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User manual

Product:	Wearable Breast Pump (Model S21)
Model:	S21
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Table of Contents

1 Overview 3
2 Conventions used in this manual 3
3 Important safety information 3
3.1 Indications for use 3
3.2 Safety Precautions 3
3.3 Precautions 4
3.4 Contraindication 4
3.5 Usage & operating life 5
4 Product description 5
4.1 Product structure diagram 5
4.2 Description of led display and button function 5
4.3 Package Content 6
5 Getting started 6
5.1 Assembly 6
5.2 Pumping 7
5.2.1 Before pumping 7
5.2.2 To begin pumping 7
5.3 Ending your pumping journey 10
6 Charging your breast pump 11
6.1 Charge the device 11
6.2 Battery status indicator illustration 11
6.3 Charging times 11
7 Hints to help you succeed 12
8 Cleaning, Transfer & Storage 12
8.1 Cleaning & maintenance 12
8.2 Milk storage guidelines 13
9 Troubleshooting 14
10 Technical information 14
10.1 Specifications 14
10.2 Operating conditions 15
10.3 Transport and storage 15
10.4 EMC Declaration 16
11 Waste Disposal information 21
WARNINGS 21
12 Symbols definition 21
13 Warranty 23
13.1 Warranty period 23
13.2 Division of warranty responsibility 24
13.3 Warranty specification 24

1 Overview

Thank you for purchasing this product.

Breast milk is the best source of nutrition for babies in the first year as recommended by doctors, and it contains antibodies that help protect your baby from infections and allergies, especially for your baby's needs. You can express and store your breast milk by using a breast pump. That way, when you can't breastfeed your baby yourself (whether you're away or resting, or returning to work), your baby can still enjoy the benefits of breastfeeding.

Our product, wearable breast pump has a soft silicone flange and intuitive design to make whole expression more comfortable and convenient. And, as the pump is easy to assemble and discreet, you can take it with you anywhere, allowing you to express milk at your own convenience and maintain your milk supply.

2 Conventions used in this manual

WARNING

Can lead to moderate injury.

CAUTION

Can lead to minor injury.

NOTE

Can lead to material damage.

TIPS

Useful or important information that is not related to safety.

Please read this user manual carefully before using your breast pump, and save the user manual for future reference. Failure to follow this instructions/safety information can lead to danger from the device.

3 Important safety information

3.1 Indications for use

The Wearable Breast Pump is intended to express milk from lactating women in order to collect milk from their breasts. The device is intended for a single user.

3.2 Safety Precautions

WARNINGS

- Powered breast pumps that are designed for single users should never be rented or shared.
- Only use products or parts described in this user manual.
- Close supervision is necessary when product is used near children.
- Do not modify device yourself or attempt to open or repair pump or charger.

- Pump is not provided sterile. Boil flange, silicone diaphragm, valve and milk collector prior to first use and ensure that these parts are cooled sufficiently before being assembled.
- Do not use harsh chemicals to clean flange, silicone diaphragm, valve and milk collector.
- Do not put flange, silicone diaphragm, valve and milk collector in microwave or microwave sterilizer bags.
- Do not wash pump or immerse in water. Wipe it with clean, damp cloth only.
- Do not place pump in refrigerator or freezer.
- Do not store damp components.
- Do not thaw breast milk in the microwave or in hot water.
- Do not refreeze thawed breast milk.
- Plug Charger into an electrical outlet that is visible and easily accessible. To remove line voltage (mains power); unplug the power supply from the wall.
- Do not operate the product if the power cord or plug is damaged by being dropped, damaged, or submerged in water.
- Do not drop or insert any object into any openings on Pump.
- Do not use pump in an airplane.
- Do not operate where aerosol spray products are used or oxygen is being administered.
- Pump will not work when connected to Charger; always disconnect Pump from Charger before using.
- Do not attempt to reset Pump during use.
- Consult your healthcare practitioner to understand how long you should pump in a pumping session before using the device.
- Pregnant women should not use the breast pump, as pumping can induce contractions orpremature labor.
- If you are a mother who is infected with Hepatitis B, Hepatitis C or Human Immunodeficiency virus (HIV), pumping breast milk will not reduce or remove the risk of transmitting the virus to your baby through your breast milk.

3.3 Precautions

- Ensure flange, silicone diaphragm, valve and milk collector is clean.
- Ensure flange, silicone diaphragm, valve and milk collector are securely assembled and connected to Pump.
- Before each use visually inspect the individual components for cracks, chips, tears, discoloration or deterioration. In the event that damage to the device is observed, please discontinue use until the parts have been replaced.
- If discomfort is felt, then suction can be broken by inserting a finger between the breast and the flange.
- If irritation or discomfort occurs, discontinue use and see a doctor.
- If the power adapter casing or wiring becomes loose, separated, or frayed, stop use of the power adapter immediately and contact the device manufacturer.
- Stop using the device immediately if you note any smoke or burning from the pump unit or power adapter.
- If package appears damaged or tampered with before use, do not use and contact Customer Care.

3.4 Contraindication

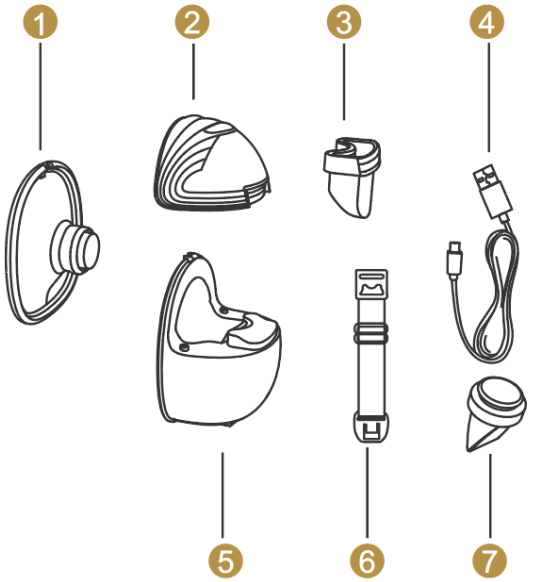
No known contraindications.

3.5 Usage & operating life

- Pump is reusable for a single user, and has an expected operating life of 1 year.
- Reusable parts (including flanges, silicone diaphragms and valves) should be cleaned prior to use and replacement every 3 months is recommended.

4 Product description

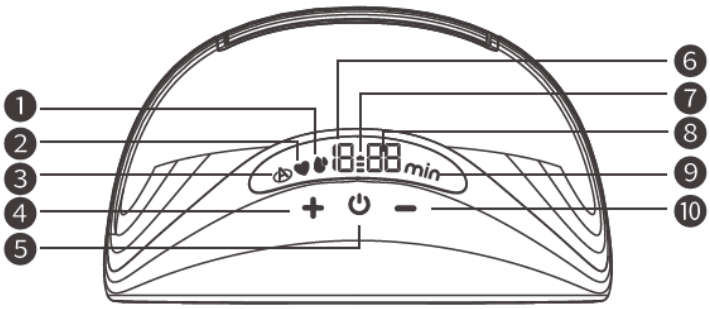
4.1 Product structure diagram



01	Flange
02	Pump motor
03	Silicone diaphragm
04	USB Charging Cable
05	Milk Collector
06	Bra adjustment buckle
07	Valve

Note: Additional breast shield sizes and spare parts are available for purchase at our local service center.

4.2 Description of led display and button function



No.	Component Name	Function Description
1	Expression Mode Symbol	To the expression mode selected on the display

2	Stimulation Mode Symbol	To the Expression mode selected on the display
3	Auto Mode Symbol	To the auto mode selected on the display
4	Level Up Button	Increase suction levels
5	Power Button/Mode Selection Button	Power on/off switch/mode selector switch
6	Suction level Indicator	To indicate the suction level
7	Battery Indicator	To indicate the battery status
8	Timing Indicator	Indicate how long the pump works
9	Time Unit	Unit for minutes
10	Level Down Button	Decrease suction levels

4.3 Package Content

Pump motor*1; Flange*1; Silicone diaphragm*1; Value*1; Milk collector*1; Bra adjustment buckle*1; USB Charging cable*1; User manual*1.

5 Getting started

5.1 Assembly

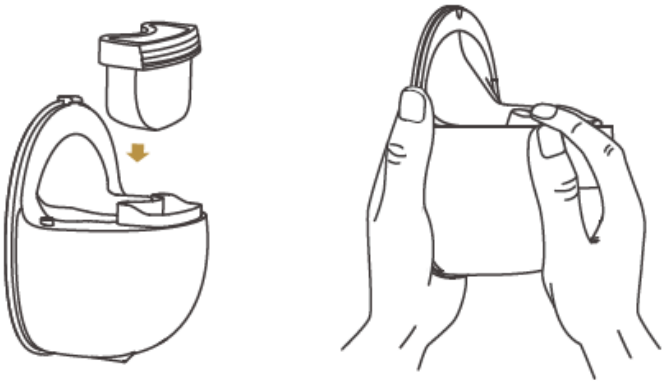
To assemble the pump, follow the steps below.

CAUTIONS

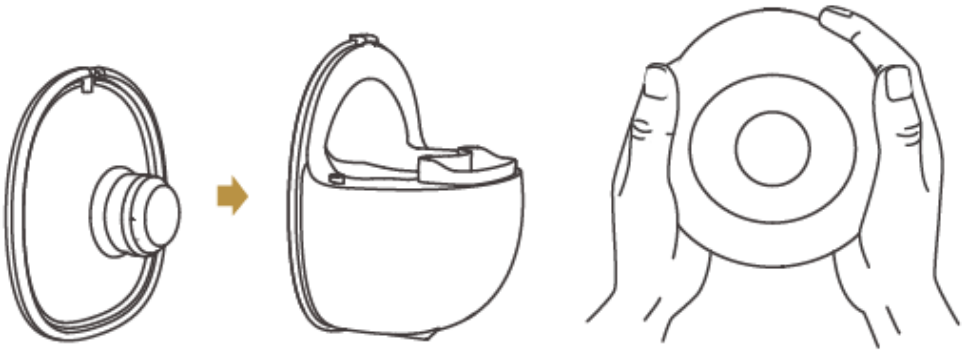
- Make sure that you clean the pump as instructed in this user manual.
- Make sure that you assemble the pump correctly as instructed in this user manual.
- To avoid leakage, remove the residue around the rim before assembling.
- Wash your hands thoroughly before you assemble cleaned components.

(1) Install the valve to the milk collector. Pay attention to the direction of installation.

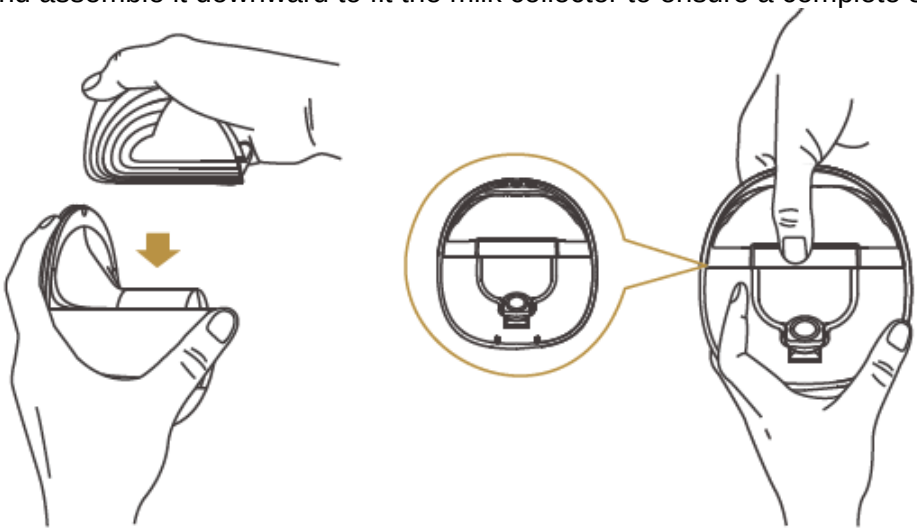
(2) Put the silicone diaphragm into the milk collector, and press it with your hands to make the edges fasten tightly to ensure a perfect sea.



(3) Install the Flange on the milk collector. Make sure to align the diversion groove on the Flange with the backflow groove on the milk collector, and then press the edges with both hands to ensure that the seal is in place.



(4) Install the pump motor on the milk collector, align the notch under the main body with the silicone diaphragm, and assemble it downward to fit the milk collector to ensure a complete seal fit.



WARNINGS

The breast pump cannot work when charging with a Charger.

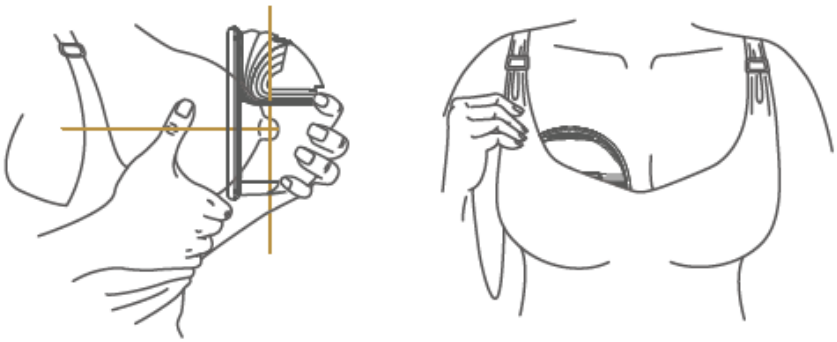
5.2 Pumping

5.2.1 Before pumping

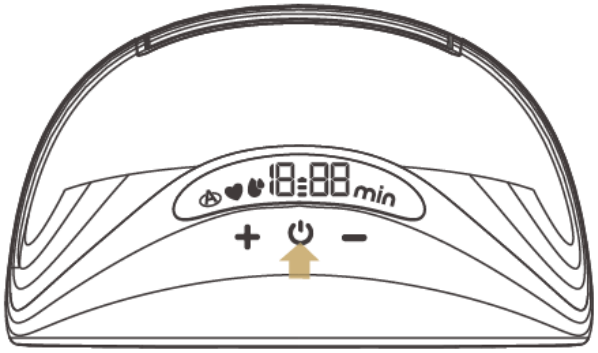
- Wash your hands well with soap and water, and make sure your breasts are clean.
- Inspect the pump kit to make sure it is clean before every use.
- Clean pump, power switch, and countertop with disinfectant wipes.
- Make sure that you have a glass of water nearby.
- Gently squeeze a little milk from each nipple to make sure that milk ducts are not blocked.
- Relax in a comfortable chair, leaning slightly forward (use cushions to support your back).

5.2.2 To begin pumping

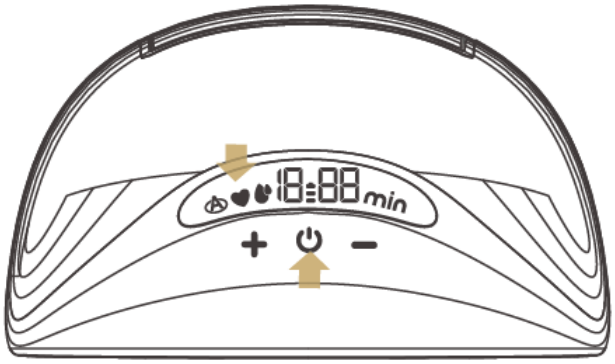
(1) Press the flange firmly against the breast, leave no gaps and make sure your nipples are centered. Keep it upright. Be careful not to distort the position of the product and the chest, otherwise the breast pump will not have suction.



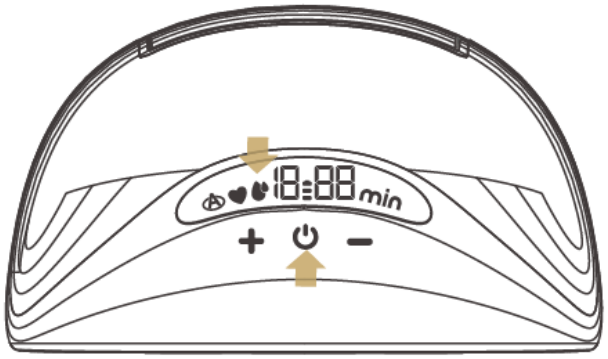
(2) Long press the power button to start the breast pump.



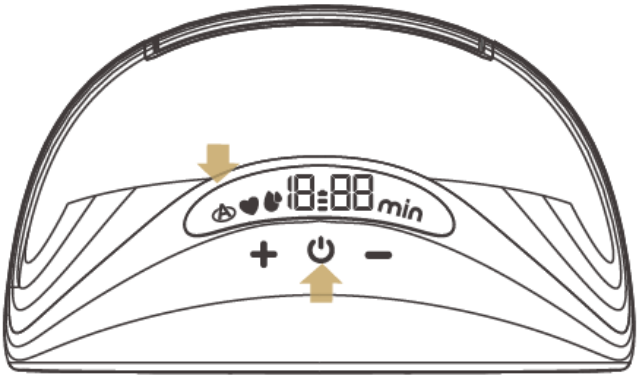
(3) You can short press the power button" ⏻ " to switch the stimulation mode, and the stimulation mode symbol will be displayed. There are 12 suction levels in this mode. You can choose the suction level that makes you comfortable by pressing the "＋" level up button and "－" level down button. In the early postpartum period, the milk duct is not easy to conduct, and this mode can be used to stimulate the breast and electively promote breast milk secretion.



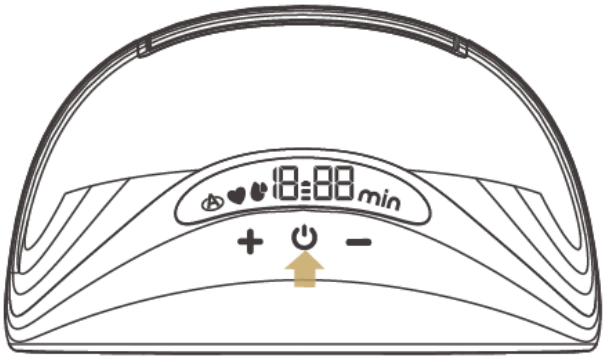
(4) Short press the power button " ⏻ "again, and the expression mode symbol will be displayed. There are 12 suction levels in this mode. You can choose the suction levels that makes you comfortable by pressing the "＋" level up button and "－" level down button.Device in this working mode can effectively improve the comfort and efficiency of breast pumping.



(5) Short press the power button "⏻"again, the auto mode symbol will be displayed. There are 12 suction levels in this mode. When switching to auto mode, the device will start from the first suction level of auto mode by default, increase by one level every 20 seconds, until the ninth levels, and stay at the ninth levels to continue working. If you want to change the suction level at this point, you need to press "+" "or "-" button in the middle. During postpartum breastfeeding, breast discomfort such as swelling and lumps are prone to occur. Using this mode can alleviate breast problems.



(6) Long press the power button "⏻" to turn off the breast pump.



⚠ CAUTIONS

1. This model has built-in a memory function, when you turn on the device again, the device automatically enters and up shifts to the working mode and suction levels you used last time. If the device is turned on for the first time, the working mode of the device is Expression mode with suction level of one.
2. The suction level is not remembered in auto mode (Auto mode is the default suction level one). When the device is in auto mode and there is no button operation, the level will be automatically upgraded to 9 level with an interval of 15 seconds. If you press a button during this period, the automatic up shift stops.
3. The device will automatically shut down regardless of operation if it is turned on for more than 20 minutes.
4. The device is not be used when lying down or sleeping to ensure proper orientation is maintained during use.

i TIPS

- Do not worry if your milk does not flow immediately. Relax and continue pumping. The first few times you use the breast pump, you may need to use a higher expression mode to get your milk flowing.
- When needed, you can also use stimulation mode to do expression.
- During expression, you can switch the stimulation mode, expression mode and auto mode by short pressing the power button for better expression.

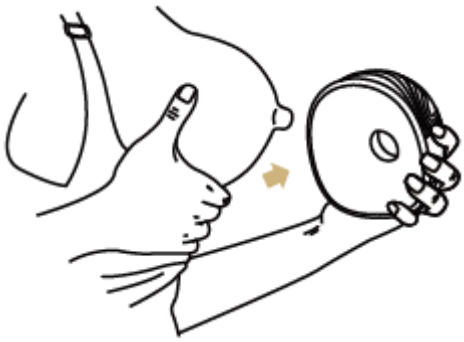
- Not all levels need to be used. You can only use the level of work that makes you comfortable.
- If you regularly express more than 180ml per session on each breast, stop the expression immediately when the expression reaches the 180 ml scale, and pour the breast milk into the bottle to prevent overfilling and overflow.
- The device will automatically turn off if it is turned on for more than 20 minutes.
- You can use the included bra adjustment buckles to attach the straps of your bra to increase the length of the straps during pumping. This will give your bra enough room to hold the breast milk collector.

WARNINGS

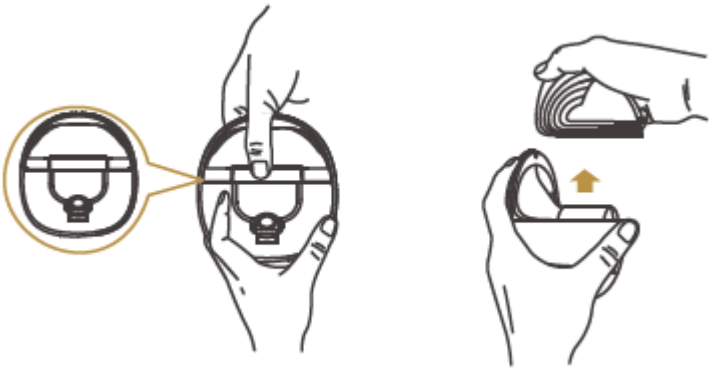
The breast pump cannot work when charging with a Charger.

5.3 Ending your pumping journey

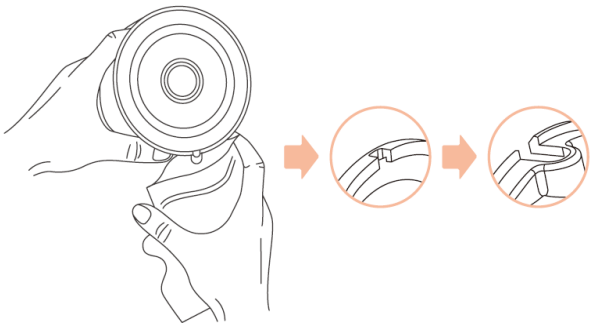
(1) When you finished expressing, press the power button to switch off and break the seal between the breast and the pump funnel with your finger, and then carefully remove the pump from your breast.



(2) Separate the milk collector from the pump motor ready for feeding/storage. Clean the other used parts as descrided in the user manual.



(3) Pour the milk into the storage bottle; Make sure the slot feature aligned with the bottle.



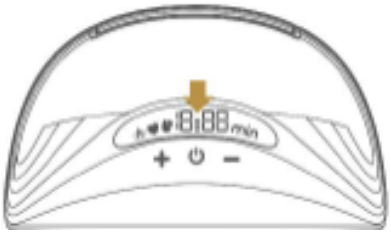
TIPS

- Do not continue pumping for more than 5 minutes at a time if you do not succeed in expressing any milk. Try to express at another time during the day.
- If you experience extreme discomfort or pain while using the device, stop using it and consult your breastfeeding consultant.
- Never tilt the breast pump when the milk has reached the maximum line on the milk collector before re-pumping to avoid spillage.
- After expression, please take off the milk collector from pump motor immediately, and then pour the milk into the milk bottle for sealing and storage.

6 Charging your breast pump

6.1 Charge the device

Check the battery indicator after each use by pressing power button. If the battery indicator blinks, charge Pump with Charger recommended by us.



1. Plug charger into pump's port.
2. Plug other end of charger into any standard electrical outlet.
3. Once pump is charged, remove charger from pump and unplug from electrical outlet.

6.2 Battery status indicator illustration

Battery status indicator displayed	Remaining pump time left
Third gear is always on	No less than 100 minutes
One gear flashing	No less than 5 minutes

6.3 Charging times

Full charge takes approximately 120 minutes and power indicator will turns 3 Grids always on when fully charged.

TIPS

- The device with a rechargeable lithium battery inside can be used without the adapter connected.
- The device has three grid battery display, when the power is off or No DC power is connected, the battery indicator DOES NOT display.
- When the power is off, if DC power is connected, the battery indicator lights up. When charging the battery indicator flashes, the three grids are always on while fully charged.
- When the device is working, NO DC power connected, the battery indicator is always on if battery full, or flashes if the power is low.
- When the device is working, if DC power is connected, the device will stop working in order to protect the device.

WARNINGS

Only use the adaptor we recommend certified DC5V1A adaptor that meets requirement of standard IEC 60950, and they should be placed outside the patient environment when they are working.

7 Hints to help you succeed

The Wearable Breast Pump is easy to use. Take some practice, and you will soon get used to expressing milk.

- Choose a time when you are not rushed nor interrupted easily.
- Having your baby or a photograph of your baby nearby can help encourage your milk to flow.
- Before expressing milk, place a warm towel onto your breast, and lightly stimulation for a few minutes. This encourages milk flow, and eases the pain of your breast.
- Warmth and relaxation can encourage milk flow. Try expressing after a warm bath or shower.
- Try expressing from one breast while your baby is feeding from the other, or continue expressing just after a feed.
- Repositioning the pump on the breast from time to time can help stimulate your milk flow.

8 Cleaning, Transfer & Storage

8.1 Cleaning & maintenance

	First Time Use	After Each Use
Pump outer housing	Wake up Pump by pressing power button.	Wipe with a clean damp cloth with 70% ethyl alcohol or isopropyl alcohol as needed. Do not immerse Pump in water.
Flange, Silicone Diaphragm, Valve and Milk Collector	Boiling in water for 10 minutes. Do not microwave Flange, Silicone diaphragm, Valve and Milk collector.	Clean with mild dish washing soap or clean water.

WARNINGS

- Be careful when removing and cleaning the valve, if the valve is damaged, the breast pump will not work properly.
- To clean the valve, please rub it gently in the warm water with a few drops of cleaning liquid. Do not insert any objects into the valve, which may cause damage.

(1) Clean by hand

- Place pump parts in a clean wash basin used only for infant feeding item. Don not place pump parts directly in the sink.
- Add soap and hot water to basin.
- Scrub items using a clean brush used only for infant feeding items.
- Rinse by holding items under running water, or by submerging in fresh water in a separate basin.
- Air-dry thoroughly. Place pump parts, wash basin, and bottle brush on a clean, unused dish towel or paper towel in an area protected from dirt and dust. Do not use a dish towel to rub or pat items dry.
- Clean wash basin and bottle brush. Rinse them well and allow them to air-dry after each use. Wash them by hand or in a dishwasher at least every few days.

(2) Clean in dishwasher

- Clean pump parts in a dishwasher, be sure to place small items into a closed-top basket or mesh laundry bag. Add soap and if possible, run the dishwasher using hot water and a heated drying cycle.

- Remove from dishwasher with clean hands. If items are not completely dry, place items on a clean, unused dish towel or paper towel to air-dry thoroughly before storing. Do not use a dish towel to rub or pat items dry.

(3) Disinfection

- Flange, linker, silicone diaphragm, valve and milk collector, those parts that come into contact with breast/breast milk should be disinfected by boiling in water for 10 minutes in the following steps.
- Separate all parts that come in contact with breast/breast milk. Wash hands thoroughly.
- Fill pot with enough water to cover all parts, bring water to a boil. Place parts in boiling water for 10minutes.
- Allow water to cool and gently remove parts from water with tongs.
- Place parts on a clean surface and/or towel.
- Allow all parts to air dry
- Store dry parts in a clean, cool place when not in use. Do NOT store wet or damp parts.

TIPS

- Flange, silicone diaphragm, valve and milk collector are dishwasher safe using top rack only.

WARNINGS

- Do not wash pump. Wipe with clean, damp cloth, if needed.
- Use milk dish washing soap rather than harsh chemicals to clean flange, silicone diaphragm, valve, and the milk collector.
- Do not store or wet or damp parts.

8.2 Milk storage guidelines

Storing expressed milk

(1) Use breast milk storage bags or clean food-grade containers with tight fitting lids. Avoid plastic containing bisphenol A (BPA) (recycle symbol #7).
(2) Write the date on the storage container, Include your child's name if you are giving the milk to a child care provider.
(3) Gently swirl the container to mix the cream part of the breast milk that may rise to the top back in to the rest of the milk. Do not shake the milk. This can make some of the milk's valuable parts break down.
(4) Refrigerate or chill milk right after it is pumped, if possible .You can put it in the refrigerator, place it in a cooler or insulated cooler pack, or freeze it in small (2- to 4- ounce) batches for later feedings. Pumped milk is OK without being refrigerated for up to 4 hours after pumping.

Human milk storage guidelines			
Type of breast milk	Countertop 77 ℉(25℃)or colder *(room temperature)*	Refrigerator 40℉ (4℃)	Freezer 0℉(-18℃) or colder
Freshly expressed or pumped	Up to 4 hours	Up to 4 days	Within 6 months is best up to 12 months is acceptable
Thawed, previously frozen	1-2 hours	Up to 1 day (24 hours)	Never refreeze human milk after it has been thawed
Leftover from a feeding (baby did not finish the bottle)	Use within 2 hours after the baby is finished feeding		

NOTE:

- Store milk in the back of the freezer or refrigerator, not the door.
- When freezing leave an inch of space at the top of the container; breast milk expands as it freezers.
- Milk can be stored in an insulated cooler bag with frozen ice packs for up to 24 hours when you are travelling.
- If you don't plan to use freshly expressed milk within 4 days, freeze it right away.

9 Troubleshooting

This chapter summarizes the most common problems you could encounter with the appliance. If you are unable to solve the problem with the information below, please contact the local service center in your country or send mail to us: service@tph-tech.com

Problem	To solve issues
Lack of suction	Check that all components are assembled correctly and that the valve is in positioned correctly.
	Make sure that the diaphragm, and the valve are fitted securely to the pump body and a perfect seal is created.
	The air pressure in your region is too low, this may affect the suction.
No milk being expressed	Make sure the pump is assembled correctly, and the suction is created.
	Relax and try again, as expression may improve with practice.
	Refer to the "Hints to help you succeed" section.
Pain in the breast area when expressing	You may be pumping too hard. You do not need to use all the suction that the pump can generate but the comfortable levels. Press the level down button to lower down the suction intensity.
	Consult your health professional/breast feeding adviser.
Leakage of breast milk during use	Remove and refit the Flange Make sure that it is installed correctly and firmly.
	Try leaning lightly forward.

10 Technical information

10.1 Specifications

Power requirements	
* Only use the Charger recommended as below:	
Power supply	Charged power: 5Vdc by Adaptor Worked power: 3.7Vdc Li-ion battery
Charger specifications	Input: 100-240 Vac, 50-60Hz, 0.4A-0.2A Output: DC5V, 1A

Technology specifications	
Use environment	Home use
Location for use	OTC
Pump dimensions	119 mm×110 mm× 69 mm
Package dimensions	180mm×145mm×80mm
Weight	226g
Milk collector Capacity	180ml
Single/Multiple user device	Single user device
Provided non-sterile	Yes
Re-usable	Yes
Pump options	Single
Pump type	Diaphragm pump
Vacuum range(Stimulation)	-30 to -160 mmHg
Vacuum range(Expression)	-120 to -280 mmHg
Vacuum range(Auto)	-30 to -280 mmHg
Cycle speed (Stimulation mode)	70-101 cycles/minute
Cycle speed (Expression mode)	23-98 cycles/minute
Cycle speed (Auto mode)	23-115 cycles/minute
Adjustable suction levels	12 levels
Visual indicator	LED screen
Auto-off time	Automatically turn off if it is turned on for more than 20 minutes.
Service Life	1 year

10.2 Operating conditions

Operating Temperature	5℃ to 40℃
Relative Humidity	15%-90%; non-condensing
Atmospheric Pressure	90 KPa to 106 Kpa

10.3 Transport and storage

Transport and storage Temperature	-20 to 60℃
Relative Humidity	15%-90%; non-condensing

Atmospheric Pressure	70 KPa to 106 Kpa

10.4 EMC Declaration

The Wearable Breast Pump may be used at home, office, or other general areas. Special consideration should be given to use:

- During Medical Procedures: Do not use the Pump during any medical procedure or during imaging. For example, do not use pump during RF ablation of a skin anomaly, x-ray, MRI, or ultrasound.
- With other equipment: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, the pump and the other equipment should be observed to verify that they are operating normally.
- In High Electrostatic Discharge Environments: If the air is very dry, use the pump where floors are wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%. If you notice shocks when you touch things, as sometimes happens in very dry winter months, be sure to touch a metal item such as a table before handling the pump.
- In Industrial Settings; avoid using the pump near arc welding equipment, radar installations, and similar industrial settings.
- Near RF Emitters: Keep devices that use WiFi, Bluetooth, and other international RF emitters at least 30 cm from the pump during operation. This includes communications equipment peripherals such as antenna cables and external antennas. Otherwise, degradation of the performance of the pump could result. If you know the power output the RF emitter, the table labeled “Electromagnetic Compatibility Compliance Statement Information” can be used for more precise information about separation distances.

WARNINGS

Use of accessories other than those specified by us may result in increased emissions or decreased immunity of the Wearable Breast Pump

(1) Pay attention to electromagnetic environment because product may be subject to electromagnetic field. Keep away from products or facility with strong magnetic waves emission in installation and use, e.g. radio signal tower, high frequency electro tome, NMR device, etc.

(2) The device may produce electromagnetic field interference to other electrical equipment, but it complies with requirement of electromagnetic compatibility standard. Portable and mobile RF communication device may have an impact on it.

(3) Do not use this device with other devices around or stacked. If must, observe if it functions well on that condition.

(4) Using accessories and cables apart from therapy cables, diagnostic test cables and power line sold as accessories of components may result in the increase of equipment or system emission or decline of noise immunity.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

Electromagnetic emission

Guidance and manufacturer´s declaration – electromagnetic emission		
The model S21 is intended for use in the electromagnetic environment specified below. The customer or the user of the model S21 should assure that it is used in such an environment.		
Emissions test	**Compliance**	**Electromagnetic environment – guidance**

RF emissions CISPR 11	Group 1	The model S21 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The S21 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Not applicable	

Electromagnetic immunity

Guidance and manufacturer´s declaration – electromagnetic immunity			
The model S21 are intended for use in the electromagnetic environment specified below. The customer or the user of the model S21 should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment -guidance**
Electrostatic discharge IEC 61000-4-2	±2 kV, ±4 kV, ±6 kV, ± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±2 kV, ±4 kV, ±6 kV, ± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient/ burst IEC 61000-4-4	± 2 kV for power supply lines 100 kHz repetition frequency ± 1 kV for input/output lines	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV differential mode line-line	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0 % U_T (100 % dip in U_T) for 0.5 cycle at 0°, 45°, 90°, 135°,180°, 225°, 270°, and 315° 0 % U_T (100 % dip in U_T) for 1 cycle at 0° 70 % U_T (30 % dip in U_T) for 25/30 cycles at 0° 0 % U_T (100 % dip in U_T) for 250/300 cycle at 0°	Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the models S21 requires continued operation during power mains interruptions, it is recommended that the models S21 be powered from an uninterruptible power supply or a battery.
Power			Power frequency magnetic fields

frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m, 50/60Hz	30 A/m, 50/60Hz	should be at levels characteristic of a typical location in a typical commercial or hospital environment.
IMMUNITY to proximity magnetic fields	65A/m, Modulation: Pulse modulation, 2.1KHz Test frequency:134.2KHz; 7.5A/m, Modulation: Pulse modulation, 50KHz Test frequency:13.56MHz;	65A/m, Modulation: Pulse modulation, 2.1KHz Test frequency:134.2KHz; 7.5A/m, Modulation: Pulse modulation, 50KHz Test frequency:13.56MHz;	/
NOTE: U_T is the a. c. mains voltage prior to application of the test level.			
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bands and amateur radio bands[a]	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bands and amateur radio bands[a]	Portable and mobile RF communications equipment should be used no closer to any part of the models S21, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$ $d = \left[\frac{3.5}{E_1}\right]\sqrt{P}$ 80MHz to 800MHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$ 800MHz to 2.7GHz where P is the maximum output

Radiated RF IEC 61000-4-3	10 V/m 80MHz to 2.7 GHz	10 V/m 80 MHz to 2.7 GHz	power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters(m).[b] Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [c] should be less than the compliance level in each frequency range [d] Interference may occur in the vicinity of equipment marked with the following symbol:
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
a /The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.			
b /The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,7 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in these frequency ranges.			
c/ Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the / is used exceeds the applicable RF compliance level above, the / should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the /.			
d/ Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Recommended separation distances between

Recommended separation distances between portable and mobile RF communications equipment and the model S21	
The model S21 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the model S21 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model S21 as recommended below, according to the maximum output power of the communications equipment.	
Rated maximum output of transmitter	**Separation distance according to frequency of transmitter /m**

/W	150 kHz to 80 MHz $d=[\frac{3.5}{V_1}]\sqrt{P}$	80 MHz to 800 MHz $d=[\frac{3.5}{E_1}]\sqrt{P}$	800 MHz to 2.7 GHz $d=[\frac{7}{E_1}]\sqrt{P}$
0.01	0.12	0.035	0.07
0.1	0.38	0.11	0.22
1	1.2	0.35	0.7
10	3.8	1.11	2.21
100	12	3.5	7
For transmitters rated at a maximum output power not listed above the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.			
NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.			
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

Recommended separation distances between RF wireless communications equipment

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between RF wireless communications equipment and the device as recommended below, according to the maximum output power of the communications equipment.

Frequency /MHz	**Maximum Power /W**	**Distance /m**	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - – uidance**
385	1.8	0.3	27	27	RF wireless communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $E=\frac{6}{d}\sqrt{P}$ Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance
450	2	0.3	28	28	
710	0.2	0.3	9	9	
745					
780					
810	2	0.3	28	28	
870					
930					

1720	2	0.3	28	28	in meters (m). Field strengths from fixed RF transmitter, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:
1845					
1970					
2450	2	0.3	28	28	
5240	0.2	0.3	9	9	
5500					
5785					
Note 1: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.					

11 Waste Disposal information

The Breast Pump contains a rechargeable lithium ion battery. Use your local return and collection system for electrical waste and electronic equipment (including batteries).
Flange, silicone diaphragm and valve should be disposed of in your home's waste management container.

WARNINGS

- This device should not be used in the vicinity or on the top of other electronic equipment such as cell phone, transceiver or radio control products. If you have to do so, the device should be observed to verify normal operation.
- The use of accessories and power cord other than those specified, with the exception of cables sold by the manufacturer of the equipment or system as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment or system.

12 Symbols definition

The warning symbol identifies all instructions that are important for safety. Failure to observe these instructions can lead to injury or damage to the breast pump! When used in conjunction with the following words, the warning symbol stands for:

(1) Pump control buttons

Button symbol	Function description
	ON/OFF or Mode selection

	Level down = decrease suction level
	Level up = increase suction level

(2) Symbols on the packing

Symbol	Definition
	This symbol indicates the manufacturer.
	This symbol indicates to keep the device dry.
	This symbol indicates to handle the fragile device with care.
	This symbol indicates to keep the device away from sunlight.
	This symbol indicates that waste electrical and electronic equipment must not be disposed of as unsorted municipal waste and must be collected separately.
℃	This symbol indicates the temperature limitation for operation, transport and storage.
%	This symbol indicates the humidity limitation for operation, transport and storage.
kPa	This symbol indicates the atmospheric pressure limitation for operation, transport and storage.
	This symbol indicates to follow instructions for use.
	This symbol indicates that the packaging contains products intended to come in contact with food according to regulation 1935/2004.
	This symbol indicates that the recyclable.
Karton Carton Board	This symbol indicates a carton package.

(3) SYMBOLS ON THE DEVICE

	This symbol indicates to follow instructions for use.
	This symbol indicates the manufacturer.
	This symbol indicates do not dispose the device together with unsorted municipal waste (for EU only).
	This symbol indicates a type BF applied part.
IP22	This symbol indicates the degree of IP protection
	This symbol indicates the date of manufacture (four digits for the year and two digits for the month).
SN	This symbol indicates manufacture's serial number of the device.
	This symbol indicates direct current.

13 Warranty

This warranty gives you specific legal rights and you may also have other rights, which vary, by location. We make no express warranty of any kind regarding the product other than those warranties explicitly set forth herein. Any implied warranty, including any implied warranty of merchantablity, non-infrngement, quiet enjoyment, or any implied warranty of fitness for a particular purpose, to the extent permitted by law, shall be limited in duration to a period of 90 days from the date of purchase by the original purchaser.

13.1 Warranty period

- The pump warranty:

We warrant to the original consumer purchaser to be free from defects in material and workmanship for the period of 12 months from the date of the pump first use on the pump mechanism under normal use and conditions. From the day of purchase by the consumer, the pump warranty period is one year.

- The other product components warranty:

No warranty is provided for other product components.

Note:

This limited warranty does not apply to any product that has been used commercially, sold or transferred to another person, subjected to misuse, abuse, or alteration.

13.2 Division of warranty responsibility

This limited warranty does not cover damage caused by accident, misuse, normal wear and tear, improper use, unauthorized maintenance or repair, or failure to follow written instructions for use.

13.3 Warranty specification

- When applying for free warranty service during the warranty period, the user must present a valid purchase certificate (such as warranty coupon).
- If you damaged the product during transportation due to improper packaging when you returned the device, no free warranty or update will be provided.
- In the event the product is found by us to not meet the above limited warranty in the Warranty Period, as purchaser's sole and exclusive remedy we will repair or, at the option of us, replace this product without charge for such replacement or parts or labor.
- The purchaser shall bear all expense for returning this product to us.To the extent permitted by law, we shall not be liable for any indirect, special, punitive, exemplary incidental or consequential damages including, but not limited to, and replacement costs resulting from the breach of any written or implied warranty.

If you wish to make a claim under this limited warranty, you must return the product to us prepaid, together with our dated bill of sale or other dated proof of purchase and a brief statement of the problem with a Returned Goods Authorization number. You can obtain the appropriate Authorization number and shipping address by mail our the Customer Care Team. Items returned without an associated Returned Goods Authorization Number will be returned to sender.

We recommend recording your serial number here when you first open your pump for easy reference when contacting our Customer Care Team. The serial number can be found on the pump interior or packing box.
Record the Serial Number(s) here for easy reference:

Serial Number of Pump 1:	
Serial Number of Pump 2:	
……	

Shenzhen TPH Technology Co., Ltd.

Address: Room 203,2nd floor,29th Building, Lianchuang Technology Park, No. 21 Bulan Road,Xialilang Community,Nanwan Street,Longgang District,Shenzhen,China.
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Email: service@tph-tech.com

FCC Caution.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.