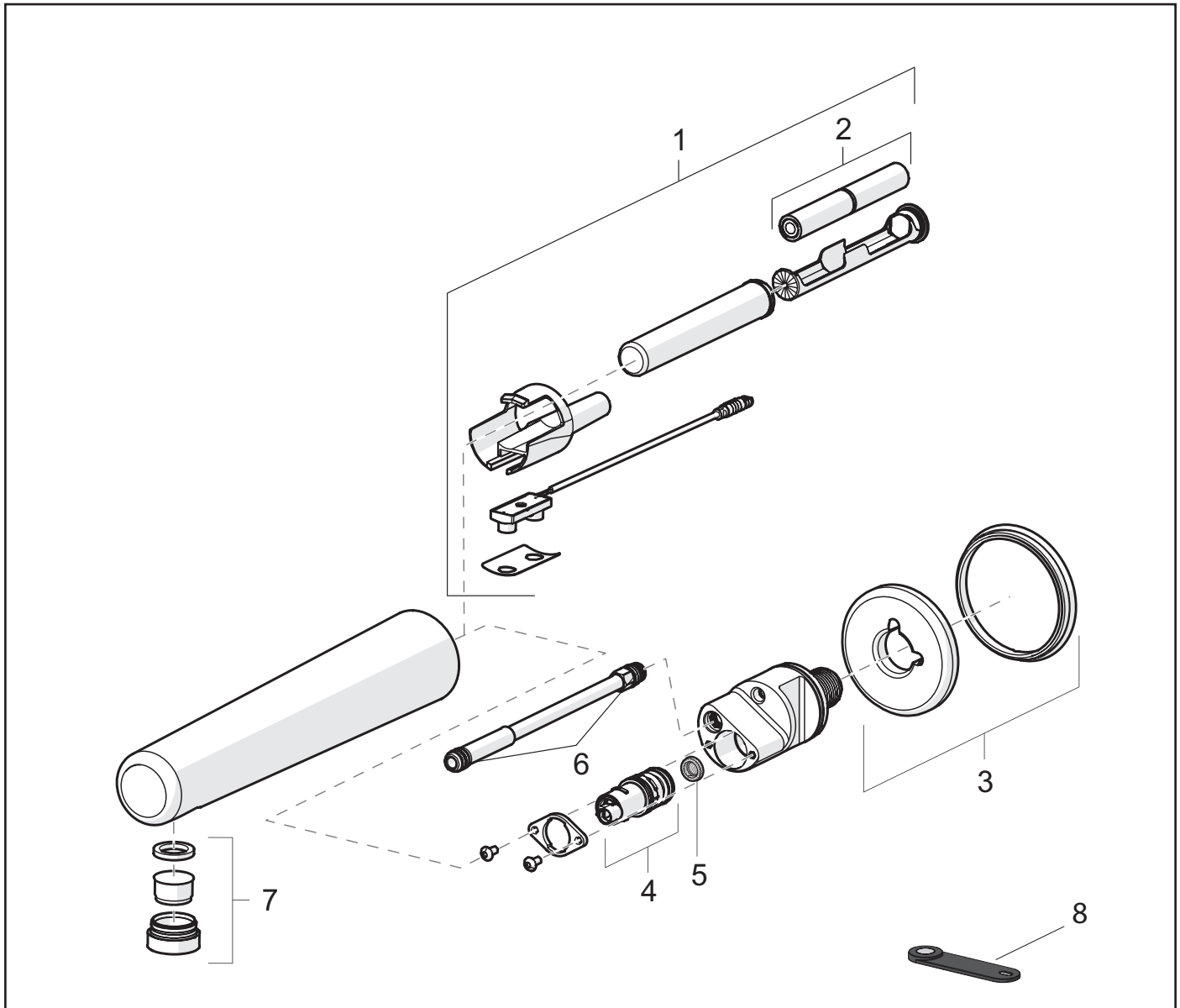
|	DESCRIPTION	SALES CODE
1	Sensor kit 3V (Excludes batteries) - 602395V	ENMS253
2	AA 1.5V Lithium Battery x2	
3	Cover plate and colour indicator pack - 602399V	ENMS248
4	Solenoid valve 3V - 602388V	ENMS249
5	Mesh Strainer - 602396V	ENMS250
6	Inlet O-rings (10 in pack) - 158170/10	ENMS251
7	Aerator 6lpm and key - 198692	ENMS220
	Aerator key - Anti Vandal	672282
8	Magnetic Key (for Cleaning Mode activation)	ENMS260

changing the battery
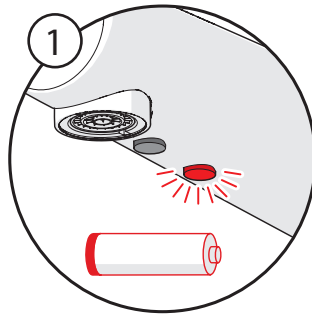
1. If the red light blinks repeatedly, it indicates the battery is running low, or has run out.
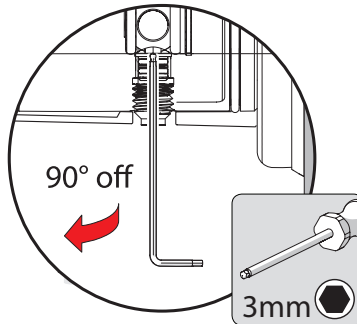
2. Turn water supply off, by turning isolation key 90 degrees with a 3mm Allen key, or turning off the main water supply to the tap.
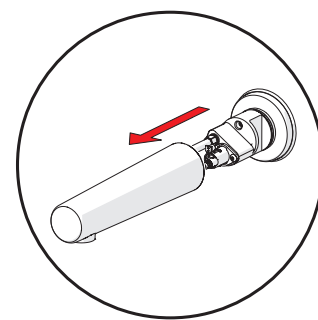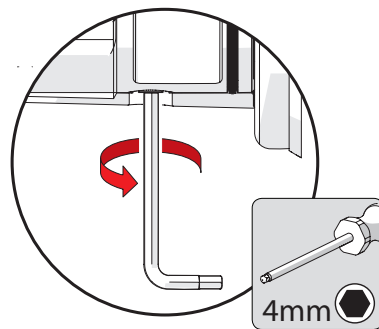
3. Using a 4mm Allen key, turn the grub screw **clockwise** so that it screws into the base body. (Note: the grub screw does not come out.) This disengages the chrome spout from the base body. Slowly but firmly pull out the chrome spout.
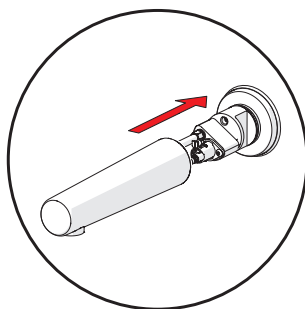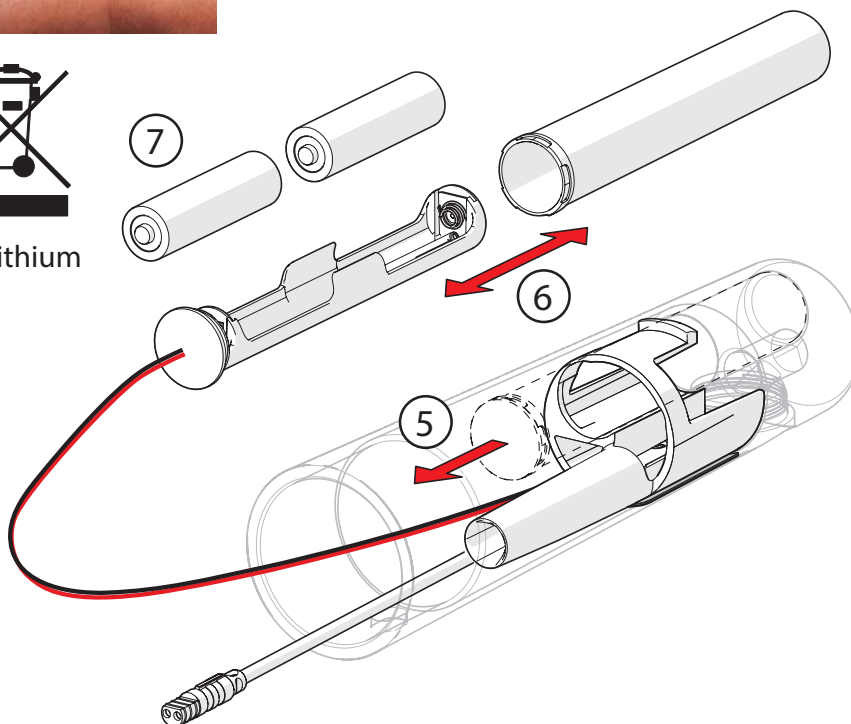

4. Disconnect sensor cable from solenoid.

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

2 x AA 1.5 V Lithium
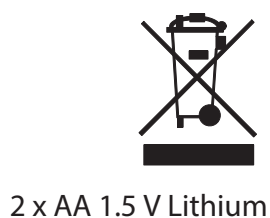
7. Close the battery casing and place back into the chrome spout.

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

4mm

3mm

90° on

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.
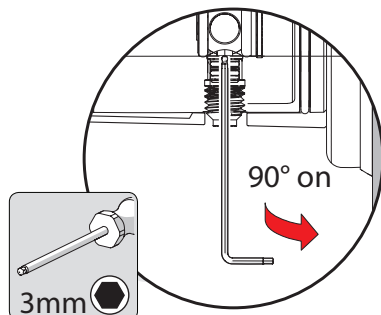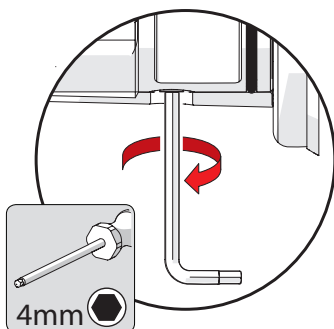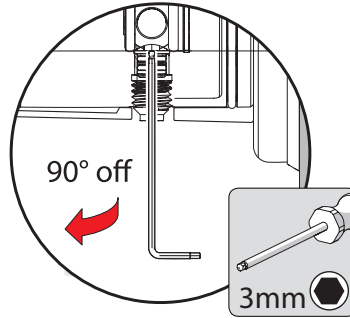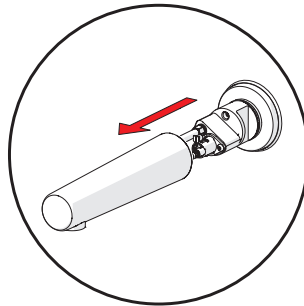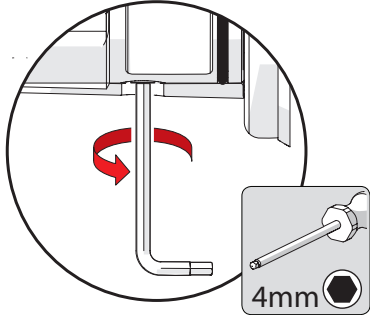

3. Disconnect sensor cable from solenoid, and keep the chrome spout aside.

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.

2.5mm

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.

90° off

3mm

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.
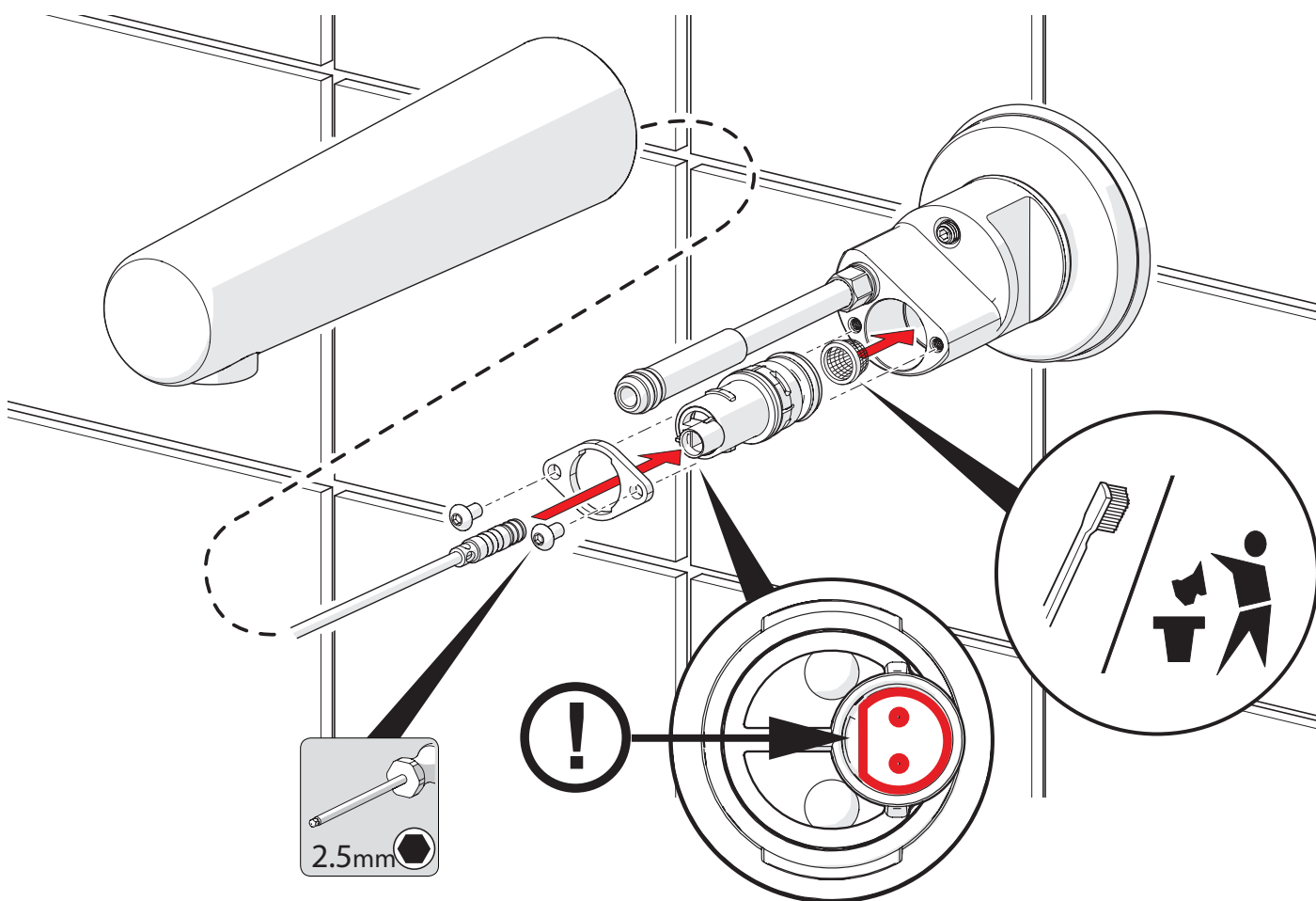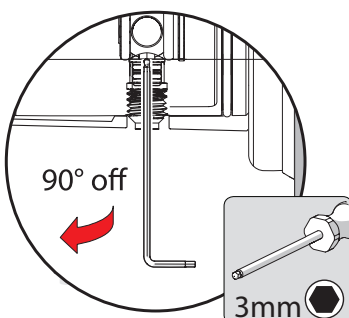
4mm

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.

10

4mm

90° on

3mm
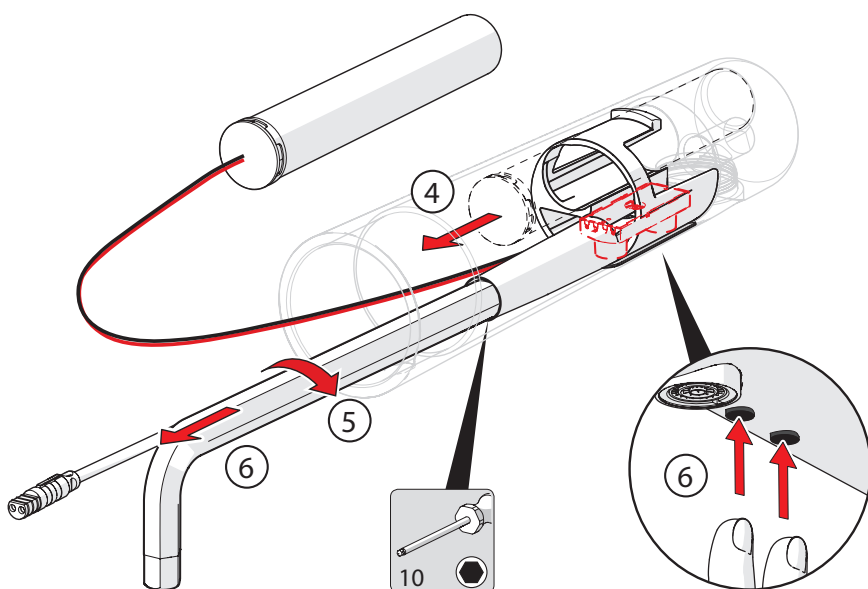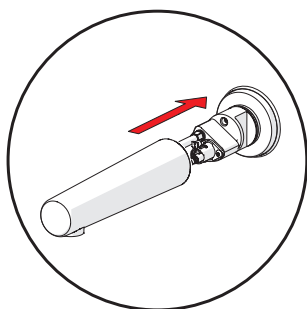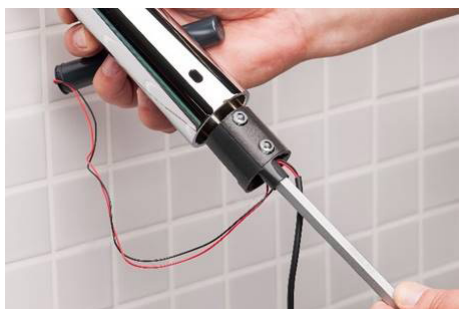
6. Replace the sensor with a new one.

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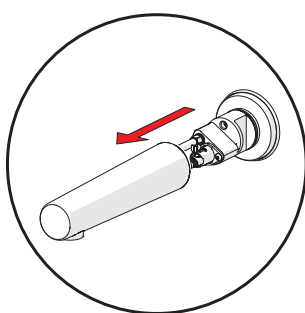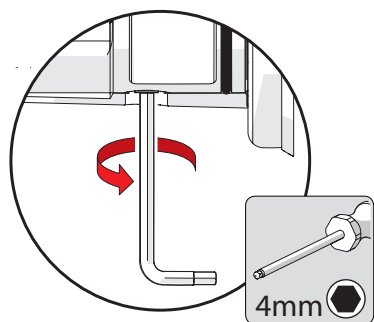
9. Install the chrome spout back onto base body.
    Follow Installation Instruction steps 11 to 14, on pages 9 and 10.
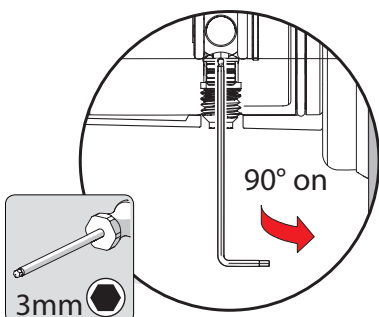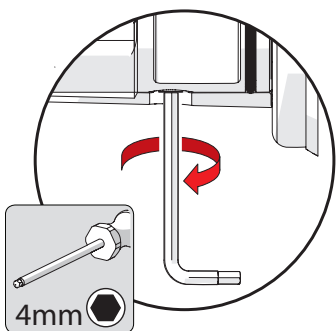
troubleshooting

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.

product warranty for Australia

Enware Australia ("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/warranty-service-form.

All notifications and accompanying forms must be sent to us marked for the attention of the Enware Australia, 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.