

# TOTO®

## Automatic Soap Dispenser

# TOTO SOAP DISPENSER

### Warranty Registration and Inquiry

For product warranty registration, TOTO U.S.A. Inc. recommends online Warranty Registration. Please visit our web site <http://www.totousa.com>. If you have questions regarding warranty policy or coverage, please contact TOTO U.S.A. Inc., Customer Service Department, 1155 Southern Road, Morrow, GA 30260 (888) 295-8134 or (678) 466-1300 when calling from outside of U.S.A.

For the best results, be sure to read the following installation instructions and use the product only as described in this manual.



1





## Safety Precautions

Follow all safety precautions and warnings when installing the TOTO® SOAP DISPENSER.


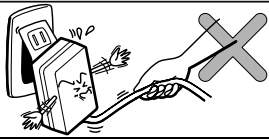
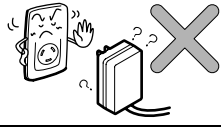

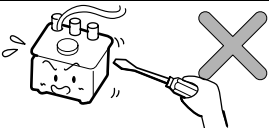

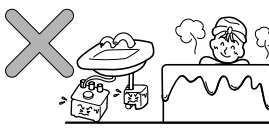

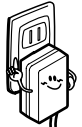
**Before installing this product, be sure to read the "Safety Instructions" section of the manual.**

- The following symbols are used to indicate important safety instructions for the safe and proper use of the product.
- Each symbol is defined as follows:



Indication	Definition
 <b>Warning</b>	When this symbol appears, precaution should be taken to ensure proper and safe use of the product. Ignoring this precaution could result in injury or death.
 <b>Caution</b>	When this symbol appears, precaution should be taken to ensure proper and safe use of the product. Ignoring this precaution could result in injury or damage to personal property.

	This symbol indicates a prohibited use of the product.		This symbol means do not disassemble.
	This symbol means do not use this product in wet places, such as a bathing area or shower stall.		This symbol means "Always follow this precaution"

## Warning

	<b>Do not use a loose or faulty electrical outlet or plug.</b> Doing so may cause fire or electrical shock.	
	<b>Do not use direct current or power source with improper voltage.</b> Doing so may cause fire.	
	<b>This product should only be serviced, disassembled or modified by a factory technician to prevent possible malfunction or electric shock.</b>	
	<b>Please do not install in a bathing area or humid place.</b> Doing so could cause fire or electric shock.	
	<b>Be sure to plug the AC adapter all the way into the wall socket to avoid possible fire or electrical shock. TOTO recommends that the AC adapter be connected to a GFCI-protected outlet.</b>	

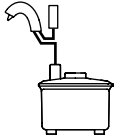
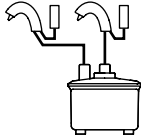
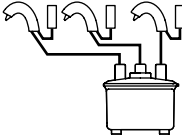
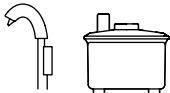
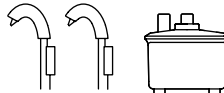
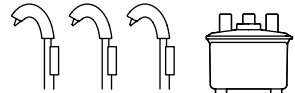
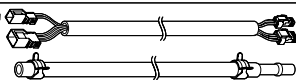
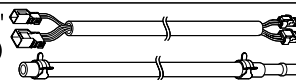
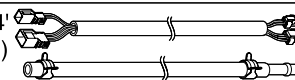
## Caution

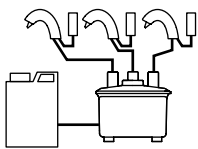
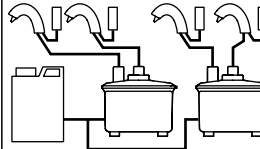
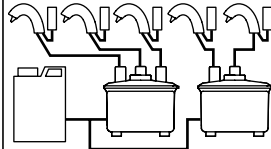
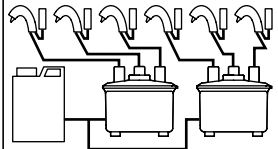
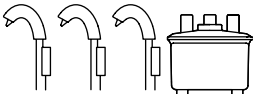

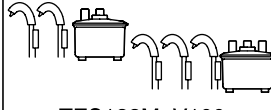
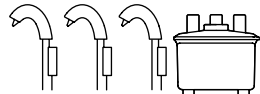
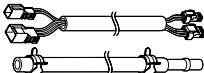
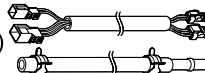
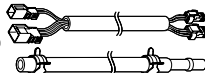
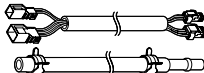
	<b>Do not apply force or sudden impact to this product, as this may cause malfunction or leakage.</b>	
---	---	---



# 2

## Specifications

<Standard>				
Item		TES1ADC-05	TES2ADC-05	TES3ADC-05
Configuration				
	Number of Dispenser	1	2	3
Details	Base Unit	 TES121M V100	 TES122M V100	 TES123M V100
	Tube and Cords	16.4' (5m)  TN80-1 V100	16.4' (5m)  TN80-1 V100(2sets)	16.4' (5m)  TN80-1 V100(3sets)
	Sub-Tank	N/A		
	Power Source	AC Aapter Input : 120VAC60Hz      Output : 24VDC		
Specifications	Wattage	10W	20W	30W
	Detection Range	4"(110mm) (using #300 white paper ) *Note that the detection range may vary due to learning methods.		
	Ambient Temperature for Use	34~104°F(1~40°C)		
	Power Cord Length	71"(1.8m)		
	Dispensed Amount of Soap	2mL (at factory setting)		
	Tank Capacity	Approximately 1 gallon (4L) (Usable Capacity)		

<Special> ... with subtank and 39.4' (12m) tube and cords					
Item	TES3ADC-12	TES4ADC-12	TES5ADC-12	TES6ADC-12	
Configuration					
	Number of Dispenser	3	4	5	6
Details	Base Unit	 TES123M V100	 TES122M V100 (2sets)	 TES122M V100 TES123M V100	 TES123M V100 (2sets)
	Tube and Cords	39.4' (12m)  TN80-2 V100(3sets)	39.4' (12m)  TN80-2 V100(4sets)	39.4' (12m)  TN80-2 V100(5sets)	39.4' (12m)  TN80-2 V100(6sets)
	Sub-Tank	1set TN80 V100			
	Power Source	AC Aapter Input : 120VAC60Hz    Output : 24VDC			
Specifications	Wattage	30W	40W(20W+20W)	50W(20W+30W)	60W(30W+30W)
	Detection Range	4"(110mm) (using #300 white paper )*Note that the detection range may vary due to learning methods.			
	Ambient Temperature for Use	34~104°F(1~40°C)			
	Power Cord Length	71"(1.8m)			
	Dispensed Amount of Soap	2mL (at factory setting)			
Tank Capacity	6.8 gallons (26L) (usable capacity)		Approximately 8 gallons (30L) (Usable Capacity)		



# 3

## Before Installing Your TOTO Soap Dispenser

### 1. Wiring

The voltage is AC 120V (60Hz). The energy consumption is as follows.

Wiring should be installed in compliance with the following energy consumption levels.

Single spout configuration : TES1ADC-05	10W
Two spout configuration : TES2ADC-05	20W
Three spout configuration : TES3ADC-05/TES3ADC-12	30W
Four spout configuration : TES4ADC-12	40W (20W+20W)
Five spout configuration : TES5ADC-12	50W (20W+30W)
Six spout configuration : TES6ADC-12	60W (30W+30W)

### 2. Installation of the soap tank

- Install the soap tank and sub-tank (Special) on a flat surface.
- When connecting the tank or installing the sub-tank (Special), make sure that both tanks are installed on a flat and level surface. Be sure to install the soap tubes in a straight line.

### 3. Other

- This product cannot be used with stainless steel or stainless steel plated lavatories, as this may cause malfunction of the product.
- The dispenser installation holes for this product are 1"~ 1-1/8" (25 ~ 28 mm) in diameter.
- Be especially careful not to scratch the sensor surface.



# 4

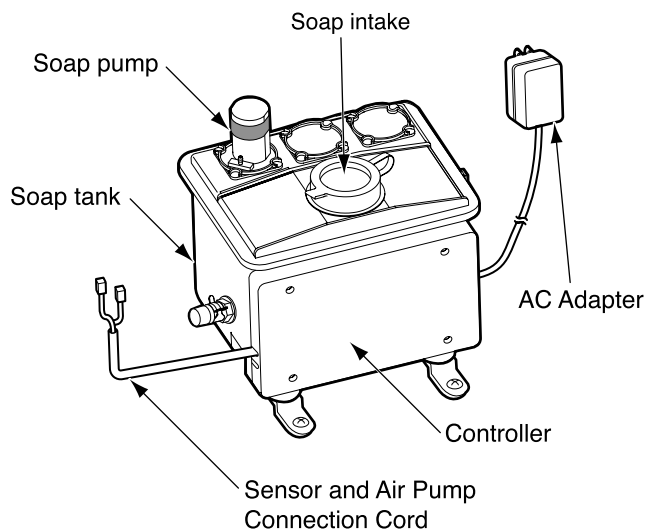
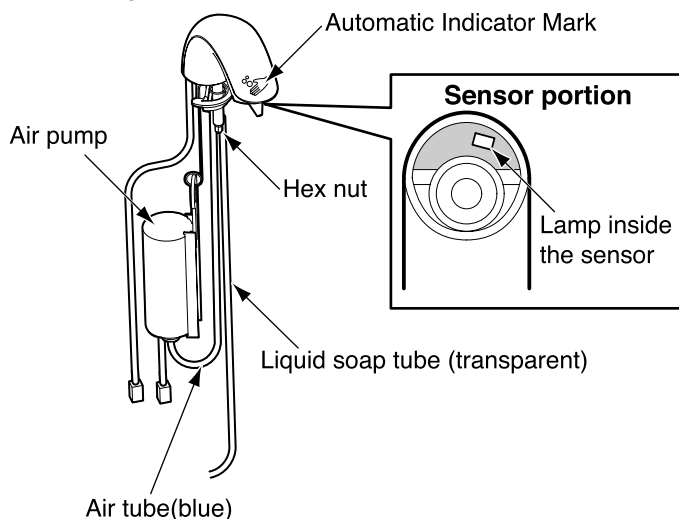
## Parts Identification

Please verify that the following parts are included.

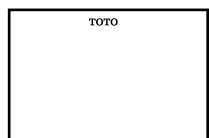
\*Some models may have different component as illustrated below.

### Base Unit ( Models TES121 / 122 / 123M V100) \*pictured TES121M V100

#### <Dispenser Portion>



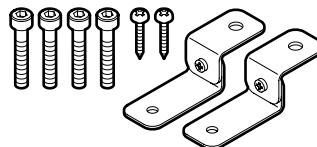
Owner's Manual



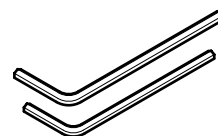
Installation Manual



Instruction Label

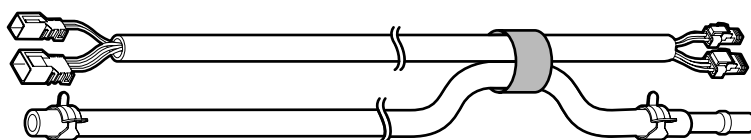


Anchor Brackets



Allen Wrench  
(Size : 1/12" (2.5mm)  
1/16" (2mm) )

### Tube and Cords (Model TN80-1V100 / TN80-2V100)



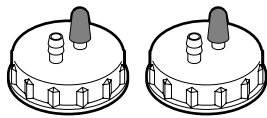
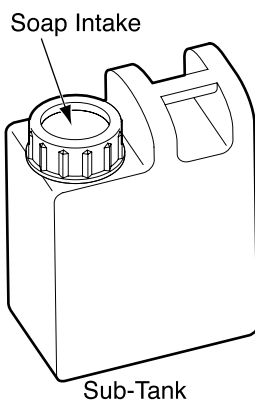
#### Sensor and Air Pump Cords

(TN80-1V100 : 16.4' (5 m)  
TN80-2V100 : 39.3' (12 m)

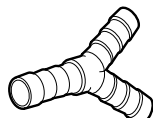
#### Liquid Soap Tube

(TN80-1V100 : 16.4' (5 m)  
TN80-2V100 : 39.3' (12 m)

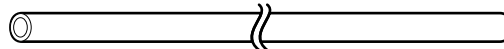
### Sub - Tank Unit (Model TN80 V100)



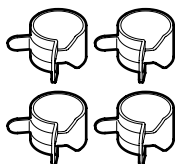
Coupling caps (2)



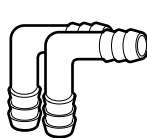
Y-shaped nipple



Connecting Tube 16.4' (5m)



Hose clamps (4)



Elbows (2)



Hose tie(2)



Wood Screw(2)



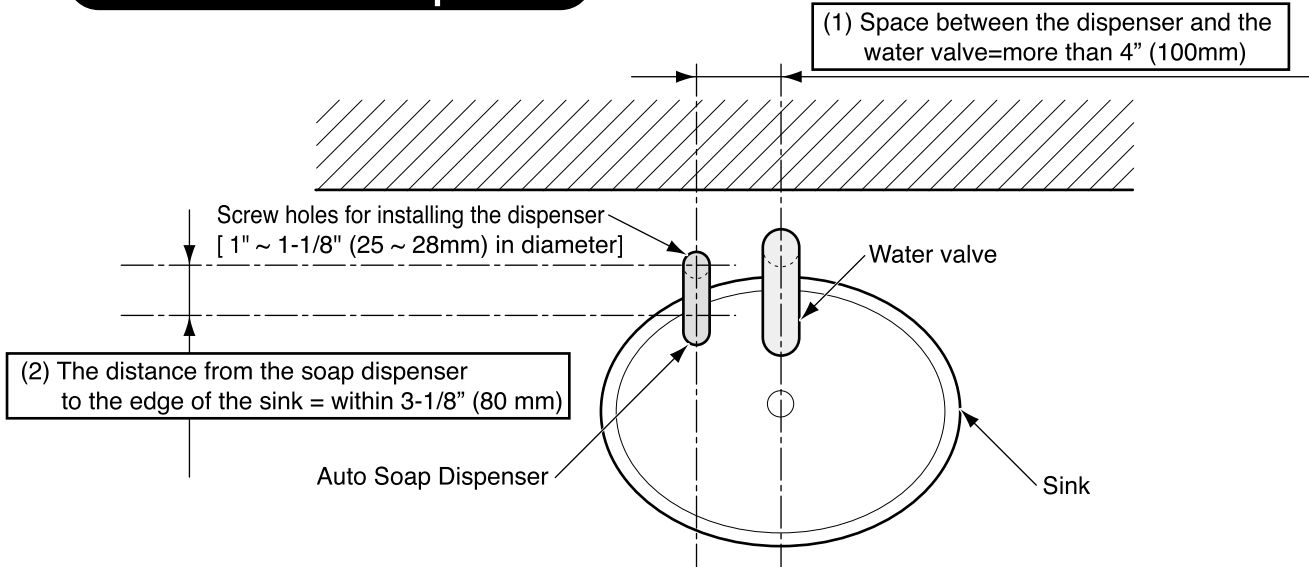
Air outlet hose (2)



# 5

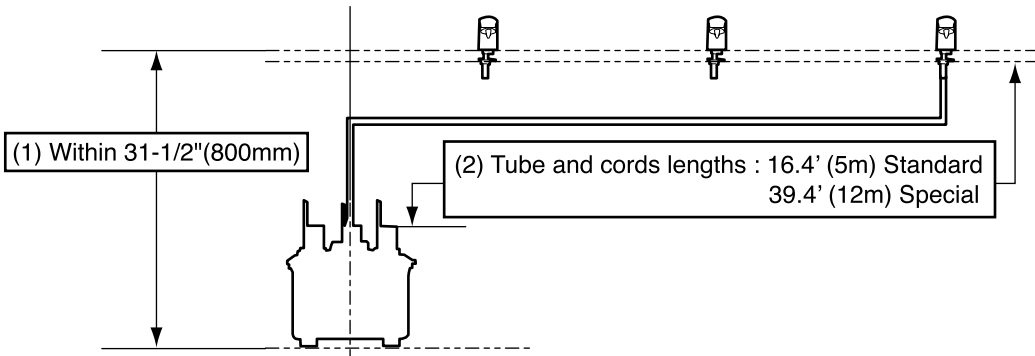
## Installation of the Dispenser and Tank

### Position of the Dispenser



- (1) Be sure to leave at least 4" (100 mm) of space between the soap dispenser and the water valve to prevent a malfunction of the detector, which could result in faulty soap spray.
- (2) Leave 3-1/8" (80 mm) of space from the inside edge of the sink to the spout installation holes to ensure that any residual soap drips from the dispenser spout into the sink bowl.

### Position of the Tank



- (1) Install the liquid soap tank within 31-1/2" (800 mm) under the counter. The tank cannot be installed on top of the counter or underground.
- (2) When installing the tank, make sure that the tubes and cords can reach the tank.

Standard (TES1/TES2/TES3ADC-05)	Within 16.4' (5m)
Special (TES3/TES4/TES5/TES6ADC-12)	Within 39.4' (12m)

### Caution

**Do not install the liquid soap tubes at a height that is taller than the height of the counter, as this may cause the water and soap to discharge even after the unit is turned off.**

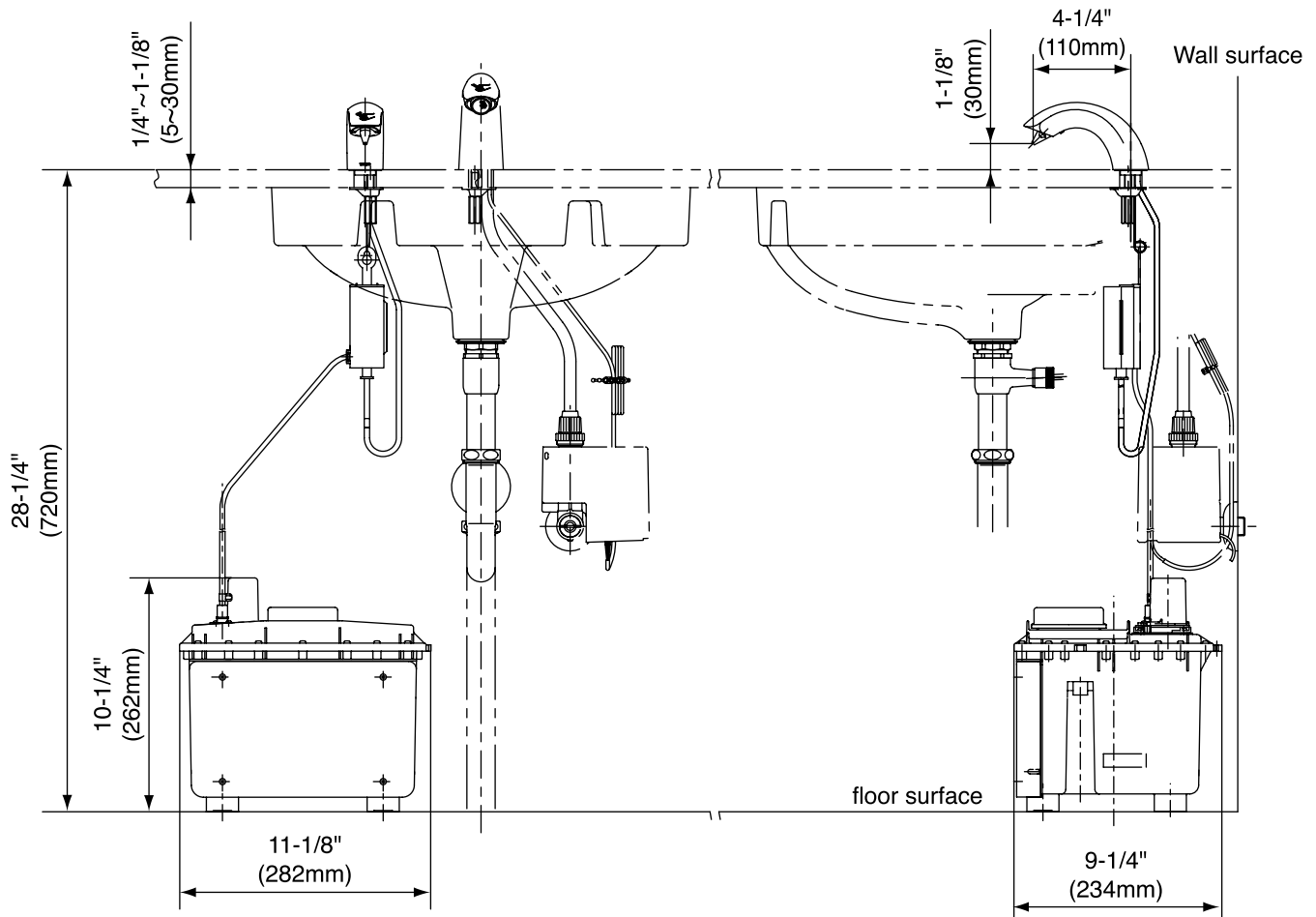


## 6

# Diagram of Assembled Product

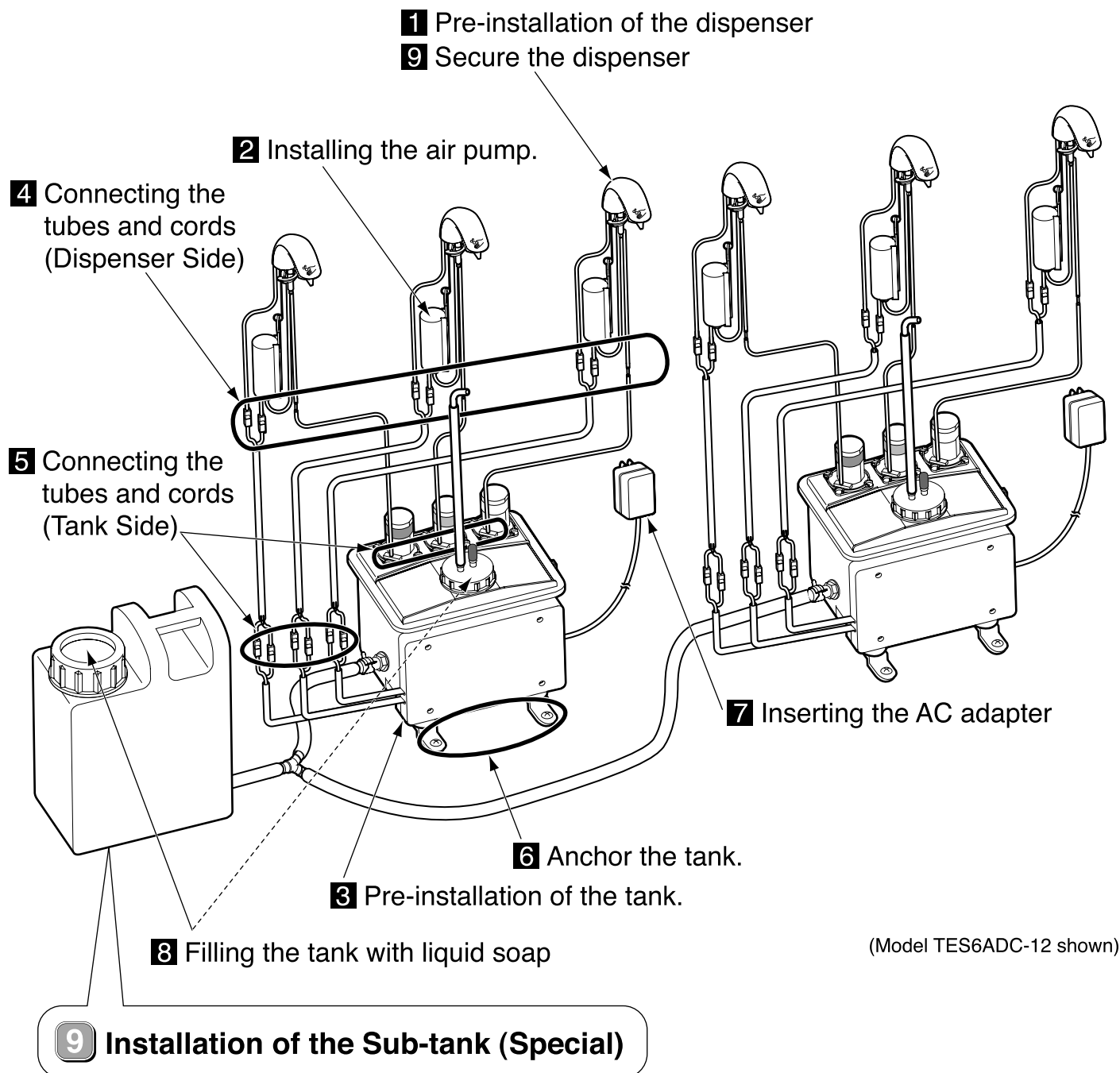
\*Some models may have different components as illustrated below.

**Model : TE1SADC-05**



# 7

## Installation Procedure



### Caution

- Use of the TOTO Soap Dispenser in conjunction with other equipment that has an inverter or infrared lamps may cause the unit to malfunction.
- Make sure that the cords and tubes do not come into contact with the hot water supply pipe.

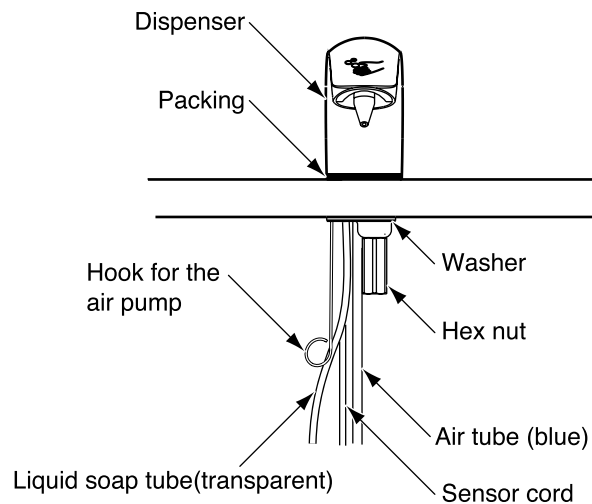


## 1 Pre-installation of the dispenser

- (1) Insert the dispenser into the installation holes in the counter (or the sink).
- (2) Loosely screw in the washers with the hex nuts.

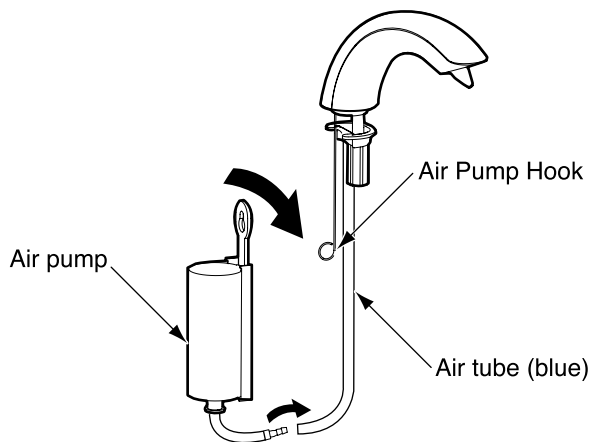
### Caution

***Make sure that the cords and tubes do not get crimped.***



## 2 Installing the air pump

- (1) Hook the air pump onto the air pump hook.
- (2) Connect the air tube (blue).

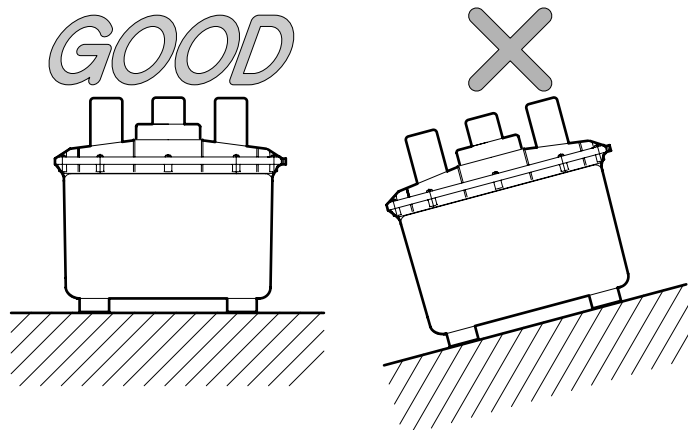


## 3 Pre-installation of the tank

Place the tank in the designated position.

### Caution

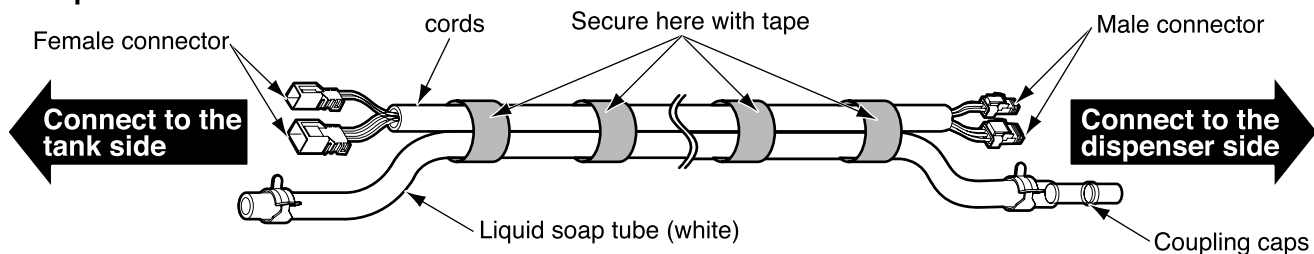
***Be sure to place the tank and sub-tank(Special) on a level surface.***



#### 4 Connecting the tubes and cords (Connection to the Dispenser Side)

##### Preparation before connecting the tubes and cords

- Be sure to connect one cord with one liquid soap tube (white).
- Before connecting the tubes and cords, pair one liquid soap tube (white) with one cord and tape them together.
- When installing 2 or more dispenser units, make sure to use the same number of tube-cord pairs as dispenser units to be installed. Improper installation may result in a malfunction of the dispenser.



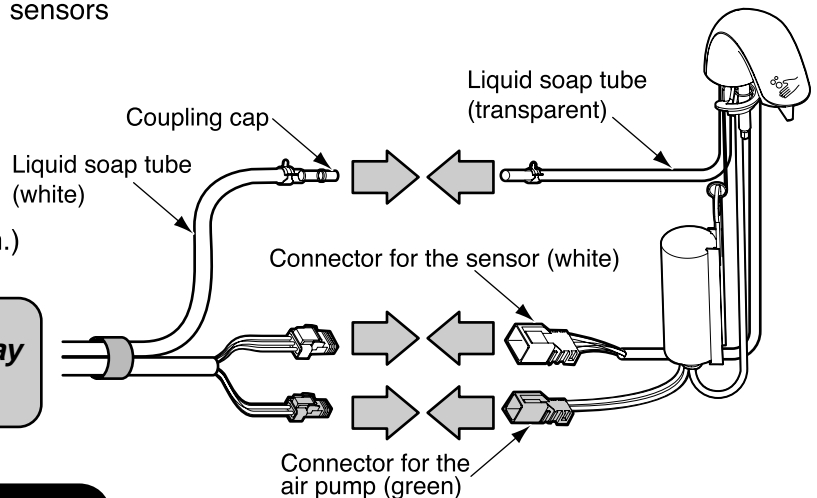
- (1) Connect each of the connectors for the sensors and air pump cords.

Connector for the sensor	White
Connector for the air pump	Green

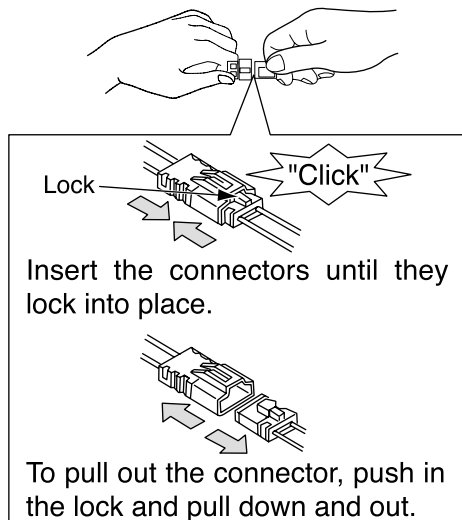
- (2) Connect the liquid soap tubes.  
(Use the coupling caps to connect them.)

##### Caution

**Be sure to insert the tubes all the way into the coupling caps.**



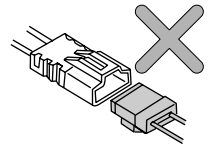
##### Pre-insertion of the connectors



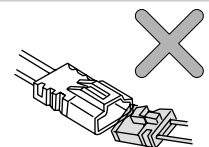
##### Caution

**Be sure to insert the connectors all the way into place until they lock into position. Be careful not to damage the waterproof packing when inserting or pulling out the connectors.**

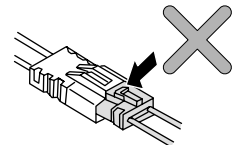
Check to make sure that the connectors are not upside down.



Be sure to insert the connectors straight into position and not at an angle.

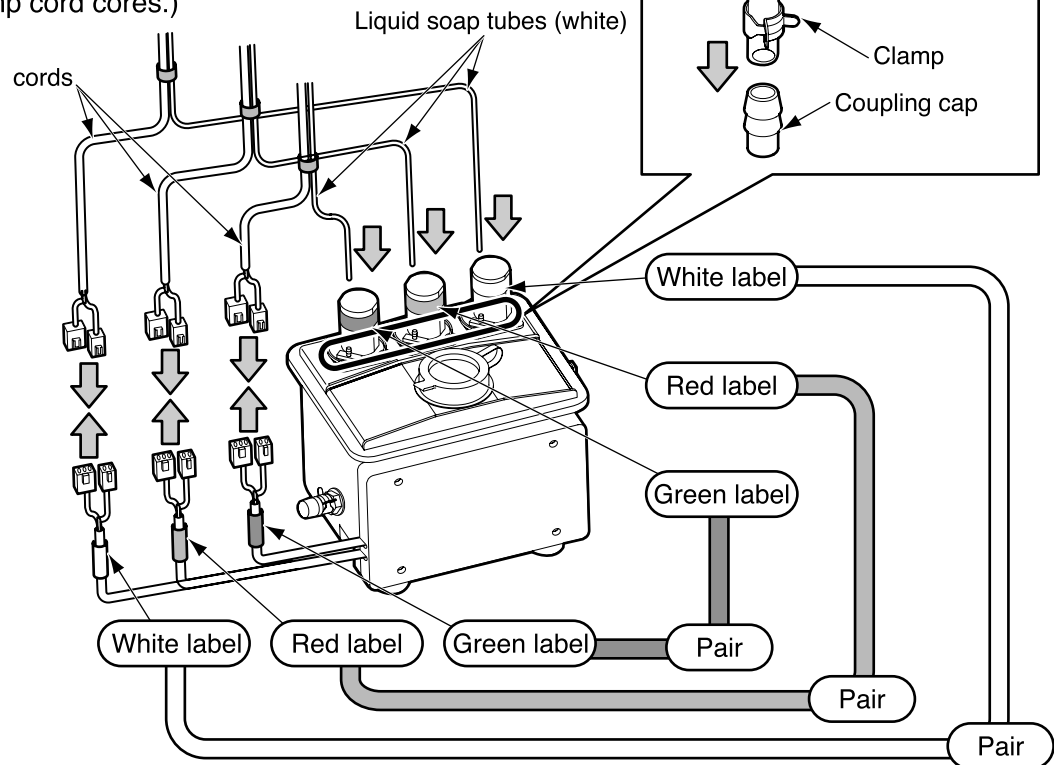


Not locked into place.



## 5 Connecting the tubes and cords (Connection to the Tank Side)

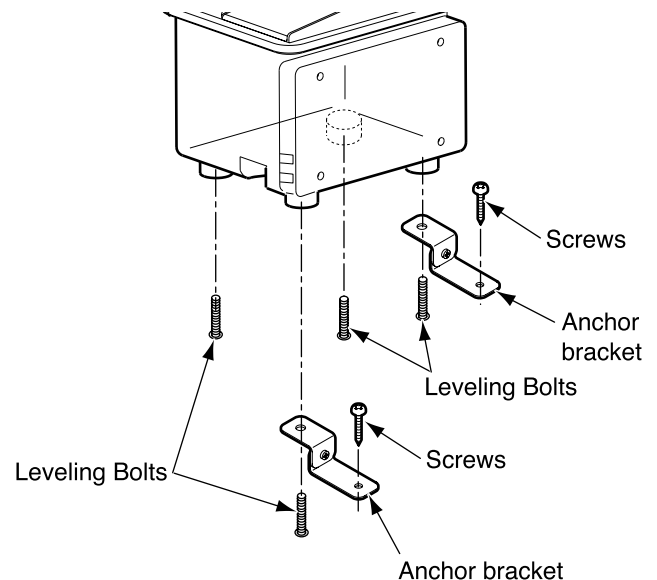
- (1) Insert the liquid soap tubes into each of the coupling caps located on the side of the liquid soap pump and secure them with the clamps.
- (2) Connect each of the liquid soap tubes and the pair of cords with each of the cords on the tank side that have the same color label as the labels affixed to the pump. (Three sensor cord cores and two air pump cord cores.)



## 6 Anchor the tank

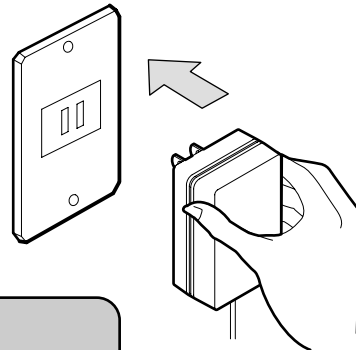
Anchor the tank with the supplied brackets.

- (1) Insert the four bolts into the bottom of the tank **hand tight**.  
These bolts will need to be adjusted to level the tank.
- (2) Install the two screws after the tank has been leveled.  
**NOTE:** If installing on a concrete floor, be sure to use inserts before installing the two screws.



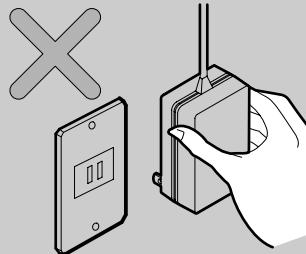
## 7 Inserting the AC Adapter

Insert the AC Adapter into the wall outlet.



### Caution

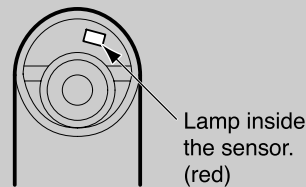
- *Do not install AC Adapter upside down.*



- *The range detector is activated when the power is connected.*

*Avoid placing objects in the sink bowl or covering the sensor with your hand. (The range detector is set in approximately 10 seconds.)*

*\*The sensor lamp will flash when there is no soap in the tank.*

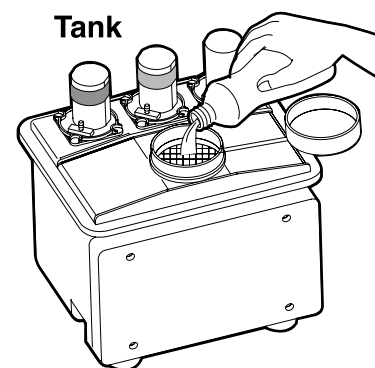


## 8 Filling the tank with liquid soap

Fill the tank with liquid soap.

(If your unit has a sub-tank, pour the liquid soap into the opening in the sub-tank.)

\*Fill the tank until the light located inside the sensor stops flashing. If the sensor light continues to flash even after adding 1/2 gallon (2L) of soap, see the instructions in the next section **9**, “Securing the Dispenser”.

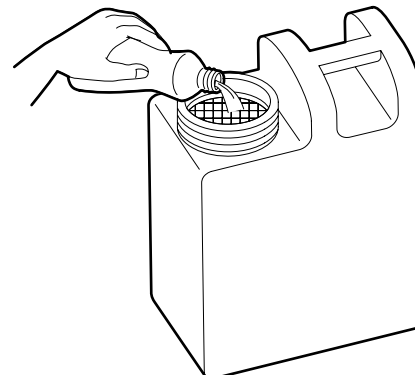


### Caution

*When the dispenser is not in use for long periods of time, fill the tank with **water** and perform a trial Re-*

*“ **8** Trial Operation **2**.When the Dispenser is Not Used for Long Periods of Time”.*

Sub-tank



## 9 Securing the Dispenser

- (1) Make sure not to cover the sensor light with your hand or place any objects inside the sink bowl, as this will cause the Lamp inside the sensor located at the front of the dispenser to flash off and on.

If the light continues to flash even after removing any obstacles, adjust the position of the dispenser until the light stops flashing.

The sensor light flashes in two different modes.

Two flashes every second means.

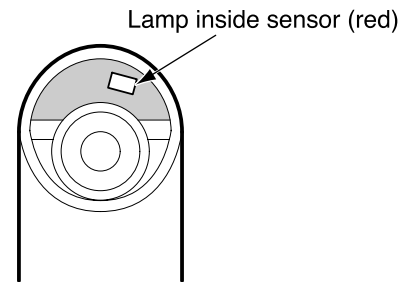


Liquid soap level is near empty.

Eight flashes every second means.



The sink is reflecting off the sensor light, causing an obstruction.

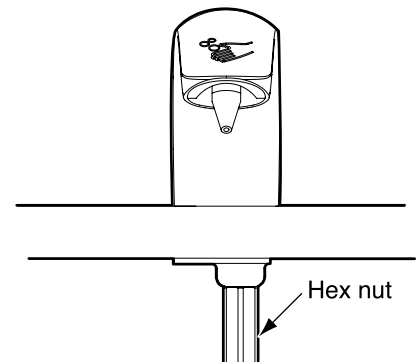


### Caution

*Certain types of ceramic may cause the sensor light to flash off and on continuously. In this case, follow the standard installation procedure. The sensor will automatically recalibrate itself.*

*Once the unit has been turned on, the light will stop flashing after 10 minutes.*

- (2) Secure the dispenser with the hex nuts provided. The hex nuts are positioned 1/2" (13mm) apart on opposite sides of the dispenser.



### If installation is not completed before sensor is calibrated.

- *If the dispenser position is still being adjusted when the flashing light automatically goes out after 10 minutes, pull the power cord out of the wall outlet and reinsert.*
- *Be sure to wait at least 10 seconds before inserting the plug back into the wall outlet.*



# 8

## Trial Operation

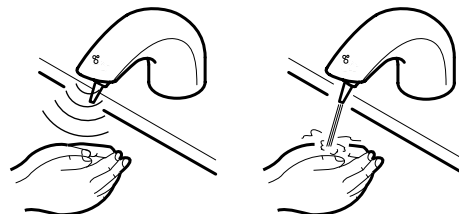
### 1. Confirming that the dispenser functions properly after installation

After installation is complete, confirm that the unit is working properly using the following method.

- (1) Place your hands under the dispenser spout and hold them in place until soap is discharged.

#### Caution

- *The dispenser pump will operate intermittently. After the third discharge, the dispenser will operate continuously for a maximum of 4 minutes.*
- *Continuous discharge only takes place within 15 minutes following power ON.*



- (2) Make sure that there is no soap leaking from the tube and hose connections.

### 2. When the dispenser is not in use for long periods of time

- If the dispenser is not in use for an extended period of time, the liquid soap in the tube may dry up and clog the tube. In such a case, fill the dispenser tank with **water** and perform a trial operation. Once you have confirmed that the dispenser is working properly, replace the water in the tank with liquid soap.

### 3. Confirming proper operation

Starting and stopping the soap discharge.

- Hold your hands under the dispenser spout to automatically discharge soap foam.
- Remove your hands from under the spout and the dispenser will stop pumping soap.
- Hold your hands under the spout continuously and an intermittent discharge of soap is pumped (a maximum of 3 discharges over a two-second period).

### 4. Trouble shooting

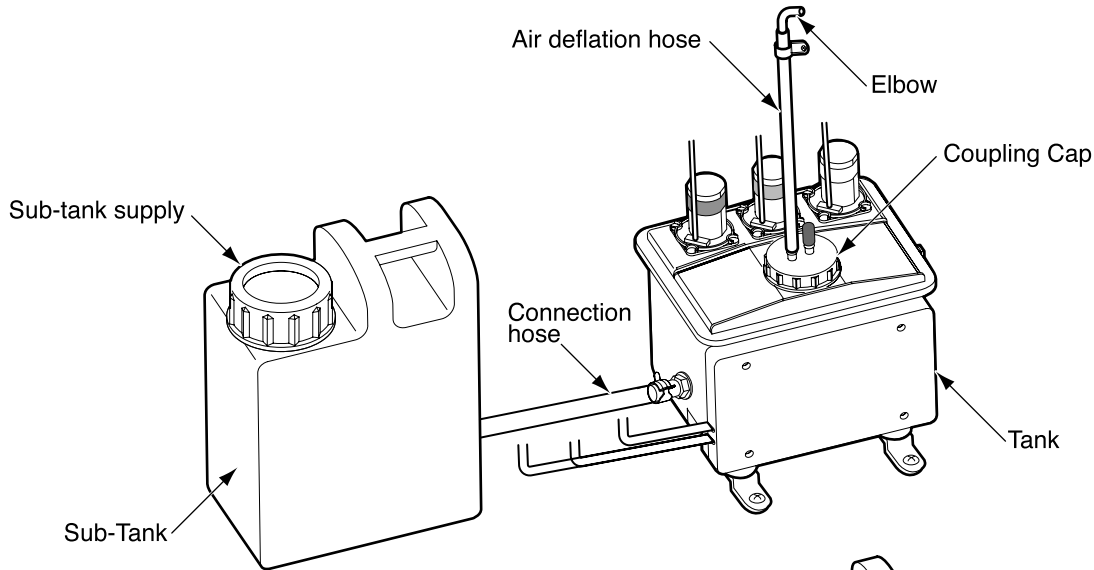
Phenomenon	What to look for	What to do	Reference page
No soap comes out.	Is the AC adapter inserted in the electrical outlet?	The AC adapter is inserted.	<b>7</b>
	Does the liquid soap tank contain liquid soap?	Fill the tank with liquid soap.	<b>8</b>
	Is the soap tube inserted securely?	Insert tube.	<b>4 , 5</b>
	Is the white connector inserted securely?	Insert the white connector.	<b>4 , 5</b>
	Is there a kink in the tube?	Remove the knik.	
It doesn't dispense mousse.	Is the green connector for the air pump inserted securely?	Insert the green connector.	<b>4 , 5</b>
	Are you using a high-viscosity liquid soap?	Please use the recommended liquid soap.	<b>2</b>
	Is the blue air tube pushed all the way into place?	Insert the blue air tube all the way into place	Instruction manual
Hardly any soap comes out.	Hasn't the connected hose of the sub tank and the water soap tank bent?	A bent hose is corrected.	



# 9

## Installation of the Sub-Tank (Special)

Fill the sub-tank with liquid soap from the sub-tank supply opening.

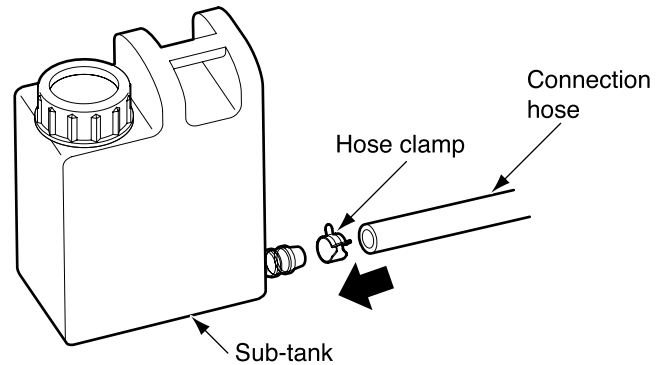


- (1) Connect the hose to the sub-tank.

\* Use the connection hose for connecting the liquid soap tanks and cut to the desired length to fit between the sub-tank and the tank.

### Caution

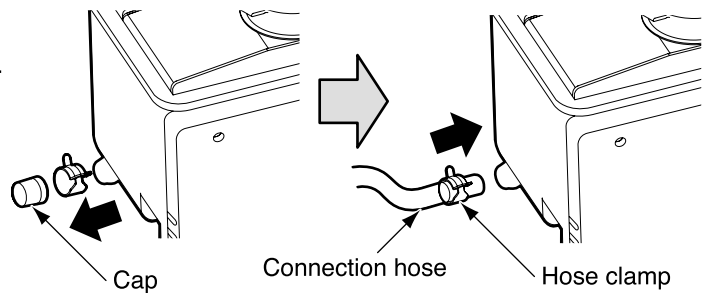
**Do not have kinks or excessive bends in the hose.**



- (2) Remove the cap located on the side of the tank.
- (3) Connect one end of the connection hose to the coupling cap on the side of the liquid soap tank.

### Caution

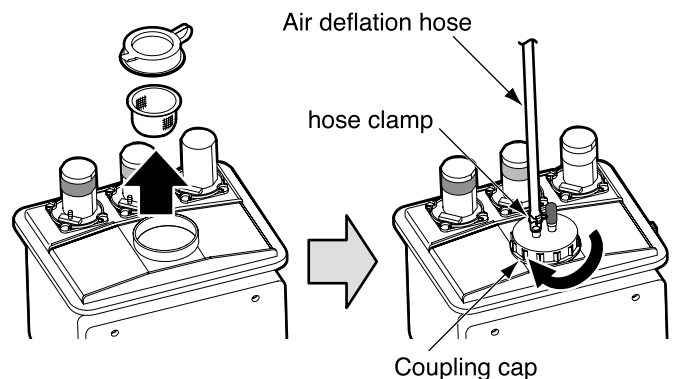
**Be sure to tighten the hose connection with the hose clamp to secure it into place.**



- (4) Unscrew and remove the lid for the soap tank supply opening and replace it with the coupling cap. Connect the air deflation hose to the coupling on the coupling cap and secure with hose clamp.

### Caution

**If the cap is not replaced soap will overflow in this area.**



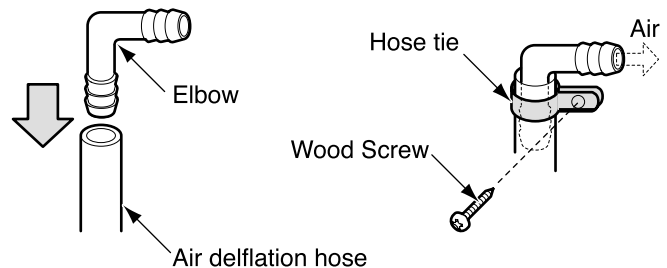
- (5) Attach the elbow to the front end of the air deflation hose and attach it to the wall with the hose tie and wood screw.

\*Do not block the elbow. It is the air bleed point for the system. The soap will not flow properly if the elbow is blocked.

- Be sure to install the elbow **between the top of the sub-tank and the counter.**

When the elbow is installed lower than the sub-tank the soap overflows.

- Be sure that the hose tie is in position with the air deflation hose and the elbow.



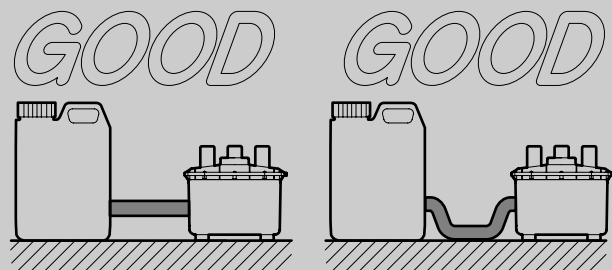
### Caution

- **The total length of the connection hose is 16.4' (5 m).**

**To ensure sufficient supply performance, do not use a hose that is longer than 16.4' (5 m).**

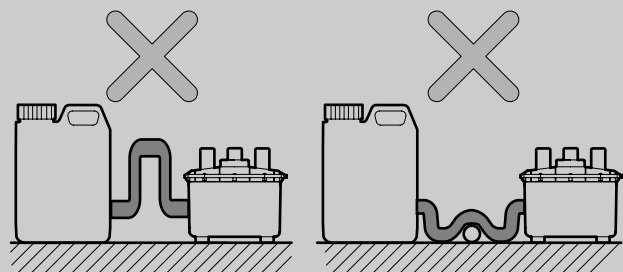
**Please install the hose horizontally.**

**(It is OK to place on the floor.)**



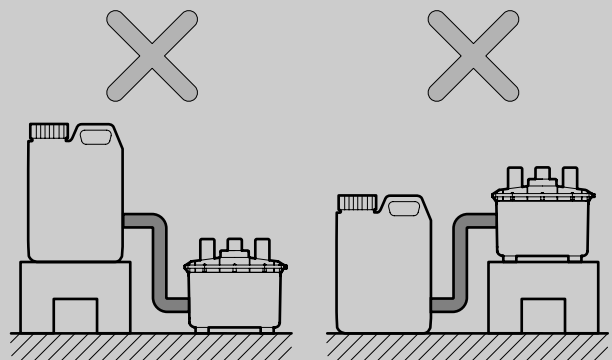
- **Install the hose in a straight line.**

**A bent hose will prevent the smooth flow of liquid soap.**



- **Position the tanks on a level surface at even height. Installing the tanks at different levels may result in the following malfunctions:**

- **Soap leakage from the tank that is at a lower level.**
- **Improper detection of the liquid soap level in the tank at the higher level.**

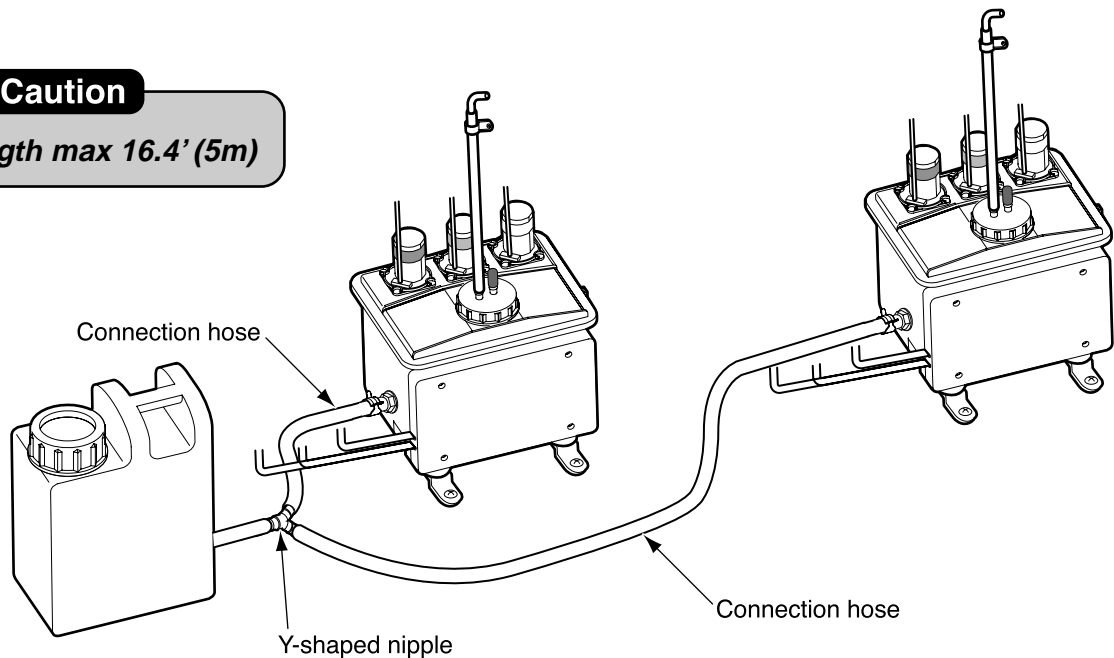


## Connecting two liquid soap tanks to one sub-tank

- *Up to two liquid soap tanks can be connected to one sub-tank. Attach the Y-shaped nipple to sub-tank to divert the connection hoses and connect them to each of the liquid soap tanks.*

### Caution

*Hose length max 16.4' (5m)*



**Be sure to provide the customer with the Owner's Manual, Instruction Label, and Allen wrenches that come with the TOTO Soap Dispenser.**

