



b70  
DECO



bernette

SWISS DESIGN

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# IMPORTANT SAFETY INSTRUCTIONS

Please be aware of the following basic safety instructions when using your machine. Before using this machine, read instruction manual carefully.

## DANGER!

To reduce the risk of electrical shock:

- Never leave the machine unattended as long as it is plugged in.
- Always unplug the machine from the electrical outlet immediately after using.

Protection against LED radiation:

- Do not view the LED light directly with optical instruments (e.g. magnifier). The LED light corresponds with protection class 1M.
- When the LED light is damaged or defective, contact your bernette specialist dealer.

## WARNING

To reduce the risk of burns, fire, electric shock or injury to persons:

- To operate the machine always use the supplied power cable. USA and Canada only: Do not connect power plug NEMA 1-15 to circuits exceeding 150 volt-to-ground.
- Use this machine only for purposes as described in this manual.
- Only use the machine in dry rooms.
- Do not use the machine in a damp condition or in a damp environment.
- Do not use this machine as a toy. Close attention is necessary when this machine is used by or near children.
- The machine can be used by children older than 8 or by people with reduced physical, sensory or mental capabilities or if there is a lack of experience and knowledge how to operate the machine as long as they are supervised or have been given instruction concerning the responsible use of the appliance and are aware of the involved risks.
- Children are not allowed to play with this machine.
- Cleaning and maintenance work must not be carried out by children unless they are supervised.
- Never operate this machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Contact the nearest authorized bernette dealer to arrange further details.

- Only use accessory recommended by the manufacturer.
- Don't use this machine when the ventilation openings are blocked. Keep the ventilation openings and the foot control free from the accumulation of lint, dust and loose cloth.
- Never insert any objects into any openings of the machine.
- Do not place any objects on the foot control.
- Always use the machine with a foot control of this type -.
- Do not operate the machine where aerosol products (sprays) or oxygen are being used.
- Keep fingers away from all moving parts. Special care is required around the needle.
- Neither pull nor push the fabric while sewing. This can cause needle breakage.
- When making any adjustments in the needle area – such as such as threading the needle, changing the needle, threading the hook or changing the presser foot – turn power switch to «0».
- Do not use bent needles.
- Always use the original bernette stitch plate. The wrong stitch plate can cause needle breakage.
- To disconnect, turn power switch to «0» and then remove the plug from the outlet. Do not unplug by pulling the cord, instead grasp the plug to pull it from the outlet.
- Always disconnect the power plug from the electrical outlet when the covers are removed or opened, when the machine is lubricated or during any other maintenance adjustments mentioned in the instruction manual.
- This machine is provided with double insulation (except USA, Canada and Japan). Use only identical replacement parts. See instructions for Servicing of double-insulated products.
- The sound pressure level is lower than 70 dB(A) under normal conditions.

## Important information

### Availability of the digital instruction manual

The instruction manual of the machine are provided exclusively as a PDF.

- > «www.mybernette.com» in the Internet Browser.
- > Select desired machine model.
- > Download the instruction manual under «Download».

### Appropriate use

Your bernette machine is conceived and designed for private household use. It answers the purpose to quilt fabrics as it is described in this instruction manual. Any other use is not considered appropriate. bernette assumes no liability concerning consequences resulting from an inappropriate usage.

### Servicing of double-insulated products

In a double-insulated product two systems of insulation are provided instead of grounding. No grounding means is provided on a doubleinsulated product, nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to the original parts in the product. A double-insulated product is marked with the words: «Double insulation» or «double-insulated».



The symbol may also be marked on the product.

### Environmental Protection

BERNINA is committed to the protection of the environment. We strive to minimize the environmental impact of our products by continuously improving product design and our technology of manufacturing.



The machine is labeled with the symbol of the crossed-out wastebin. This means that the machine must not be disposed of with the household waste when the machine is no longer needed. Improper disposal can result in dangerous substances getting into the groundwater and thus into our food chain, damaging our health.

The machine must be returned free of charge to a nearby collection point for waste electrical and electronic equipment or to a collection point for the reuse of the machine. Information on the collection points can be obtained from your local administration. When purchasing a new machine, the dealer is obliged to take back the old machine free of charge and dispose of it properly.

If the machine contains personal data, you are responsible for deleting the data yourself before returning the machine.



# 1 My bernette Embroidery


## 1.1 Overview Machine






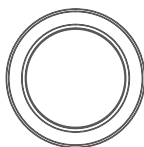
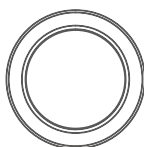

### Overview front controls




- |   |                      |    |  |
|---|----------------------|----|--|
| 1 | Sewing light         | 6  | Needle up/down                           |
| 2 | Thread cutter        | 7  | Upper Multifunctional knob               |
| 3 | Presser foot up/down | 8  | Lower Multifunctional knob               |
| 4 | Start/Stop           | 9  | Motif center                             |
| 5 | Checking motif size  | 10 | Center the needle to the embroidery hoop |

### Operation buttons

Number	Buttons	Name	Purpose
1		Sewing light	To switch the sewing light on or off, press the button «Sewing light».

Number	Buttons	Name	Purpose
2		Thread cutter	<ul style="list-style-type: none"> <li>&gt; Press the «Thread cutter» button in order to cut the upper and lower threads automatically.</li> </ul>
3		Presser foot up/down	<ul style="list-style-type: none"> <li>&gt; Press the button «Presser foot up/down» to raise the presser foot into hovering position.</li> <li>&gt; Push the button «Presser foot up/down» to raise the presser foot.</li> </ul>
4		Start/Stop	<p>The button «Start/Stop» serves the purpose to change the presser foot position and to start the machine.</p> <ul style="list-style-type: none"> <li>&gt; To start the machine, keep the button «Start/Stop» pressed for 2 seconds.</li> <li>&gt; To bring the presser foot to its highest position, quickly press «Start/Stop» in the embroidery mode.</li> <li>&gt; Press the button «Presser foot up/down» again to move the presser foot into hovering position.</li> </ul>
5		Checking motif size	<ul style="list-style-type: none"> <li>&gt; To position the hoop on the display according to the needle position, press the icon «Checking motif size».</li> </ul>
6		Needle up/down	<ul style="list-style-type: none"> <li>&gt; Push the button «Needle up/down» to lower the needle.</li> <li>&gt; Push the «Needle up/down» button again to raise the needle.</li> </ul>
7		Upper Multifunctional knob	With the «Upper Multifunctional knob» setting values can be changed in the embroidering and the Setup Program.
8		Lower Multifunctional knob	With the «Lower Multifunctional knob» setting values can be changed in the embroidering and the Setup Program.
9		Motif center	<ul style="list-style-type: none"> <li>&gt; Touch the icon «Center of the embroidery motif» to position the hoop so that the needle is placed exactly over the center of the embroidery motif.</li> </ul>

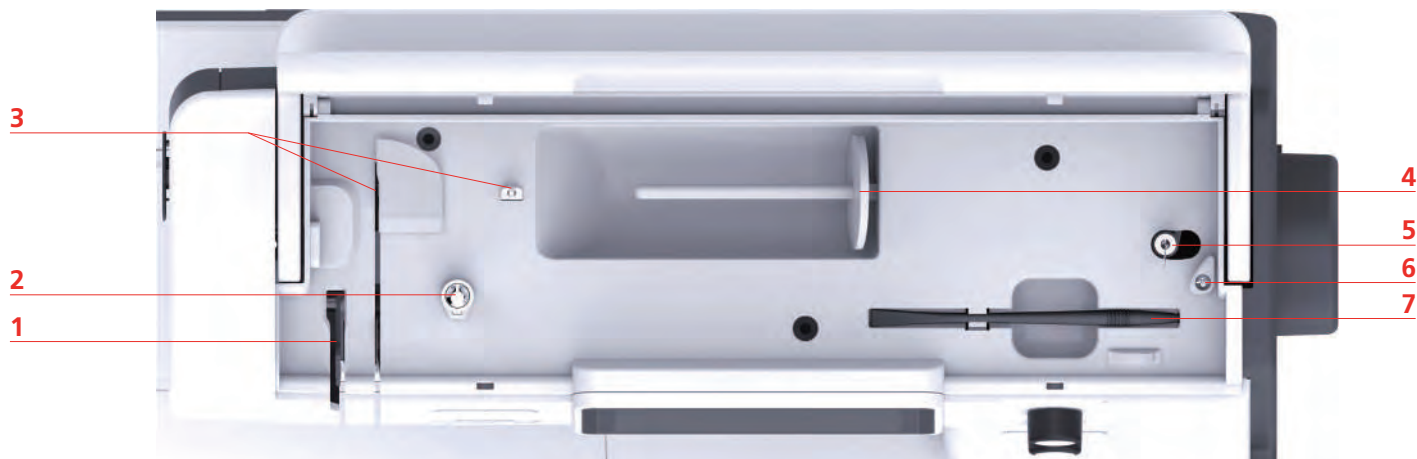
Number	Buttons	Name	Purpose
10		Center the needle to the embroidery hoop	> To facilitate threading the needle and to get enough clearance from the needle to the hoop, press the icon «Center embroidery hoop to the needle».

### Overview front



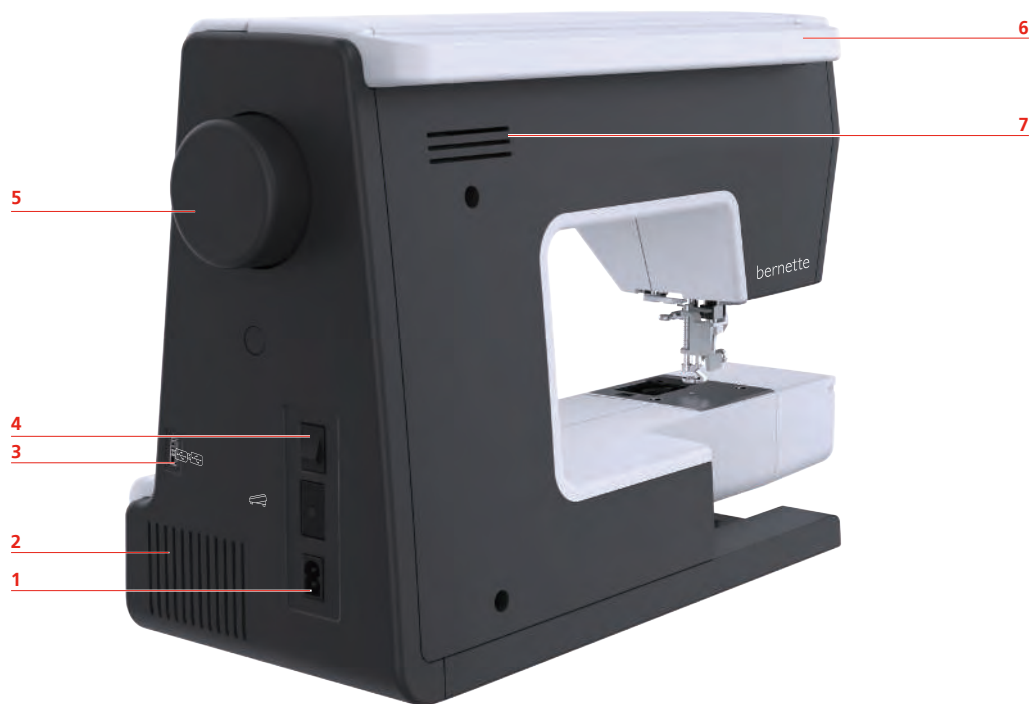
- |   |                                  |    |                      |
|---|----------------------------------|----|----------------------|
| 1 | Connection for embroidery module | 7  | Thread cutter        |
| 2 | Stitch plate cover               | 8  | Slide speed control  |
| 3 | Stitch plate                     | 9  | Thread take-up lever |
| 4 | Embroidery foot                  | 10 | Top cover            |
| 5 | Sewing light                     | 11 | LCD Display          |
| 6 | Needle threader                  |    |                      |

### Overview top



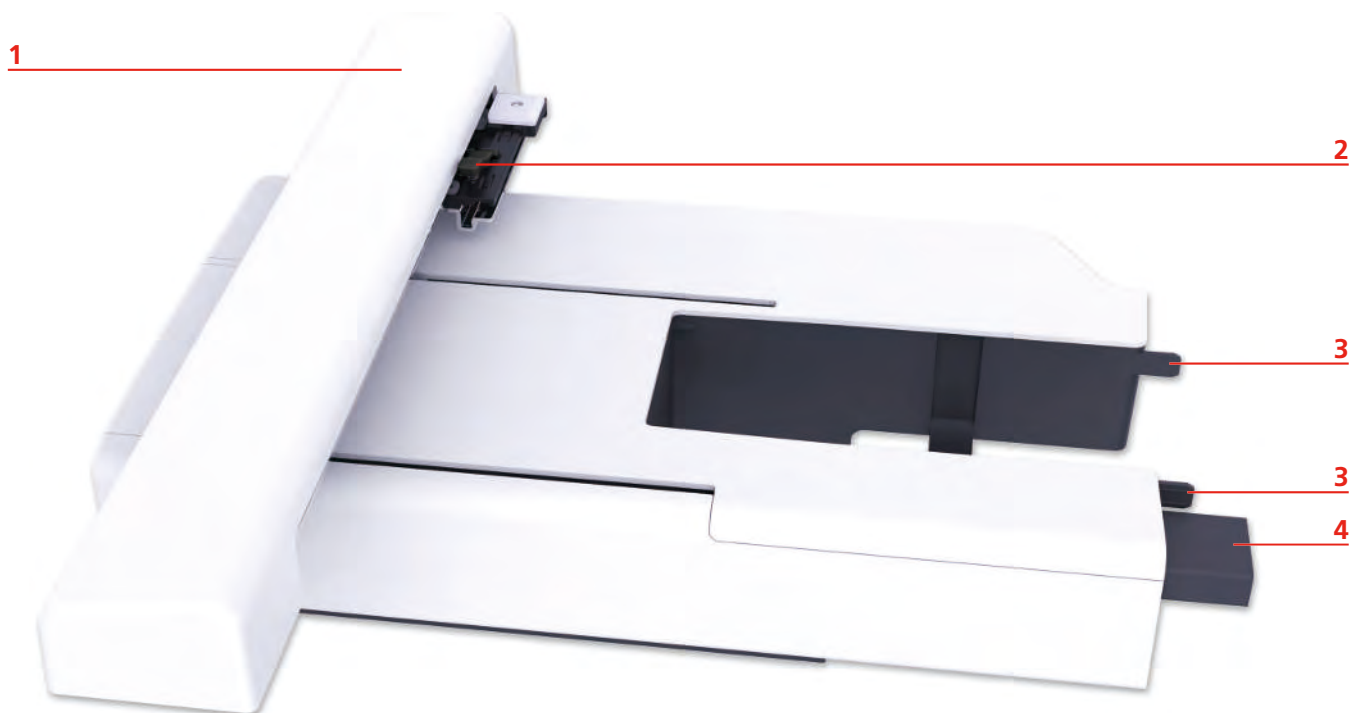
- |   |                      |   |  |
|---|----------------------|---|--|
| 1 | Thread take-up lever | 5 | Bobbin winding unit and holder for second spoolpin |
| 2 | Thread pretension    | 6 | Bobbin winding stopper                             |
| 3 | Thread guide         | 7 | Touchscreen pen                                    |
| 4 | Spool holder         |   |  |

### Overview back



- |   |                            |   |                 |
|---|----------------------------|---|-----------------|
| 1 | Connection for power cable | 5 | Handwheel       |
| 2 | Air vents                  | 6 | Carrying handle |
| 3 | USB port                   | 7 | Air vents       |
| 4 | Power switch               |   |                 |

## Overview Embroidery module



- |   |   |   |                                |
|---|---|---|--------------------------------|
| 1 | Embroidery arm                            | 4 | Connection to the machine      |
| 2 | Bracket for attaching the embroidery hoop | 5 | Embroidery unit release button |
| 3 | Guide rails for the machine               |   |                                |




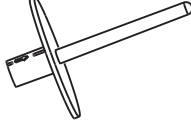


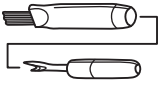
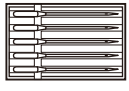

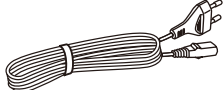

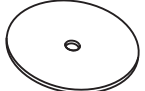

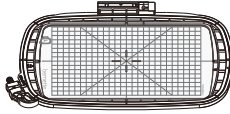
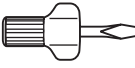
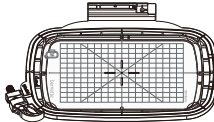
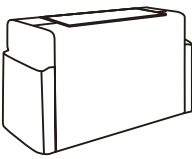
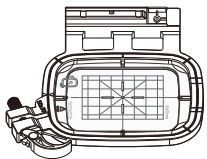

## 1.2 Accessory

**All rights reserved:** For technical reasons and for the purpose of product improvements, changes concerning the features of the machine can be made at any time and without advance notice. The supplied accessory can vary depending on the country of delivery.

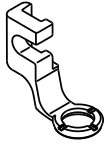
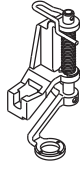
### Included accessories

Visit [www.mybernette.com/accessories](http://www.mybernette.com/accessories) for more accessory information.



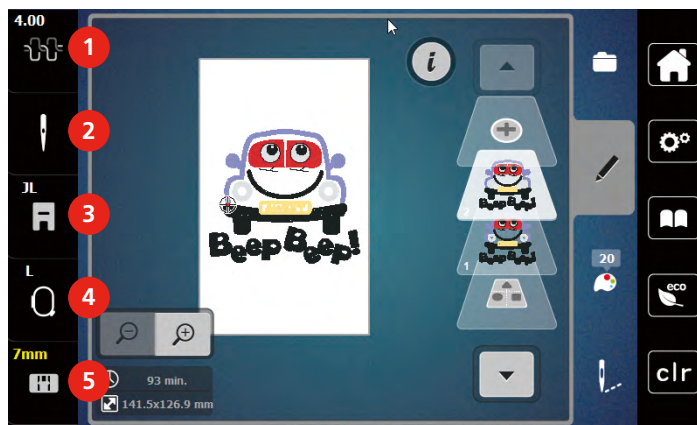
Illustration	Name	Illustration	Name
	Bobbin (3x)		Second spool pin
	Spool net		Touchscreen pen
	Brush/ Seam ripper		Selection of needles
	Spool disc large		Power cable
	Spool disc middle (1x)		Felt disc
	Spool disc small		Embroidery hoop large, 160 x 260 mm with embroidery template
	Screwdriver		Embroidery hoop medium, 120 x 180 mm with embroider template
	Dust cover		Embroidery hoop small, 50 x 70 mm with embroidery template
	Lubricator		

### Overview presser feet

Illustration	Name	Purpose
	Embroidery foot (JL)	For embroidering, darning and free-motion quilting.
	Hopper embroidery foot (JX)	For embroidering, darning and free-motion quilting.

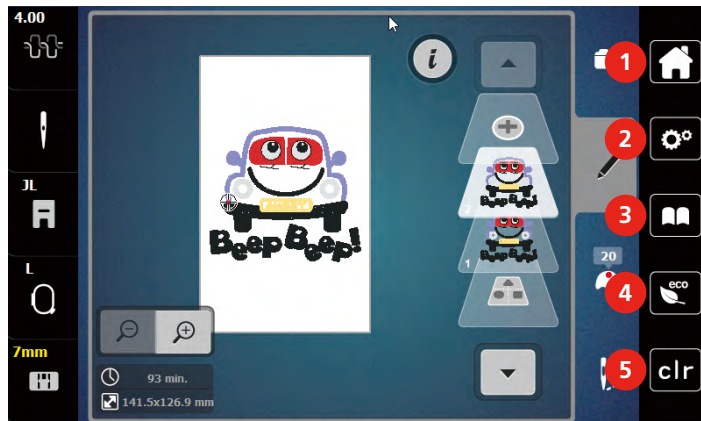
## 1.3 Overview User Interface

### Overview functions/visual information



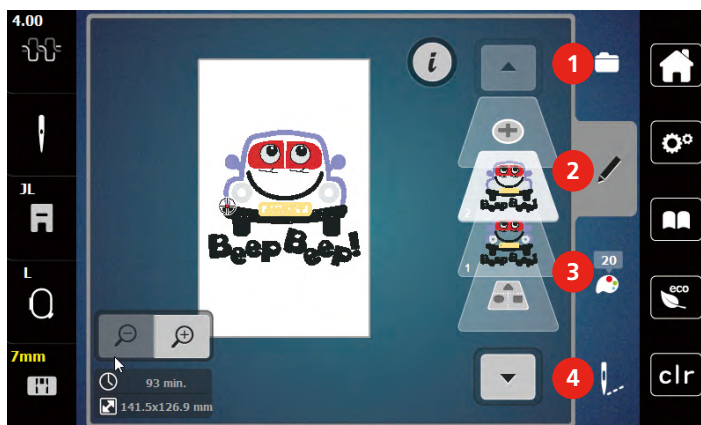
- |   |                      |   |   |
|---|----------------------|---|---|
| 1 | Upper thread tension | 4 | Embroidery hoop display/Embroidery hoop selection |
| 2 | Needle selection     | 5 | Stitch plate selection                            |
| 3 | Presser foot display |   |   |

### Overview System settings



- |   |               |   |                         |
|---|---------------|---|-------------------------|
| 1 | Home          | 4 | eco mode                |
| 2 | Setup Program | 5 | Back to default setting |
| 3 | Tutorial      |   |                         |

### Overview Selection menu embroidery











- |   |                             |   |                   |
|---|-----------------------------|---|-------------------|
| 1 | Selection embroidery motifs | 3 | Color information |
| 2 | Editing embroidery motifs   | 4 | Embroidery        |

### Overview Functions and Views

Illustration	Name	Purpose
	Close	The display is closed and the previously made adjustments are saved.
	Icons «-/+»	By touching the icons «-» and «+» the setting values are changed.
	Confirm	Confirms the previously adjusted alterations. The display is closed.



Illustration	Name	Purpose
	Cancel	The process is canceled. The display is closed and the previously made adjustments are not saved.
	Slide	By moving the slide the setting values are changed.
	Switch	Activates or deactivates functions.
	Process navigation	With the process navigation, you can return from any display to the previous the display.
	Machine	To load or save motifs on the machine.
	USB stick	To load or save embroidery motifs on the USB stick.
	USB storage space	The percentage of used USB storage (%) will be displayed in the green bar icon.
	Swipe function	By swiping the display using the touchscreen pen or the finger upwards or downwards, further functions can be displayed.
	Yellow-framed icon	Touch the yellow-framed icon to reset the alterations to default setting.

## 1.4 Needle, Thread, Fabric

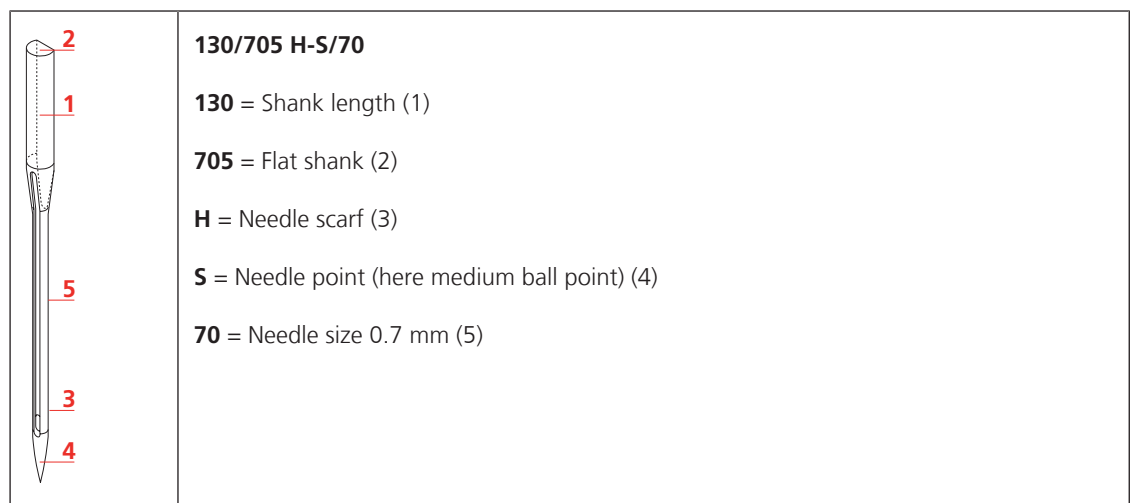
In the course of time a needle wears out. Therefore, the needle should be replaced regularly. Only a perfect point results in a good stitching result. In general it can be said: the thinner the thread, the finer the needle. The illustrated needles are either standard or optional accessory, depending on the machine.

- Needle sizes 70, 75: for light-weight fabrics.
- Needle sizes 80, 90: for medium fabrics.
- Needle sizes 100: for heavy fabrics.

### Overview Needles

#### Example for needle description

The 130/705 system, which is the most common for household machines, is explained by the following picture of a Jersey/Stretch needle.




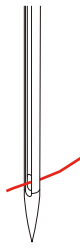
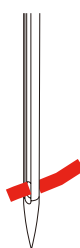
### Thread selection

For a perfect sewing result, thread and fabric quality play an important role.

We recommend purchasing quality threads to achieve good sewing results.

- Cotton threads have the advantage of being a natural fiber and therefore are especially suitable for sewing cotton fabrics.
- Mercerized cotton threads have a slight sheen that is not lost with washing.
- Polyester threads have a high tensile strength and is particularly colorfast.
- Polyester threads are more flexible and are recommended where a strong and elastic seam is required.
- Rayon threads are made of natural fibers and have a brilliant sheen.
- Rayon threads are suitable for decorative stitches and achieve a more beautiful effect.

### Needle/thread combination

	<p>The needle/thread combination is correct, when the thread fits perfectly into the long groove and goes easily through the needle eye. The thread can be optimally sewn.</p>
	<p>The thread can break and cause skipped stitches if there is too much play in the long groove or eye of the needle.</p>
	<p>The thread can break and become jammed if it frays on the edges of the long groove and is not guided optimally through the eye of the needle.</p>

## 1.5 Important Embroidery information

### Upper thread

A good quality thread (brand manufacturer) is essential for embroidery so that the embroidery is not affected negatively because of poor thread or thread breakage.

Embroidery is particularly effective if you use 40wt glossy rayon or polyester embroidery threads as upper threads. They are available in a wide range of colors for beautiful embroidery.

- Glossy polyester with a brilliant sheen is a hard wearing, colorfast thread and has a high tensile strength which is suitable for all types of embroidery.
- Rayon is a soft viscose fiber with a brilliant sheen and suitable for fine, delicate embroidery, or items that will not receive excessive wear and tear.
- Metallic thread is a light to medium-weight thread suitable for special effects in embroidery.
- When working with metallic threads, the automatic bobbin thread cutter should be deactivated. The other thread cutters shouldn't be used either because the knives are likely to wear off very quickly.

- When using metallic threads, the speed and the upper thread tension should be reduced.



### Bobbin thread

In most cases black or white bobbin thread is used for embroidering. When both sides should have the same look, it is recommended to use the same color for bobbin and upper thread.

- Bobbin Fill is an especially soft and light polyester thread which is suited well to be used as bobbin thread. This special bobbin thread ensures a steady thread tension and an optimal intertwining of the upper and bobbin thread.
- Darning and embroidery threads are fine mercerized cotton threads which are suitable for embroidery on cotton.



### Choosing the embroidery motif

Simple motifs with a low stitch count are suitable for embroidery on fine material. Densely embroidered motifs, e. g. embroidered motifs with multiple color and embroidery direction changes, are suitable for medium and heavy-weight material.

### Embroidery test

For the embroidery test, always use the original material reinforced with the same stabilizer as will be used later. For the embroidery test it is recommended to use the same colors, threads and needles which are planned to be used for the embroidery project.

### Embroidering motifs by third-party providers

bernette recommends uploading embroidery motifs of any file format via the free program «ART-Link» to the machine or a USB stick. Using «ART-Link» ensures that the embroidery motif can be read and embroidered correctly. «ART-Link» can be downloaded for free at [www.berna.com](http://www.berna.com).

### **Underlay stitches**

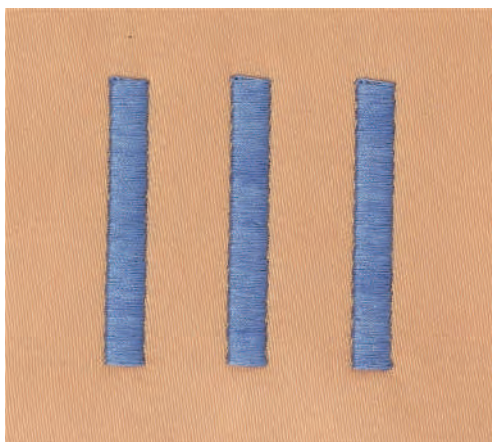
Underlay stitches are the foundation of a motif and are used to stabilize the base material and hold it in shape. They also prevent the covering stitches of the motif from sinking into the knit or the nap of the material.

### **The size of the embroidery motif**

Embroidery motifs can be enlarged or downsized on the embroidery machine or on the PC using the BERNINA Embroidery software (optional accessory). Enlargements or reductions up to 20% achieve the best results.

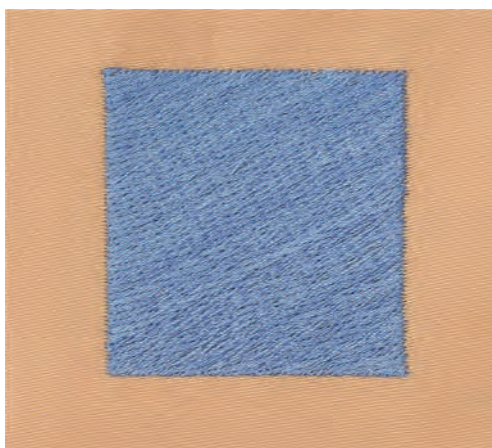
### **Satin or Leaf stitch**

The needle moves left to right and vice versa. The result is a very dense, covering zig zag stitching to fill the shape. Satin stitching fills are ideal for narrow and small shapes. Satin stitching is, however, not suitable for larger areas, since wide stitches are too loose and do not cover the fabric properly. In addition there is the risk that with too long stitches the threads could catch on something which would damage the embroidery.



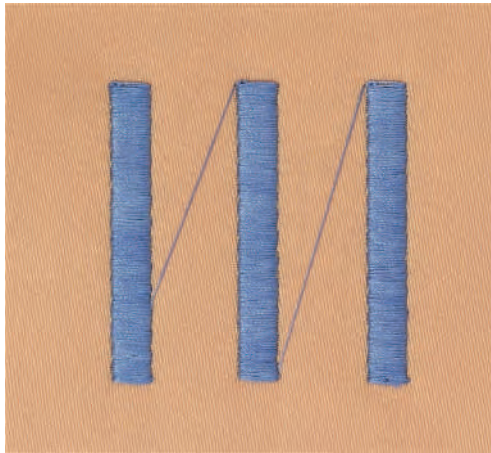
### **Step stitch**

Many short, equally long stitches are embroidered in offset rows closely next to each other which results in a densely filled area.



## Connecting stitches

Long stitches which are used to get from one part of the motif to the next. Before and after the connecting stitch securing stitches are sewn. Connecting stitches are trimmed.



## 2 Embroidering preparation

### 2.1 Connection and Switching on

#### Connecting the machine

- > Insert the power cable into the power cord connection.



- > Insert the power cable into the power cord connection.

#### Use of the power cable (only USA/Canada)

The machine has a polarized plug (one blade wider than the other). To reduce the risk of electrical shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way!

#### Switching the machine on

- > Switch on the machine at the main switch to «I».



#### Fixing the touchscreen pen

- > Store the touchscreen pen on the top holder.



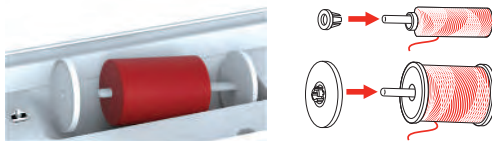
## 2.2 Spool pin

### Horizontal spool pin

Placing the thread spool and the thread disc

Spool discs hold the thread spool in place for proper release of thread from the spool. The thread disc is only used with the horizontal spool holder.

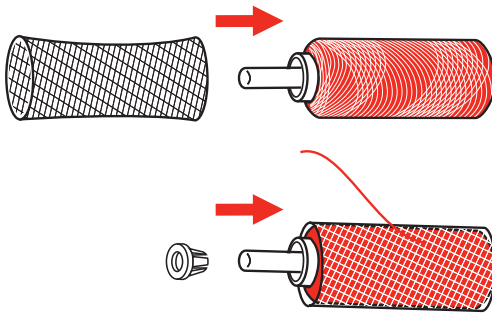
- > Place the thread spool on the spool holder.
- > Position the appropriate spool disc on the spool holder so that there is no space between the spool disc and the thread spool.



Using a spool net

The spool net provides an even unwinding of the thread from the thread spool and prevents the thread from knotting and breaking. The spool net is only used with the horizontal spool holder.

- > Pull the spool net over the thread spool.

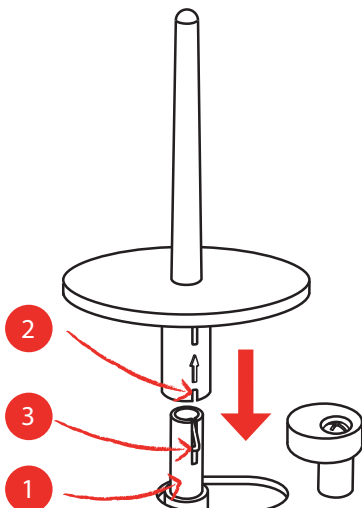


### Second spool pin

Installing the second spool pin

The second spool pin is necessary when several threads are sewn.

- > Insert the second spool pin onto the end of the bobbin winding unit(1).
- > Align the notch (2) with the spring (3) on the bobbin winding unit.

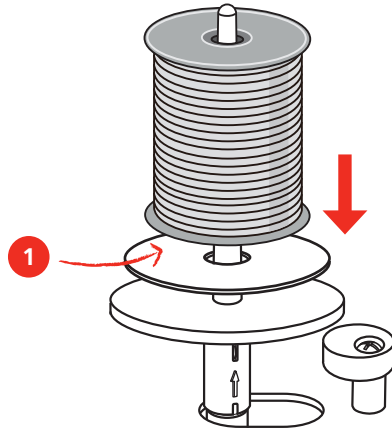




### Inserting thread spool

The felt disc prevents the thread from getting hooked at the second spool pin.

- > Place the felt disc (1) on the second spool pin.
- > Place the thread spool on the second spool pin.



## 2.3 Attaching the Module

### NOTICE

#### Transporting the embroidery module

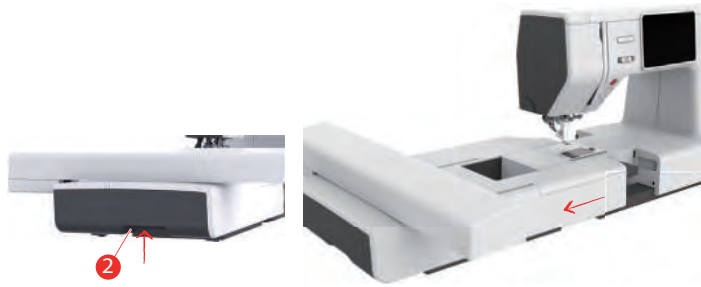
Damage to the embroidery module connection and machine.

- > Remove the embroidery module before transporting the machine.

- > Make sure that the module and the machine are placed on a stable, even surface.
- > Make sure that there is enough space around to allow the unimpeded movement of the embroidery arm.
- > Lift the embroidery module on the left.
- > Carefully push the module from left to right into the embroidery module connection (1) of the machine.



- > To remove, hold the embroidery module and press the release button (2), then slide left the embroidery module out of the machine arm.

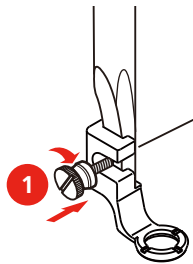


## 2.4 Embroidery foot

### Attaching the embroidery foot

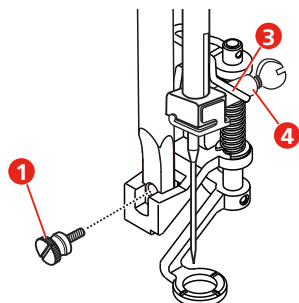
Mount the embroidery foot

- > Raise the needle.
- > Raise the presser foot.
- > Switch the machine off and disconnect it from the power supply system.
- > Attach the embroidery foot (JL) from the back with the index finger to the presser foot bar and tighten the screw (1).



Mount the hopper embroidery foot

- > Raise the needle.
- > Raise the presser foot.
- > Switch the machine off and disconnect it from the power supply system.
- > Mount the hopper embroidery foot (JX) on the presser foot rod, making sure that the spring (3) is above the needle fixing screw (4).
- > Tighten the screw (1).



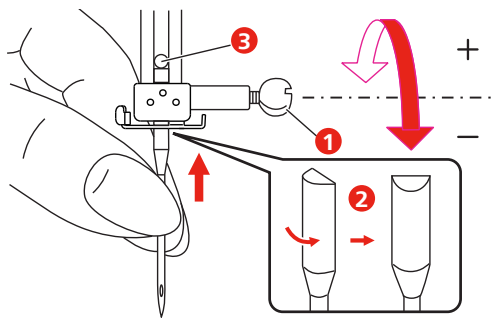
## 2.5 Needle

### Inserting the embroidery needle



Embroidery needles of the type 130/705 H-SUK provide a larger eye and are slightly rounded. This avoids thread abrasion when using Rayon- and cotton embroidery thread. Depending on the embroidery thread use a size No. 70-SUK to No. 90-SUK needle.

- > Raise the needle.
- > Switch the machine off and disconnect it from the power supply system.
- > Remove the attached foot.
- > Loosen the needle clamp screw (1) using the screwdriver and remove the needle.
- > Hold the needle with the flat side (2) to the back.
- > Insert the needle as far up as it will go (3).
- > Tighten the needle clamp (1) screw using the screwdriver.

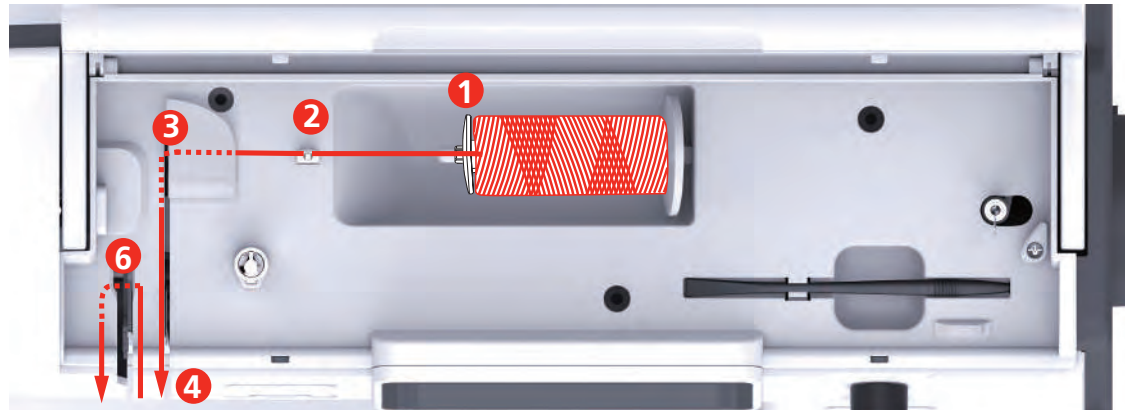


## 2.6 Threading

### Threading preparation

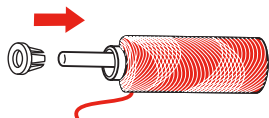
- > Press the button «Presser foot up/down» to raise the presser foot.
- > Raise the presser foot.

### Threading the upper thread

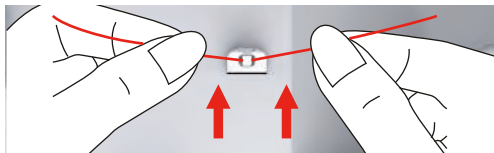


- |   |                            |    |                       |
|---|----------------------------|----|-----------------------|
| 1 | Spool disc                 | 7  | Guides                |
| 2 | Thread guide               | 8  | Guides                |
| 3 | Thread guide               | 9  | Needle threader lever |
| 4 | Silver discs               | 10 | Hook pin              |
| 5 | Thread take-up lever cover | 11 | Thread cutter         |
| 6 | Thread take-up lever       | 12 | Thread                |

- > Place the thread spool on the spool holder so that the thread unwinds clockwise.
- > Add the appropriate spool disc.



- > Guide the thread from the spool through the upper thread guide (2).



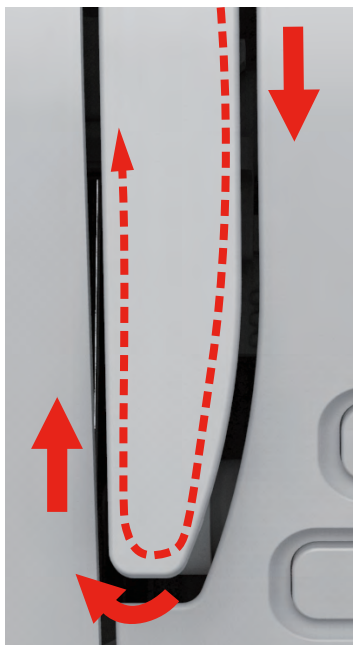
- > Guide the thread from the spool through the upper thread guide (3).



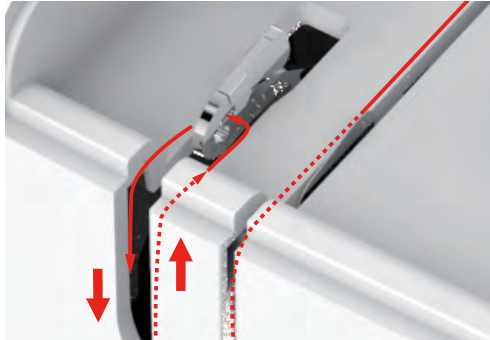
- > Place the thread end downwards along the duct.



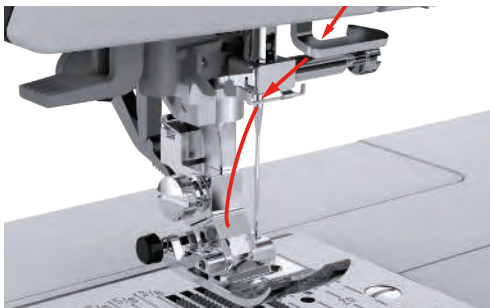
- > Then, down and around the check spring holder.



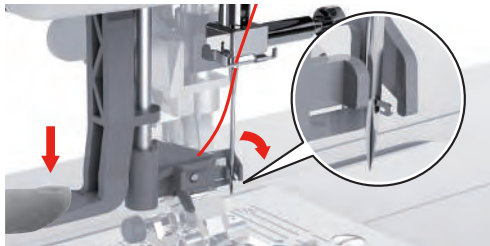
- > At the top of this movement pass the thread from right to left through the slotted eye of the take-up lever and then downwards again.



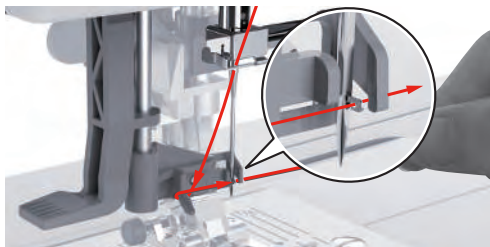
- > Guide the thread through the guides above the presser foot.



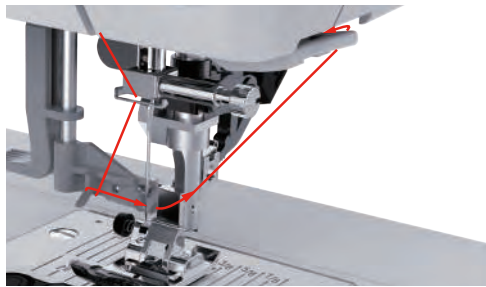
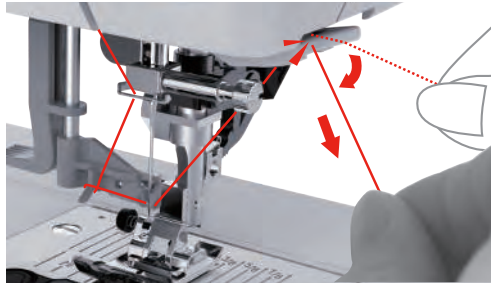
- > Press the lever to the very bottom until it clicks in.
  - The hook pin passes through the needle eye (9).
  - To prevent the threader from being damaged, the presser foot is lowered automatically.



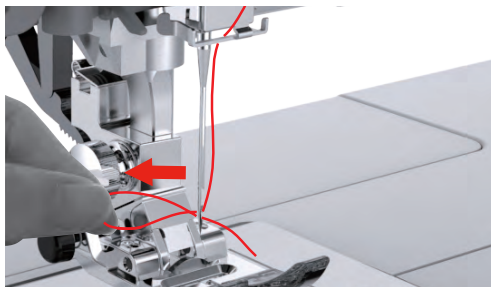
- > Guide the thread around thread guide.
- > Guide the thread in front of the needle and under the hook pin.



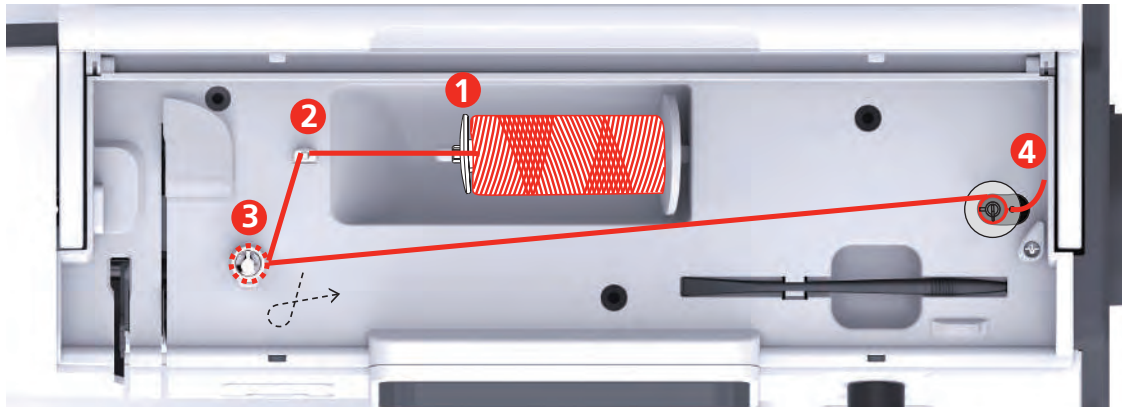
- > To cut the excess thread, take thread end and gently pull it over the thread cutter.



- > To thread the needle, lift the threader lever.
  - The hook retreats and passes the thread through the needle eye where a loop is formed.
- > Pull the thread through the needle eye.

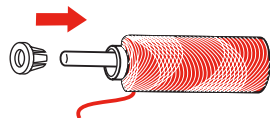


## Winding the bobbin thread

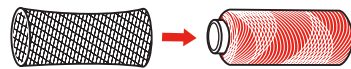


- |                |                     |
|----------------|---------------------|
| 1 Spool disc   | 3 Thread pretension |
| 2 Thread guide | 4 Spool pin         |

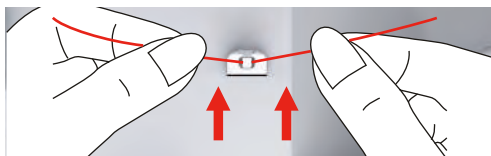
- > Place the thread spool and the appropriate spool disc on the spool holder.
- > For small thread spools use the spool disc.



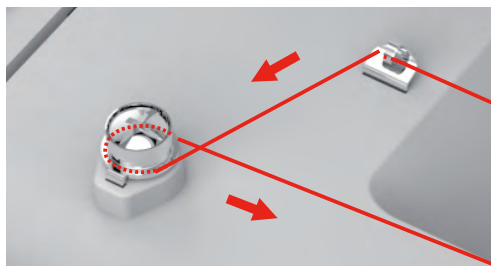
- > In order to prevent tangling of the thread, please use a spool net.



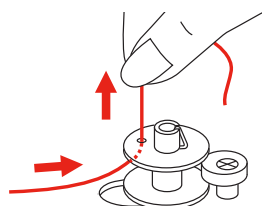
- > Guide the thread through the upper thread guide.



- > Guide the thread around the thread pretension clockwise.

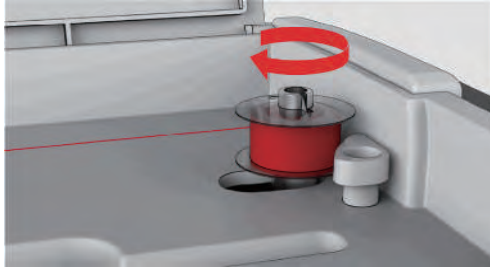


- > Place the thread end through one of the inner holes and place the empty bobbin on the winding unit.

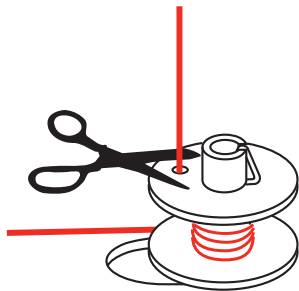




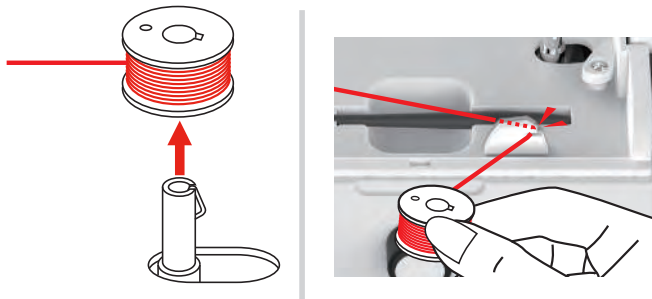
- > Push the bobbin to the right.
- > The button «Start/Stop» flashes and the display for winding appears.



- > Hold the thread end with one hand.
- > To start the winding process for a few rotations and then stop, push the button «Start/Stop», so that the thread is held tight on the bobbin.
- > Cut the thread end next to the inner hole.



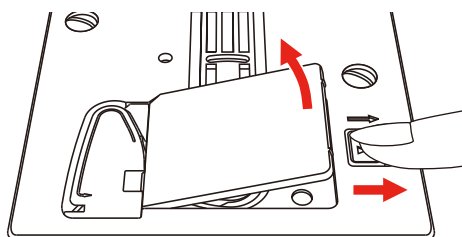
- > To continue the winding process, push the button «Start/Stop» or press the foot control.
- > To stop the winding process, push the button «Start/Stop» or press the foot control.
- > Remove the bobbin and cut the thread.



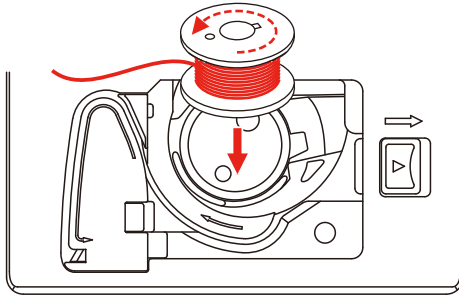
## Threading the bobbin thread

Prerequisite:

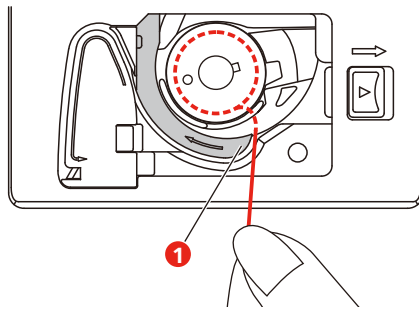
- The needle is raised.
  - The presser foot is raised.
  - The machine is switched off.
- > Open the bobbin cover by pushing the release button to the right.



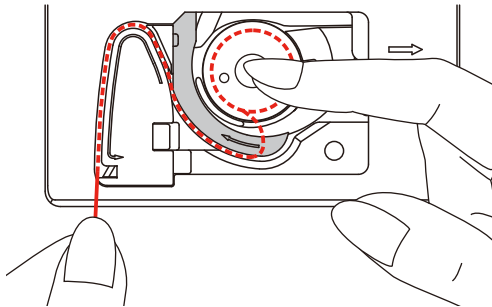
- > Insert the new spool so that the thread is wound in the counterclockwise direction.



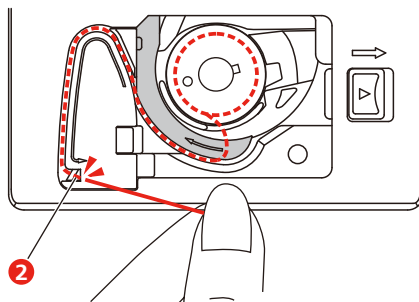
- > Pull the thread into the slit (1).



- > Press gently on the bobbin.
- > Follow the arrow markings to bring the thread into the bobbin thread guide.



- > To cut excess thread, take the thread end and pull over the thread cutter (2).



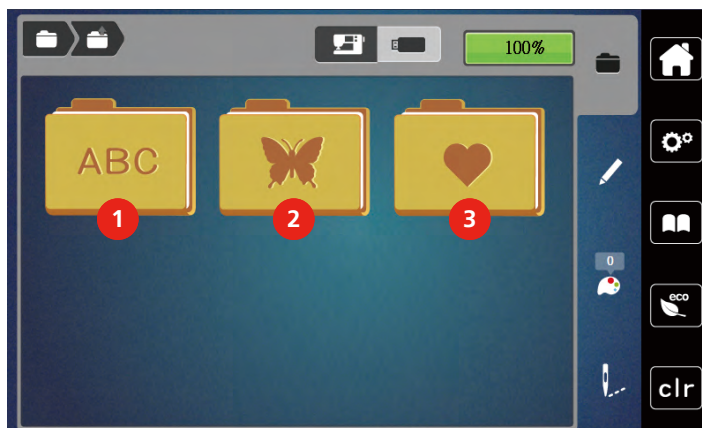
- > Close the bobbin cover.

## 2.7 Selecting the embroidery motif

All embroidery motifs can be embroidered directly or they can be altered using the various functions the embroidery machine provides. You can find all embroidery motifs at the end of the instruction manual. In addition to that, embroidery motifs can be downloaded from the personal memory or from the USB stick (optional accessory).



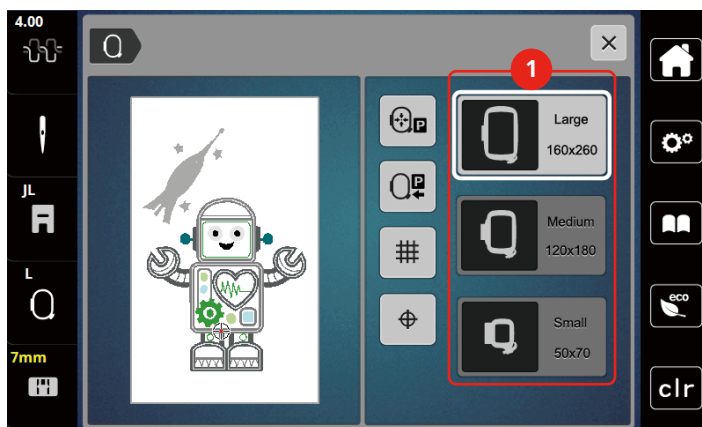
- > Touch the icon «Home».
- > Select an alphabet, an embroidery motif, a stitch pattern or a personal embroidery motif from one of the files.



- |   |                     |   |                           |
|---|---------------------|---|---------------------------|
| 1 | Embroidery Alphabet | 3 | Personal Embroidery motif |
| 2 | Embroidery motif    |   |                           |

## 2.8 Embroidery hoop

### Overview embroidery hoop selection



- 1 Hoop selection

## Selecting the embroidery hoop

The best embroidery result is achieved when the smallest possible embroidery hoop for the embroidery motif is selected.

The embroidery motif has a pre-set size which is displayed.

Prerequisite:



- The embroidery motif is selected.
- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».
  - The presently attached embroidery hoop is displayed.
  - The machine selects the optimal embroidery hoop according to the size of the embroidery motif automatically.
  - If the preset embroidery hoop is not available, another desired embroidery hoop can be selected.
  - When an embroidery hoop is attached which does not correspond with the selected one, the attached hoop is considered active and the embroidery motif area is displayed accordingly.
- > Select the desired embroidery hoop.

## Tear-away stabilizers

Using a stabilizer ensures more stability of the embroidery project. A tear-away stabilizer suits all woven and non-stretch materials. 1 – 2 layers can be used. Stabilizers are available in different weights. With larger embroidered areas the stabilizer will remain under the embroidery thread. The stabilizer is applied to the wrong side of the fabric with temporary adhesive spray. Carefully tear away excess stabilizer after embroidering.

## Cut-away stabilizers

Using a stabilizer ensure more stability of the embroidery project. A cut-away stabilizer suits all elastic materials. 1 – 2 layers can be used. Stabilizers are available in different weights. With larger areas to be embroidered the stabilizer will remain under the embroidery thread. The stabilizer is applied to the wrong side of the fabric with temporary adhesive spray. Carefully cut away excess stabilizer after embroidering.

## Using adhesive spray

The application of spray adhesive is recommended for stretch and smooth materials and knitware. It prevents the fabric from losing shape and slipping. Appliqués can be exactly positioned with spray adhesive. The spray adhesive shouldn't be used near the machine to avoid contamination.

- > Use the adhesive spray carefully at a distance 25 – 30 cm (9 – 12 inch) when spraying the stabilizer.
- > Adhere the sprayed stabilizer to the wrong side of the fabric carefully, smoothing material so there are no puckers.
- > Position smaller parts such as pocket flaps or collars on the stabilizer.
- > To avoid the possibility of getting hoop marks when working with napped materials or fleece, don't hoop the parts but spray the stabilizer and hoop it.
- > Adhere the fabric to be embroidered.
- > Remove any adhesive residue before starting the machine.

## Using spray starch

Spray starch is ideal for additional stiffening fine, loosely woven materials. Always use an additional stabilizer on the wrong side of the material.

- > Spray the area to be embroidered.
- > Let it dry or press gently with a warm iron if necessary.

### Using iron-on interfacing

Iron-on interfacings are available in a variety of weights. It is recommended to use an iron-on interfacing which is easily removable from the basic fabric. An Iron-on interfacing suits all materials that are easily distorted like stretch fabric such as tricot and jersey.

- > Iron-on interfacings are ironed to the wrong side of the material using a warm iron.

### Using paper-backed adhesive stabilizer

Paper-backed adhesive stabilizers are intended to be used for fabrics such as jersey and silk as well as for embroidery projects which are not suited to be hooped in the embroidery hoop.

- > Place the stabilizer in the hoop, so that the paper side is up.
- > Use a pair of scissors to score the paper and remove paper in the hoop area.
- > Position the fabric to be embroidered on the stabilizer and press it on place.
- > Remove any adhesive residue before starting the machine.

### Using water-soluble stabilizer



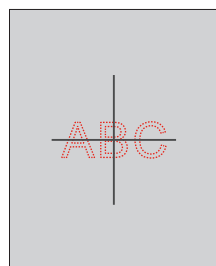
For lace embroidery it is recommended to hoop 1 – 3 layers of water-soluble stabilizer in the embroidery hoop. As the embroidery motif is not embroidered on the fabric, only the thread embroidered motif is left. The embroidery motifs should be combined with short stitches otherwise the individual motifs may fall out.

Water-soluble stabilizers are ideal for fine, sheer fabrics where other stabilizers may show through the embroidery stitches as well as for lace embroidery. The stabilizer dissolves in water. Water-soluble stabilizers are an ideal protection for looped pile fabrics preventing the loops from being damaged. It prevents threads from sinking into the material and keeps the fabric pile from poking through the embroidery.

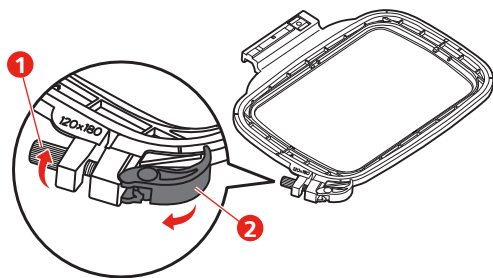
- > Place the stabilizer on the underside of the material.
- > Use adhesive spray to adhere stabilizer if necessary.
- > For material with a pile, reinforce with additional, suitable stabilizer on the wrong side.
- > Place all the layers together into the embroidery hoop.
- > After dissolving, lay the motif down flat and let dry.

### Preparing the embroidery hoop

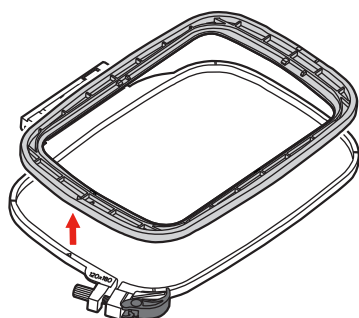
The embroidery hoop consists of an outer and an inner hoop. There is an embroidery template for each hoop. The area to be embroidered is marked in 1 cm (0,39 in) squares. The center is marked with hole and cross lines. The required marks can be transferred to the material.



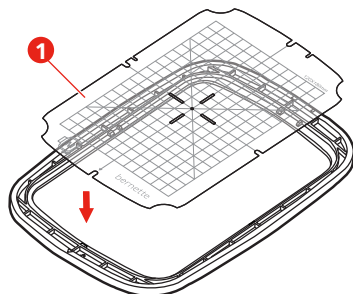
- > Loosen the screw (1) or open the quick release device (2) on the outer hoop.
  - If a new type of fabric is used, the pressure must be adjusted by turning the screw.



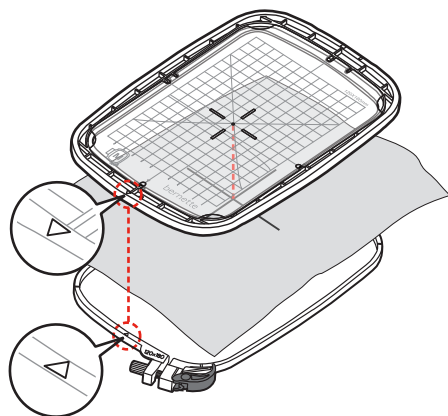
- > Remove the inner hoop.



- > Place the template (1) in the inner hoop, so the bernette logo is at the front edge, and make sure the cut outs click into place.

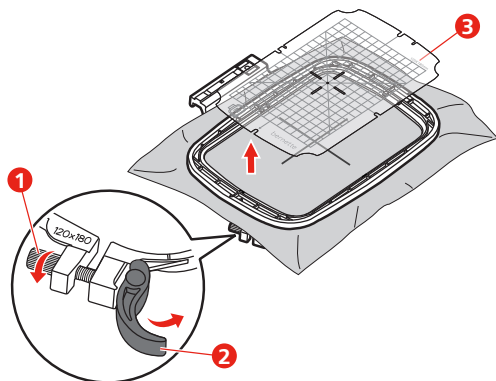


- > Place fabric under the inner frame so that it is at least 2 cm above the hoop.
- > Line up the marked center point on the center of the template.
- > Place the material and the inner hoop on the outer hoop so that the arrows of both hoops match.



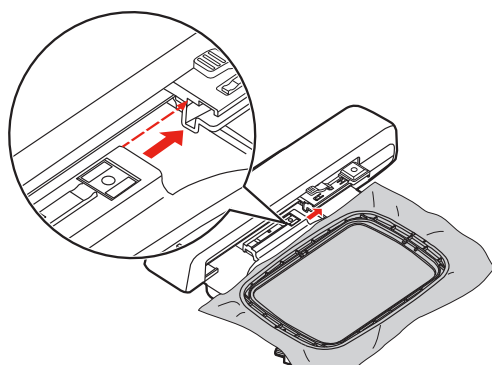
- > Fit the hoops into each other; ensure that the material does not move.

- > Hoop the fabric to be embroidered tightly.
- > Close the quick release device (2). If necessary, tighten screw (1).
- > The inner hoop should protrude about 1 mm on the underside, this prevents the hoop from sticking to the stitch plate.
- > The quick release device (2) is for changing the same type (thickness) fabric easily and quickly.
- > Remove the template (3) from the hoop.

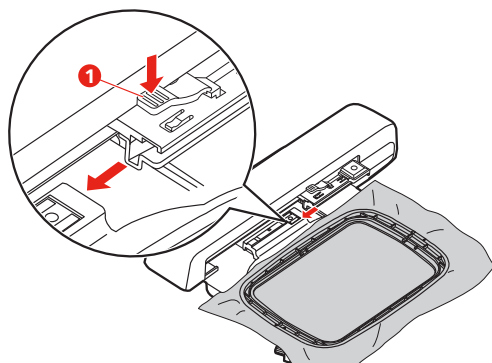


### Attaching the hoop

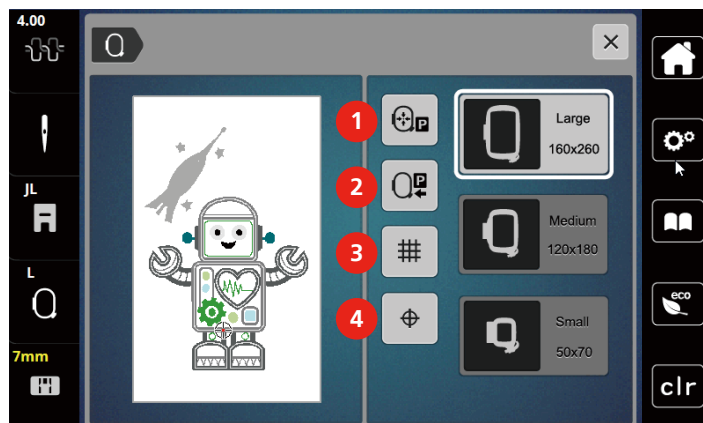
- > Raise the needle.
- > Raise the embroidery foot.
- > Position the embroidery hoop under the embroidery foot.
- > Push the embroidery hoop into the embroidery module until it clicks into place.
  - The hoop is attached.



- > To remove the hoop, press the securing lever and pull the hoop backwards.



## Overview Embroidery functions



- |   |  |   |              |
|---|--|---|--------------|
| 1 | Center the needle to the embroidery hoop | 3 | Grid on/off  |
| 2 | Embroidery arm return                    | 4 | Motif center |

### Locating the center of the embroidery motif

The embroidery hoop is positioned so that the needle is exactly above the center of the embroidery motif or the motif begin.



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».



- > Touch the icon «Center of the embroidery motif» to position the hoop so that the needle is placed exactly over the center of the embroidery motif.
- > Touch the icon «Center of the embroidery motif» again to position the hoop so that the needle is placed exactly over the motif start.

### Center the needle to the embroidery hoop

Relocating the embroidery hoop facilitates threading when the needle is close to the embroidery hoop.



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».



- > > Touch the icon «Center the needle to the embroidery hoop» to move the hoop to the center.
- > Thread the upper thread.



- > Push the button «Start/Stop» to move the hoop back to its previous position.



### Embroidery arm return

The embroidery arm can be positioned to store the embroidery module.



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».
- > Remove the hoop.



- > Touch the icon «Embroidery arm return» the embroidery arm travels horizontally to the left to the park position.



- > Push the button «Start/Stop» to move the embroidery arm to the last position.

### Grid on/off

When the center of the hoop and the grid are displayed, the embroidery motif can be positioned more exactly.



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».



- > Touch the icon «Grid on/off» to display the center of the hoop on the display.
- > Touch the icon «Grid on/off» again to display the grid.
- > Touch the icon «Grid on/off» again so that the center of the hoop and the grid disappear.

## 3 Setup Program

### 3.1 Embroidery settings

#### Adjusting the upper thread tension

Alterations of the upper thread tension in the Setup Program affect all embroidery motifs.



> Touch the icon «Setup Program».



> Touch the icon «Embroidery settings».



> Touch the icon «Alter the upper thread tension».

> Move the slide using the touchscreen pen/finger or touch the icons «+» or «-» to alter the upper thread tension.

#### Adjusting the maximum embroidering speed

By using this function, the maximum speed can be reduced.



> Touch the icon «Setup Program».



> Touch the icon «Embroidery settings».



> Touch the icon «Alter the maximum speed».

> Move the slide using the touchscreen pen/finger or touch the icons «+» or «-» to alter the maximum speed.

#### Calibrating the embroidery hoop

The calibration of the embroidery hoop is the coordination of the needle to the center of the embroidery hoop.

Prerequisite:

- The embroidery module is connected and the embroidery hoop with the appropriate embroidery template is attached.



> Touch the icon «Setup Program».



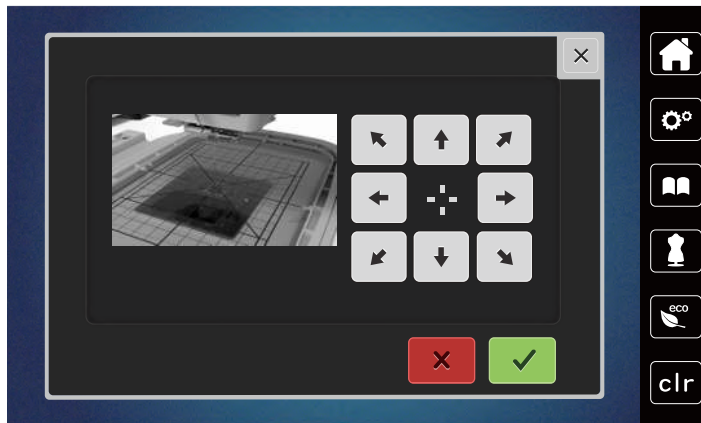
> Touch the icon «Embroidery settings».



> Touch the icon «Calibrate the embroidery hoop».

- The machine recognizes the size of the attached embroidery hoop automatically and moves to the center of the hoop.

- > Center the needle via the arrow icons on the display and confirm.



### Deactivating securing stitches



- > «»Touch the icon «Setup Program».



- > Touch the icon «Embroidery settings».



- > Touch the icon «Securing stitches on/off».
- > Touch the switch in the lower left corner of the display to deactivate the securing stitches.
  - No securing stitches will be sewn and the bobbin thread needs to be brought up manually and held when embroidering is started.
- > Touch the switch again to activate the securing stitches.

### Adjusting the thread cut



- > Touch the icon «Setup Program».



- > Touch the icon «Embroidery settings».

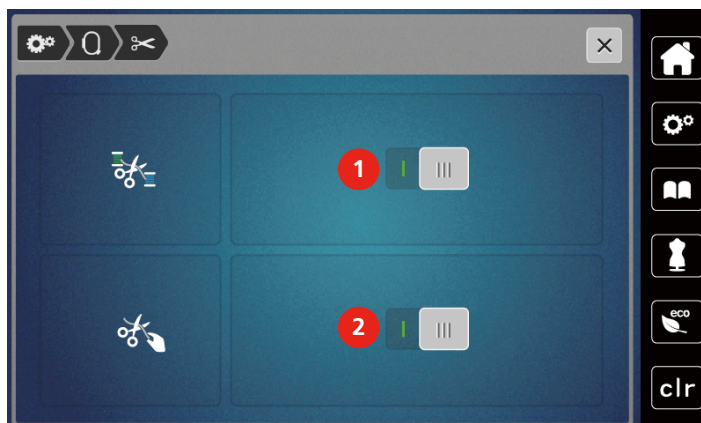


- > Touch the icon «Thread cut settings».



- > To deactivate the automatic thread cut before changing a thread, press the switch in the upper section of the display (1).
- > To activate the automatic thread cut before changing a thread, press the switch in the upper section of the display (1) again.
- > Touch the switch in the lower section of the display (2) to deactivate the automatic thread cut after starting embroidering.
  - The machine won't stop for a manual thread cut.
- > To activate the manual thread cut after embroidering, press the switch in the lower section of the display (2).
  - The machine will stop after about 7 stitches.

- > Cut the remaining thread with scissors.



### Adjusting the height of the embroidery presser foot



- > Touch the icon «Setup Program».



- > Touch the icon «Embroidery settings».



- > Touch the icon «Adjust the height of the embroidery presser foot».
- > Turn the «Upper Multifunction knob» or the «Lower Multifunction knob» or touch the icons «-» or «+» to adjust the distance between the stitch plate and the presser foot.

## 3.2 Selecting personal settings



- > Touch the icon «Setup Program».



- > Touch the icon «Personal settings».
- > Select the desired display color.



### 3.3 Monitoring functions

#### Activating the upper thread indicator



- > Touch the icon «Setup Program».



- > Touch the icon «Monitoring settings».



- > Touch the switch in the upper portion of the display to deactivate the upper thread indicator.
- > Touch the switch again to activate the upper thread indicator.

#### Activating the bobbin thread indicator



- > Touch the icon «Setup Program».



- > Touch the icon «Monitoring settings».



- > Touch the switch in the lower section of the display to deactivate the bobbin thread indicator.
- > Touch the switch again to activate the bobbin thread indicator.

### 3.4 Sound on/off



- > Touch the icon «Setup Program».



- > Touch the icon «Sound on/off» to deactivate any audio signals in general.
- > Touch the icon «Sound on/off» again to deactivate any audio signals in general.

### 3.5 Machine settings

#### Adjusting the brightness of the display

The brightness of the display can be adjusted corresponding to the personal preferences.



- > Touch the icon «Setup Program».



- > Touch the icon «Machine settings».



- > Touch the icon «Adjust the brightness».
- > Move the slide in the upper portion of the display using the touchscreen pen/finger or touch the icons «+» or «-» to alter the brightness of the display.

## Calibrating the display

Please find further information on this topic in the chapter attachment below troubleshooting at the end of the instruction manual.



> Touch the icon «Setup Program».

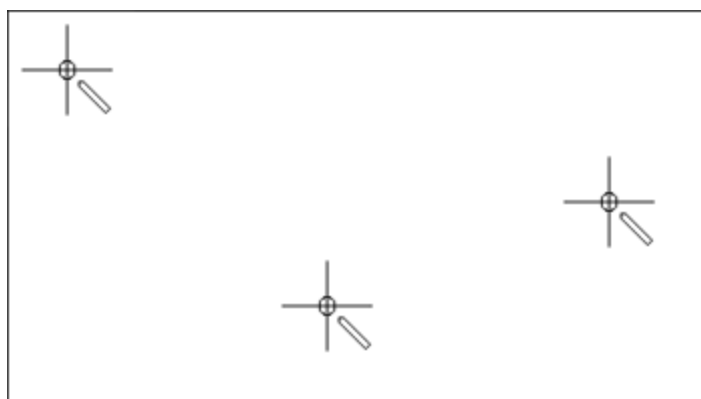


> Touch the icon «Machine settings».



> Touch the icon «Calibrate the display».

> Touch the crosses in sequence using the touchscreen pen.



## Back to basic setting

**ATTENTION:** Using this function will delete all individually made settings.



> Touch the icon «Setup Program».



> Touch the icon «Machine settings».



> Touch the icon «Default settings».



> Touch the icon «Default setting embroidery».



> Touch the icon «Confirm» and restart the machine to restore all default settings.

## Updating the machine Firmware

The latest firmware of the machine and a detailed step-by-step instruction for updating processes can be downloaded at [www.mybernette.com](http://www.mybernette.com). Personal data and settings are automatically transferred during a firmware update.

### NOTICE

USB stick (optional accessory) has been removed too early

Firmware has not been updated and the machine cannot be used.

> Remove the USB stick (Optional accessory) only after the saved data has been transferred successfully.

> Insert the BERNINA USB Stick (optional accessory), FAT32 formatted, providing the latest software into the port.



> Touch the icon «Setup Program».



> Touch the icon «Machine settings».



> Touch the icon «Firmware version».



> Touch the icon «Update» to start the update of the firmware.

## Checking the firmware version

The firmware version of the machine is displayed.



> Touch the icon «Setup Program».



> Touch the icon «Machine settings».



> Touch the icon «Firmware version».

## Reviewing the total number of stitches

The total number of stitches of the machine as well as the number of stitches since the last service carried out by the specialized dealer are displayed.



> Touch the icon «Setup Program».



> Touch the icon «Machine settings».



> Touch the icon «Firmware version».

## Selecting a language

The User Interface can be programmed in different languages according to the customer's wish.



> Touch the icon «Setup Program».



> Touch the icon «Machine settings».



> Touch the icon «Language selection».

> Select a language.



## 4 System settings

### 4.1 Calling up the tutorial

The tutorial provides information and explanations on different sections concerning embroidering.



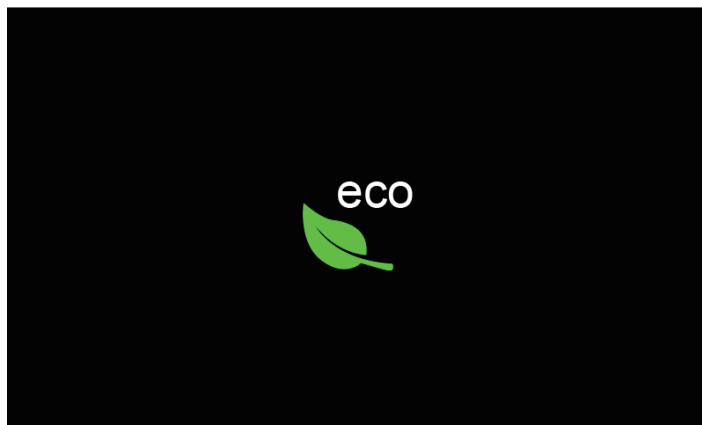
- > Touch the icon «Tutorial».
- > Select the desired topic to get information.

### 4.2 Using eco mode

During a longer interruption of work the machine can be set into a power save mode. Nothing can be selected in the display and the machine cannot be started.



- > Touch the icon «eco» again.
  - The display goes to sleep. The power consumption is reduced and the sewing light is off.



- > Quickly click the green icon «eco» on the screen.
  - The machine is ready for use.

### 4.3 Cancelling any alterations with «clr»

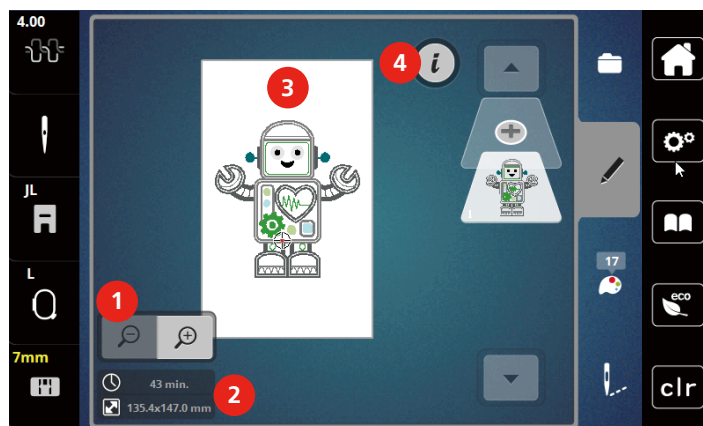
Any alterations to motifs can be reset to default setting. Exceptions are saved motifs which have been filed in the personal memory and monitoring functions.



- > Touch the icon «clr».

## 5 Creative embroidering

### 5.1 Overview embroidering



- |   |   |   |                        |
|---|---|---|------------------------|
| 1 | Scaling up, downsizing and moving the embroidery motif view | 3 | Area to be embroidered |
| 2 | Embroidery time/Embroidery motif size in mm                 | 4 | «i»-Dialog             |

### 5.2 Selecting and changing the embroidery motif



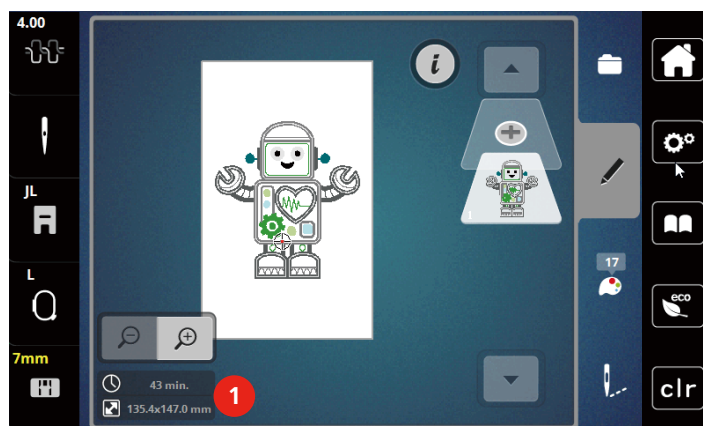
- > Touch the icon «Selection».



- > Touch the icon «Upload embroidery motif».
- > Select a new embroidery motif.

### 5.3 Checking the embroidery time and the embroidery motif size

In the selection menu «Editing» the estimated embroidery time in minutes as well as the width and height of the embroidery motif is indicated at lower left (1).



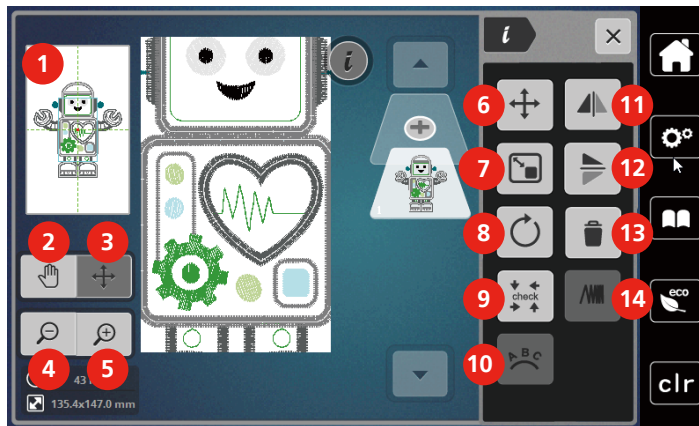
### 5.4 Regulating the speed

The sewing speed can be adjusted infinitely variable with the slide.

- > Move the slide to the left to reduce the sewing speed.
- > Move the slide to the right to increase the sewing speed.

## 5.5 Editing the embroidery motif

### Overview Editing embroidery motif



- |   |                                   |    |                             |
|---|-----------------------------------|----|-----------------------------|
| 1 | Preview all                       | 8  | Rotating motif              |
| 2 | Moving the view                   | 9  | Checking motif size         |
| 3 | Moving the view of the motif      | 10 | Bending the text            |
| 4 | Zoom out                          | 11 | Mirror image left/right     |
| 5 | Zoom in                           | 12 | Mirror image up/down        |
| 6 | Moving the embroidery motif       | 13 | Deleting                    |
| 7 | Altering the motif proportionally | 14 | Altering the stitch density |

### Scaling up the embroidery motif view

The view of the embroidery motif can be scaled up. In addition to that, the view can be adjusted with or without changing the embroidery position.

- > Select an embroidery motif.
- > Touch the icon «Zoom in» to edit the view of the embroidery motif.



- > Touch the icon «Zoom in» 1 to 9 times to enlarge the view of the embroidery motif gradually.



- > Touch the icon «Zoom out» 1 to 9 times to get back to the Edit Mode.



### Downsizing the embroidery motif

The view of the embroidery motif can be downsized. In addition to that, the view can be adjusted with or without changing the embroidery position.

- > Select an embroidery motif.
- > Touch the icon «Zoom in» to scale up the embroidery motif.



- > To downsize the enlarged embroidery motif view by each one step, touch the icon «Zoom out» 1 to 9x.



### Moving the embroidery motif view

The view of the embroidery motif can be moved. In addition to that, the embroidery motif position won't be changed.



- > Select an embroidery motif.
- > Touch the icon «Zoom in» to edit the view of the embroidery motif.



- > Touch the icon «Move the view».
  - The icon turns dark gray.
- > Move the view of the embroidery motif using the touchscreen pen/finger.
  - Touch the icon «Zoom out» again to return to previous view. The embroidery position is not altered.



- > To return to the previous view, touch the icon «Zoom out» again .

### Moving the embroidery motif in enlarged view

The view of the embroidery motif can be moved when the embroidery position is changed.



- > Select an embroidery motif.
- > To activate the icon «Relocating the motif», touch the icon «Zoom in».



- > Touch the icon «Move the motif».
  - The icon turns dark gray.
- > Move the embroidery motif using the touchscreen pen/finger.
  - The embroidery motif position is altered.



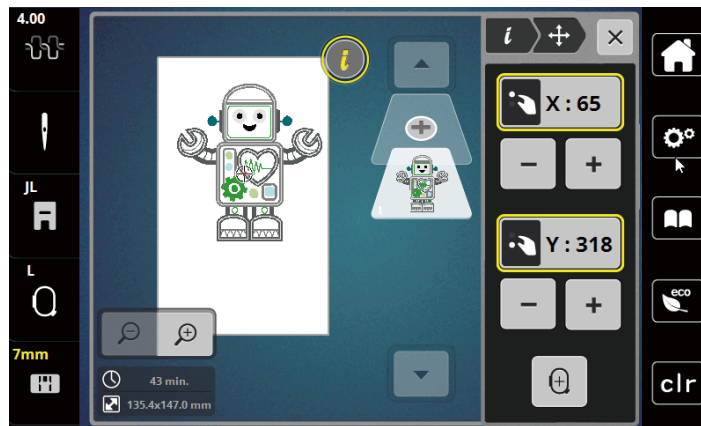
- > To return to the previous view, touch the icon «Zoom out» again .

## Moving the embroidery motif

- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Move the motif».
- > Turn the Upper Multifunction knob to move the embroidery motif horizontally.
- > Turn the «Lower Multifunction knob» to move the embroidery motif vertically in 0.5-mm steps or touch the «+»/«-» icon or touch the embroidery motif, keep it pressed and move it as you like.
  - The relocation is indicated in the yellow-framed icons.



- > Touch the icon «Center of the embroidery motif».
  - The embroidery motif is repositioned in the center of the embroidery hoop.

## Rotating motif

- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Rotate the motif».
- > Turn the «Upper Multifunction knob» or the «Lower Multifunction knob» to the right or touch the «+» icon to rotate the embroidery motif clockwise.
- > Turn the «Upper Multifunction knob» or the «Lower Multifunction knob» to the left or touch the «-» icon to rotate the embroidery motif counter-clockwise.



- > Touch the icon «Rotate the motif +90°» to rotate the embroidery motif in 90°-steps.

## Altering the embroidery motif size proportionally

The alteration is limited to +/- 20%.

- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.





- > Touch the icon «Alter the embroidery motif proportionally».
- > To increase the size of the embroidery motif proportionally, turn the «Upper Multifunction knob» or the «Lower Multifunction knob» to the right or touch the icon ««+»».
- > To decrease the size of the embroidery motif proportionally, turn the «Upper Multifunction knob» or the «Lower Multifunction knob» to the left or touch the icon ««-»».

### Mirroring embroidery motifs

Embroidery motifs can be mirror-imaged both vertically and horizontally.



- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Mirror image left/right» to mirror the embroidery motif vertically.



- > Touch the icon «Mirror image up/down» to mirror the embroidery motif horizontally.

### Checking the size and the position of the embroidery motif

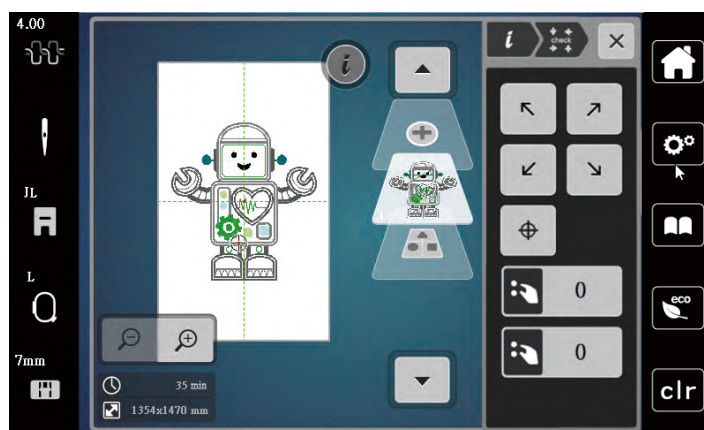
It can be checked whether or not the embroidery motif matches the designated position/location on the fabric.



- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Checking the size of the embroidery motif».
  - The embroidery hoop travels all the way until the needle is at the position as it is indicated in the display.
  - If the embroidery motif hasn't been positioned correctly yet, the position can be altered via the «Upper/Lower Multifunction knobs» and the complete embroidery positions can be checked again.



- > Touch the icon «Embroidery motif center» to bring the needle to the center of the embroidery motif.
- > Turn the «Upper Multifunction knob» to move the embroidery motif horizontally.
- > Turn the «Lower Multifunction knob» to move the embroidery motif vertically.

## Deleting an embroidery motif

The active embroidery motif is deleted.

- > Select an embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Delete».



- > Touch the icon «Confirm» to delete the embroidery motif.



## 5.6 Creating lettering

### Overview embroidery alphabets

Embroidery motif	Name
<b>ABC</b>	Swiss Block
<b>A B C</b>	Swiss Block vertical
<b>ABC</b>	Childs Play
<b>A B C</b>	Childs Play vertical
<b>ABC</b>	Victoria
<i>ABC</i>	Anniversary

### Creating words/sentences

Lettering can be positioned within the hoop as you like. When the embroidery motif is positioned outside the area to be embroidered, the hoop is outlined in red on the display. With the hoop selection it can be checked whether or not the embroidery motif can be embroidered in another hoop. When the lettering does not fit in any hoop, two single words can be combined and positioned below each other as the following example will show.



- > Select the file «Alphabets».
- > Select the font.
- > Enter the text «Made to».
- > Touch the icon (1) (standard setting) to use upper case letters.
- > Touch the icon (2) to use lower case letters.
- > Touch the icon (3) to use numbers and mathematic characters.

- > Touch the icon (4) to use special characters.



- > Touch the icon «DEL» to delete single letters of the entered text.



- > Touch the icon «Confirm» to accept the text.



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».
- > Select the hoop.
- > Touch the icon «Embroidery hoop display/Embroidery hoop selection» again to go back to the Edit Mode.

### Editing words/sentences



- > Touch the icon «i»-Dialog.



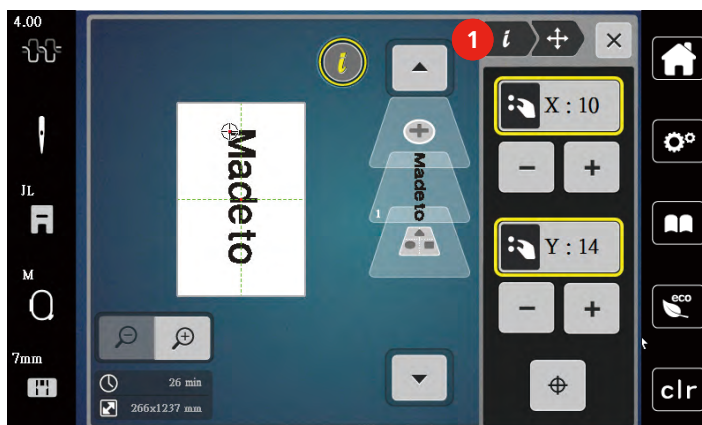
- > Touch the icon «Rotate the motif».



- > Touch the icon «Rotate the motif +90°» to rotate the text by 90°.
- > Touch the icon «i» (1).



- > Touch the icon «Move the motif».
- > Turn the «Upper Multifunction knob» or touch the «+»/«-» icon to move the embroidery motif horizontally.
- > Turn the Lower Multifunction knob or touch the «+»/«-» icon to move the embroidery motif vertically.







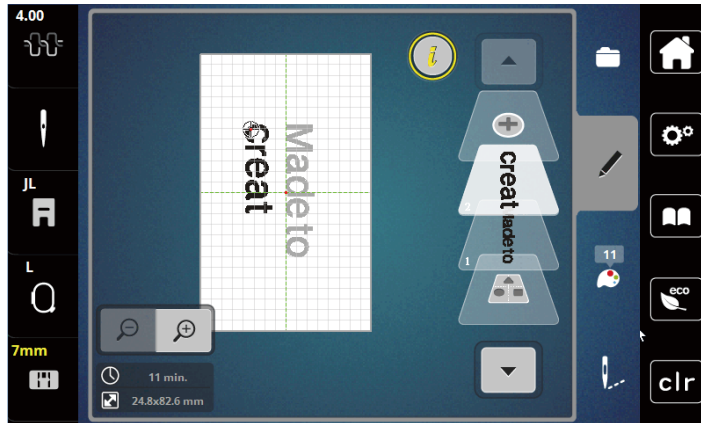
- > Touch the icon «Add motif».
- > Enter and also rotate the text «create».



- > Touch the icon «Embroidery hoop display/Embroidery hoop selection».



- > Touch the icon «Grid on/off» to position the text lines more exactly.



### Bending the text

Texts can be arranged and designed arc-shaped. This function is only applicable to alphabets.



- > Select an alphabet embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Bend text».
- > To alter the distance between the characters in millimeter-steps, turn the «Upper Multifunction knob» or touch the icons «+»/«-».
- > To bend the lettering upwards or downwards, turn the «Lower Multifunction knob» to the left or right or touch the icons «+»/«-».

### Altering the stitch density



- > Select an embroidery motif. This function is only applicable to alphabets.
- > Select an alphabet embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Altering the stitch density».
- > Touch the percentage icon to adjust the desired stitch density.

## 5.7 Combining embroidery motifs

### Combining embroidery motifs



- > Select an embroidery motif.
- > Touch the icon «Add an embroidery motif» (1).
- > Select another embroidery motif.
- > Touch the icon «Select the combination» (2) to select whole embroidery motifs.
  - The size of the combination cannot be adjusted.

### Deleting a single embroidery motif

- > Select the embroidery motif which is to be deleted.
- > Touch the icon «i-Dialog».



- > Touch the icon «Delete».

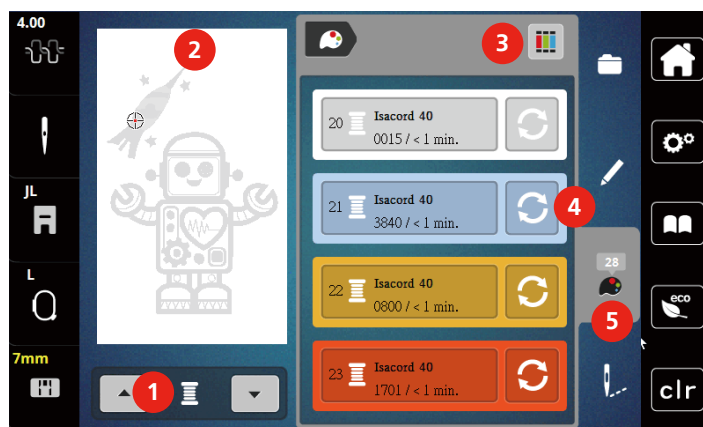


- > Touch the icon «Confirm».



## 5.8 Changing the colors of the embroidery motif

### Overview changing the color



- |   |                                 |   |                   |
|---|---------------------------------|---|-------------------|
| 1 | Colors of the embroidery motifs | 4 | Altering color    |
| 2 | Preview for selected color      | 5 | Color information |
| 3 | Allocating thread brand         |   |                   |

### Changing the colors

- > Select an embroidery motif.
- > Touch the icon «Color information».
- > Touch the icon «Altering color» next to the color which is to be changed.
- > Changing Colors by searching the theme brand.
  - Touch the icon «Scrolling» (6) in the top right portion of the display to display other thread brands.
- > Touch the icon «Color selection by number» (7) to select the color by entering the color number.
- > Touch the icon «Scrolling» (8) in the lower right portion of the display to display other colors.
- > Select the desired color.



## Changing the thread brand



- > Select an embroidery motif.
- > Touch the icon «Color information».



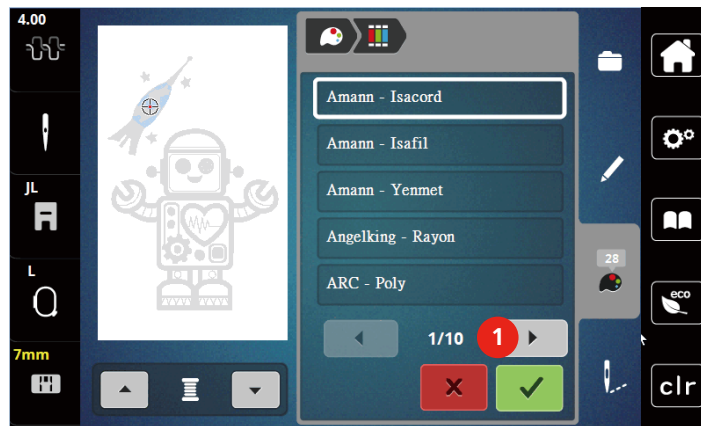
- > Touch the icon «Allocate thread brand».



- > Touch the icon «Scrolling» (1) to have further thread brands displayed.



- > Select a thread brand and touch the icon «Confirm».
- Any thread colors of the selected embroidery motif will be matched with the selected thread brand.



## 5.9 Embroidering the embroidery motif

### Overview Embroidery menu



- |   |                             |   |                                       |
|---|-----------------------------|---|---------------------------------------|
| 1 | Basting                     | 4 | Cutting connecting stitches           |
| 2 | Moving the hoop             | 5 | Multi-colored embroidery motif on/off |
| 3 | Embroidery sequence control | 6 | Color indication                      |

## Adding basting stitches

The basting stitches can be embroidered along the embroidery motif. Therefore the connection between the fabric and the stabilizer can be improved.



- > Select an embroidery motif.
- > Touch the icon «Embroidering».



- > Touch the icon «Basting» to embroider basting stitches along the embroidery motif.
- > Touch the icon «Basting» again to deactivate the basting stitches.

## Moving the hoop

If the embroidery project is so big that repeated rehooping is necessary, the embroidered motif can be moved again.



- > Select an embroidery motif.
- > Touch the icon «Embroidering».



- > Touch the icon «Move the hoop».
- > Turn the «Upper Multifunction knob» to move the hoop horizontally.
- > Turn the «Lower Multifunction knob» to move the hoop vertically.

## Embroidery sequence control when thread breaks

When the thread breaks, the needle can be repositioned in the embroidery motif by means of the embroidery sequence control.



- > Select an embroidery motif.
- > Touch the icon «Embroidering».



- > Touch the icon «Embroidery sequence control when thread breaks».
  - In the left portion of the display a compact view of the embroidery motif is displayed. On the right side the enlarged embroidery motif is displayed.

### – Repositioning via compact view

- > Select the desired position in the compact view (1) (2) using the touchscreen pen/finger.

### – Repositioning via stitch bar

- > Select the bar in the display (3) (4) using the touchscreen pen/finger.

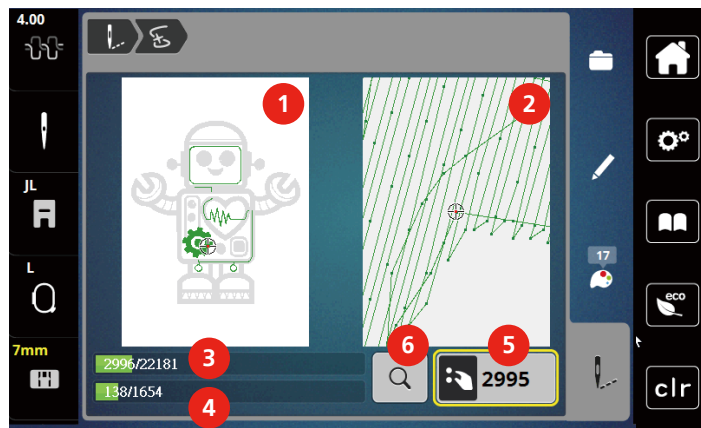
### – Repositioning via Multifunction knobs

- > Turn the «Upper Multifunction knob» to move the hoop stitch by stitch.
- > Turn the «Lower Multifunction knob» to move the hoop in large steps.

### – Repositioning via Magnifier



- > Touch the icon «Magnifier» to select the desired stitch via entry.



- The number in the yellow-framed icon indicates the number of stitches within the embroidery sequence.

- > Position the needle back far enough so that it will resume stitching several stitches before the thread breaks.

### Cutting connecting stitches

The function is activated by default and the connecting stitches are cut automatically. When the function is deactivated, the connecting stitches between the embroidery motifs must be cut manually.

- > Select an embroidery motif.
- > Touch the icon «Embroidering».



- > Touch the yellow-framed icon «Cut the connecting stitches» to deactivate the function.
- > Touch the icon «Cut the connecting stitches» again to activate the function.



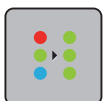
### Multi-colored embroidery motif on/off

Multi-colored embroidery motifs can also be embroidered in one color.

- > Select an embroidery motif.
- > Touch the icon «Embroidering».



- > Touch the icon «Multi-colored embroidery motif on/off».
  - The embroidery motif is embroidered in one color.



## Color indication

Every color of the embroidery motif can be selected individually. The hoop moves to the first stitch of the current color. The currently active color can be embroidered individually or in another sequence.

- > Select an embroidery motif.
- > Touch the icon «Embroidering».



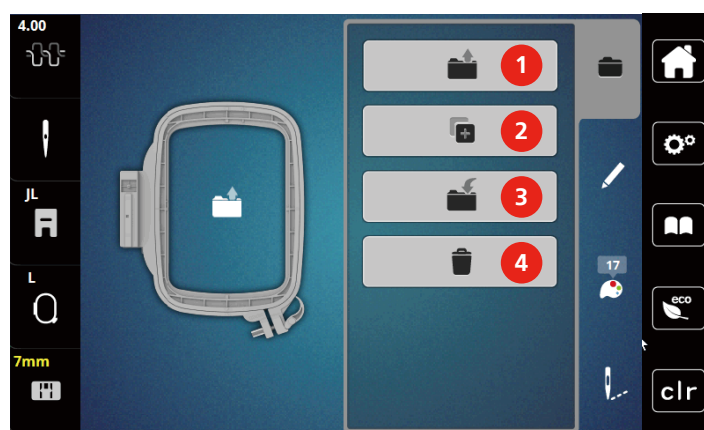
- > Touch the icon «Scroll down» to select the next color of the embroidery motif.



- > Touch the icon «Scroll up» to select the previous color of the embroidery motif.

## 5.10 Administering embroidery motifs

### Administering embroidery motifs



- |   |                              |   |                             |
|---|------------------------------|---|-----------------------------|
| 1 | Loading the embroidery motif | 3 | Saving the embroidery motif |
| 2 | Adding an embroidery motif   | 4 | Deleting                    |

### Saving embroidery motifs in the personal memory

In the filing system «Personal memory» any stitch patterns, also those which have been individually edited, can be saved.

- > Select an embroidery motif.
- > Edit the embroidery motif.
- > Touch the icon «Selection».



- > Touch the icon «Save the motif».
  - The embroidery motif to be saved is outlined in yellow.
  - The icon «Embroidery machine» is activated.



- > Touch the icon «Confirm».

### Saving the embroidery motif on the USB stick

- > Select an embroidery motif.
- > Edit the embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Save the motif».
  - The embroidery motif to be saved is outlined in yellow.



- > Insert the USB stick into the USB port of the machine.
- > Touch the icon «USB stick».



- > Touch the icon «Confirm».

### Overwriting the embroidery motif in the personal memory

- > Select an embroidery motif.
- > Edit the embroidery motif.
- > Touch the icon «Selection».



- > Touch the icon «Save the motif».
  - The embroidery motif to be saved is outlined in yellow.



- Touch the icon «Embroidery machine» is activated.
- > Select the embroidery motif which is to be overwritten.



- > Touch the icon «Confirm».

### Overwriting the embroidery motif in the personal memory

- > Select an embroidery motif.
- > Edit the embroidery motif.
- > Touch the icon «i»-Dialog.



- > Touch the icon «Save the motif».
  - The embroidery motif to be saved is outlined in yellow.



- > Insert the USB stick into the USB port of the machine.
- > Touch the icon «USB stick».
- > Select the embroidery motif which is to be overwritten.



- > Touch the icon «Confirm».

### Loading an embroidery motif from the personal memory



- > Touch the icon «Selection».



- > Touch the icon «Upload embroidery motif».



- > Select the file «Personal embroidery motifs».
- > Select an embroidery motif.

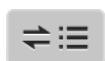
### Loading an embroidery motif from the USB stick



- > Touch the icon «i»-Dialog.
- > Insert the USB stick into the USB port of the machine.



- > Touch the icon «USB stick».
- > Select a personal embroidery motif.



- > By clicking on the icon «Display embroidery motif name/embroidery motif image» in the attachment, you can switch between the embroidery motif name and the embroidery motif image. This is only possible when loading a motif from the USB stick.

### Deleting an embroidery motif from the personal memory

The embroidery motifs which are saved in the personal memory can be deleted individually.



- > Touch the icon «i»-Dialog.



- > Touch the icon «Delete».



- Touch the icon «Embroidery machine» is activated.
- > Select the embroidery motif which is to be deleted.



- > Touch the icon «Confirm».

### Deleting an embroidery motif from the USB stick



- > Touch the icon «i»-Dialog.



- > Touch the icon «Delete».
- > Insert the USB stick into the USB port of the machine.



- > Touch the icon «USB stick».
- > Select the embroidery motif which is to be deleted.



- > Touch the icon «Confirm».



## 6 Embroidery

### 6.1 Embroidering via the button «Start/Stop»

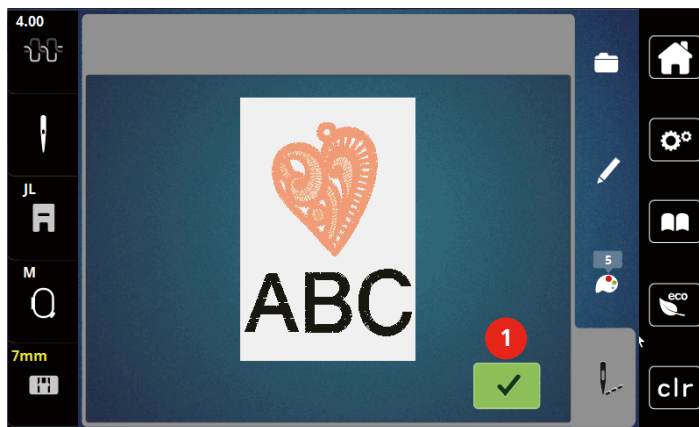
In case of a power cut the embroidery process is interrupted. After the restart the machine goes to the position which was embroidered last.



- > Push the button «Start/Stop» to start the embroidery machine.
  - All parts of the motif being in the current color are embroidered.
  - The embroidery machine stops automatically at the end.
  - Both threads are cut automatically.
  - The embroidery machine switches to the next color automatically.



- > Change the upper thread.
- > Push the button «Start/Stop» to embroider the new color.
  - After having completed the embroidery motif, the machine stops automatically and the threads are cut automatically.
- > Touch the icon «Confirm» to finish the embroidery motif.



### 6.2 Adjusting the upper thread tension

Basic settings are applied automatically when an embroidery motif or program is selected.

When using different types of embroidery threads, the optimal tension may vary. Therefore it may be necessary to adjust the upper thread tension according to the embroidery project as well as the desired embroidery motif individually.

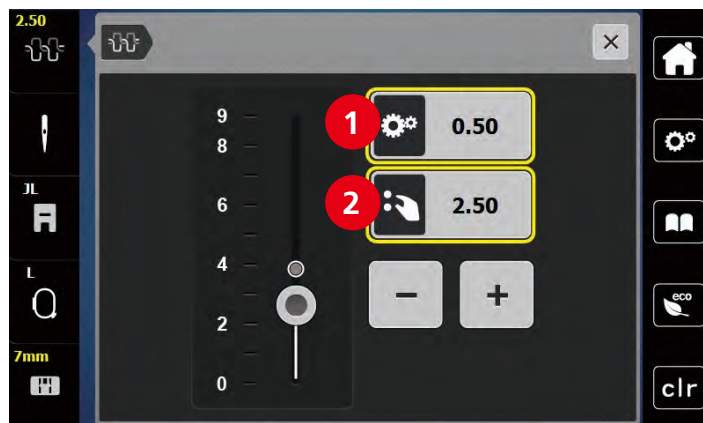
The higher the upper thread tension, the tighter the upper thread which means that the bobbin thread is pulled up to the top of the fabric. When the upper thread tension is low, the upper thread is less tightened which means that the bobbin thread is pulled up less.

Alteration of the upper thread tension affect the currently embroidery motif. Permanent alterations of the upper thread tension can be made in the Setup Program.



- > Touch the icon «Upper thread tension».

- > Move the slider in the display using the touchscreen pen/finger to increase or reduce the upper thread tension.



- 1 Permanent alteration of thread tension
- 2 Thread tension of the current embroidery motif

## 7 BERNINA CutWork Tool

### 7.1 Changing the CutWork Tool

The CutWork Tool accessory is optional. It is not included with this machine.

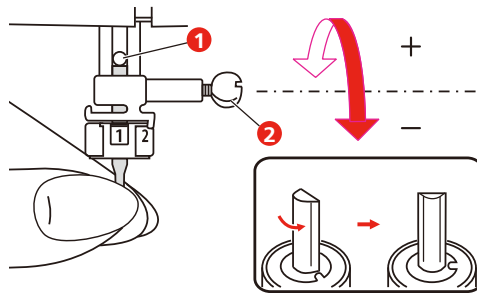


The CutWork Tool is a very sharp accessory. Special care is required when working with this tool and keep fingers away from the sharp knife. You can find more information in the CutWork book, which is packaged with the CutWork tool.

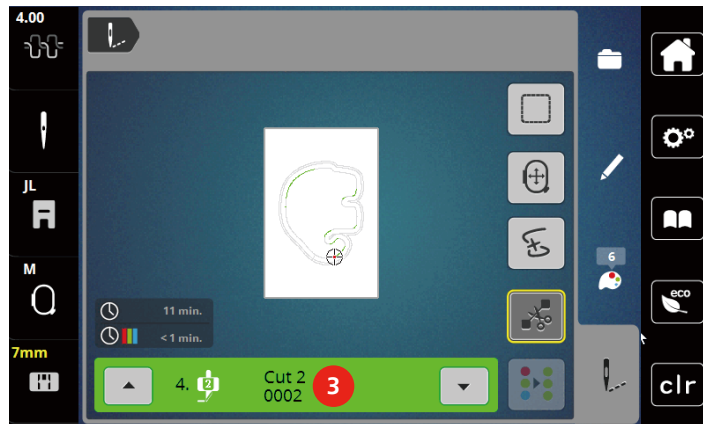
In CutWork Mode the upper thread, bobbin thread and cut thread sensor are disabled.

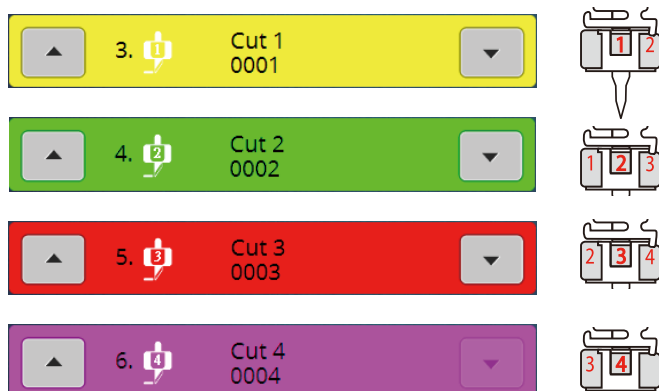
Prerequisite:

- Stitch plate CutWork/Straight ist attached.
- > Remove the embroidery foot.
- > Remove the needle.
- > Insert the CutWork Tool with the flat side back, fully up to the top (1). Tighten the needle clamp screw (2).



- > Attach the embroidery foot.
- > Turn the CutWork Tool according to the information in the display of the color indication (3).





## 7.2 Start to cut



- > Push the button «Start/Stop» and start to cut.
  - When it is completed, the machine stops automatically and return to Embroidery menu display.
- > Turn the CutWork Tool knife according to the cutting position on the display of Color indication (3).
- > Repeat the same actions.
- > When the cutting is completed, the machine stops automatically and shows the embroidery finished screen on the display.

## 8 Attachment

### 8.1 Maintenance and cleaning

#### Cleaning the display

- > Clean the display in the switched off status with a soft slightly damp microfiber cloth.

#### Cleaning the hook

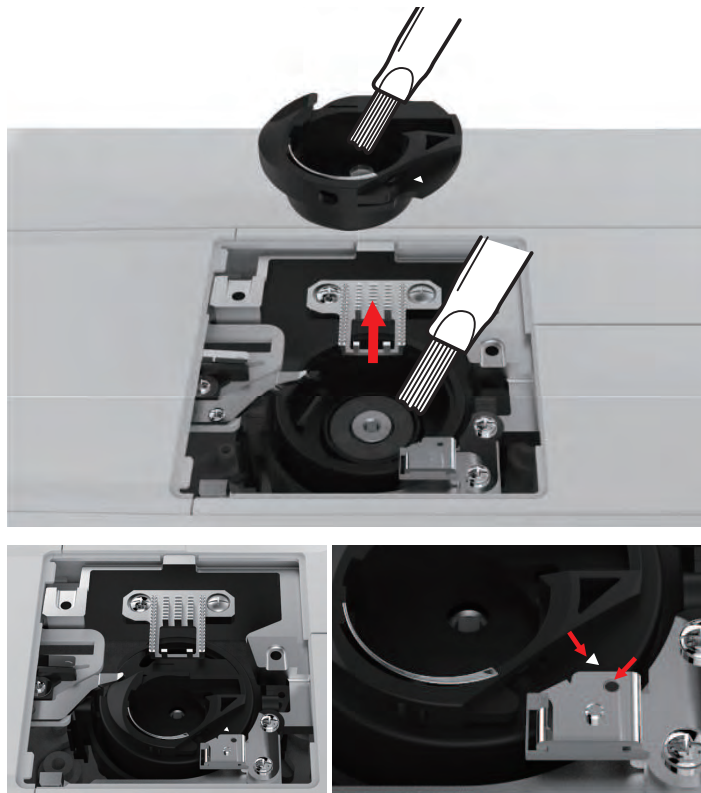


#### Electronically driven components

Risk of injury near the needle and the hook.

- > Raise the presser foot.
- > Switch the machine off and disconnect it from the power supply system.

- > Remove the presser foot and the needle.
- > Remove the stitch plate.
- > Clean the hook race with a brush.



## Oiling the needle bar

If needle bar lacks of lubrication, needle bar might not move smoothly. If the machine is used often, the needle bar should be oiled every 6 months to avoid it from blocking.

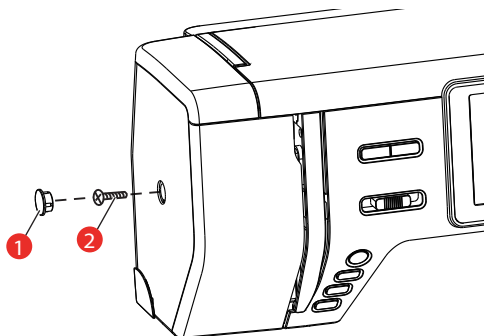


### Electronically driven components

Risk of injury near the needle bar.

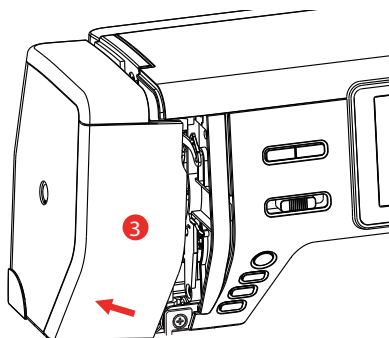
> Switch the machine off and disconnect it from the power supply system.

> Remove the plug (1) and remove screw (2).



> Remove the face cover (3).

– After removing the face cover be careful of the moving parts.



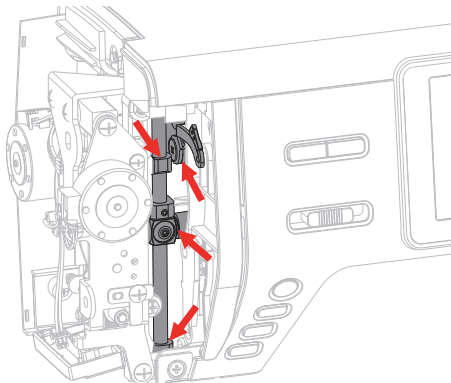
> Put one drop of oil on the needle bar movement mechanism, including needle bar crank rod/needle bar bracket and needle bar supporter (add the oil on the area made by arrow).

> Remove the presser foot.

> Turn the handwheel a few times and remove excess oil with a cloth.

> After oiling, the face cover must be remounted before reconnecting the machine.

– Never reconnect the machine or make it run with the face cover removed.



## 8.2 Troubleshooting

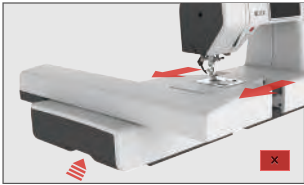
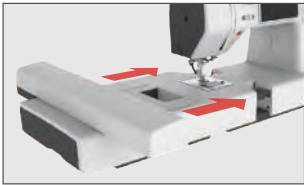
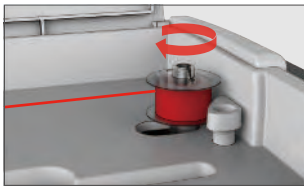
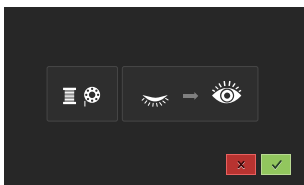
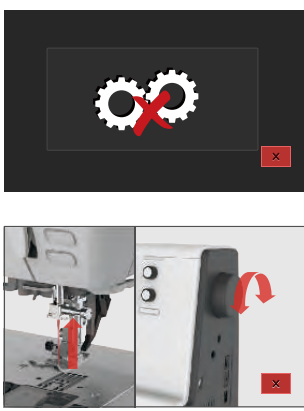

Fault	Cause	Repair
<b>Uneven stitch formation</b>	Upper thread too tight or too loose.	> Adjust upper thread tension.
	Needle blunt or bent.	> Replace the needle, make sure that a new BERNINA quality needle is used.
	Poor quality needle.	> Use a new BERNINA quality needle.
	Poor quality thread.	> Use quality thread.
	Incorrect needle/thread combination.	> Match the needle with the thread size.
	Incorrectly threaded.	> Rethread.
<b>Skipped stitches</b>	Incorrect needle.	> Use the needle system 130/705H.
	Needle blunt or bent.	> Replace the needle.
	Poor quality needle.	> Use a new BERNINA quality needle.
	The needle is incorrectly inserted.	> Insert the needle with the flat side to the back as far up as it will go into the needle holder and tighten the screw.
	Incorrect needle point.	> Match the needle point to the texture of the material.
<b>Upper thread breaks</b>	Incorrect needle/thread combination.	> Match the needle with the thread size.
	Upper thread is too tight.	> Reduce the upper thread tension.
	Incorrectly threaded.	> Rethread.
	Poor quality thread.	> Use quality thread.
	The stitch plate or the hook tip is damaged.	> Contact a specialized bernette dealer to have the damages repaired. > Replace the stitch plate.



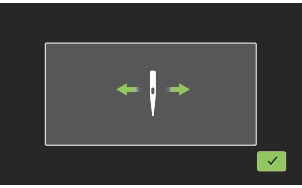
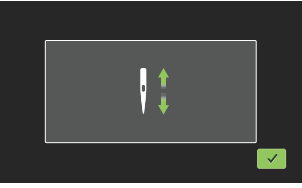


Fault	Cause	Repair
<b>Lower thread breaks</b>	The bobbin is not inserted correctly.	> Remove and reinsert the bobbin and pull on the thread. – The thread should run easily.
	The bobbin is threaded incorrectly.	> Check bobbin and thread correctly.
	The stitch hole in the stitch plate is damaged.	> Contact a specialized bernette dealer to have the damages repaired. > Replace the stitch plate.
	Needle blunt or bent.	> Replace the needle.
<b>Needle breaks</b>	The needle is incorrectly inserted.	> Insert the needle with the flat side to the back as far up as it will go into the needle holder and tighten the screw.
	Knotted thread.	> Use quality thread.
<b>Display is inactive</b>	Incorrect calibrating data.	> Switch the machine off. > Switch the machine on and at the same time push button «Center embroidery hoop to the needle/Center embroidery motif» and keep it pressed. > Calibrate the display again.
	The eco mode is active.	> Touch the icon «eco» again.
<b>Speed too low</b>	Unfavorable room temperature.	> Place the machine in a warm room one hour before use.
	Settings in the Setup Program.	> Adjust the embroidery speed in the Setup Program. > Adjust the slide.
<b>The machine doesn't start</b>	Unfavorable room temperature.	> Place the machine in a warm room one hour before use. > Connect the machine and switch it on.
	The machine is damaged.	> Contact the specialized bernette dealer.
<b>The light of the button «Start-/Stop» doesn't light up</b>	Light is defect.	> Contact the specialized bernette dealer.
<b>Neither the sewing light nor the light on the free arm lights up</b>	Settings in the Setup Program.	> Activate it in the Setup Program.
	The sewing light is defect.	> Contact the specialized bernette dealer.
<b>Upper thread indicator doesn't react</b>	Settings in the Setup Program.	> Activate it in the Setup Program.
	The upper thread indicator is defect.	> Contact the specialized bernette dealer.


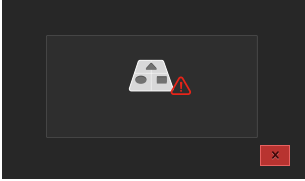
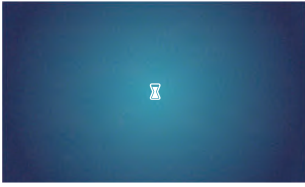

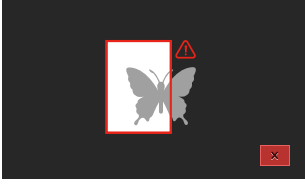
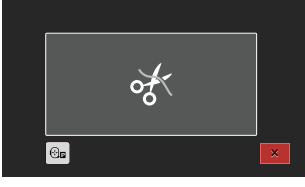


Fault	Cause	Repair
<b>Bobbin thread indicator doesn't react</b>	Settings in the Setup Program.	> Activate it in the Setup Program.
	The bobbin thread indicator is defect.	> Contact the specialized bernette dealer.
<b>Error during software update</b>	The update process is blocked and the hourglass on the display is inactive.	> Remove the USB stick. > Switch the machine off. > Rename the firmware file from «.fw» to «.auto». > Insert the USB stick. > Switch the machine on. – The update starts automatically.

### 8.3 Error messages

Message on the display	Cause	Repair
	Embroidery module has to be removed.	> Push the release button and pull the embroidery module carefully to the left.
	The embroidery module has to be attached.	> Carefully slide the module from left to right into the module connection of the machine.
	The bobbin winder is activated.	> Deactivate the bobbin winder.
	The thread indicator is deactivated.	> To activate both indicators, touch the icon «Confirm». > To keep the indicators deactivated, touch the icon «Cancel».
	The main motor isn't running.	> Turn the handwheel clockwise until the needle is at its top position. > Remove the stitch plate. > Remove the thread remnants. > Clean the hook. > Remove the hook and make sure that there are no pieces of broken needle points on the magnetic back of the hook.
	The upper thread is used up.	> Insert a new spool. > Rethread.
	The upper thread has broken.	> Rethread.

Message on the display	Cause	Repair
	The bobbin thread is used up.	> Remove the empty bobbin, fill it on the winder unit and thread.
	The needle threader lever is not raised.	> Raise the needle threader lever.
	The bernette USB stick (Optional accessory) is not inserted	> Insert the bernette USB stick (Optional accessory) into the USB stick socket.
	Not enough free space available on the USB stick (Optional accessory).	> Delete the data on the USB stick (optional accessory). > Overwrite the data on the USB stick.
	Needle moves sideways.	When the stitch plate is being changed, this picture appears because the needle is likely to move.
	The needle moves upwards.	> Check that there are no other objects near the needle plate. > Touch the icon «Confirm» to raise the needle.
	The hoop is not attached.	> Attach the hoop.
	The hoop is attached.	> Remove the hoop.

Message on the display	Cause	Repair
	<p>The embroidery hoop is calibrated.</p>	<ul style="list-style-type: none"> <li>&gt; Touch the icon «Confirm».</li> </ul>
	<p>The maximum number of stitches, which is 120.000, has been reached.</p>	<ul style="list-style-type: none"> <li>&gt; Select another pattern with less stitches.</li> </ul>
	<p>The data is loading.</p>	<ul style="list-style-type: none"> <li>&gt; Wait for processing.</li> </ul>
	<p>Software version update failed.</p>	<ul style="list-style-type: none"> <li>&gt; Check the update file on the USB stick.</li> <li>&gt; Touch the icon «Cancel» and try to start the update again.</li> </ul>
	<p>The embroidery motif is partly outside the hoop or too big for the hoop.</p>	<ul style="list-style-type: none"> <li>&gt; Reduce the size of the embroidery motif.</li> <li>&gt; Re-position the embroidery motif.</li> <li>&gt; Attach a bigger hoop.</li> </ul>
	<p>This message appears after activating the thread cutter when embroidering has been started.</p>	<ul style="list-style-type: none"> <li>&gt; Cut the thread manually.</li> </ul>

## 8.4 Technical data

Term	Value	Measurement unit
Sewing light	300, 2	mA, Watt
Maximum speed	Embroidery mode850	Stitches per minute
Measurements (B × T × H)	509 × 199,8 × 314,3	mm
Weight	10	kg
Energy consumption	100	W
Input voltage	100 – 240	V
Protection class (Electrical engineering)	Class II	





## 9 Overview stitch patterns

### 9.1 Overview Embroidery motifs









#### Editing the embroidery motif


















Let your inspiration run free. A vast selection of embroidery motifs is at your disposal.












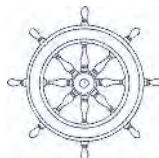

If you see one of the following pictograms below a number of the embroidery motif, you can find additional information at [www.mybernette.com/7series](http://www.mybernette.com/7series).

	Detached point		Appliqué
	Fringe embroidery		CutWork Design (motif)

#### Embellishment







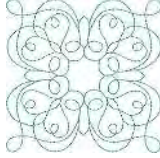



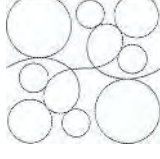




No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (002_bell)		50,4 103,0	2 (019_swiss)		150,4 129,4
3 (Edelweiss)		102,9 58,5	4 (12383-18)		90,6 171,2
5 (12490-03)		118 113,4	6 (12490-04)		146,4 122,4
7 (12490-05_ sized)		118 97,8	8 (12535-03_ 1_sized)		155 116


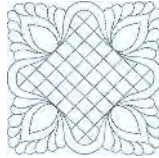
No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
9 (12490-5_sized)		49 100	10 (12587-57)		57,6 20,3
11 (12587-58)		52,8 116,2	12 (12587-59)		33 94,8
13 (12587-60)		126,2 126	14 (12606-33) 		43 70
15 (12611-27) 		136,9 137,3	16 (12611-28) 		140 140
17 (12670-03)		121 144,6	18 (12669-03)		109,4 194,6
19 (19999-002_check_S)		125 136,4	20 (21013-29)		152 40,2
21 (21013-30)		75,8 75,8	22 (21021-04)		123 150,2

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
23 (21021-05)		118,8 155,6	24 (21027-01_ S)		123 122,2
25 (21027-14)		120,8 120,8	26 (32078-02) 		123,4 172,9
27 (BE790308_ bernette) 		155,2 178,2	28 (FB148_48)		101 89,6
29 (FB158_48)		39,6 53,2	30 (NA597)		56,6 52,8
31 (NA614)		102 101,4	32 (NA617)		96,6 96,6
33 (NB843_48)		87,6 121,2			






















### Quilt motifs

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12380-04)		83 89,8	2 (12380-22)		110,6 60,8
3 (12380-43)		123,6 123,6	4 (12383-09) 		113,0 77,2
5 (12607-20)		122,4 122,4	6 (BD298_L_b ernette)		155 154,6
7 (BD502_48)		61,4 60,8	8 (BD513_48)		63,4 63,4
9 (BD796_48)		47,2 172,7	10 (BD800_48)		126,1 122,3
11 (BD837_48)		123,6 123,6	12 (NB934_48)		132,4 164,8
13 (Quilt 02)		101,8 101,6	14 (Quilt 09)		139,6 139,6



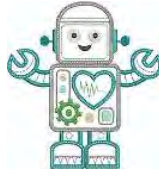



No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
15 (Quilt 10)		139,6 139,6	16 (Quilt 11)		139,6 139,6
















### Borders and Lace

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12398-29) 		26,4 153	2 (12410-08) 		80,6 168,2
3 (12594-03) 		36,4 152	4 (12659-01) 		45,2 57,8
5 (BC015105)		118,4 123	6 (BC01506)		103 131,8
7 (BD567_48)		108 108,2	8 (BE790504)		121,4 121,4
9 (BE790702)		73 190,5	10 (BE790704)		72,5 217,7














No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
11 (BE790705)		42,3 169,3	12 (FQ736_48)		7,9 253,2
13 (NY)		67 151,6	14 (NX952)		65,6 98,6
15 (NX238)		71,1 97,9			













### Children


No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12401-17)		98,8 55,2	2 (12590-03) 		135,5 147
3 (BE790306)		132,2 151,4	4 (BE790307) 		141,5 126,9

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
5 (BE790313) 		99 102,4	6 (CM193_48) 		106,6 127,4
7 (CM368_48)		70,2 140	8 (CM376_48) 		100,4 97,6
9 (NA667)		83,8 83,8	10 (NB302-48)		68,2 80,6
11 (CK229)		88,8 98	12 (CM428_48)		78,2 106,4
13 (MS974)		94,2 98,6	14 (NZ612)		96 99,6
15 (NZ613)		103 84,1	16 (NZ611)		99,6 81,2











## Flowers


















No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12392-01) 		112,6 157,4	2 (12392-13)		112,6 203,4
3 (21008-24)		97,6 121,6	4 (BE790406)		120,0 180,8
5 (21012-04) 		123,2 124	6 (80001-23)		85 101,6
7 (BE790304_ sized)		115,2 59,6	8 (BE790401_ bernette)		155,1 220,9
9 (BE790402_ sized)		135,6 259	10 (BE790404_ bernette)		157 180,2
11 (F1135)		88,6 87,1	12 (F1136)		84,7 89,2

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
13 (FQ527_48)		90,4 141,4	14 (FQ562_48)		90,4 156,4
15 (FQ808_48)		123,8 142,4	16 (FQ810_48)		23,6 206,4
17 (NA146)		63,2 69,3	18 (NB039_48)		97 127
19 (Rose_S)		63,9 129,2	20 (Sunflower)		91 88,2
21 (FP005)		80,8 95,2	22 (FM856)		76,2 68,2
23 (FQ681_48)		107 138,8	24 (FP238_S)		61,2 65,4


No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
25 (FQ239_48)		62,6 90,4			

### Seasons





No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12384-02)		132,8 203,4	2 (12384-11)		84,4 189,8
3 (12400-03)		123,4 161,3	4 (12400-11)		74,2 211,9
5 (12427-01)		133,8 167,6	6 (12427-11)		81,6 126,2
7 (12443-03)		120,4 161,4	8 (12443-11)		73,4 193,1
9 (BE790301_ sized)		116,2 81,4	10 (BE790303)		69,6 70,2

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
11 (NA006)		72,4 91,8	12 (HG747_48 ) 		124 147,4
13 (12421-03)		45,8 48,4	14 (12421-11)		39,9 43,6
15 (12421-37)		67,4 61	16 (FQ749_48)		77,6 94,8
17 (HE252) 		88,1 144,9	18 (HE255) 		133,2 127,2
19 (HE563)		63,2 129,4	20 (HE919_48)		89,2 69,2
21 (HG053_48 )		122 121,8	22 (HG795_48 )		89,2 164,4
23 (HD382)		66 97,4	24 (HD246)		80,8 99





























No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
25 (HE179)		89 95,2			















### Asia

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (FB276_48_ sized)		115,1 103,2	2 (FB283_48)		102,4 109,4
3 (FQ194_48)		120,2 118,4	4 (NB124_48 _sized 100%)		155 118,6


















### Sport/Hobby
















No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (12465-33)		80 79,8	2 (NX688)		92,2 85,6
3 (12611-08) 		80 119,7	4 (12611-21) 		71,7 155,8







No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
5 (12611-22) 		71,7 155,8	6 (12611-23) 		71,7 155,8
7 (12677-01_ sized) 		117,2 115,2	8 (12677-02) 		116,4 115
9 (12677-03_ sized) 		117 82,4	10 (80085-25) 		134,8 166,2
11 (BE790601_ S)		80,3 80,2	12 (BE790602)		80,2 75,6
13 (BE790603)		80,4 74,8	14 (BE790604)		79,8 80,4
15 (BE790604)		79,6 79,6	16 (BE790606_ S)		100,2 86
17 (BE790607)		79,8 74,4	18 (BE790608)		80,4 80

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
19 (SP980)		63,3 63,6	20 (SP989)		101,6 82,4
21 (CK510)		76,2 60	22 (CK522)		70,8 53,2
23 (CK970)		84,8 81,6	24 (LT749)		99,2 38,4
25 (LT920)		89,1 55,6	26 (CM442_48 )		46,4 47
27 (LT870)		97,6 57	28 (NB759)		98,8 61,6
29 (RC675_S)		101,6 79,6	30 (RC675_48)		100,4 99
31 (SR067)		87,6 96,8	32 (SR589)		95,2 66,6


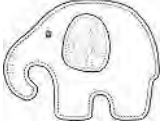



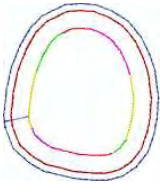




### Animals

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (BE790302 )		68,4 66,4	2 (12672-02 )		138 133,4
3 (CM022_48)		89,2 97	4 (CM142_48)		56,6 66,8
5 (CM211_48)		80,6 70,6	6 (CM213_48)		58,2 102
7 (CM220_48) 		71,4 71,8	8 (CM226_48) 		63,2 63
9 (CM286_48)		97,8 82,4	10 (CM362_48_sized) 		115,1 107,8
11 (CM384_48)		77,4 80,6	12 (CM465_48_sized)		48,2 33
13 (DEC104)		10,4 13	14 (FQ617_48 )		118 198,2



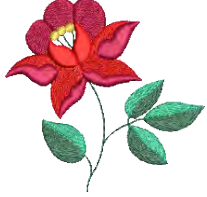
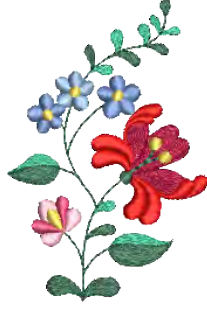
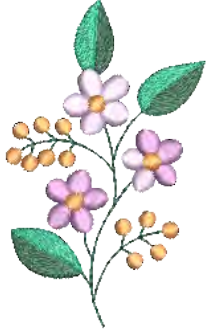
No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
15 (FQ624_48 )		64,5 144,2	16 (FQ945_48 _S)		93,8 95
17 (LJ699)		93,2 98	18 (WM785)		84,6 103,4
19 (WP201_4 8)		76,2 92	20 (WP325_4 8)		77,8 94
21 (WP217_4 8)		93,8 78,2	22 (WP224_4 8)		100,4 111
23 (WP415_4 8)		132,4 148,4	24 (WP421_4 8)		95,8 137,6
25 (WS610_4 8_sized)		120 104,4	26 (CM442H D26748)		65,2 51,4
27 (WM784)		106 114,4	28 (BE790305 ) 		118,2 145,6

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
29 (BE790309 ) 		87,5 149,8	30 (BE790311 ) 		114,1 152,5
31 (BE790312 ) 		122 133			

### Cutwork

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1 (CM594_4 8) 		96 75,6	2 (CM594_4 8_CWA01) 		90,8 110,0
3 (CM594_4 8_CWA02) 		43,6 50,2	4 (FS344_48 )		94,4 101
5 (FS345_48 )		92,6 104,9	6 (FS345_48 _CWA) 		80,6 72,2

### Campaign

No.	Embroidery motif Colors	Width x Height in mm	No.	Embroidery motif Colors	Width x Height in mm
1  (Campaign _3_elen- ts)		118,9  216,7	2  (Campaign _1_elen- t)		75,3  69,3
3  (FB060)		75,7  72,9	4  (FB062)		60  91
5  (FB069)		53,1  87,4			

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