

**lactina<sup>®</sup>**  
electric breastpump



 service instructions



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Valid as of May 2015

## WARNING

- Do not use or sit the pump where it is exposed to direct sunlight or any other source of heat.
- This equipment is not suitable for use in the presence of flammable materials.
- If the power cord is damaged, it has to be replaced by a qualified service person.
- Before taking off the back of the Lactina housing for service purposes, do not forget to switch off the pump and to disconnect the power cord from the main supply.

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# 1. General Description

## Product Description

Mothers milk is the best nutrition for your baby. The Lactina® Breastpump is a clinically proven pump suitable for frequent and long term pumping.

The pump motor and the suction source are completely separate. All components which can come into contact with the milk are part of the accessories and can be very easily disconnected from the drive unit for cleaning or sanitization. The accessory kit can also be used separately as a manual pump.

## Intended Use

The Lactina Breastpump is a powered breastpump:

- To be used by lactating women to express and collect milk from their breast.
- To initiate and maintain a milk supply as well as collect breastmilk at work or during other absences from the baby.
- To initiate and maintain a milk supply if direct breastfeeding is not possible.
- To relieve engorgement.
- For use in a hospital or at home.

Lactina Select includes the following general specifications:

- with variable vacuum.
- with variable speed, i.e. the number of suction cycles per minute can be regulated.
- powered by regular electric outlet (120 VAC) or the vehicle lighter adapter.

The Lactina breastpump is for indoor use only.

## Disposal

This breastpump is made of technical plastics and metals which cannot be separated. It has to be disposed of in accordance with local regulations.

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## 2. Warranty

This product is warranted by Medela, Inc., to the original retail purchaser to be free from defects in material and workmanship for the period of three (3) years from the date of purchase. In the event of a defect or failure to conform to this warranty, Medela will, at Medela's option, repair or replace this product without charge for such replacement, on parts or labor. The Purchaser shall bear all responsibility and expense for returning this product to Medela, including risk of loss prior to receipt by Medela, and shipping, packing, and insurance costs.

Medela will have no obligation under this warranty to repair any malfunction or damage arising from any misuse, abuse, or alteration of this product. Without limiting the generality of the foregoing, bending, or dropping of this product or its components, visible cracking of the equipment housing will be presumed to be defects resulting from misuse or abuse. Accessories that are not expressly manufactured by Medela and subsequently attached to the equipment will immediately void this warranty.

ANY AND ALL IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THREE YEARS FROM DATE OF PURCHASE.  
SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

THE LIABILITY OF MEDELA FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF THIS PRODUCT, AND MEDELA WILL HAVE NO LIABILITY UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

If you wish to make a claim under this warranty, you must return this product to Medela at the address below. You must contact Medela Customer Service and obtain a Return to Merchant Authorization (RMA) Number and reference the number on your return package. The original Invoice Number or Purchase Order Number must be referenced on the RMA. Customer Service toll free number: 1-800-435-8316.

Medela, Inc. — Returns, Door 4501  
1101 Corporate Dr.  
McHenry, IL 60050  
ATTENTION: RETURNS


Call first for authorization number. Returns not accepted without an authorization number.

## 3. Technical Description

### 3.1.1 Technical Specifications

 vacuum (approx.)  
-100mmHg ..... -240mmHg  
-13.33kPa ..... -32kPa


 5.29lbs  
2.4Kg

 cycles  
Lactina Select 40 - 60 / min.


 Operation  
+5  
+40  
°C

 100 – 240V  
50 / 60Hz  
50VA  
~ Alternating current

 Transport/Storage  
-20  
+50  
°C


 T 1.25 A / 6.3 x32 / 250 V

 Operation  
20  
80




 12V DC Medela Art Nr. 928.7001  
16W  
T 1.25 A

 Transport/Storage  
20  
95

 900 410 410 mm  
180 250 150 mm

 108 kPa  
70

 Please see accompanying papers

 Protection class II  
Type B  

 Must not be disposed of together with household refuse

 FDA (GMP)  
ISO 9001  
ISO 13485  
CE (93/42/EEC)



0123



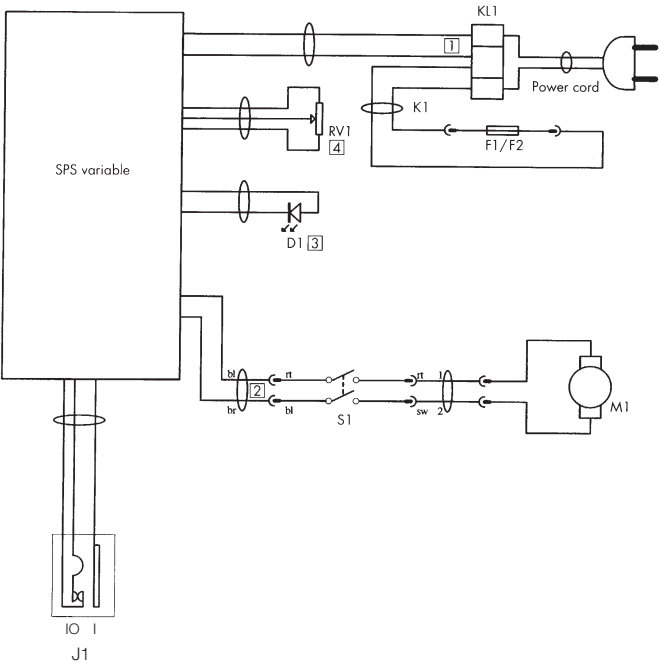


<b>Item</b>	<b>Description</b>	<b>Order #</b>
1.	Rubber clamp	820.0009
2.	Pumping arm, complete	800.0111
3.	Cotter	810.0179
4.	Bearing	810.0153
5.	Housing select	800.0244
6.	Plastic foot	812.0025
7.	Cover insert	810.0113
8.	Fillister head self-tapping screw type 1, 2.9 x 13	426.5002
9.	Fuse T 1.25 A USA	931.0012
10.	Fuse holder complete, USA	900.0382
11.	Gearbox with commutator motor 12 V	600.0923
12.	Bearing pin	599.0028
14.	Spring holder (special tool for fitting)	522.1433
15.	Countersunk self-tapping screw M 2.9 x 6.5	429.0002
16.	Cord clamp	599.0005
17.	Cord sleeve	824.1326
18.	Power cord USA	928.0026
19.	Fillister head screw with cross-slot M4 x 8	411.1001
20.	Back	810.0107
21.	Run-Stop rocker switch	934.0159
22.	Rubber protector for switch	812.0007
23.	Mains connecting cable	900.0332
24.	SPS variable trans for select	901.0034
25.	Spacing piece complete	810.0351
26.	Knob	699.0065
27.	Nut cover with line	699.0064
28.	Cover for knob	699.0066
29.	Green LED lens	942.0009

\*Not all items listed above may be available for purchase.

Medela reserves the right to change technical specifications and designations and/or order numbers without prior notice.

### 3.1.3 Electric Circuit Diagram





### 3.1.4 Dismantling

#### WARNING

Before taking off the back of the Lactina® housing for service purposes, do not forget to switch off the pump and to disconnect the power cord from the mains supply.

#### Gearbox unit:

- Remove the back (20) after releasing the screws (15 and 19).
- Release power cord with cable tension relief (16 to 18) from the back (20) and gearbox unit (11).
- Turn the gearwheel until the pumping arm (2) is swung in fully.
- Swing out the pumping arm (2) fully by hand.
- Lock the return spring by inserting the spring holder (14) obtainable from Medela in the slot provided for this purpose (see exploded view diagram).
- Swing in pumping arm (2).
- Withdraw bearing pin (12).
- Swing out pumping arm (2) again fully.
- Detach electrical connections on right-hand side from main terminal and withdraw.
- Remove gearbox unit (11).

#### Electronics:

- Remove gearbox (11) as described above.
- Compress retainer of switch case and press out switch (21) from inside to outside.
- Remove SPS red + blue connections from switch (21).
- Disconnect motor leads from switch (21).
- Withdraw LED (D1) (fuse holder 9/10 + 23 is also preferably dismantled beforehand).
- Detach SPS cable (24) from its holders.
- Remove cover (28) from knob (26 + 27).
- Release screw in knob (26 + 27) and remove knob.
- Release nut under knob (26 + 27) and draw off potentiometer inwards.
- Swing in pumping arm (2) fully.
- Hold pump case (5) by handle and withdraw SPS (24) with other hand.

#### Pump arm:

- Remove gearbox (11), preferably also SPS (24) according to description above.
- Dismantle cover insert (7) after releasing the screws (8).

### 3.1.5 Assembly

Assembly is performed in the reverse sequence to dismantling. The following points should also be noted:

- Sequence of cable routing from top to bottom: mains lead from SPS, potentiometer (RV1), switch, LED (D1).
- The SPS must be placed right at the rear of the case and the cables must be pressed fully into their holders.
- Insert potentiometer (RV1) in spacing piece (25) in positioning pin from inside to outside. The potentiometer must lie flat on the spacing piece. Place nuts on from outside and tighten.
- Turn potentiometer clockwise to stop, fit knob (26 + 27) and turn clockwise until line is at 7. Tighten screw.
- Before fitting the back check whether the internal parts of the pumping arm (2) do not touch anywhere.
- Connections on right-hand side of mains terminal strip (KL1) from top to bottom: Power cord no. 1, power cord no. 2 and SPS brown, SPS blue.
- Connections on left-hand side of mains terminal strip from top to bottom: black, blank, white.
- Fitting of the cover insert (7) is simplified if the pumping arm (2) is not swung in completely, but only set to the final position together with the cover insert (7).

### Breastpump Systems

Breastmilk Initiation System for Symphony® or Lactina®	67340S
Symphony / Lactina	67116 67116-06 67316S
Lactina	67094-06 67394S
Symphony / Lactina Rental Kit	67206-03

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## 3.1.6 Final Test Procedure

### a) General checks

- 100% check (visual) of type designation, serial no., DC plate 12 V and labeling on back.
- 100% check with respect to air gap between swivel arm and case with leaf gauge. Permissible air gap 0.2–1.5 mm; if the air gap is outside this range reject unit and replace.
- 100% check with respect to gap between case and back, permissible gap 0.8 mm.  
If gap > 0.8 mm, the back must be adjusted or replaced.
- 100% check high voltage test.  
Test points: 4 screw heads on back  
                  2 screw heads case floor
- 100% check rubber protection to switch for tightness.
- 100% check tightness of rotary knob with cover.

### b) Running test A 100% check

Allow unit to run for 4 hours without cylinder. Set on position 4 (standard). LED must light.

### c) Running test B 100% check

Check for running noise:

Functional check:

- Mains plug inserted (SPS active)
  - Switch at "RUN" unit runs and LED lights
  - Switch at "STOP" LED lights, unit stationary
- DC inserted (12 V) (SPS not active)
  - Switch at "RUN" unit runs, LED does not light
  - Switch at "STOP" LED does not light, unit stationary

## 4. Cleaning

The Lactina® breastpump may be cleaned with Quick Clean™ wipes or a non-abrasive detergent for general cleaning. The Lactina should be disinfected between use by different mothers. If you have questions contact Customer Service at 800.435.8316.

### Tools Required

Alcohol based disinfecting agent

Clean Cloth

Quick Clean Wipes -

Item #87056

### WARNING

- Please be sure to disconnect the Lactina power cord from the main supply prior to cleaning.

**Note:** These recommendations are not substitutes for official procedures that may differ among institutions

### Directions

#### 1. For cleaning in between a mother's own sessions

To clean the pump use a Quick Clean wipe to wipe over the breastpump. Optionally, soapy water or a non-abrasive detergent may be used.

#### 2. For cleaning in between different mothers

Wipe off with a clean, damp (not wet) cloth. Alcohol based disinfecting agent may be used.

#### 3. Do not immerse the pump unit in water; do not run water over pump.

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## 5. Precautionary Measures / Troubleshooting

The breastpump should only be used in a dust-free environment. Do not use or set the pump where it is exposed to direct sunlight or any other source of heat.

### What to do when...

– **pump does not run when it is switched on:**

Check whether the Lactina® breastpump is properly connected to the electric supply. Check the fuse. Be sure that the pump is plugged in.

– **pump action is too weak:**

Suction strength can be adjusted using the vacuum regulator. Maximum suction is achieved by setting the pointer on the regulator ring to MAX. If suction strength is still inadequate at this setting, please check whether:

- the vacuum regulator ring has been turned beyond the stop, has been displaced, is no longer a close fit or is dirty on the inside.
- the rubber seal of the piston is seating correctly and is in good condition.
- the valve has been correctly fitted to the breastshield. Is the valve membrane clean and closing properly when in resting position?
- the cylinder has been screwed tightly into the cylinder holder (or into the breastshield in the case of manual operation).
- there is no leak in the tube connection between cylinder holder and breastshield.
- the breastshield fits closely to the breast.

– **vacuum cannot be regulated:**

The two holes in the cylinder under the vacuum regulator ring may be blocked with dirt. Clean them using a brush and soapy water. The points listed above should also be checked.

– **vacuum is not released at the end of the suction stroke:**

The ventilation hole at the bottom of the cylinder may be blocked with dirt; or the piston has not been drawn right to the end during manual operation.

– **piston does not return after the suction phase:**

Check whether the suction circuit is blocked or whether there is a kink in the tubing.

To ensure that the breastpump will provide trouble-free operation for years to come, it should be examined periodically according to the following checklist.

### Checklist:

1. The specification of the fuse employed as well as the power supply to which the pump is connected must match the data on the pump specification plate.
2. Fit the accessories to the breastpump as described in the instructions for use (included with the accessory kit). The breastshield should then be connected to a vacuum gauge.
3. Connect the power cord to the main supply and switch on the unit. The pivot arm must operate with a pumping motion.

4. The following values must be attained:

Suction rate: Lactina Select

approx. 40–60 cycles/min.,  
mains  
approx. 50 cycles/min.,  
battery

Suction strength at MAX setting:

Location sea level	0 m above sea level	500 m above sea level	1000 m above sea level	2000 m above sea level
Factor	1.00	0.94	0.88	0.78
Lactina Select (+/- 20 mmHg)	255 mmHg	240 mmHg	225 mmHg	199 mmHg

## 6. Safety Tests

The following safety tests should be performed yearly:

### 1. Visual check

The breastpump should be examined for damage and dirt on the inside and outside and repaired or cleaned if necessary.

### 2. Functional test

Every function of the breastpump must be controlled according to the Instructions for Use and Service Instructions.

### 3. Electrical tests

- Enclosure leakage current: This test should be performed under normal conditions and under the conditions of Single Fault. Conditions of Single Fault: The interruption of each supply conductor one at a time.
- Patient leakage current.
- The dielectric strength between live parts and the housing. This insulation shall be double insulation.

The allowable values are defined according to the chart below:

Test		Allowable Value		Chapter IEC 601-1
Enclosure leakage current		NC	SFC	19.1
		0,1 mA	0,5 mA	19.2
				19.3
Patient leakage current	DC	NC	SFC	19.1
		0,1 mA	0,5 mA	19.2
	AC	NC	SFC	19.3
		0,1 mA	0,5 mA	19.4
Dielectric Strength	50 <U ≤150V	3000V (double insulation)		20.1
				20.3
	150 <U ≤250V	4000V (double insulation)		20.4

NC: Normal Condition  
SFC: Single Fault Condition  
U: Reference voltage

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## 7. Terms of Guarantee

The manufacturer may only be held responsible for inadequate safety, reliability and performance of the unit if assembly, additional items, adjustments, alterations and/or repairs have been carried out by persons authorized by the manufacturer and:

- the electrical installation within the room concerned satisfies IEC requirements (in the course of preparation)
- the unit is used as specified in the instructions for use
- accessory kits used on Lactina® Breastpumps are authorized by Medela, Inc.





Medela, Inc.  
1101 Corporate Drive  
McHenry, IL 60050, USA  
Ph: (800) 435-8316 or (815) 363-1166  
Email: [customer.service@medela.com](mailto:customer.service@medela.com)

[www.medela.com](http://www.medela.com)

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