



Motif Luna® Operational Manual

1. Introduction

Meet The Luna

Innovated with the modern mom in mind, the battery-powered Motif Luna® is a sophisticated, strong, and portable breast pump, designed for on-the-go pumping with a modern aesthetic.

All Motif Medical® products purchased from authorized retailers come with a manufacturer's warranty stating that product will be free from defects in workmanship and materials; for 2-years on double-electric breast pumps, for 1-year on internal batteries, and for 90-days on breast pump parts.

Be sure to register your breast pump upon receiving it: motifmedical.com/warranty-registration/



















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2. Highlights



The Motif Luna® is proven to provide More Milk in Less Time®

Based on a 3rd-party study, 5 out of 6 moms agree the Luna pumps More Milk In Less Time®! You can read the full report at: motifmedical.com/more-milk-less-time

Battery-powered & Rechargeable

Made for the mom on-the-go, with 2+ hours of battery life per charge and portable with a lightweight design.

Double Pumping

Expressing from both breasts at the same time saves time and supports milk supply.

Massage & Expression Modes

Effortlessly switch from Massage to Expression Mode, by pressing a single button.

The Motif Luna® Double Electric Breast Pump utilizes a vacuum to express breast milk.

Compact Elegance

Innovated with Moms in mind, the Motif Luna® is a powerful breast pump designed to blend in with a modern aesthetic.

Full Control

Easily adjust suction level and cycles for maximum comfort and an effective pumping session.

Night Light

Choose from three different light levels; great for pumping at night.

3. Intended Use (Indications of Use)

The Motif Luna® Double Electric Breast Pump is intended for use by lactating women to express and collect breast milk. The Luna can be used as a single or double pump and is only intended for personal use.

Please read this document completely and follow the instructions exactly. To prevent personal injury and material damage, please observe the warning and safety information provided in this document.



WARNING
To avoid minor injury:

 Sharing a breast pump can cause health hazards and void manufacturers warranty.

4. Symbols



Warning: Potentially dangerous situation that could result in serious injury.



Caution: A possibly dangerous situation that could result in slight bodily injury.



Notice: Useful information or information you need to know when using this product.



Manufacturer



Date of manufacturer



Serial number



Refer to instruction manual



Type BF applied part



Class II equipment

∱	Type BF applied part
	Class II a
·	Battery State
	DC
	Transport / Storage Humidity
<u></u>	Operation Humidity
	To use Temperature
23 T	Storage Temperature
<u></u>	Operating Pressure
S	Transport / Storage Pressure
SN	Serial Number
Ī	Fragile
6	Do not pile
(MP)	Good Manufacturing Practice Logo
$rac{rac}{rac}$	Keep dry
IP22	Degree of protection against harmful ingress of water or particulate matter.
Ø	This product should not be mixed with other commercial waste for disposal
\bigcirc	Power
\oplus	Increase the level of suction or cycle
	Decrease the level of suction or cycle



Changes of operation mode



LED night light

Safety

5.1 Prohibition, Warnings, and Cautions



WARNING

To prevent voiding of warranty:

- Do not modify this equipment without authorization of the manufacturer.
- Do not disassemble or modify the product. The device has no userserviceable parts.



WARNING

To avoid fire, electrocution, or serious burns:

- Do not leave the product unattended when plugged into an electrical outlet.
- Close supervision is necessary when this product is used near children or persons with disabilities.
- Place product out of reach of children.
- Use the product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- Never operate this product if it has a damaged cord or plug if it is not working properly, or if it has been dropped or damaged, or dropped into water.
- Keep cord away from heated surface.
- · Never use while sleeping or when drowsy.
- Never drop or insert any object into any opening or tubing.
- Do not use outdoors, or operate where aerosol (spray) products are being used where oxygen is being administered.
- Always inspect power adapter wires prior to use for damage or exposed wire. If damage is found, immediately discontinue use of power adapter and call Motif Medical® Customer Service.
- The Motif Medical® Luna should not be positioned so that it is difficult to operate the adapter.

- Do not disassemble or modify the product. When disassembled by unauthorized person, it voids warranty.
- Do not unplug power adaptor/charger by pulling on the cord.
- Do not inhale or swallow small parts.
- · Allergic reactions may occur.
- Lint, dust, light (including sunlight), etc can be unacceptably a ect safety
- and essential performance.
- Avoid direct sunlight and dust, and store in a dry and cool area.
- Keep out of reach of children to prevent possible su ocation or injury from swallowing small parts.



WARNING

To reduce the risk of electrocution:

- · Always unplug immediately after use.
- Do not use while bathing.
- Do not place or store product where it can fall or be pulled into a tub or sink.
- Do not place or drop into water or other liquid.
- Do not reach for a product if it has fallen into water. Immediately unplug from electrical outlet
- Do not sanitize the kit in microwave oven, never immerse main body in water.
- · Always unplug electrical product immediately after use.



WARNING

To avoid health risk and reduce the risk of injury:

- 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.
- 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.
- This product is the intended for use by a single user only and should not be shared between users.
- Do not drive while pumping.
- Never use while pregnant, as pumping can induce labor.

- Clean and sanitize all parts that come in contact with your breast and breast milk prior to first use.
- Wash all parts that come in contact with your breast and breast milk after every use.
- Do not continue pumping for more than 2 consecutive pumping session if no results are achieved.
- · Do not thaw frozen breast milk in a microwave or in a pan of boiling water.
- If tubing becomes moldy, discontinue use and replace with new tubing.
- If breast milk backup occurs you must clean tubing before your next pumping session.



CAUTION

To avoid minor injury:

- · Do not wrap cord around adapter body.
- Use only the power adapter that comes with the powered breast pump.
- Pump only with the breast pump in an upright position.
- · Do not shorten tubing.
- Make sure the voltage of the power adapter is compatible with the power source.
- Plug the power adapter into the breast pump first and then into the wall socket.
- Do not use antibacterial or abrasive cleaners/detergents when cleaning breast pump or breast pump parts.
- Never put breast pump motor in water or sterilizer as you can cause permanent damage to the breast pump.
- Do not attempt to remove the breast shield from your breast while pumping.
 Turn the breast pump off and break the seal between your breast and breast shield with your finger, then remove breast shield from your breast.
- If pumping is uncomfortable or causing pain, turn the unit off, break the seal between the breast and breast shield with your finger and remove the breast shield from your breast.
- Plastic bottles and component parts become brittle when frozen and may break when dropped.
- Bottles and component parts may become damaged if mishandled, e.g. dropped, over- tightened or knocked over.
- Take appropriate care in handling bottles and components.
- Do not use the breast milk if bottles or components become damaged.

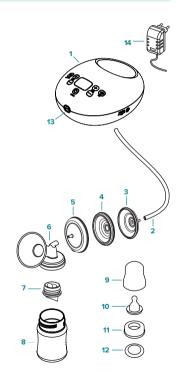
6. Parts

6.1 What's Included



While unpacking the box, make sure all of the following components are enclosed.

- Powered Breast Pump, Motif Medical® Luna
- **2** Tubing (2)
- 3 Diaphragm Top (2)
- 4 Diaphragm (2)
- **5** Diaphragm Bottom (2)
- 6 24mm & 28mm Breast Shields (2)
- **7** Valve (2)
- 8 Bottle (2)
- 9 Bottle Cap (2)
- **10** Nipple (2)
- 11 Bottle Cover (2)
- 12 Bottle Disk (2)
- **13** Air Flow Port
- 14 Power Adapter DC12V, 2A (2)
 - Milk Collection Kits (2)



Additional accessories and parts available for the Luna breast pump:

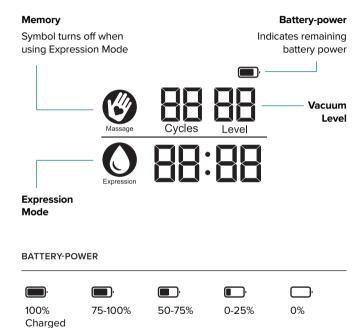
- Full resupply kit with replacement parts
- 21mm and 32mm Breast Shields
- Individual parts
- · Luna pump cooler set



Find replacement parts and additional supplies for the Luna at: motifmedical.com/replacement-supplies/

6.2 Buttons and Features

LCD SCREEN

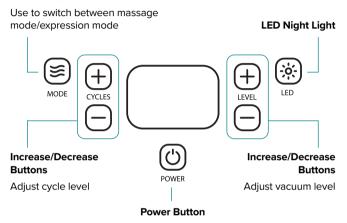




It is recommended to charge the battery as soon as battery gets to 0% - 25%. If the battery dies, your Motif Luna® will automatically shut down.

BUTTON CONTROL

Mode Button





NIGHT LIGHT

- · The LED light appears by pressing the button.
- Select between the three lighting levels by pressing the LED Night Light button until desired light intensity is selected.
- To turn off the LED light completely, press this button until light is no longer on.

6.3 Settings and Modes

Using the Cycle and Suction Settings

The Motif Medical® Luna will remember your settings automatically for your next session. If you want to start pumping on different settings than those you finished in your previous session, adjust the settings before you start expressing.

The cycle level refers to the number of full pumping motions the device will complete per minute; this is measure in Cycles Per Minute (CPM). The cycle setting can adjusted in Massage Mode from 80 to 60 CPM. The cycle setting in Expression Mode can be adjusted from 46 to 30 CPM





SUCTION SETTINGS

The suction level on your breast pump refers to the suction strength; this is measured in mm-Hg. When you are using your Motif Medical® Luna, you will usually find that expressing is most effective on the highest suction level that you are comfortable with.

However, it's important not to set section level so high that it makes you uncomfortable, as the resulting pain will hinder your milk flow.



EXPRESSION MODES

Suction pattern with slower cycles and higher vacuum to express milk gently and efficiently.



MASSAGE MODES

Suction pattern with fast cycles and low vacuum to help with Letdown and to start the flow of milk.

7. Sterilization and Cleaning



Before initial use sterilize each part of the:

- Diaphragms
- Breast Shields Bottle Caps

- Valves
- - Bottles Nipples

Repeat sterilization of other listed parts once daily after pump use.

Sterilization Instructions

- 1. If parts have been used previously, following cleaning instructions first
- 2. Place your breast pump parts in a pot and cover them with water.
- 3. Bring water to a boil and let boil for five minutes.
- 4. Remove parts with clean tongs.
- 5. Place pump parts on a clean paper towel or dish towel and allow to air dry completely.



Parts can also be sterilized in a steam sterilizer or microwave sterilization bag to sterilize breast pump parts quickly and efficiently.



Be sure not to place tubing into the Sterilizer Bags in attempt to clean the tubing.

^{**}Do not sterilize or wash the tubing.

Cleaning Instructions

- 1. Thoroughly wash your hands with warm soap and water.
- 2. Disassemble each breast pump part that came into contact with breast milk. This includes the valves, bottles, breast shields, and nipples. *Do not clean the tubing or diaphragms. Diaphragms do not need to be cleaned unless milk or moisture develops in them. If moisture or milk becomes present in the tubing, replace it as soon as possible. Do wash and hang it to dry if you need to use it again before replacing. Assure the tubing is dry before use. Moisture in the tubing could be pulled into the pump and damage the motor.
- 3. Rinse each part with cool water to remove milk residue.
- 4. Options for washing pump parts:
 - Separately wash each part in the sink with a soft brush and soap. (Be sure to use a new brush or washcloth exclusively for breast pump parts.)
 - Soak each part in warm, soapy water for 5 minutes and then thoroughly rinse them.
- Dry each part with a clean towel or allow to fully air dry on a sanitary surface, such as a clean paper towel or clean dish towel. Do not pat dry.
- Wipe the outside of your breast pump with a dry, clean towel. *Do not wash the outside of your breast pump with water or get your breast pump wet when cleaning it.



It is not recommended to wash and dry Motif Breast Pump parts in the dishwasher.

There is no standard temperature for dishwashers and some may warp parts. Parts damaged in the dishwasher are not covered under warranty.

After Every Use

- Thoroughly wash your hands before handling each breast pump component.
- Disassemble each part that comes into contact with breast milk including the valve, bottle, bottle nipple, breast shield, bottle disk, and bottle cover.
- 3. Rinse each part in cool water to remove milk residue.
- 4. Options for washing individual parts:
 - Separately wash each part with a soft brush or a clean dishcloth
 - Soak each part in warm soapy water for 5 minutes then thoroughly rinse them.
- 5. Dry each part with a clean towel and/or allow them to completely air dry on a sanitary surface.
- Wipe the main body with a dry, clean towel after each use.
 *Never use water to wash the outside of your breast pump.
- 7. Store parts after they completely dry in a clean bag or container. *Do not store any damp parts.

8. Operating Your Breast Pump

8.1 Breast Shield Sizing

Understanding size

Pumping should not hurt. This guide is a starting point to help determine your optimal breast shield size based on your nipple diameter.

HOW TO FIND THE RIGHT SIZE BREAST SHIELD FOR YOU

Step 1

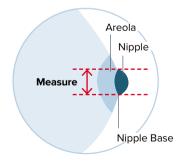
Using a ruler or measuring tape measure the diameter of your nipple at the base (across middle) in millimeters (mm).

Step 2

Take your measurement and add 4mm to determine your breast shield size. **Do not include the areola.**

*1 cm = 10 mm

Example: If your nipple size measures 26 mm in diameter, the recommended breast shield size is 30 mm.



See below for the recommended breast shield size based on your measurements:



TEST YOUR BREAST SHIFLD SIZE



Too Small

During pumping some or your entire nipple rubs against the sides of the breast shield tunnel.



Good Fit

During pumping your nipple is able to move freely in the breast shield tunnel. You will have space around your nipple and not much of the areola is drawn into the tunnel with the nipple.



Too Large

During pumping more of your areola is drawn into the breast shield tunnel with your nipple. You may experience your areola rubbing up against the side of the breast shield tunnel.

Should you try a new breast shield size?

- Does your nipple rub sides of the tunnel, to the point of causing discomfort?
- Do you see excessive areola being pulled into the tunnel?
- Do you see any redness?
- · Is your nipple or areola turning white?
- · Do you feel unexpressed milk after pumping?

If you answered "YES" to any of these questions, consider trying a new size by following the measuring instructions above.

If you are still unsure if you selected the correct size, see a lactation consultant, or breastfeeding specialist for assistance in choosing the right size breast shield.



If you need a breast shield size other than the 24mm or 28mm that come in this set, 21mm and 32mm breast shields are also available.

You can find them at: motifmedical.com/pump-supplies/luna-breast-shields

8.2 How to Assemble Backflow Protector

- 1. Wash hands before touching breast pump components.
- Insert the diaphragm into the diaphragm bottom (the component that connects to the breast shield). Ensure that it fits securely and that the diaphragm edge fits around the rim of the diaphragm bottom.
- Connect the diaphragm top (the component that connects to the tubing) over the diaphragm bottom, and diaphragm, by snapping on the diaphragm bottom into the rim of the top diaphragm.

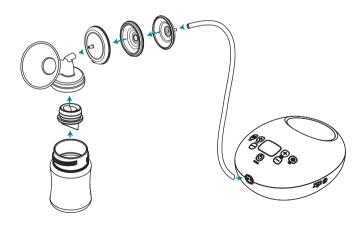






8.3 Assembling The Luna Pump

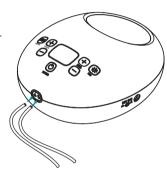
- 4. Push the valve onto the underside of the breast shield.
- Connect the diaphragm assembly to the top of the breast shield. Use a twisting motion to attach, and later remove, this assembly to avoid damaging it.
- 6. Screw the bottle onto the underside of the breast shield.
- Connect the tubing to the diaphragm assembly, and connect the other end of the tubing to the Luna. (For single-pumping attach the cap on one of the air flow ports).
- 8. Attach the power adapter to the Luna.
- 9. Plug the power adapter into the electrical outlet.



WARNING: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

8.4 How to use The Dual Pump

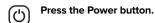
To use the Luna in Double-Pump mode remove the plug from the air flow port and connect the tubing from the extra collection kit.



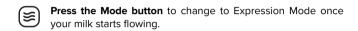
When changing back to Single-Pump mode make sure to cover the air flow port with the plug.

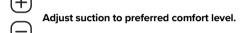


8.5 Turning On/Off The Luna Pump



The device will power ON, indicated by the screen lighting up. The Luna will begin in Massage Mode to help with faster letdown





When you wish to stop expressing, first press the Power button, then remove the breast shield and milk collection kit from your breast.

Charge the battery immediately when the Battery-power symbol is low when displayed on the LCD screen.

If the breast pump remains unused for a long period of time, make sure that the battery is fully charged before use. Unplug the power adapter from the breast pump immediately after you are finished charging your device.

9. Using Your Motif Luna Pump

9.1 Pumping Guide



Even when you are using the breast pump, it is recommended to breastfeed your baby whenever you can.

- Gently massage your breasts or apply warm compresses from the breast toward the nipple before starting your pumping session.
- Express milk from each breast for 10 15 minutes. It is recommended to pump frequently rather than pumping for a long duration. (Every 2 - 3 hours, 8 times a day.)

9.2 Getting Ready to Pump

- Check to see if you are using the correct size breast shield. See section 8.1 Breast Shield Sizing for more details.
- 2. Wash hands thoroughly.
- Connect your assembled collection kit to the tubing port on your breast pump.
- Make sure that the collection kit is connected and positioned properly.
- Place the breast shield on the breast so that the nipple is properly centered in the tunnel.
- 6. Hold the breast shield and connector onto your breast with your thumb and index finger.
- 7. Support your breast with the palm of your hand.

9.3 Aligning The Breast Shield

Center the breast shield on your breast so that the nipple is drawn into the breast shield tunnel.

It's important that the breast shield is positioned properly before pumping begins to avoid any pain that may be caused by rubbing or twisting of your nipple onto the side of the breast shield. If double pumping, place the second breast shield in place as well.

If you're concerned about the fit or want to ensure you've placed the breast shield on correctly, please reference the "Test your breast shield size" portion of section **8.1 Breast Shield Sizing**.

While some discomfort may be felt when first using a breast pump, using a breast pump should not cause pain. If you are unsure about breast shield sizing, please contact a healthcare professional or Motif Medical® representative who can help you get a proper fit.



9.4 Expressing Your Milk

1.	Press the (b) POWER button to start pumping. The breast pump
	begins with the last used setting, so you may need to press the
	MODE button to switch back to Massage Mode.

2.	Adjust the vacuum and cycles per minute by pressing the
	+ INCREASE button and - DECREASE button to find a
	comfortable setting.

- 3. Once your milk begins to flow, press the MODE button to switch to Expression Mode.
- 4. You may need to adjust the vacuum and cycles per minute by pressing the HINCREASE button and DECREASE button to find your optimal settings.
- 5. When your pumping session is over, press the (b) POWER button on the breast pump to stop the pump. Please note, the breast pump will automatically stop after 30 minutes.

9.5 After Pumping

After each pumping session, be sure to take apart the assembly. Never attempt to clean or sterilize pump parts when still assembled; ensure you are cleaning and sterilizing each part individually.



- 1. Twist the diaphragm assembly off the breast shield.
- Remove the breast shield from the milk collection bottle and close the bottle tightly with the bottle cover and bottle disk, and store safely.
- 3. Remove the tubing from the diaphragm assembly and breast pump.
- Make sure no moisture comes in contact with or gets inside the tubing. Store the tubing in a clean bag/container. Do not wrap tubing around the breast pump.

9.6 Storing Breast Milk



TYPE OF BREAST MILK

When storing breast milk in a milk storage bag, make sure to only use non-toxic markers when writing on the bag.

STORAGE LOCATIONS / TEMPERATURES

	Room Temperature 77°F (25°C) or colder	Refrigerator 40°F (4°C)	Freezer 0°F (-18°C) or colder
Freshly expressed or pumped	0 - 4 hrs	0 - 4 days	0 - 6 mo. is best 6 - 12 mo. is acceptable
Thawed (previously frozen)	1-2 hrs	0 - 24 hours (one day)	**Never
Leftover from a Feeding (baby did not finish the bottle)	0 - 2 hrs after the baby is finished feeding		refreeze human milk after it has been thawed**

Source: CDC.gov

HOW TO THAW BREAST MILK

- Always make sure to check the date on the milk's container before using. Do not use undated milk, or milk that has been stored longer than recommended.
- 2. Thaw frozen milk in the refrigerator or under cool, running water.
- Heat the milk under warm, running water and gently swirl the container to mix the milk. Be sure not to shake the bottle.
- 4. If warm water is not available, heat a pot of water in the stove. Once the water is warm, not boiling, remove the pot from the stove and place milk container in the pot. Never warm the milk container directly on the stove.
- 5. Never microwave breast milk because microwaves can cause dangerous hot spots that could burn you or your baby.
- 6. Always test the temperature of the milk on the inside of your wrist before feeding it to a baby. The milk should feel warm, not hot.
- After thawing, milk should be stored in the refrigerator for no more than 24 hours
- Never refreeze thawed milk. Throw away previously frozen milk that is not used within 24 hours

10. Troubleshooting

10.1 Troubleshooting

Below you will find general conditions that may occur with your Motif Luna® and corresponding troubleshooting solutions.

CONDITION	POSSIBLE CAUSES	CHECKS	SOLUTIONS
	Adapter	Check if the power cord is not connected or is damaged.	Plug into the outlet. If it has damage, contact Motif customer service at 844-272-8390 or where you purchased the pump.
No power	No charge	Plug in the power cord and into an outlet and see if the Luna powers on after charging.	Plug into the outlet. If it has damage, contact Motif customer service at 844-272-8390 or where you purchased the pump.
	Battery not charging	Make sure the power adapter is properly connected when attempting to charge.	Allow the pump to fully charge for 2.5 hours before attempting to use. If the pump doesn't power on after a full charge time, contact Motif customer service at 844-272-8390, or where you purchased the pump.
Breast milk in tubing		Turn off the breast pump. Disconnect the tubing from the diaphragm. Remove the milk and tubing from the diaphragm.	

CONDITION	POSSIBLE CAUSES	CHECKS	SOLUTIONS
	Tubing	Check the tubing is connected to the main body.	Connect the air tube to the main body.
No suction	Valve	Check if the valves are connected to breast shield properly.	Disassemble and reassemble them properly.
	Air flow port plug	Check if the air flow port plug is closed.	Close the air flow port plug.
	Suction level	Check if there is a low vacuum level on the vacuum regulator valve or if there is an abnormal noise.	Contact Motif customer service at 844-272-8390.
Low suction	Defective assembly kit	Check the connection of the kit.	Disassemble and reassemble them.
	Breast shield	Check if there is a problem with the breast shield.	Visit motifmedical.com
	Valve	Check if there is damage in valve head.	Replace the valve.

CONDITION	POSSIBLE CAUSES	CHECKS	SOLUTIONS	
Pain	Suction too high	Check the suction level.	Set to the lowest suction level and consult your lactation consultant or physician.	
Main body becomes wet		Unplug the power adapter from the socket. Turn off the Breast Pump. Wipe the main body with a clean dry cloth and store it in a warm dry area for about 12 hours.		



If you need additional help troubleshooting your breast pump, please reach out to the Motif Medical® Customer Service Department.

You can access them online at motifmedical.com via chat, through email at hello@motifmedical.com or by phone (844) 272-8390.

[※] Do not store near a heater or humidifier.

10.2 Disposal

Please send components that are no longer used to Motif Medical® or properly dispose of the device in accordance with local, state, and federal regulations.



As electrical and electronic equipment, the device must be disposed of according to a specialized procedure for collection, pick-up and recycling or destruction in accordance with Directive 2012/19/EU of the European Council on Waste Electrical and Electronic Equipment [WEEE].

10.3 When to Replace Parts

How often you should replace your breast pump supplies can vary based on how often you use your breast pump. For example, a mom that exclusively breast pumps about 9 times a day and sanitizes their pump more frequently than a mom that only pumps 3 to 4 times per day will need to replace her parts more often.



A good reference to keep in mind is replacing your parts every 90 days.

Replacing Breast Pump Tubing

As the tubing becomes stretched and worn out over time it can impact your breast pump suction strength.

- If the tubing easily slides on and off the motor and backflow protector then it's time to replace it.
- You should also immediately replace the tubing if any moisture gets inside.
- There's no way to completely sterilize the tubing to prevent bacteria from collecting inside and the moisture could damage your breast pump motor.

Replacing your Valves

The silicone valves (the membranes or little white flaps on the valves) need to be replaced between 1 to 3 months based on how frequently they're used because they can affect suction power.

- Membranes need to be replaced when they don't lay flat on the valves.
- It's important to remember that smaller breast pump parts may not show any visible damage.

Replacing the Backflow Protectors

The membranes within the backflow protectors may stretch and lose elasticity over time, making them less effective at keeping moisture out of your breast pump motor.

- They need to be replaced between 3 to 6 months depending on use.
- If you see any tearing, warping, rips, or discoloration then it's time to replace them.

Replacing your Breast Shields (Flanges)

Your breast shields will collect residue, can crack, or become discolored over time depending on how often you pump.

- They should be replaced every 6 months.
- However, keep an eye out for any cracks, tears, or warping because that could indicate that need to be replaced sooner.
- The discoloration will not affect how well your pump works but may not be pleasing to the eye.

11. Technical Information

Contents	Description		
Rated voltage and frequency	Input : DC 12V, 2A		
Power Consumption	0.8A		
Battery / Life	11.1V 2000mAh Li-Polymer / 2 hours +		
Protection on electronic shock	Class II, TYPE BF: Breast Shield		
Degree of protection against ingress of water	IP Classification : IP22		
Operation Mode (Continuous operation)	Expression Mode, Massage Mode		
Suction Levels	Expression Mode	1 - 12 Levels	
	Massage Mode	1 - 5 Levels	
Suction Cycles	Expression Mode	Adjustable (30-46)	
	Massage Mode	Adjustable (60-80)	
Single/Double	Single/Double		
Timer Function	Automatic Off (30 min ± 1 min)		
Noise	Less than 45 dB		
Backflow Protection	Yes		
Cleaning Method for Accessories	Boiling water		
Operating Conditions			
Ambient temperature	41 to 104°F		
Relative humidity	20 to 80%		
Air pressure	700 to 1,060 hPa	Temperature Humidity Pressure	
Transport and Storage Conditions			
Ambient temperature	-4 to 122°F		
Relative humidity	20 to 95%		
Air pressure	500 to 1,060 hPa		

12. Electromagnetic Compatibility

Guidelines and Manufacturer's Declaration - Electromagnetic Emissions

The Motif Luna with Battery is intended for use in the electromagnetic environment specified in the table below. The customer or the user of the Motif Luna with Battery should ensure that it is used in such an environment.

Emission Test	Compliance	Electromagnetic Environment—Guidance
RF emission - CISPR 11	Group 1	The Motif Luna with Battery 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 emission - CISPR 11	Class B	The Motif Luna with Battery is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-
Harmonic emissions IEC 61000-3-2	Class A	voltage network that is supplied to buildings used for domestic purposes.
Voltage fluctuations /flicker emissions IEC 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The Motif Luna with Battery is intended for use in the electromagnetic environment specified below. The customer or the user of the Motif Luna with Battery should ensure that it is used in such an environment.

Immunity	IEC 60601	Compliance	Electromagnetic
Test	Test Level	Level	Environment—Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 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%.

Electrical fast transients IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/ output lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surges IEC 61000-4-5	±1kV differential mode ±2kV common mode	±1kV differential mode ±2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations IEC 61000-4-11	$ \begin{array}{c} <5\% \ U_{\ T} \\ >95\% \ dip \ in \\ U_{\ T} \\) \ for \ 0.5 \ cycle \\ 40\% \ U_{\ T} \\ (60\% \ dip \ in \\ U_{\ T} \\) \ for \ 6 \ cycles \\ 70\% \ U_{\ T} \\ (30\% \ dip \ in \\ U_{\ T} \\) \ for \ 30 \ cycles \\ <5\% \ U_{\ T} \\ (>95\% \ dip \ in \\ U_{\ T} \\) \ for \ 5 \ s \\ \end{array} $	$ < 5\% \ U_{\ T} \\ (> 95\% \ dip \\ in \ U_{\ T} \\ for 0.5 \ cycle \\ 40\% \ U_{\ T}) \\ (60\% \ dip \ in \\ U_{\ T}) \\ for 6 \ cycles \\ 70\% \ U_{\ T} \\ (30\% \ dip \ in \\ U_{\ T}) \\ for 30 \ cycles \\ < 5\% \ U_{\ T} \\ (> 95\% \ dip \ in \\ U_{\ T}) \\ for 5 \ s$	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Motif Luna with Battery requires continued operation during a power interruption, it is recommended that the Motif Luna with Battery be powered from an uninterruptible power supply.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	±1kV differential mode ±2kV common mode	±1kV differential mode ±2kV common mode	Power frequency magnetic fields should be measured in the intended installation location to ensure that it is sufficiently low.

NOTE. $\boldsymbol{U}_{\!\scriptscriptstyle T}$ is the AC mains voltage prior to application of the test level.

Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the device, including
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance d = 1,2 √P d = 1,2 √P 80 MHz to 800 MHz d = 2,3 √P 800 MHz to 2.5 GHz 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 in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range ^b . 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. 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 device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.

b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the Motif Luna with Battery

The Motif Luna with Battery is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of Motif Luna with Battery can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Motif Luna with Battery as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of	Separation distance according to frequency of transmitter [m]			
transmitter [W]	150kHz to 80MHz d = 1,2 \sqrt{P} 80MHz d = 0.00MHz d = 1,2 \sqrt{P}		800MHz to 2.5GHz d = 2,3 √P	
0.01	0.12 m	0.12 m	0.23 m	
0.1	0.38 m	0.38 m	0.73 m	
1	1.2 m	1.2 m	2.3 m	
10	3.8 m	3.8 m	7.3 m	
100	12 m	12 m	23 m	

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 80MHz and 800MHz, 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.

13. Warranty

Be sure to register your pump upon receiving it at: motifmedical.com/product-registration

Two-Year Limited Manufacturer's Warranty on Breast Pump Motor, 1-Year on Internal Battery (when applicable) and 90-days on breast pump parts.

All Motif Medical® products purchased from authorized retailers come with a manufacturer's warranty stating that product will be free from defects in workmanship and materials; for 2-years on double-electric breast pumps, for 1-year on internal batteries, and for 90-days on breast pump parts and the Manual Breast Pump.

Motif's sole obligation under this express warranty shall be, at Motif's discretion, to replace or repair the product or part(s) thereof (in case the product is not available, to deliver a similar type of product).

The warranty starts on the proven purchase date and is a single warranty ending from this starting date.

The warranty does not extend if the product is replaced.

The warranty is non-transferable. Motif breast pumps are single-user pumps and the warranty only applies to the original pump user.

The warranty covers manufacturing defects. Motif Medical® cannot replace a pump part which was damaged by the end user while using the pump. The warranty does not cover lost or stolen items, normal wear and tear to breast pump parts, and items that are misused, abused or improperly stored. Failure to comply with operating instructions or alterations made to the product will result in the warranty being voided.

Warranty products are shipped using standard ground. Express; overnight and 2-day shipping are available for an additional fee. The warranty is valid in the United States only. Warranty items will only be shipped to addresses in the US.

Expective service life: 2 years



If you have a warranty question, you can call **844-272-8390**, visit us online at **motifmedical.com**, or email customer service at **hello@motifmedical.com**



Manufactured for:

Motif Medical®, LLC 8 The Green, Suite 5601 Dover, DE 19901 (844) 272-8390 info@motifmedical.com www.motifmedical.com



Thank you for choosing the Motif Luna® Double Electric Breast Pump.

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