

# stern

STERN ENGINEERING LTD.



**TUBULAR**



**QUADRAT**

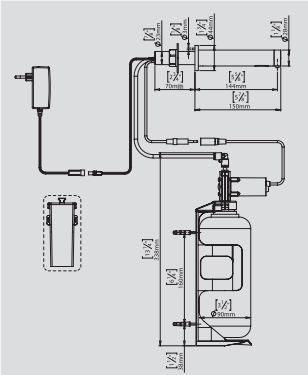
**TOUCH FREE WALL MOUNTED SOAP DISPENSERS**

INSTALLATION AND MAINTENANCE GUIDE

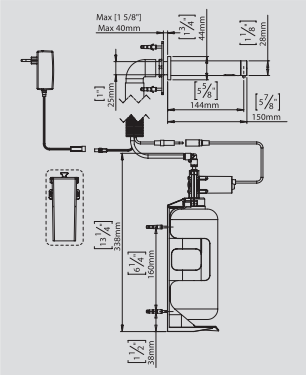
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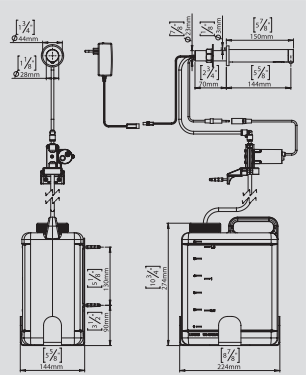
# TECHNICAL DATA



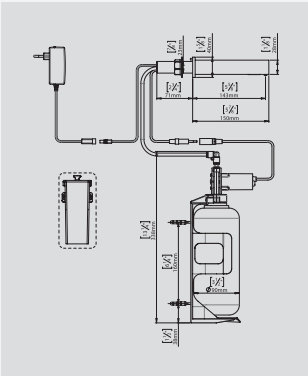
TUBULAR SOAP DISPENSER B	350920
TUBULAR SOAP DISPENSER E	350925



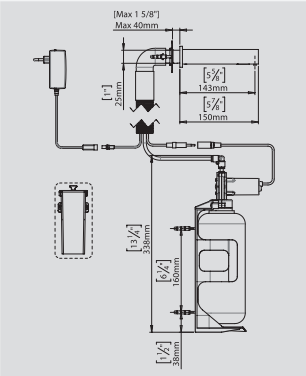
TUBULAR SOAP DISPENSER 2030 B	350922
TUBULAR SOAP DISPENSER 2030 E	350927



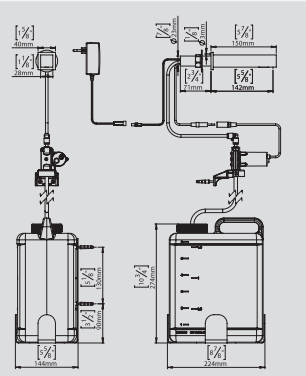
TUBULAR SD 1.6 E	350116
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QUADRAT SOAP DISPENSER B	351910
QUADRAT SOAP DISPENSER E	351900



QUADRAT SOAP DISPENSER 2030 B	351920
QUADRAT SOAP DISPENSER 2030 E	351930



QUADRAT SD 1.6 E	351916
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Capacity	1 Liter \ 33.8 oz.
Power Supply	Battery models: Battery Box for 6xD Alkaline batteries Mains models: 12V transformer
Soap viscosity	100 – 3800 cPs
Standard discharge	1.4cc, Adjustable
Sensor range	35-155 mm +/- 10 mm / 1.38"-6.10" +/- 0.39" (customizable by optional remote control)
Preset sensor range	80 mm +/- 10 mm / 3.15" +/- 0.39"

## PRE-INSTALLATION INFO

### Check contents

Separate all parts from the packaging and check each part with the “Pack contents” section.

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

If any parts are missing, do not attempt to install your touch free soap dispenser until you obtain the missing parts.

### Warnings

Do not install the system facing a mirror or any other electronic system operated by an infra-red sensor.

To prevent reflection problems, it is recommended to keep a minimum distance of 300 mm between the soap dispenser and any other objects.

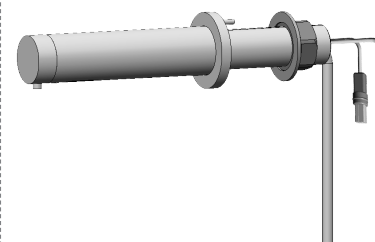
**IMPORTANT:** Keep in mind that when using the faucet installed next to the soap dispenser, the user hands should not interfere with the soap dispenser sensor detection area.

Stern liquid soap dispensers, with proper care, will provide long term trouble free service. Quality liquid soap of recommended viscosity and pH levels are the main factors for smooth operation of your dispenser. If needed, use a viscometer to verify the viscosity of your soap to ensure maximum benefit. The recommended range for liquid soap viscosity is 100-3800 cPs. Thicker liquid soap flows slower and inhibits the pump valve, causing strain and damage.

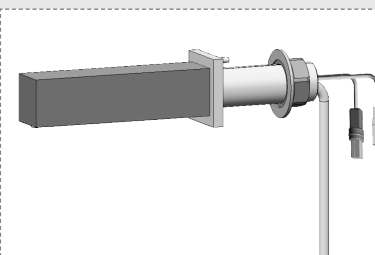
Stern liquid soap dispensers are suitable for use with any generic liquid soap of the correct viscosity and pH. The pH level of all soap used in Stern liquid soap dispensers should be between 6.5 to 8.5. Lower levels will cause corrosion to the metal dispenser and even the rubber and plastic components. Higher pH levels will cause swelling to rubber parts and degradation of plastic components over time.

## PACK CONTENTS

Familiarize yourself with the part names and ensure that all the parts are included in your package.



**1 X BODY ASSEMBLY FOR TUBULAR SOAP DISPENSER B / E**



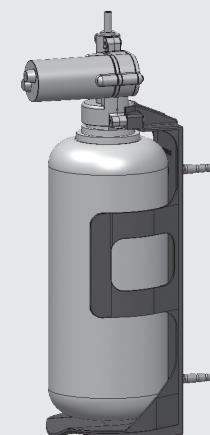
**1 X BODY ASSEMBLY FOR QUADRAT SOAP DISPENSER B / E**



**1 X QUICK CONNECTION FITTING**



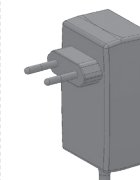
**2 X SCREW  
3.5X1 1/4"**



**1 X SOAP TANK WITH BOTTLE SUPPORT AND PUMP ASSEMBLY**



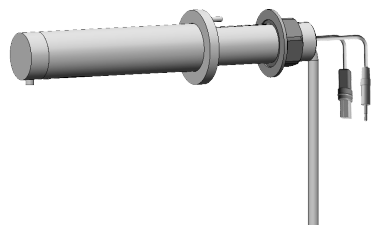
**B VERSIONS**



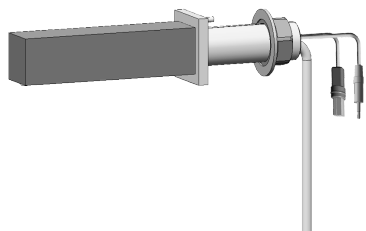
**E VERSIONS**

**1 X BATTERY BOX FOR 6XD ALKALINE BATTERIES \ 12V TRANSFORMER**

## PACK CONTENTS



1 X BODY ASSEMBLY FOR TUBULAR SOAP DISPENSER B / E



1 X BODY ASSEMBLY FOR QUADRAT SOAP DISPENSER B / E



1 X QUICK CONNECTION FITTING



2 X SCREW  
3.5X1 1/4"



1 X TEMPORARY BASE COVER



1 X SOAP TANK WITH BOTTLE SUPPORT AND PUMP ASSEMBLY



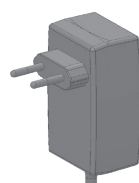
1 X ELBOW AND CORRUGATED TUBE



1 X WALL ROSETTE



B VERSIONS



E VERSIONS

1 X BATTERY BOX FOR 6XD ALKALINE BATTERIES \ 12V TRANSFORMER

## INSTALLATION

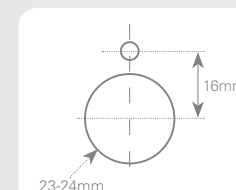
### TUBULAR SOAP DISPENSER B / E QUADRAT SOAP DISPENSER B / E

#### STEP 1 – PREPARATION FOR INSTALLATION

Drill a hole (23 to 24 mm) at the desired location for the soap dispenser spout installation.

Drill a small hole (2 to 3 mm) just above the previous one for the anti-rotation pin, according to the diagram.

Remove the hexagonal nut and the disk from the base of the soap dispenser spout.



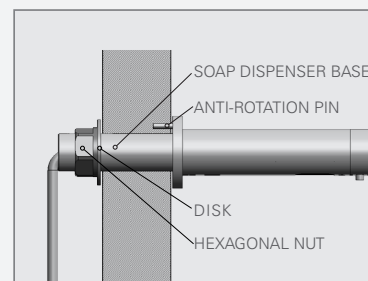
RECOMMENDED HOLE SIZE

#### STEP 2 – INSTALLING THE SOAP DISPENSER

1

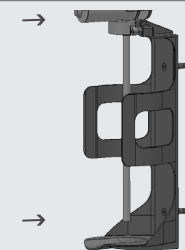
Insert the Soap dispenser base and the anti-rotation pin into the holes drilled.

Fix the base behind the wall with the hexagonal nut and the disk.



2

Fix the bottle with bottle support to the desired location.

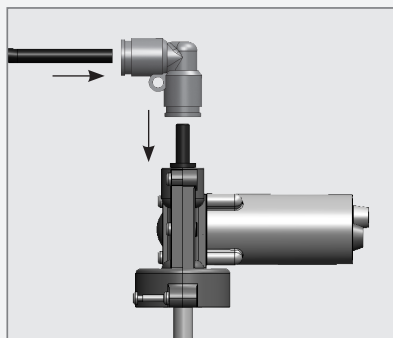


## INSTALLATION

TUBULAR SOAP DISPENSER B / E  
QUADRAT SOAP DISPENSER B / E

3

Connect the soap tube that is coming out of the soap dispenser body to the quick connector at the top of the soap dispenser pump assembly by snapping it in.



### STEP 3 – CONNECTING THE POWER SOURCE

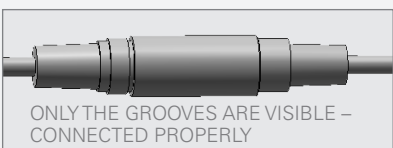
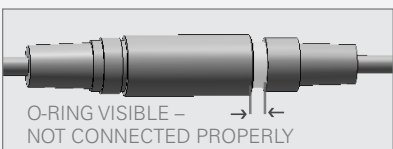
1

Remove the protective sticker covering the sensor. Keep away from the sensor range and check that no objects are in front of the sensor.



2

Connect the soap pump connector to the matching connector from the sensor. Please note that since the connector is waterproof, some friction might apply.



## INSTALLATION

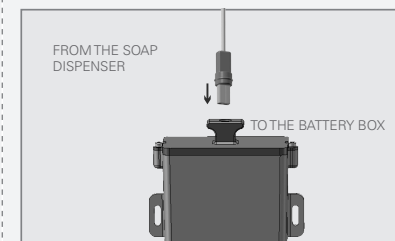
TUBULAR SOAP DISPENSER B / E  
QUADRAT SOAP DISPENSER B / E

**IMPORTANT:** the 4 contacts connector should be connected properly so that the white o-ring is not visible and a clicking sound is heard.

**PAY ATTENTION:** If the 4 contacts connectors will not be connected properly, the pump will work continuously.

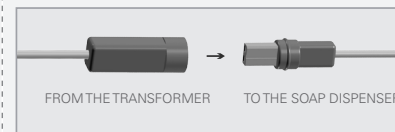
2a

**For battery versions:** install the battery box on the wall underneath the sink and connect the battery connector



3b

**For transformer versions:** plug the transformer into the electricity socket and connect the transformer connector



3

Wait about 10 seconds before you put your hands within the sensor range to avoid entering the adjustment mode.



## INSTALLATION

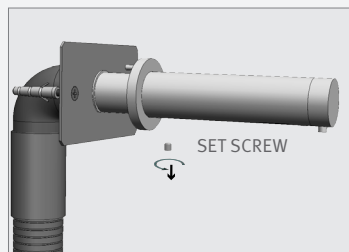
TUBULAR SOAP DISPENSER 2030 B / E  
QUADRAT SOAP DISPENSER 2030 B / E

### STEP 1 – INSTALLING THE MF SOAP DISPENSER

1

Cut an adequate opening in the wall for the dimensions of the soap dispenser base (where you want to install the spout) and the corrugated tube.

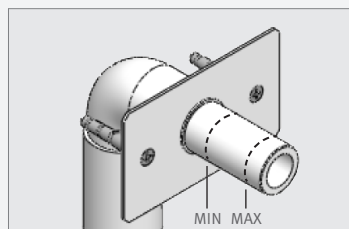
Disconnect the soap dispenser body with the rosette from the base by unscrewing the set screw.



2

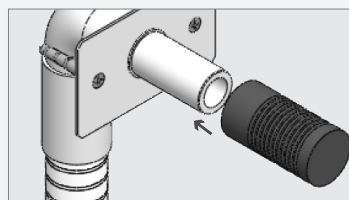
Mount the soap dispenser base into the opening in the wall and secure it using the two anchors provided in the package.

Important: The soap dispenser base should be installed so that the outside surface of the finished wall falls between the minimum and maximum lines marked at the base.



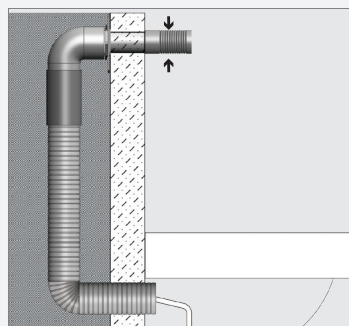
3

Assemble the temporary protective soap dispenser base cover.



4

Assemble the corrugated tube to the soap dispenser base and make sure it stays outside the wall when you do the tiling.

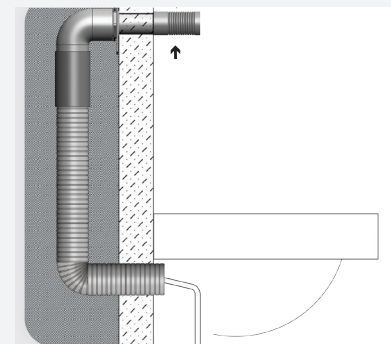


## INSTALLATION

TUBULAR SOAP DISPENSER 2030 B / E  
QUADRAT SOAP DISPENSER 2030 B / E

1

Assemble the corrugated tube to the soap dispenser base and make sure it will stay outside of the wall when tiling.

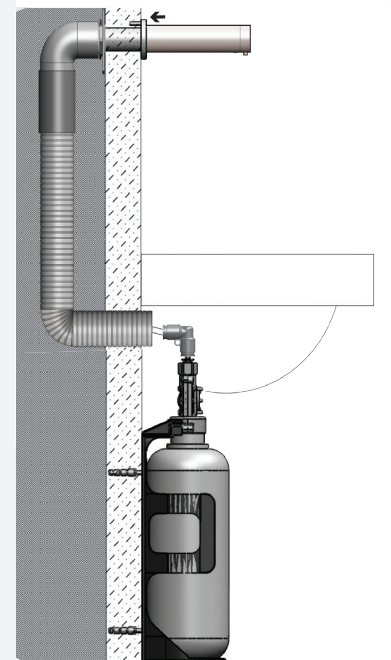


2

Once the works on electricity, plumbing and tiles have been finished, insert the wall rosette through the soap dispenser base, and cut the temporary soap dispenser base cover.

Fix the soap dispenser spout by inserting the nipple into the soap dispenser base and tighten the screw.

Pull the four way connector and the power supply connector out of the soap dispenser base, and lead it through the corrugated tube.



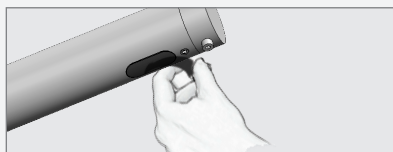
# INSTALLATION

TUBULAR SOAP DISPENSER 2030 B / E  
QUADRAT SOAP DISPENSER 2030 B / E

## STEP 3 – CONNECTING THE POWER SOURCE

1

Remove the protective sticker covering the sensor. Keep away from the sensor range and check that no objects are in front of the sensor.



2

Connect the soap pump connector to the matching connector from the sensor. Please note that since the connector is waterproof, some friction might apply.

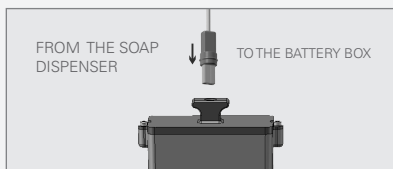


**IMPORTANT:** the 4 contacts connector should be connected properly so that the white o-ring is not visible and a clicking sound is heard.

**PAY ATTENTION:** If the 4 contacts connectors will not be connected properly, the pump will work continuously.

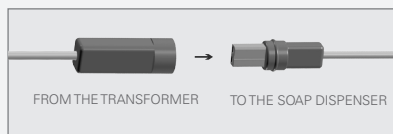
2a

**For battery versions:** install the battery box on the wall underneath the sink and connect the battery connector



2b

**For transformer versions:** plug the transformer into the electricity socket and connect the transformer connector



3

Wait about 10 seconds before you put your hands within the sensor range to avoid entering the adjustment mode.



# FILLING THE SOAP TANK

1

Unscrew the soap tank from the pump assembly and pull it out from the bottle support.



2

Fill in the liquid soap up to the top line.



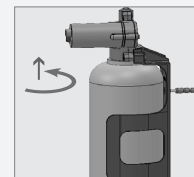
3

Insert the bottle back into the bottle support.



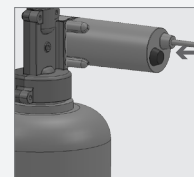
4

Screw the soap tank back into the pump assembly. Make sure the tank is firmly secured into place.



5

Press the refill button located at the back of the pump assembly until soap starts coming out of the soap dispenser spout. This operation can also be done using the soap dispenser remote control Refill function.



**NOTE:** Once the soap in the soap tank has reached the bottom line the soap tank should be refilled. To refill the soap tank please refer to steps 1-5.



## REMOTE CONTROL FUNCTIONS

If you acquired the remote control together with your soap dispenser, you may adjust the dispenser settings if required. To use the remote control hold it straight in front of the sensor at a distance of about 10-15 cm (4-6").

Attention: The remote control held out of the recommended range (too close or too far) will not operate.

The remote control can be used to adjust the following functions:

### 1-SOAP QUANTITY

The 1-4 drop keys allow the user to choose the desired soap quantity. \*

- |              |              |              |              |
|--------------|--------------|--------------|--------------|
| ① 0.7 to 0.9 | ② 1.2 to 1.6 | ③ 1.6 to 1.9 | ④ 2.1 to 2.3 |
|--------------|--------------|--------------|--------------|

Indication: continuous blinking of the LED in the sensor eye.

\*The exact dosage depends on soap viscosity.

### 2-ADJ

This function resets the sensor back to factory settings.

Indication: 2 blinks of the LED in the sensor eye.

### 3-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). The soap dispenser will remain shut for one 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 for one minute.

Indication: OFF – 2 fast blinks, ON – 4 fast blinks

### 4-FILL THE SOAP TANK

Once the soap tank has been filled / re-filled, press the FILL button. The pump will run for one minute for priming the soap to the soap dispenser spout.

To stop this activity press the FILL button again. If the soap has not started coming out of the spout, press the Fill button again.



## BATTERY REPLACEMENT

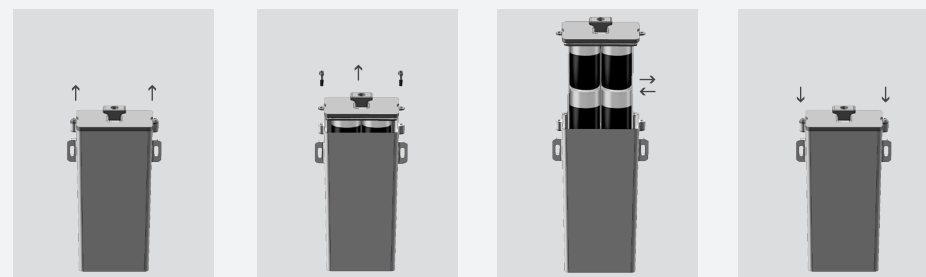
### Battery models only

When the battery weakens, the red indicator light will blink at a constant rate when the user's hands are within the sensor range. The battery must be replaced within two weeks.

To replace the battery in battery models:

1. Carefully open the battery box, use a 2.5 mm Allen key
2. Remove the old batteries
3. Replace the used batteries with new D batteries
4. Close the box.

**NOTE:** Do not mix used batteries with new ones.



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



## SPARE PARTS LIST

10-Pack Sensor Kit	07220280
Soap Dispenser Pump	07222032
6-Pack Soap Bottle 1L	07100035
6-Pack Soap Bottle 1L Support Kit	07100037
Battery box for 6xD batteries	06530041
12V Transformer (EU)	06522081
12V Transformer (UK)	06522086
12V Transformer (US)	06522080
12V Transformer (AU)	06522085
Remote Control for Soap Dispenser (Optional)	07100008

## MAINTENANCE

### 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 soap dispenser. For surface cleaning use ONLY soap and water, then wipe dry with a clean cloth or towel. When cleaning bathroom tiles, the soap dispenser should be protected from any splattering of harsh cleansers.

### Disassemble of the soap pipe from the pump

The soap pipe can be disconnected from the soap pump by a simple slide & pull action. The sliding ring of the quick connection fixation nipple on the pump should be pulled down. It releases the open end of the soap pipe which can then be easily pulled out.

### Clean the soap tank

Clean out the tank prior to refill by flushing warm water through the hoses and pump until clean water is released from the spout. TIP: Keeping a spare tank will enable this process to be completed in a speedy and hygienic manner with minimal downtime.

## LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic products will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Y. Stern Engineering Ltd. will, at its 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. Proof of purchase (original sales receipt) must be provided to Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Stern Engineering Ltd. exceed the purchase price of the product.

If you believe that you have a warranty claim, contact your Stern Distributor, Dealer or Plumbing Contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

Y. STERN ENGINEERING AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation.
- inversions of supply pipes.
- Pressures or temperatures exceeding recommended limits.
- Improper manipulation, tampering, bad or lapsed maintenance.
- Foreign bodies, dirt or scale introduced by the water supply or soap tank.
- Use of the soap outside of viscosity specifications.
- Alteration of the original soap/foam dispenser components (including pipes).

## TROUBLESHOOTING

Indication	Investigation	Cause	Solution	Illustration
False activation: Soap dispensing	Continuous discharge from the nozzle	AUX connector not fully inserted	The connector should be inserted fully until white o-ring is not visible. Remove the o-ring if necessary	
	Random discharge from the nozzle	Reflection issue from basin or other object	Eliminate any cause of reflection and if necessary use appropriate remote control to shorten detection range.	
	Soap discharging from pump housing.	Damaged pump due to high viscosity or debris in pipes	Replace the Pump. Rinse warm water through the pipe and the body of the soap dispenser all the way to the nozzle.	
Soap not dispensing	Pump is making sounds when sensor is activated	Soap tank is empty	Fill with soap with correct viscosity (100 - 3800 cPs) and prime pipes using the fill button on remote control.	
		Soap dispenser has not been primed	Prime the soap dispenser by pressing the fill button on the remote or by pressing the refill button located at the bottom of the pump, until soap exits the nozzle.	
	Sensor is not blinking when hand is placed in front	Damaged pump (discharge from housing)	Replace the Pump	
		Debris or dried soap in the pipe or tank	Run warm water through pipe, pump, and body all the way to the nozzle. Replace with soap of correct viscosity.	
		High viscosity soap (> 3800 cPs)	NOTE: Using the soap dispenser with high viscosity soap may cause permanent damage to the pump and shorten the lifecycle.	
		Bent pipes	Unbend or straighten pipes.	

## TROUBLESHOOTING

Indication	Investigation	Cause	Solution	Illustration
Soap not dispensing	Pump is not making sound when the sensor is activated	AUX connector not fully inserted	The connector should be inserted fully until the white o-ring is not visible. Remove the o-ring if necessary	
		Refill button on pump does not activate the pump.	Replace the Pump. Rinse warm water through the pipe and the body of the soap dispenser all the way to the nozzle.	
		Damaged pump (discharge from housing).		
		Debris or dried soap in the tank or tubing	Run warm water through pipe, pump, and body all the way to the nozzle. Replace with soap of correct viscosity. NOTE: Using the soap dispenser with high viscosity soap may cause permanent damage to the pump and shorten the lifecycle.	
	Sensor is not blinking when hand is placed in front	Refill button on pump does not activate the pump.	Transformer: Check operation with functioning transformer. Where necessary replace with appropriate transformer. For part numbers see spare parts list.  Battery: Check operation with functioning battery pack. Where necessary, replace batteries or replace the battery pack: Battery pack (without batteries)	
		Reflection issue from basin or other object	Eliminate any cause of reflection and use appropriate remote control to shorten detection range.	
		Damaged sensor	If the above two solutions have not resolved this issue replace with appropriate sensor. For part numbers see spare parts list.	

# stern

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