

When using an electrical appliance, basic safety precautions should always be followed, including the following:

Read all instructions before using this sewing computer. When the sewing computer is not in use, it should be disconnected from the electricity supply by removing the plug from the outlet.

DANGER

To reduce the risk of electrical shock:

1. An appliance should never be left unattended when plugged in.
2. Always unplug this sewing computer from the electrical outlet immediately after using and before cleaning.

WARNING

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

1. Do not allow to be used as a toy. Close attention is necessary when this sewing computer is used by or near children and infirm persons. This sewing computer is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the sewing computer by a person responsible for their safety. Children should be supervised to ensure that they do not play with the sewing computer.
2. Use this sewing computer only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this sewing computer if:
 - it has a damaged cord or plug,
 - it is not working properly
 - it has been dropped or damaged,
 - it has fallen into water


Return the sewing computer to the nearest authorized BERNINA dealer or service center for examination, repair, electrical or mechanical adjustment.

4. Never operate the sewing computer with any air vents blocked. Keep ventilation openings of the sewing computer and foot controller free from accumulation of lint, dust and fabric remnants and the like.
5. Keep fingers away from all moving parts. Special care is required around the sewing needle.
6. Always use the BERNINA original stitch plate. The wrong plate can cause needle breakage.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching, this may deflect the needle, causing it to break.
9. Turn power switch to «0» (off) when making any adjustments in the needle area, such as threading or changing the needle, threading the bobbin or changing the presser foot etc.
10. Always unplug the sewing computer from the electrical outlet when removing covers, lubricating or when making any other user servicing adjustments mentioned in this instruction manual.

11. Never drop or insert any object into any openings on the sewing computer.
12. Do not use the sewing computer outdoors.
13. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off («0») position then remove the plug from the outlet.
15. Do not unplug by pulling on the cord, instead, grasp the plug before pulling.
16. No responsibility will be taken on behalf of BERNINA for any possible damage as the result of misuse of the sewing computer.
17. Under no circumstances should the sewing computer be left unattended when using the embroidery module.
18. This sewing computer is provided with double insulation (except USA / Canada). Use only identical replacement parts. See instructions for servicing of double-insulated machines.

SERVICING DOUBLE-INSULATED PRODUCTS

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated 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 only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those 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.

This sewing and embroidery computer is intended for household use only.

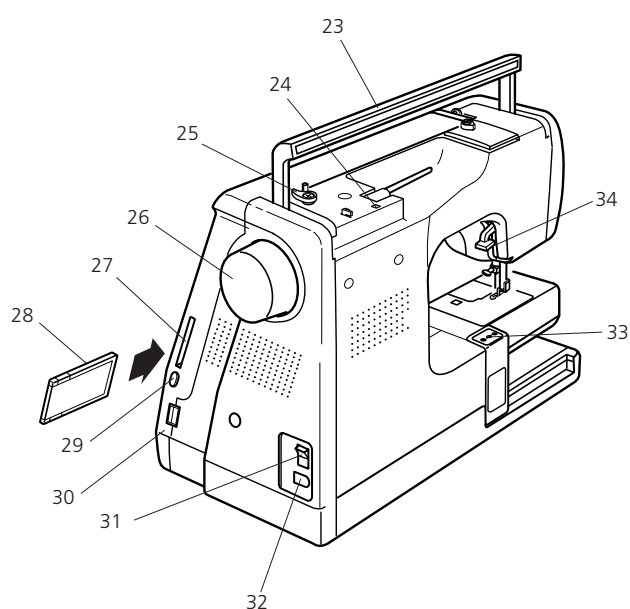
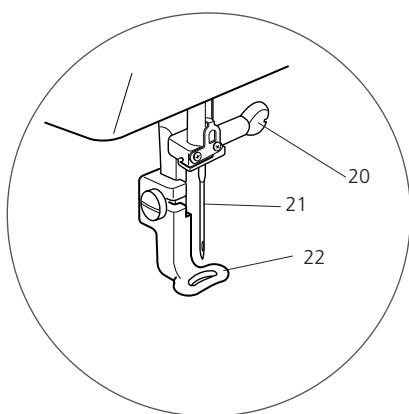
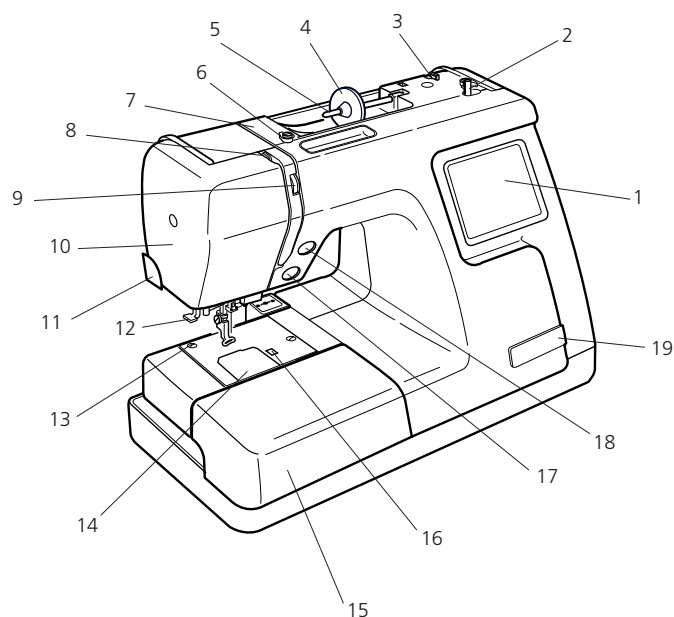
SAVE THESE INSTRUCTIONS!

ENVIRONMENTAL PROTECTION

BERNINA is committed to environmental protection. We are increasing the environmental friendliness of our products by constantly improving them in terms of design and production technology.

If you no longer require this product, please dispose of it in an environmentally responsible fashion according to national guidelines. Do not dispose of this product in your household waste. In case of doubt, please contact your dealer.

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Name of Parts

1. LCD touch panel
2. Bobbin winder spindle
3. Bobbin thread cutter
4. Spool holder (large)
5. Spool pin
6. Bobbin winding thread guide
7. Thread guide
8. Thread take-up lever
9. Thread tension dial
10. Face plate
11. Thread cutter
12. Needle threader
13. Needle plate
14. Hook cover plate
15. Extension table (accessory box)
16. Hook cover plate release button
17. Start/Stop button
18. Thread Cutter button
19. Pocket for scissors

20. Needle clamp screw
21. Needle
22. Embroidery foot

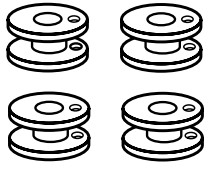
23. Carrying handle
24. Hole for extra spool pin
25. Bobbin winder stopper
26. Handwheel
27. Design Card slot
28. Design Card (optional accessory)
29. Card eject button
30. USB Stick socket
31. Power switch
32. Machine socket
33. Carriage (for embroidery)
34. Presser foot lifter

Caution:

- Always provide sufficient clearance for the embroidery carriage behind your machine before starting the machine.
- Do not force to move the carriage by hand.
- Return the carriage to the idle position before turning the power off. Use the keys Utility and Return Carriage as described on page 25.

Standard accessories

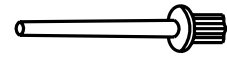
1. Bobbins



2. Lint Brush



3. Extra Spool Pin



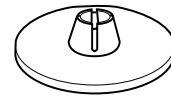
4. Spool Pin Felt



5. Spool Stand



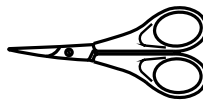
6. Spool Holder (Large)



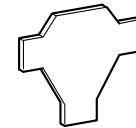
7. Spool Holder (Small)



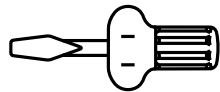
8. Scissors



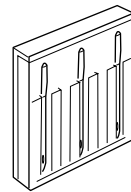
9. Screwdriver



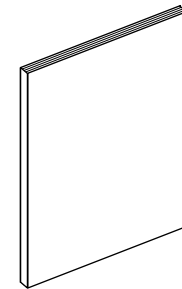
10. Screwdriver



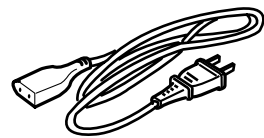
11. Set of Needles



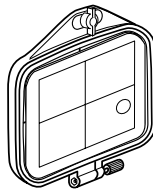
12. Instruction Book



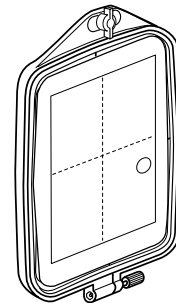
13. Power Supply Cord



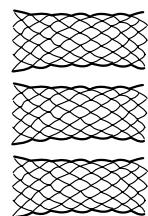
14. Hoop A (with Template)

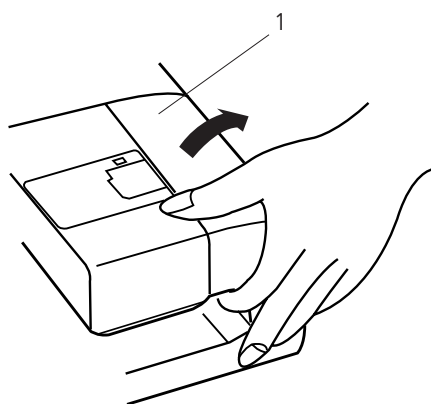


15. Hoop B (with Template)

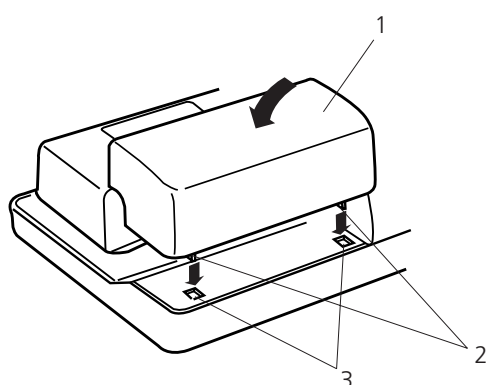


16. Spool Net



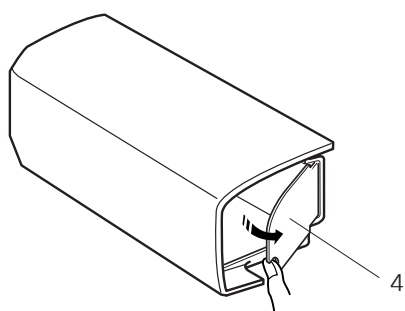
**Detachable Extension Table**

To remove, lift out the extension table toward you as illustrated.



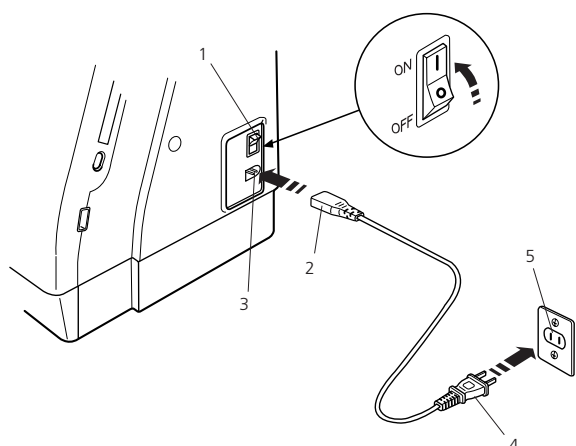
To attach, position the tabs on the base tab holes and push down gently.

- 1. Extension table
- 2. Tabs
- 3. Base tab holes



Sewing accessories are stored in the extension table.
Pull open the door to store the accessories.

- 4. Door



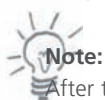
For appliances with a polarized plug (one blade wider than the other): To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If it does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install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

Connecting the Power Supply

Turn off the power switch and insert the machine plug into the machine.

Insert the power supply plug into the wall outlet and turn the power switch on.

1. Power switch
2. Machine plug
3. Machine socket
4. Power supply plug
5. Wall outlet

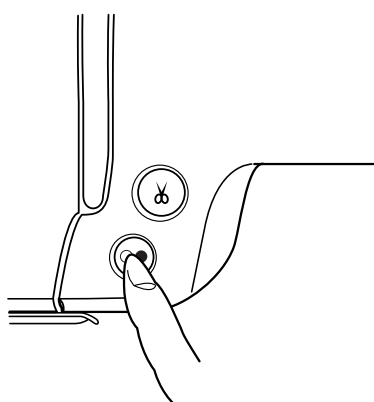


Note:

After turning on the power, it takes approximately six seconds for the pattern selection window to be displayed on the touch screen. (This is the required boot up time and is not a defect)

Operating Instructions:

The symbol «0» indicates the 'off' position of the switch.



Start/ Stop Button

Press this button to start or to stop stitching.

The color of the button changes each time you press it - red when the machine is running, and green when it is stopped.



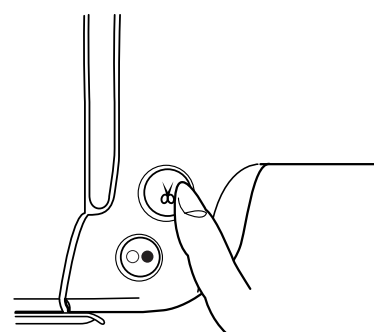
Note:

The Deco 340 is equipped with an automatic shutdown safety feature to prevent overheating when the machine is running overloaded. Follow safety instructions that appear on the visual touch screen if it happens.

For Your Safety:

While in operation, always keep your eyes on the embroidery area, and do not touch any moving parts such as the thread take-up lever, handwheel or needle. Always turn off the power switch and unplug the power supply:

- when leaving the machine unattended.
- when attaching or removing parts.
- cleaning the machine.



Thread Cutter Button

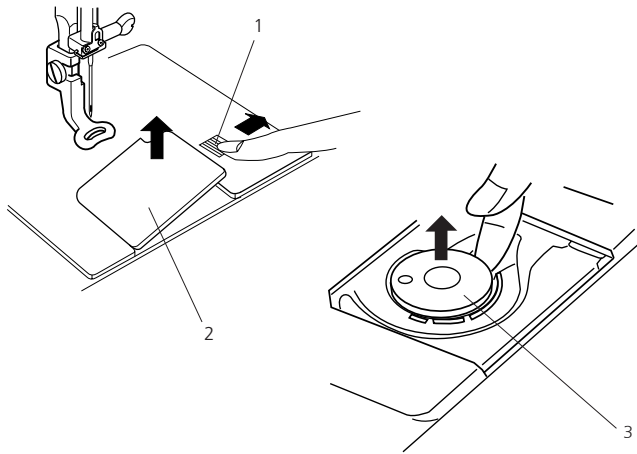
Press this button to trim the threads after sewing is finished (refer to page 39).



Note:

When using speciality thread or thread thicker than #30 do not use the Automatic Thread Cutter. Instead cut the thread with the Thread Cutter on the Face Plate.

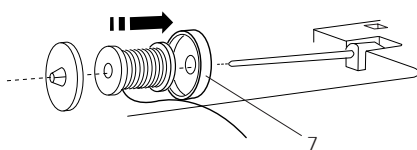
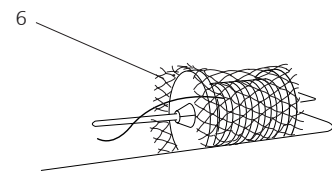
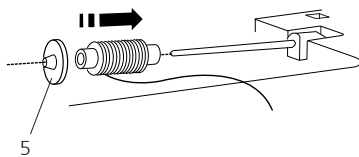
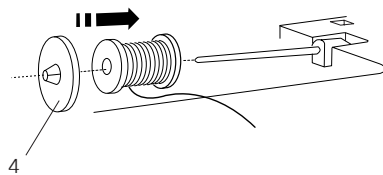
- The Thread Cutter Button will be disabled, if the Metallic Thread Button in the Embroidery Window is activated.



Removing the bobbin

Slide the hook cover plate release button to the right, and remove the hook cover plate. Lift out the bobbin from the bobbin holder.

1. Hook cover plate release button
2. Hook cover plate
3. Bobbin



Setting the spool of thread

Place the spool of thread on the spool pin with the thread coming off the spool as shown. Attach the large spool holder, and press it firmly against the spool of thread.

4. Large spool holder



Note:

Use the small spool holder to hold narrow or small spools of thread.

5. Small spool holder

In order to prevent tangling of the thread, please use a spool net. The net is especially useful to work from large or loose wound spools.

6. Spool Net

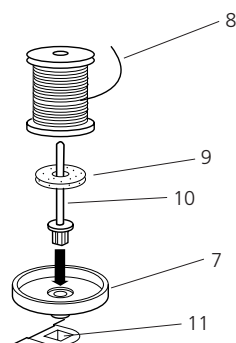
Use the spool stand if the thread tangles around the root of the spool pin

7. Spool stand

Extra spool pin

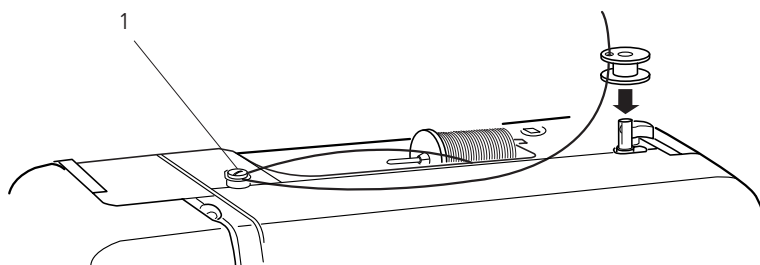
Use the extra spool pin when you need to wind the bobbin without unthreading the machine while working on a project. When working with metallic thread the use of the extra spool pin is also highly recommended.

Insert the extra spool pin into the spool stand then into the hole beside the horizontal spool pin. Place a cushion felt and spool on the spool pin. The end of the thread should unwind as illustrated.



8. End of the thread
9. Cushion felt
10. Extra spool pin
11. Hole

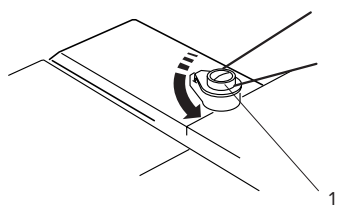
To achieve the best embroidery quality, BERNINA recommends to use only high quality embroidery thread such as Mettler Metrosene⁺® Poly Sheen®, Isacord



Winding the bobbin

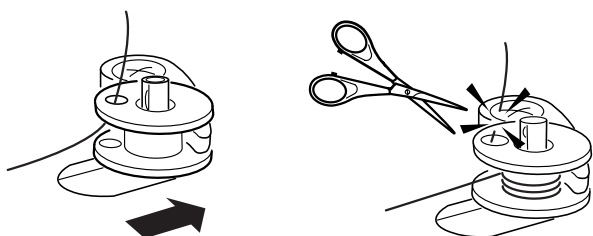
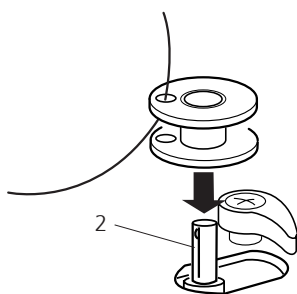
Guide the thread around the bobbin winder thread guide while holding the thread at the spool.

1. Bobbin winder thread guide



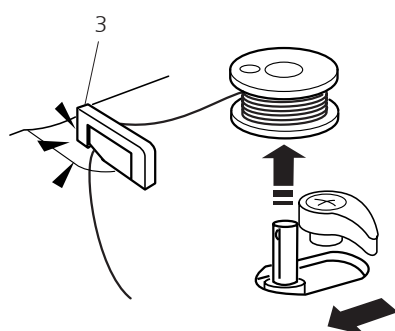
Thread through the hole in the bobbin from the inside to the outside. Put the bobbin on the bobbin winder spindle.

2. Bobbin winder spindle



Push the spindle to the right. Press the Start/Stop button while holding the end of the thread. Stop the machine after the bobbin has made a few turns. Cut the thread close to the hole in the bobbin. Press the Start/Stop button again. When the bobbin is fully wound it will stop automatically. Press the Start/Stop button to stop the machine then return the bobbin winder spindle to the left. Remove the bobbin and cut the thread with the bobbin thread cutter.

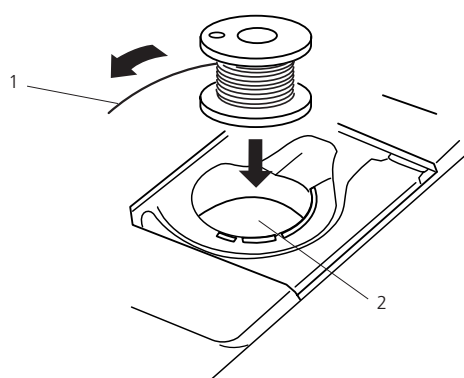
3. Bobbin thread cutter



Notes:

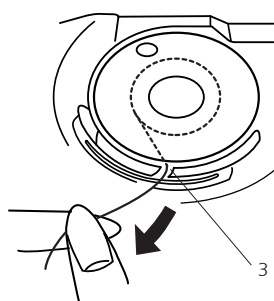
Do not move the bobbin winder spindle while the machine is running. For safety purposes, the motor will stop automatically after running for two minutes. Adjust how much the bobbin is filled by rotating the bobbin winder stopper.

To achieve the best embroidery quality, BERNINA recommends to use only high quality bobbin thread such as OESD 41ET/W or Mettler®

**Inserting the bobbin**

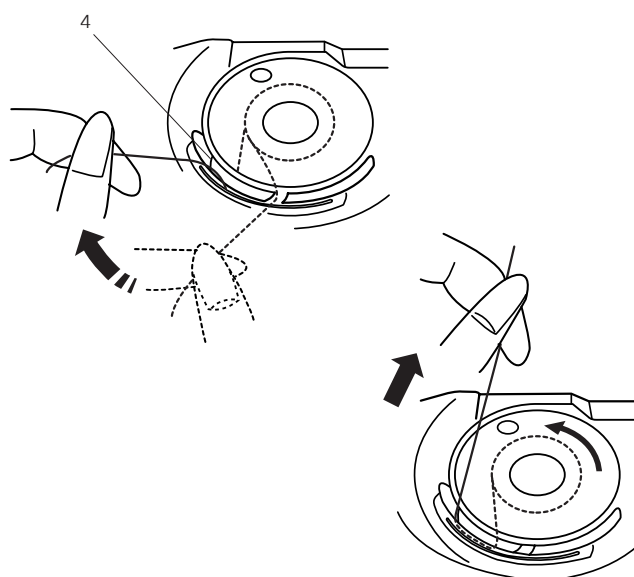
Place the bobbin in the bobbin holder with the thread unwinding counter-clockwise.

1. Thread
2. Bobbin holder



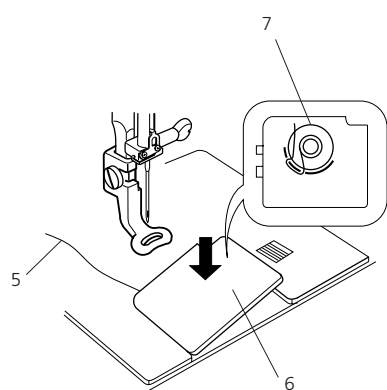
Guide the thread into front notch on the front of the bobbin holder. Draw the thread to the left, sliding it between tension spring blades.

3. Front notch



Continue to draw the thread lightly until the thread slips into side notch.

4. Side notch

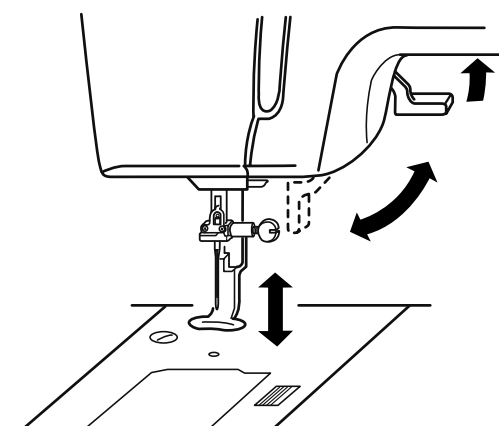


Pull out about 10 cm (4") of thread to the rear.

Refer to the threading chart shown on the hook cover plate to check the threading

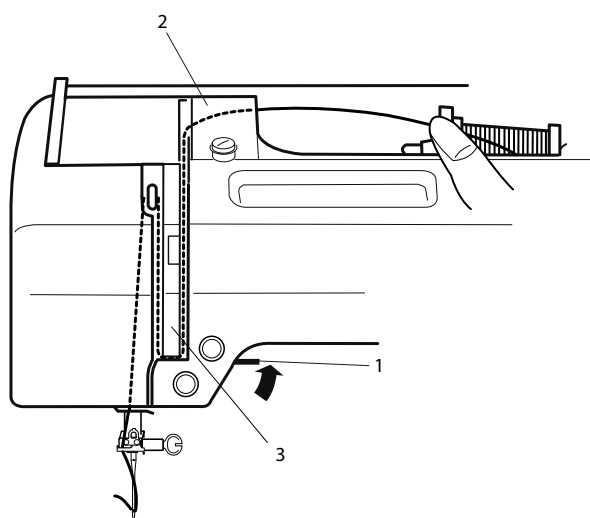
Re-attach the hook cover plate.

5. Bobbin thread
6. Hook cover plate
7. Threading chart



Raising the Presser Foot

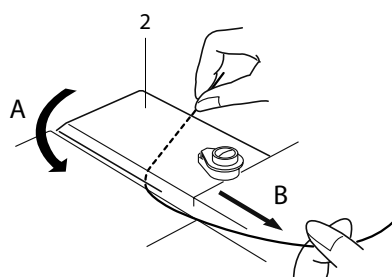
The presser foot lifter raises and lowers the presser foot. The presser foot can be raised about 6 mm (1/4") higher than the normal up position. This will help you to place the embroidery hoop under the foot.



Threading the Machine

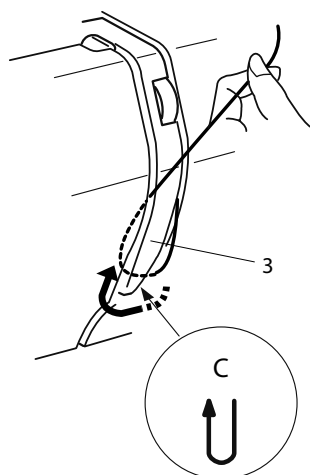
Raise the presser foot lifter. Turn the handwheel counterclockwise to bring the needle to its highest position.

1. Presser foot lifter



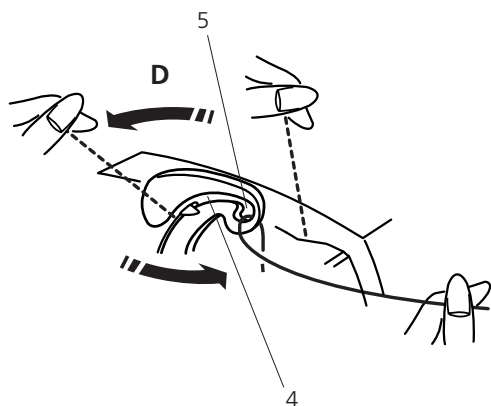
Hold the thread with both hands and pass the thread around under the thread guide plate (A). Then draw the thread down through the right channel of the thread guide plate (B).

2. Thread guide



Firmly draw the thread around the bottom of the thread guide plate and up to the thread take-up lever (C).

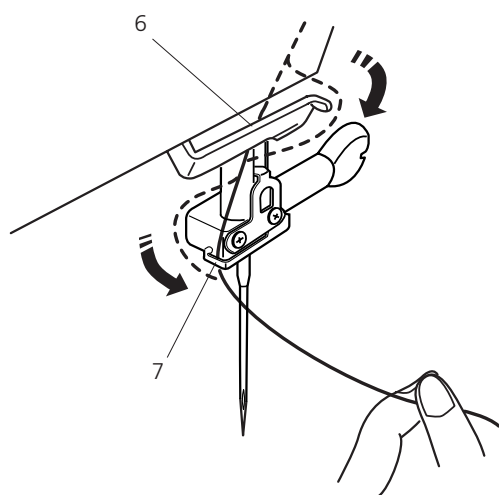
3. Thread guide plate



Slip the thread through the slit and down into the eye of the take-up lever as shown (D).

Draw the thread down through the left channel.

- 4 Slit
- 5 Eye of the take-up lever



Slip the thread behind the lower thread guide from the right.

- 6 Lower thread guide

Slip the thread in the needle bar thread guide from the left.

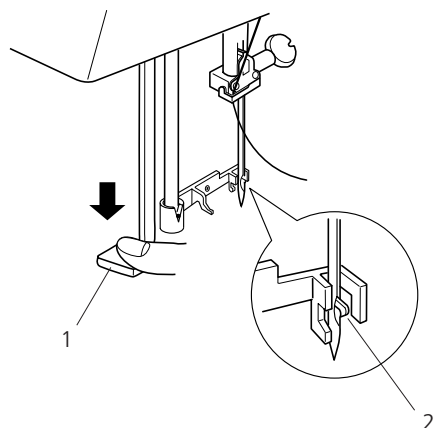
- 7 Needle bar thread guide

Thread the needle from front to back by hand or use the built-in needle threader.



Note:

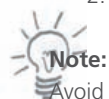
Refer to page 13 for built-in needle threader.

**Needle Threader**

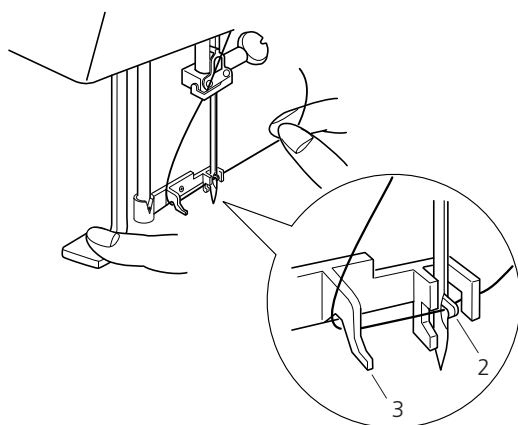
Lower the presser foot. Press the needle threader lever down as far as it will go.

The hook comes out through the needle eye from behind.

1. Needle threader lever
2. Hook

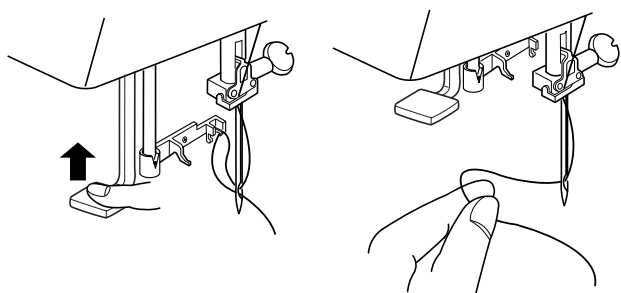
**Note:**

Avoid applying sideways force to the needle threader lever as this could cause malfunction of the threader.



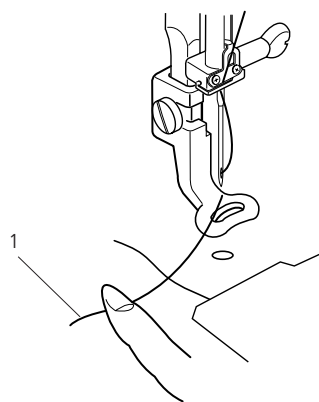
Draw the thread down around the threader guide and under the hook.

3. Thread guide



Release the threader lever slowly while holding the thread end with your fingers. A loop of the thread is pulled up through the needle eye.

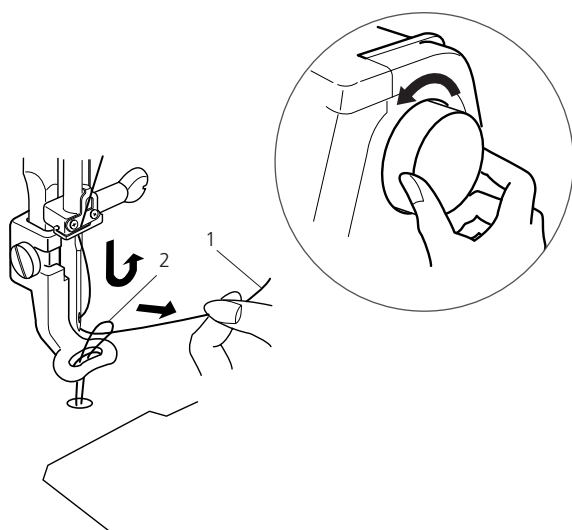
Remove the loop from the threader and pull out the thread end from the needle eye.



Drawing up the Bobbin Thread

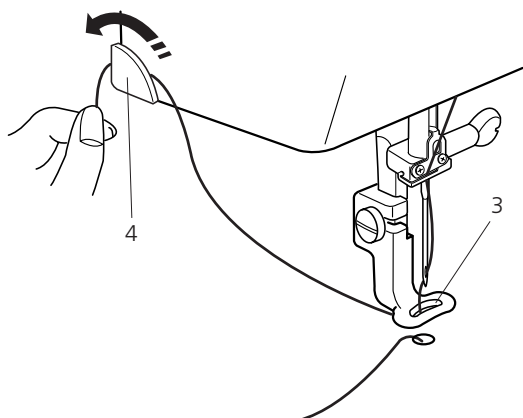
Raise the presser foot lifter. Hold the needle thread with your finger.

1. Needle thread



Turn the handwheel one complete turn toward you. Draw the needle thread to bring up a loop of the bobbin thread.

2. Loop of the bobbin thread



Pass the needle thread through the hole in the embroidery foot and draw it up to the thread holder leaving an inch of free thread.

3. Hole
4. Thread holder

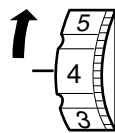
Thread Tension

Adjust the thread tension of the upper thread with the thread tension dial (9. on page 4).

The initial position for the thread tension dial is «4». For most applications this adjustment will give suitable upper thread tension. Depending on the material and the thickness of the embroidery thread, as well as of the fabric stitched on, it might be required to tweak the upper thread tension. It is recommended to embroider first a sample for every project. Adjust the upper thread tension according to the results on the sample.

Balanced thread tension:

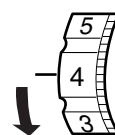
Small amount of the needle thread shows on the wrong side of the fabric.



If the needle thread tension is too tight:

The bobbin thread shows on the right side of the fabric. Reduce the tension by turning the tension dial to a lower number.

1. Bobbin thread



If the needle tension is too loose:

The needle thread forms loops and the stitches look loose. Increase the tension by turning the dial to a higher number.

Change Needle

Turn off the power switch and disconnect the machine from the power supply.

Raise the needle by turning the handwheel and lower the presser foot.

Holding the needle tight, loosen the needle clamp screw by turning it counterclockwise.

Remove the needle from the clamp.

Insert a new needle into the needle clamp with the flat side of the needle to the rear.

1. Needle clamp screw
2. Flat side of the needle

When inserting the needle into the needle clamp, push it up against the stopper pin and tighten the needle clamp screw firmly.

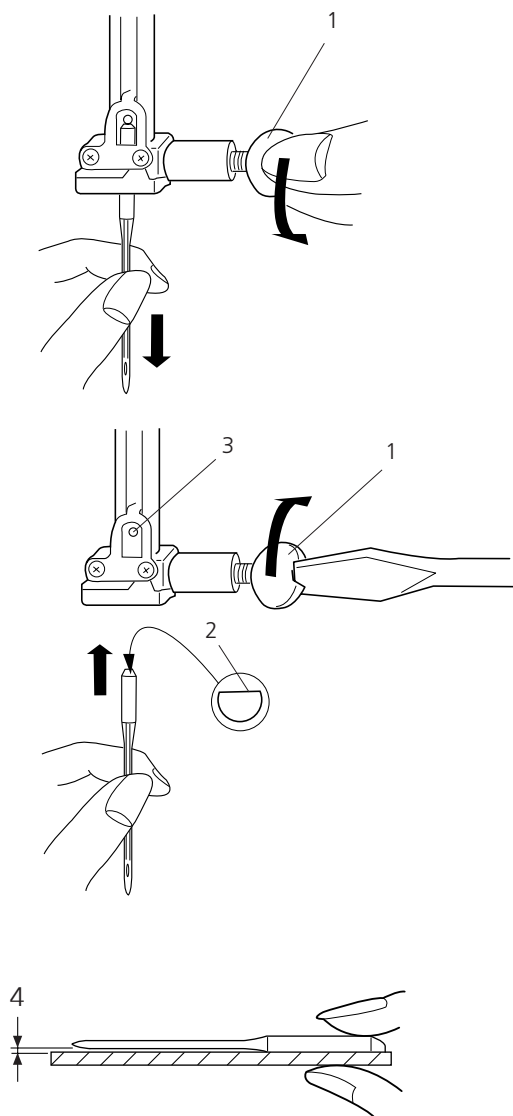
3. Stopper pin

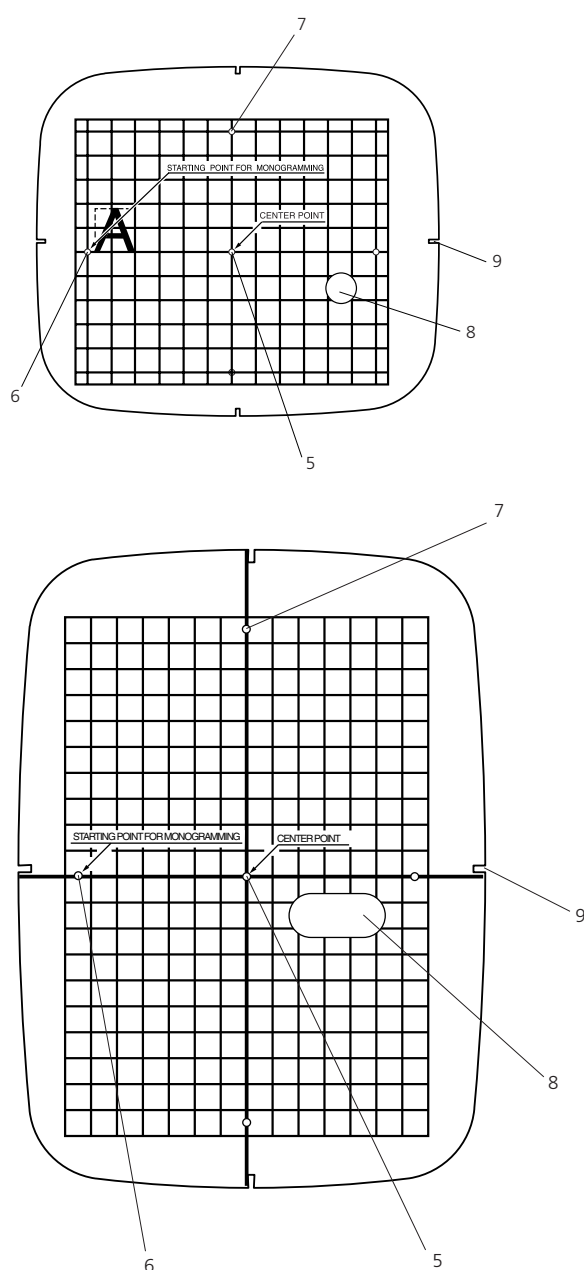
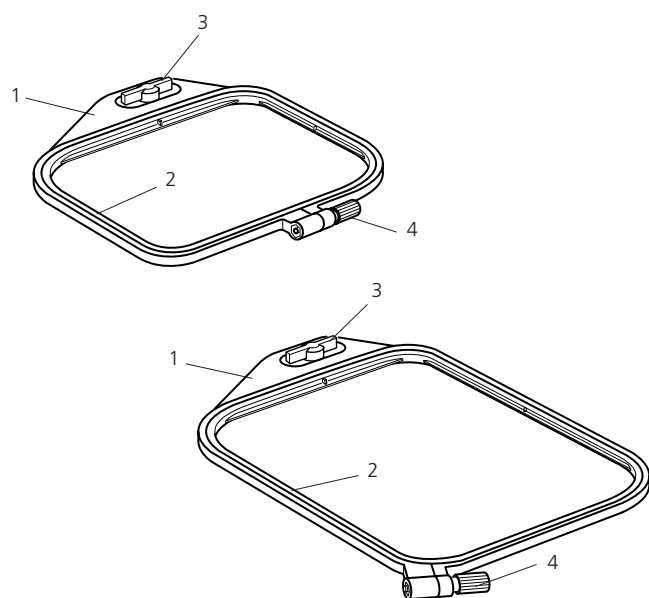


Note:

Never use a blunt needle. To check needle straightness, place the flat side of the needle onto something flat (a needle plate, glass etc.). A gap between the needle and the flat surface should be consistent.

4. Gap





Your embroidery computer can handle almost every materials commonly used. However, to achieve best embroidery results it is important to use the correct materials and tools for your project. The next pages will give you a short overview of the most important rules to make this choice. For more detailed informations please contact your dealer or read specific technical literature.

Embroidery Hoop

The Deco 340 is supplied with two hoops. Use hoop A for regular designs up to 126 x 110 mm (5" x 4³/₈"), while the hoop B will accommodate a large design up to a 200 x 140 mm (8" x 5¹/₂ ").

1. Outer hoop
2. Inner hoop
3. Attaching knob
4. Hoop tightening screw

Please see your dealer for additional hoop sizes. The following hoops are preset in the embroidery computer:

Hoop C: for free arm embroidery, 50 x 50 mm

Hoop F: round, embroidery area 126 x 110 mm

Templates

When positioning the fabric into the hoop, use the template to align the centerlines on the fabric with the center of the hoop. First mark the centerlines on the fabric and place the fabric on the outer hoop. Place the inner hoop and template over the fabric and adjust the fabric placement.

5. Starting point for built-in designs and Embroidery cards.
6. Starting point for monogramming in horizontal placement
7. Starting point for monogramming in vertical placement
8. Finger hole

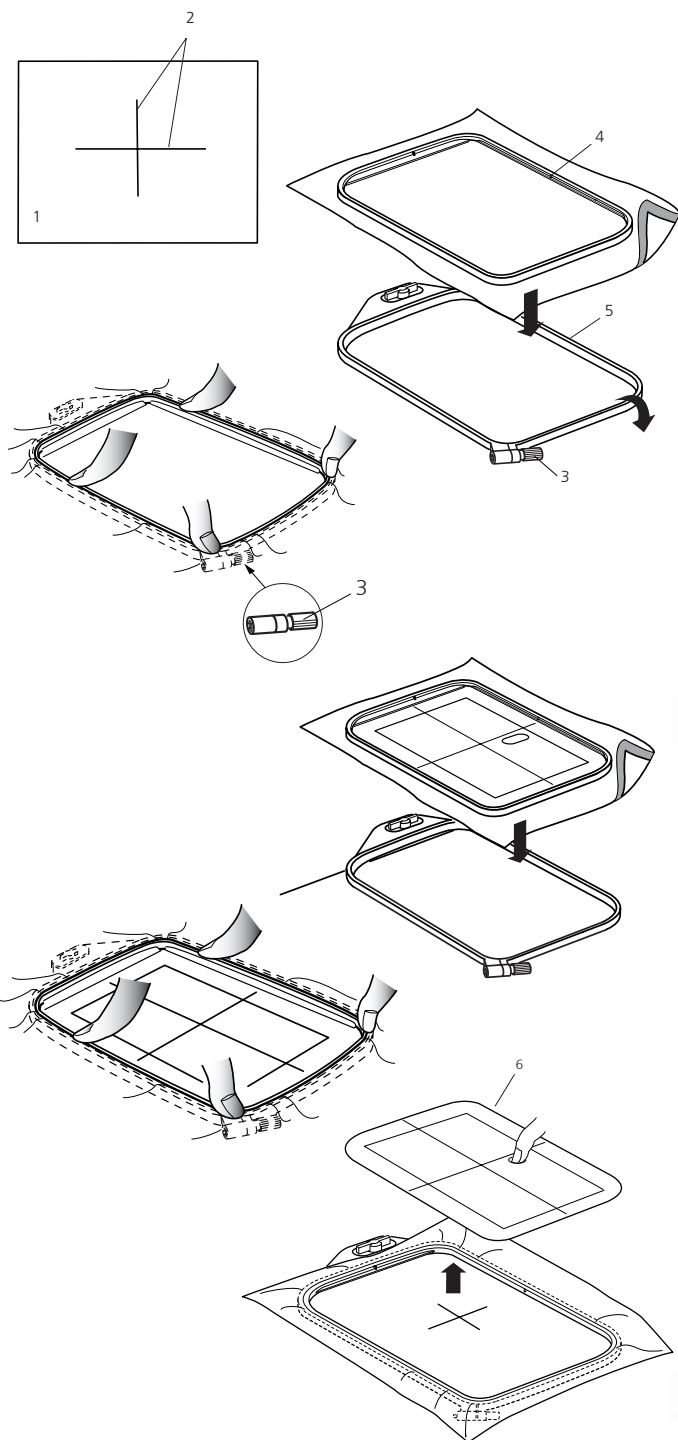


Note:

The four indentations on the template do not correspond with the reference lines.

9. Positioning indentations

There are two things to keep in mind when hooping fabric: the act of hooping and the stabilization. Following carefully the related instructions in this manual will help you to achieve the best results for your embroidery project. For hooping instructions follow the descriptions below, for the use of stabilizer please refer to page 19.



Hooping

Mark the centerlines on the right side of the fabric with tailor's chalk or a fabric marker.

- 1 Fabric
- 2 Centerlines

Place the outer hoop on a flat surface, with the attaching mechanism extending over the edge the surface.

Step 1: Calibrate the hoop (= adjust width to your project)

- a) Loosen the tightening screw of the outer hoop.
- b) Place the fabric with stabilizer on the outer hoop.
- c) Lay the inner hoop over the fabric.
- d) Push the inner hoop into the outer hoop
- e) Tighten the screw with your fingers, do not use a screwdriver.
- f) Pop out the inner hoop

- 3 Hoop tightening screw
- 4 Inner hoop
- 5 Outer hoop



Note:

This first step only calibrates the hoop for the thickness of the fabric. It is not necessary to have exact placement of the fabric.

Step 2: The final hooping.

During this second step the fabric is correctly placed.

- a) Place the fabric on a flat surface
- b) Lay the inner hoop with the template inserted on the fabric, matching the centerlines on the fabric and the template.
- c) Pick up the inner hoop and the fabric together and place them on top of the outer hoop.
- d) Push the inner hoop into the outer hoop – do not readjust the tightening screw on the outer hoop.
- e) Remove the template.

- 6 Template

Having finished step 2 the fabric should sit well stretched in the hoop. You are now ready to attach the hoop with the fabric onto the Deco 340.



Note:

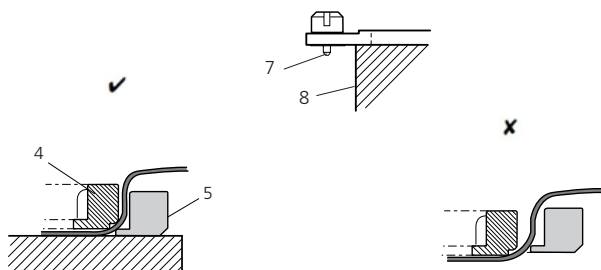
It is only necessary to calibrate the hoop once if you are embroidering several pieces with the same fabric and stabilizer.



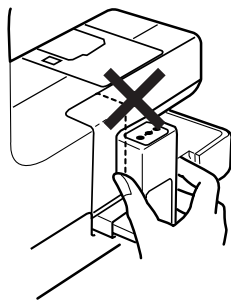
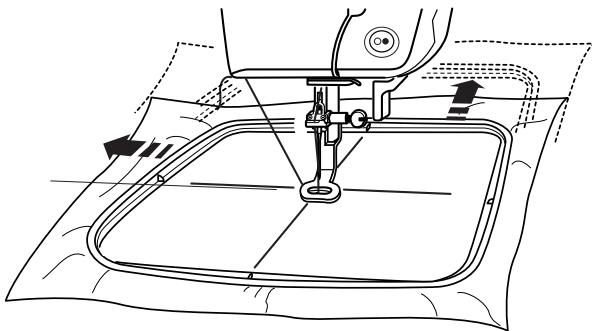
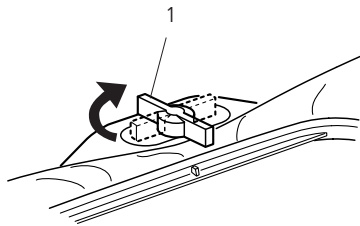
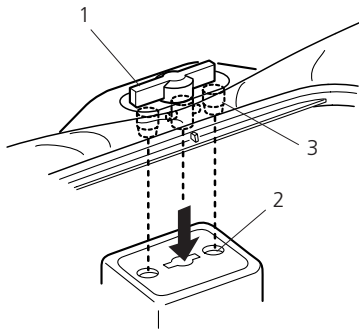
Important:

When placing the fabric on the embroidery hoop, always place the outer hoop on a flat surface. Make sure the attaching mechanism extends over the edge of the surface, such that the attaching pins do not sit on the surface.

- 7 Attaching Pins
- 8 Edge of the flat surface



After hooping the fabric should be flush with the lower edge the outer hoop. Depending on the thickness of the fabric and the stabilizer the inner hoop may extend over the top of the outer hoop quite a bit – this is correct!



Attaching the Embroidery Hoop to the Machine

Turn the attaching knob so it is parallel with the hoop, and set it on the carriage.

1. Attaching knob
2. Carriage holes
3. Pins

Turn the attaching knob clockwise.



Caution:

- Always provide sufficient clearance for the embroidery carriage behind your machine before starting the machine.
- Do not force to move the carriage by hand.
- Return the carriage to the idle position before turning the power off. Use the keys Utility and Return Carriage as described on page 25.

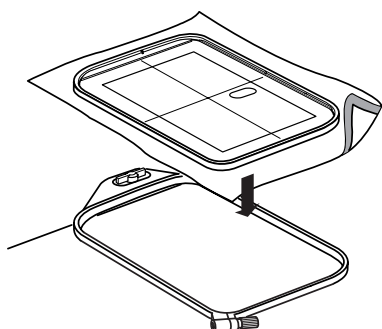
Embroidery stabilizers

Tear-away stabilizers

- Similar to interfacing; tears like paper
- one or more layers can be used
- available in different weights
- for more stability, apply to the wrong side of the fabric with temporary spray adhesive before hooping
- carefully tear away excess stabilizer from the back of the embroidery after stitching
- stabilizer will remain under larger embroidered areas

Application:

For all wovens and non-stretchables

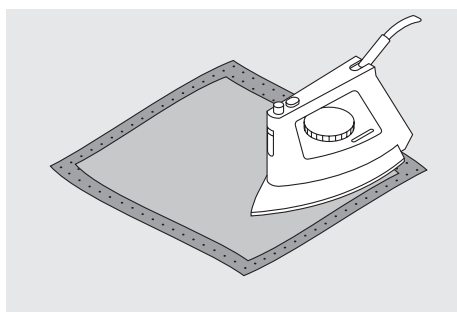


Cut-away stabilizers

- one or more layers can be used
- available in light- and heavyweight
- for more stability, apply to the wrong side of the fabric with temporary spray adhesive before hooping
- carefully cut away from the back of the embroidery after stitching
- stabilizer will remain under larger embroidered areas

Application:

For all stretchable fabrics



Iron-on interfacing

- must be preshrunk by soaking in warm water
- this is pressed (fused) to the wrong side of the fabric
- iron-on interfacings are available in a variety of weights and should be selected to suit the fabric being used
- removable iron-on interfacing is also available

Application:

To provide body and shape for fabrics onto which motifs will be placed.

Use in conjunction with appropriate stabilizer

Paper backed adhesive stabilizer

- place stabilizer in hoop, paper side up
- use a pointed object (e.g. scissors) to score the paper and remove it to reveal the self-adhesive surface
- position the piece of fabric to be embroidered on the stabilizer

Application:

Intended for delicate fabrics such as jersey or silk, or hard to hoop fabrics such as velvets

For pieces, sections and materials that can not be hooped



Note:

When using paper backed adhesive stabilizer make sure that there is no adhesive residue on needle, stitch plate and hook area.

Spray adhesive

- do not use spray adhesive near or directly at embroidery computer
- use spray to stick stabilizer to wrong side of fabric for more stability
- sparingly use spray adhesive and spray from a distance of 25-30cm to stabilizer
- place fabric and sprayed stabilizer flat on each other and press together

Application:

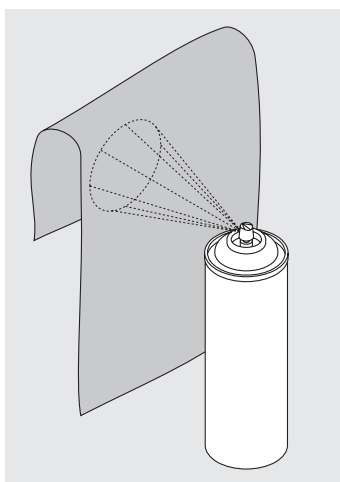
On stretchable fabrics and knits to prevent distortion.

Appliqué: exact securing of appliqués for embroidery.

Smooth fabrics: to prevent shifting.

Cutwork: to fix cut-out pieces on stabilizers, e. g. pockets on trousers, collars etc.

For fabrics that easily crush or otherwise be marked by hooping: use spray adhesive on the stabilizer, hoop the stabilizer, then fix the sections to be embroidered onto the stabilizer.



Spray starch for additional stiffening

- spray starch is ideal for stiffening fine, soft or loosely woven fabrics
- spray the area to be embroidered, let dry or press gently with a warm iron
- always use an additional stabilizer such as water soluble stabilizer on the wrong side of the fabric

Application:

- ideal for fine, loosely woven fabrics, e.g. batiste, fine linen, etc.

Water soluble stabilizer for fabric with a pile and lace embroidery

- water soluble stabilizer looks like plastic wrap
- dissolve stabilizer in warm water when embroidery is complete
- water soluble stabilizers are ideal protection for fabrics with a thick or looped pile such as toweling. It also prevents the embroidery threads from sinking into the fabric or the fabric threads from poking out between the stitching
- place on top of toweling and high nap fabrics backed by appropriate stabilizer for fabric and motif
- use spray adhesive to fix stabilizer if necessary
- for fabric with a pile, reinforce with additional, suitable stabilizer on the wrong side if necessary
- for lace embroidery place one or two layers of water soluble stabilizer in hoop (as the motif is not embroidered on any fabric, only the thread embroidered motif is left)
- after dissolving lay the motif down flat and let dry
- water soluble stabilizer can also be removed by gently tearing it away when used as a topping on non-washable fabrics like velvet

Application:

- ideal for toweling, velvet, bouclé knits, etc.
- ideal for fine, sheer fabrics such as organdy, batiste, etc.
- recommended for use as a stabilizer with low stitch count motifs
- use heavier water soluble stabilizer to stitch lace motifs

Important embroidery information**Choosing an embroidery motif**

- simple motifs with a low stitch count are suitable for embroidery on fine fabric
- large-scale, densely embroidered motifs (e.g. with multiple color and embroidery direction changes) are suitable for medium- and heavyweight fabrics

Embroidery test

- always stitch an embroidery test on a sample fabric. Adjust color, thread quality, needle, stitch density, tension, etc. to suit the motif if necessary
- for the test use the same fabric and stabilizer that you will use on the project

Embroidery Threads

One of the most important elements in successful embroidery is the quality of the thread. We strongly recommend that you purchase thread from a reputable dealer in order to avoid irregularities, thread breakage, etc. which so often occur with poor quality threads.

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

Polyester Threads

Polyester with a brilliant sheen is a hard wearing colorfast thread and has a high tensile strength. It is suitable for all types of embroidery, especially children's clothing and items which will be washed often or subject to much wear and tear.

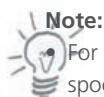
Rayon Threads

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 Wrapped Polyester Thread (= Metallic Thread)

Metallic thread is a light- to mediumweight thread suitable for special effects in embroidery.

Preferably use with a Metafil 130/705 H-MET needle or Organ needle of varying sizes.



Note:

For metallic thread it is highly recommended to use the extra spool pin (see Page 8) and the Spool Net. Even better results can be achieved by using the optional Multi Spool Holder.

- The automatic thread cutter should not be used with metallic thread. Refer to page 37 to see how to disable the thread cutter temporarily by the use of the Metallic Thread key.

Bobbin Threads

Bobbin-Fil (Special Bobbin Thread)

Bobbin-Fil is an especially soft and light polyester thread suitable for bobbin thread. This special bobbin thread ensures a steady thread tension and an optimal intertwining of the upper and bobbin thread.

Darning and Embroidery Thread

Fine mercerized cotton thread suitable for embroidery (Mettler 60 weight suggested), which is embroidered on cotton fabric.

Embroidery Needles

- use correct needle size for each thread
- exchange needle regularly

The following are the guidelines:		Needle No.
fine fabrics: fine thread (darning thread, embroidery thread)		70–75
medium fabrics: normal thread		80–90
heavyweight fabrics: stronger thread		100, 110, 120

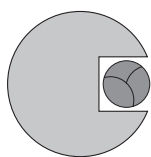
Needle, Thread and Fabric

Care has to be taken when combining needle and thread.

The correct needle size does not only depend on the chosen thread, but also has to be well-suited to the fabric used. The fabric weight determines the thread weight and needle size.

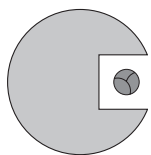
Needle/Thread Combination

In order to check the needle/thread compatibility, the correct size thread must correspond with the correct size needle.



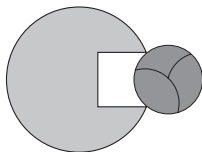
Correct Needle/Thread Combination

When sewing, the thread should travel smoothly down the long groove on the back of the needle. The thread can be secured optimally.



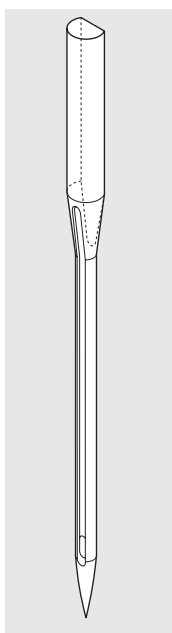
Too Thin Thread or Too Thick Needle

The thread does not travel smoothly in the groove. Faulty stitches and damage of the thread can occur.



Too Thick Thread or Too Fine Needle

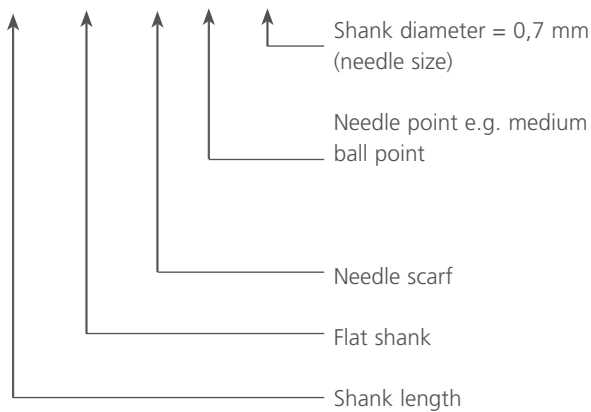
The thread rubs on the edges of the groove and can get jammed. This can break the thread.

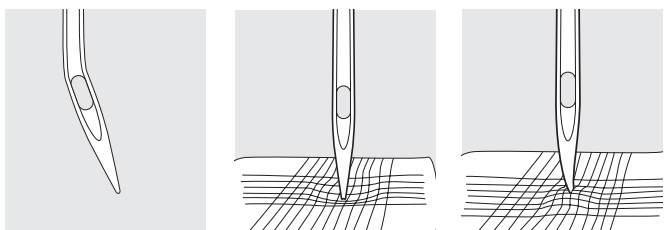


Needle Summary

BERNINA uses needle system 130/705 H. This system number refers to shank shape as well as to length and form of the needle point.

130/705 H S 70




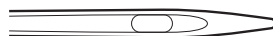




Checking the Needle Condition

The needle condition should be checked and the needle replaced regularly. A defective needle not only damages the sewing but also the sewing computer.

The following are the guidelines: replace needle when starting a new sewing project or as required.

Many materials are easier to sew if the appropriate needle is used.

Type of needle	Model	Suitable for	Needle size
Universal 130/705 H	 Normal point, slightly rounded	For nearly all natural and synthetic fabrics (woven and knitted)	60–100
Jersey/Stretch 130/705 H-SUK	 Ball point	Jersey, stretch fabrics	70–90
Embroidery 130/705 H-E	 Large eye, slight ball point	Embroidery on all natural and synthetic fabrics	75–90
Metafil 130/705 H-MET	 Large eye	sewing with metallic threads	75–90

Special needles are available at your dealer.



To make learning easy you will find the most important keys and indications always at the same location on your Deco 340 screen. For your convenience it is using icons and a status line. Please familiarize yourself first with the basic procedures and these important elements as described below.

When the machine is switched on, the pattern selection window appears on the LCD touch screen.



Note:

It requires approximately six seconds for the pattern selection window to be displayed on the LCD touch screen. This is the required boot up time and is not a defect. During the boot up the bernette 340 Deco logo is displayed.

To select a function, just touch the key on the screen with your finger tip.



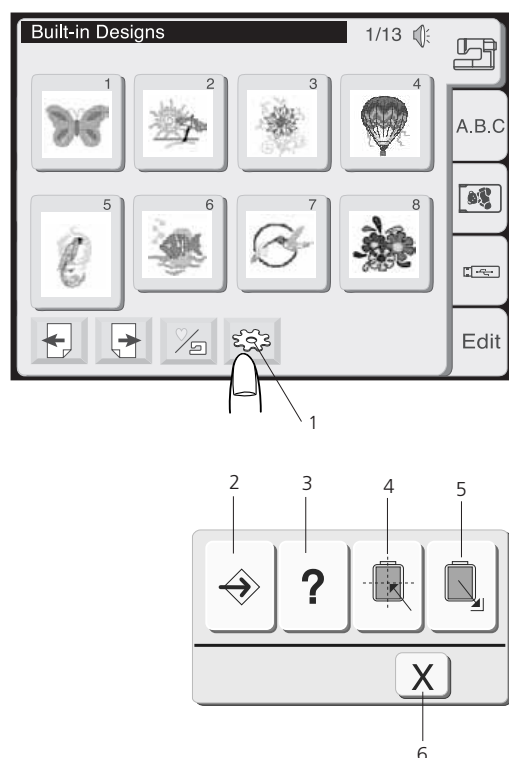
Caution:

Do not press the surface of the LCD touch screen with hard or sharp pointed objects like pencils, screwdrivers, or the like.



Note:

The screen contrast as well as the adjustment of the touch screen can be adjusted by touching the utility key and then setup



Standard Keys

1 Utility key

Press this key to open the mode selection window. There are 4 categories available in the mode selection window.

2 Setup key

Press this key to customize the user preferences.

3 Help key

Press this key to view the help topics for basic operations.

4 Hoop centering key

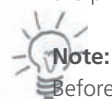
Press this key to move the hoop to the center position (starting point for embroidery).

5 Return carriage key

Press this key to bring the carriage back to its idle position for storage and transportation.

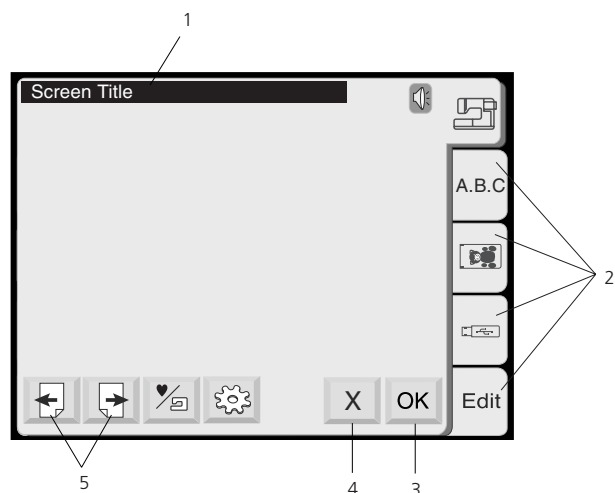
6 Close key

Pressing this key will close the utility selection window and return to the previous screen.



Note:

Before you turn the power switch OFF, always be sure to press the return carriage key to return the carriage to its idle position.

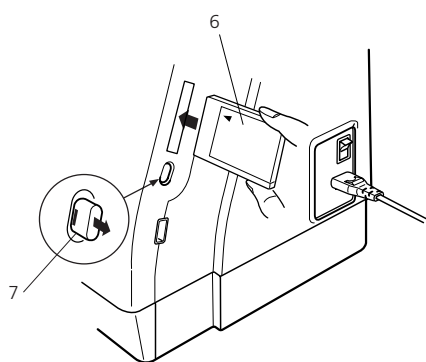


- 1 Status Line:
Displays the current status of the embroidery computer
- 2 Selection Tabs:
Touch to choose the different categories on a screen.
- 3 OK-key:
Confirm entries. Modification in this screen will be stored.
- 4 X-key:
close the current screen, without saving any modifications.
- 5 Page-keys:
Scroll through pages of larger menus.

Design Card (Optional accessory)

Inserting and Removing a Design Card

Insert the card into the slot with the front side facing to you. Push the card until it clicks and the eject button will pop out.



6. Design card (optional accessory)
7. Eject button



Note:

When the power is turned on with a Design Card in the slot, it will take sometime to get the embroidery computer booted.

Ejecting the card

Push the eject button to eject the card.

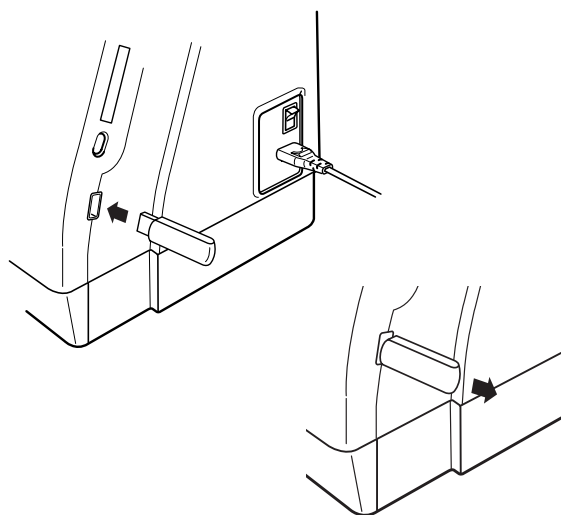
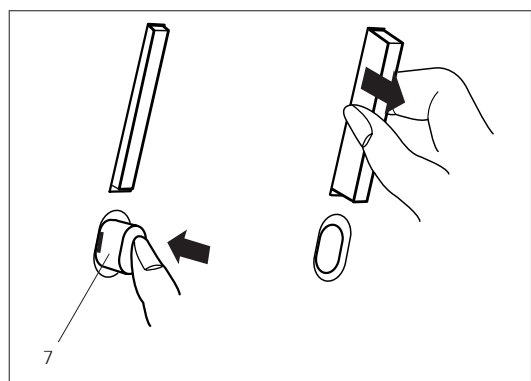


Caution!

- Do not eject the card while stitching.
- Never turn the power off or eject the card while the warning sign or hourglass is displayed. Otherwise, data stored in the memory may be lost or damaged.



= warning sign



USB Stick (Optional accessory)

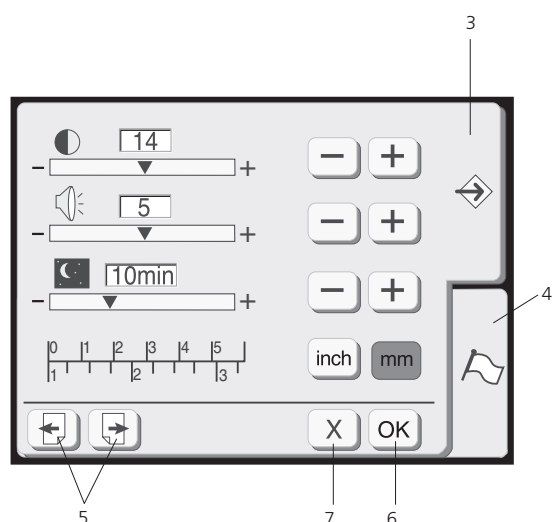
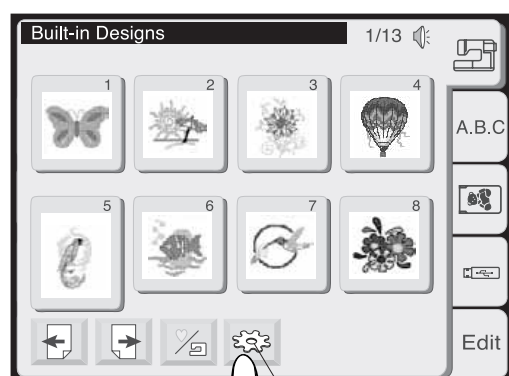
The USB Sticks can be used to save stitch data and transfer embroidery designs between the Deco 340 and your PC. USB Sticks are available at camera shops, PC supply stores etc. in various sizes and shape.

Insert the USB Stick into the USB Stick socket on the Deco 340. To remove pull firmly on the USB Stick



Caution!

- Do not disconnect the USB Stick while stitching.
- Never turn the power off or disconnect the USB Stick while the access lamp (on the stick) is blinking. Otherwise, data stored in the USB memory may be lost or damaged.



Adjust User Preferences / Setup

Use these screens to personalize the functions on the embroidery computer. All these settings are stored permanently until they are overwritten.

1 Press **Utilities - Setup** to open the setup screens.

2 Setup key

Press this key to open the setup window.

In this mode there are two tabs to choose from:

- Setup tab
- Language selection tab

3 Setup tab

Press this key to open the machine settings page.

4 Language selection tab

Press this tab to select the language for the screen display. You can select one of 6 languages.

5 Page keys

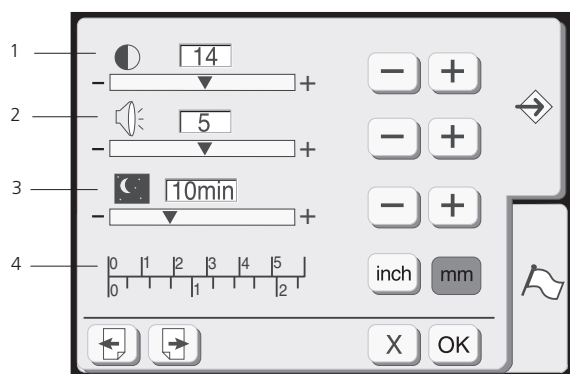
Press either one of these keys to scroll between the pages of this menu.

6 OK key

Press this key to register the new settings.

7 Close key

Press this key to cancel the new settings and close the setup window.



1 Screen contrast

The touch screen contrast can be adjusted.

Press the plus (+) key, to sharpen the screen contrast.

Press the minus (-) key, to fade the screen contrast.

2 Sound control

The buzzer volume can be adjusted. The volume level can be set from 0 to 10 and the default setting is 5.

Press the plus (+) key to increase the buzzer volume.

Press the minus (-) key to decrease the buzzer volume. To mute the buzzer, set the level at 0.

3 Eco mode

If you have not used the computer for some time it will enter the eco mode. The touch screen and the sewing light will turn off. They will turn on again, when you touch the screen.

You can set the timer from one minute to 30 minutes.

Press the plus (+) key to increase the timer setting.

Press the minus (-) key to decrease the timer setting.

To deactivate the eco mode, press the plus key until «OFF» appears in the box.

4 Inch/Millimeter

You can set your computer's measuring unit to either inch or millimeter depending upon your preference. The default unit setting is millimeter.

Press the «inch» or «mm» key to select the unit you preferred.

5 Touch screen calibration

If the touch panel doesn't respond as expected, the key positions might be out of alignment. To realign press the Yes key. Window (A) will show a sequence of crosses signs. Press the cross with your finger tip. Having pressed one cross the next will be shown. Window (B) shows for a few second when the calibration is completed.

6 Embroidery maximum speed:

The embroidery computer automatically adapts the stitch speed to the design: slow for long stitches and fast for short stitches

The maximum embroidery speed can be changed from 400 to 750 spm. The default setting is 650 spm.

Press the minus (-) key to reduce the maximum embroidery speed.

Press the plus (+) key to increase the maximum embroidery speed.

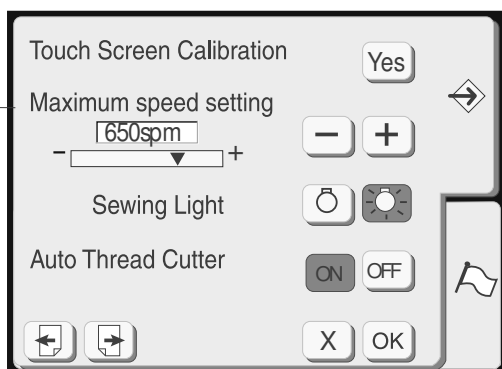


Note:

- Reduce the embroidery speed when designs with narrow satin stitches are sewn. Those tend to become uneven at high speeds.

- When the speed of 750 spm is selected a warning message is shown. (C)

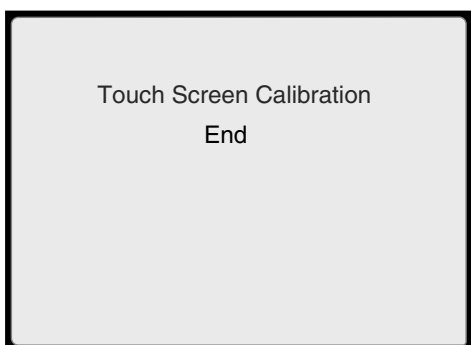
6



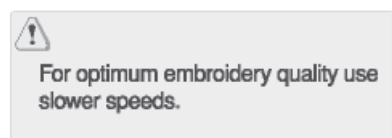
(A)

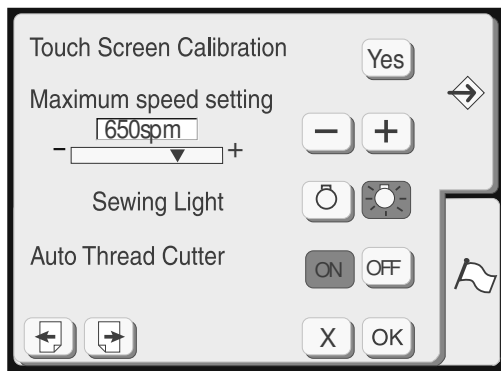


(B)



(C)





1 Sewing light

You can turn the sewing light on or off by pressing the sewing light key.

2 Auto Thread Cutter

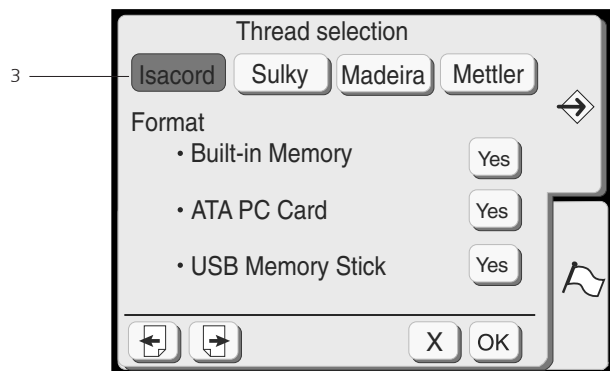
With this option activated (= ON) the Deco 340 automatically cuts the thread before a color change is requested. To disable the automatic function select OFF.

Independent of this setting you may at any time have the thread cut by pressing the Thread Cutter button located at the head of the Deco 340 (see page 7 for reference).



Note:

Auto thread cut is not recommended when sewing with metallic or thick threads, because it drastically reduces the life time of the knife.



3 Thread selection

The preferred thread brand can be chosen by pressing the corresponding brand key. Every design opened will be recalculated and the best matching colours of your preferred brand will be shown when reviewing the design. Four brands with 104 colours each are preset in the Deco 340. Please refer to the thread colour overview in the Appendix for more details on these colours.

If you don't work with a standard brand you may press the selected brand name a second time. With no brand selected the thread calculation is disabled. Instead the thread descriptions are shown as stored on the design card. This accommodates the user, to choose the best fitting colour independent of a brand.

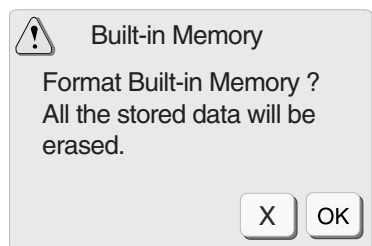



Note:


The newly assigned colours are only displayed, but not stored with the designs.

Formatting the memory

If the internal memory, the USB Stick or the ATA Design Card does not function due to damage to the memory bank, you need to re-enable it by formatting the memory.

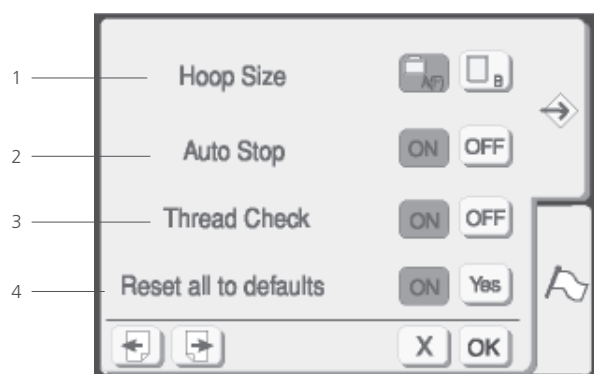


The confirmation window will appear when you press the Yes key. Press the OK  key to start formatting.

Press the close  key to close the confirmation window without formatting.

Caution!

Formatting either the internal memory, the USB Stick or the ATA Design Card will delete all designs in the corresponding memory or card.



1 Hoop Size Selection

Choose the default hoop size by pressing the corresponding key.



Note:

This selection will only be assigned for monogramming.

2 Auto Stop

Activate to have the embroidery computer automatically stop after 5 stitches in order to allow trimming the thread tail.

3 Thread Check

Choose OFF to disable the lower thread and upper thread sensor.



Note:

There is an icon (5) shown in the embroidery screen indicating the status of the Thread Check.

ON OFF



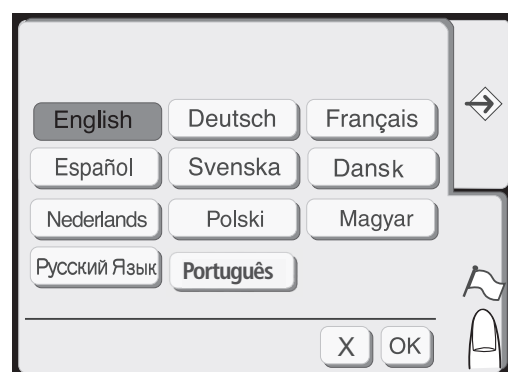
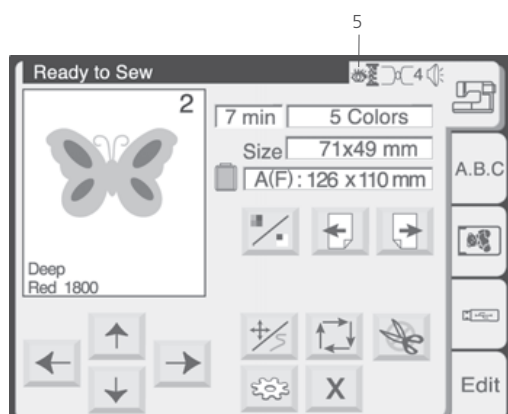
4 Setting all to default

Press the Yes key to return all settings to factory default.



Note:

The language setting remains unchanged.

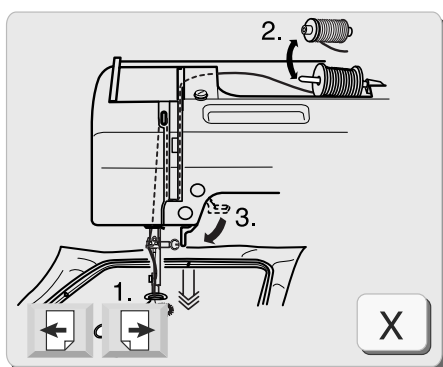
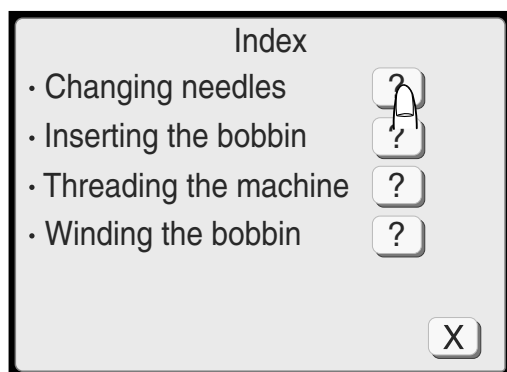
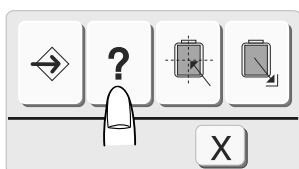
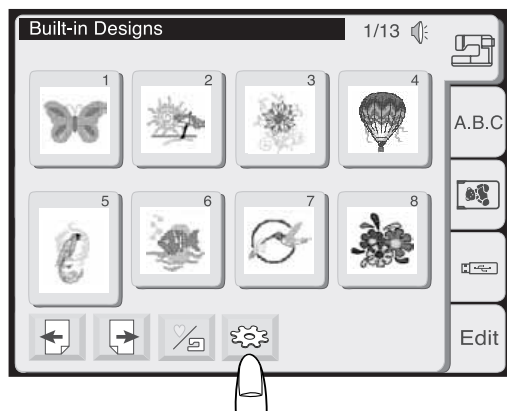


Press the language tab to get to the

Language Selection

You can select one of the following 10 languages by pressing the corresponding key:

- English
- German
- French
- Spanish
- Swedish
- Danish
- Dutch
- Polish
- Hungarian
- Russian
- Portuguese



On-screen Help

You can view on-screen help for the basic operations of the machine.

Press the utility key.

Press the help key in the utility selection window.

Select a help topic by pressing the key next to the topic.
Press the Page keys to scroll through the pages of a help window



Note:

To close the help window, press the close key.

The illustrated help of the selected topic will be displayed on the screen.

Use the page keys to scroll through the pages of the instructions.

Press the close key to go back to the previous display.

Pattern Selection Window

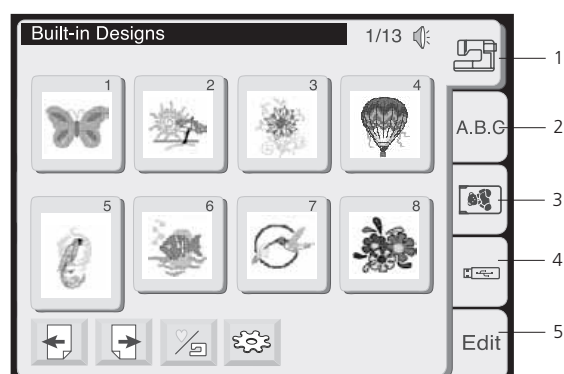
The main screen with the Pattern Selection Window will start automatically when the embroidery computer is switched on. Use this window to open embroidery designs from the following locations:

- Built-in Designs
- Lettering (integrated or design card with alphabets)
- Design Cards
- USB Stick
- Personal Designs stored in the internal memory of the Deco 340

Read how to open designs from these location on the next pages.

Pattern selection window

Press one of the five tabs to select the desired category.



1 Open designs from internal memory

There are 100 factory built-in designs available. For details of the designs such as size and stitch count please refer to the table in the appendix.

This category also allows you to access the Personal Designs which you previously saved into the internal memory. Please refer to the next page («Built-in/Personal key»)

2 Open for Lettering / Monogramming

There are three fonts for lettering (Gothic, Script and Cheltenham) built into the Deco 340. Further there is a choice of 3- letter and 2- letter monogramming available.

Use this selection as well to open fonts from the optional Design Cards with alphabets.

3 Open Designs on Cards

Use this category to open embroidery designs from the optionally available Design Cards. Every BERNINA embroidery card can be used. For further details about compatibility of Design Cards please refer to corresponding chapter «Design Transfer and Compatibility»

Choose frames included on Design Cards with alphabets through this category

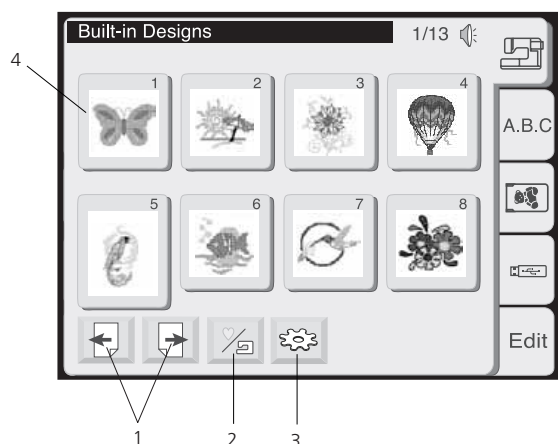
4 Open Designs on USB Stick

Use this category to open embroidery designs from optionally available USB Sticks.

5 Editing

The editing function allows you to modify and combine the embroidery designs from various sources.

For details see page 46- 53.



Select Designs for Embroidery

Press the corresponding tab in the Pattern Selection Window to open designs.

A similar window is used to select designs from the various memory sources. 8 designs are displayed at once on one page of the screen.

1 Page keys

Press the key to view the next page.

Press the key to view the previous page.

2 Built-in/Personal key

Press this key to switch between

- Built-in designs
- Personal designs from the internal memory.



Note:

This key is only shown when the internal memory tab is selected.

3 Utility key

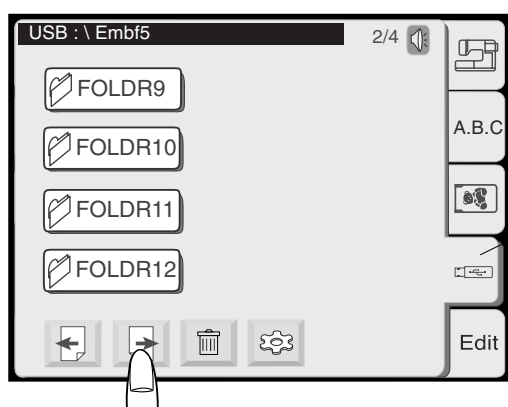
Press this key to open the utility selection window (refer to page 25 for more details).

4 Design selection keys

The pattern images of the available designs are shown on the pattern selection keys.

To select a design, press the corresponding key.

The display will switch to the embroidery window.



Folders on USB Stick

USB Sticks may contain design folders as well as design files. If so, the first pages of the Pattern Selection Window will show the folders.

Use the Page keys to scroll to the pages with individual design files

or

Press the corresponding folder key to access design files contained in this particular folder.

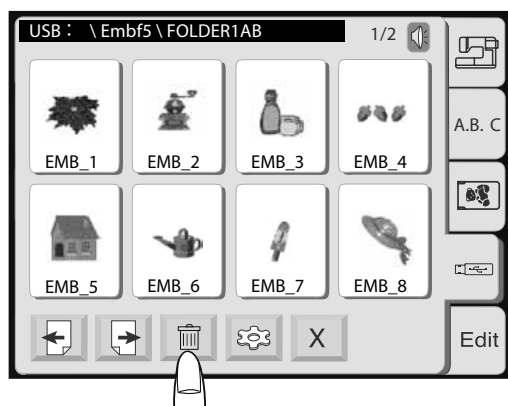


Note:

The design file location is displayed in the status line.

Deleting Designs from Memory


You may delete design files from your Personal Designs, ATA card or USB Stick provided, that these memory media are not write protected.

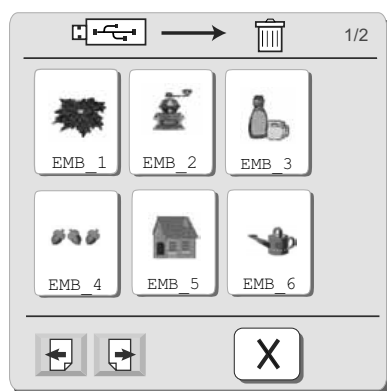


1. In the Pattern Selection Window select the location from which you want to delete a file by pressing the corresponding tab.

Note:

To delete a design in a folder of a USB Stick you must first select the correct folder.

2. Press the delete key  and a dialog box with all designs in this location will open.



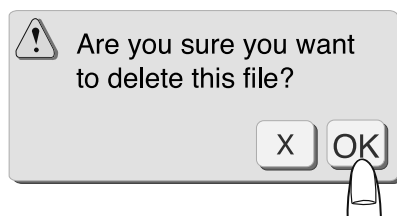
3. Scroll through the pages to find the design you want to delete



Caution:

On USB Sticks with folders, these will be displayed on the first scroll pages. To delete single files do not select the folder - If you proceed the folder with all designs contained will be deleted.

4. Press the key with the design you want to delete.



5. A confirmation dialog will open.

Press OK to delete the selected design file.



Note

To cancel your selection without deleting the file press the close key.

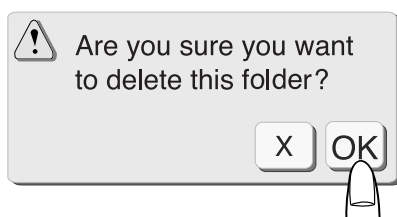
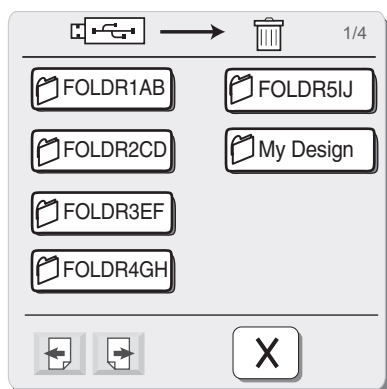
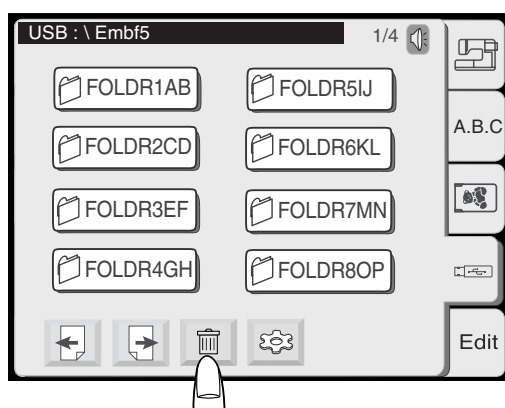
Deleting Folders from USB Stick

You may delete folders with all its contained files at once from a USB Stick.

Caution:

All designs will be deleted permanently - careful use of this function is highly recommended.

1. In the Pattern Selection Window select the tab for the USB Stick.
2. Press the delete key and a dialog box with all designs on the USB will open.

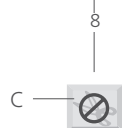
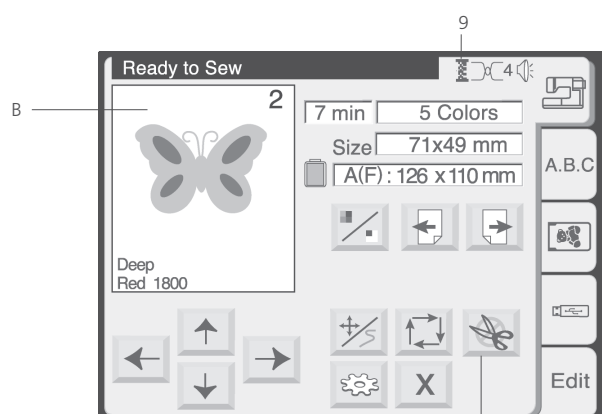
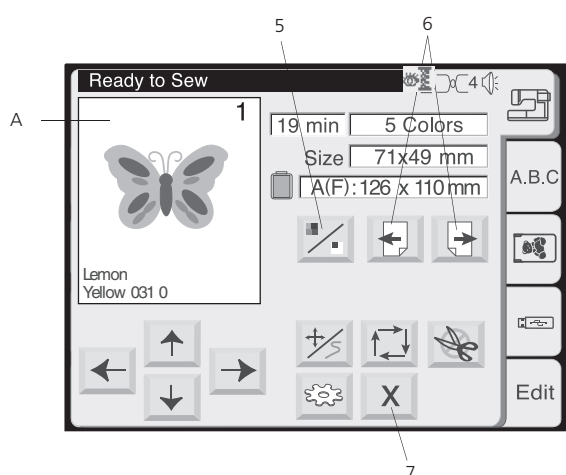
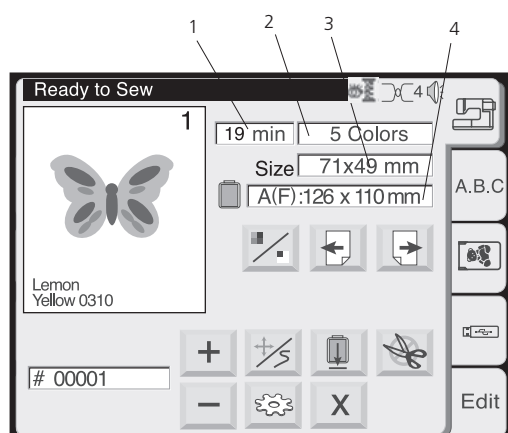


3. On the first pages all folders on the USB Stick are displayed.
4. Press the key with the folder you want to delete.

5. A confirmation dialog will open.
Press OK to delete the selected folder.



To cancel your selection without deleting the file press the close key.



Embroidery Window

Use the functions on the embroidery window to align your design on the fabric. Further there are functions to select parts of a design for stitching.

Screen Information

In the embroidery window, the following information will be shown.

- 1 Sewing time in minutes
- 2 Number of colors
- 3 Design size
- 4 Hoop to be used and its size

5 Image key

Each time you press this key, the selected design will be shown in the complete image (A) and color separated image (B) alternately.

6 Color section page keys

The image of each color section will be shown in sequence when pressing these keys. In the picture the colour area will be highlighted together with the colour sequence number as well as the recommended thread.

Embroider specific color sections:

Skip unwanted color sections by pressing the color section page key until the desired color section is shown on the screen. By pressing the Start/Stop key the computer will start to stitch out the selected color.

7 Close key

Press this key to close the embroidery window and return to the pattern selection window.

8 Metallic Thread key

Auto thread cutting will be temporarily disabled if you press this key (shown as C). Use this function when sewing a part of the design with specialty threads such as metallic threads which are not suitable for thread cutting.



Notes:

When disabling the Auto Thread Cut function the Thread Cutter Button at the head of the Deco 340 is disabled as well.

- This Metallic Thread key will only appear, if the Auto Thread Cutting is enabled in the utility menu.

9 Status of Thread Check

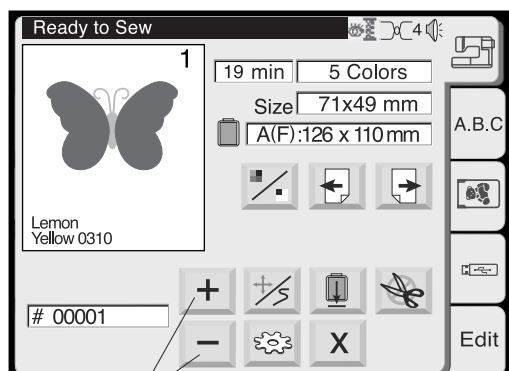
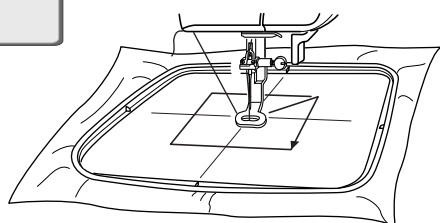
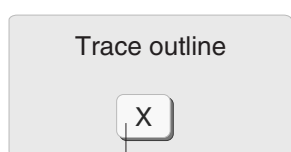
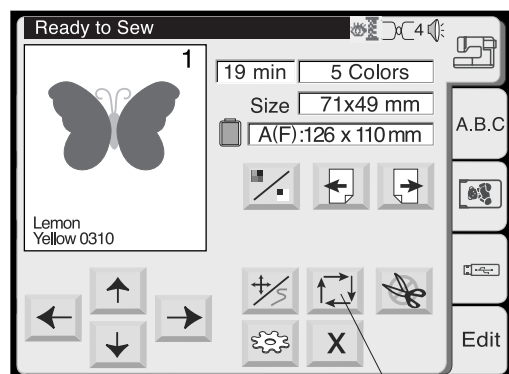
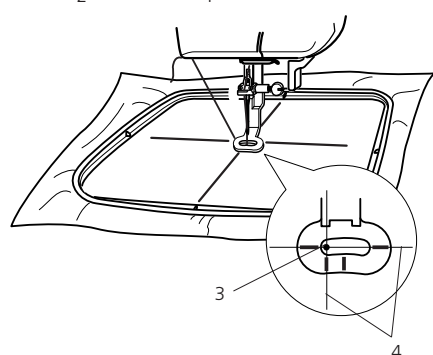
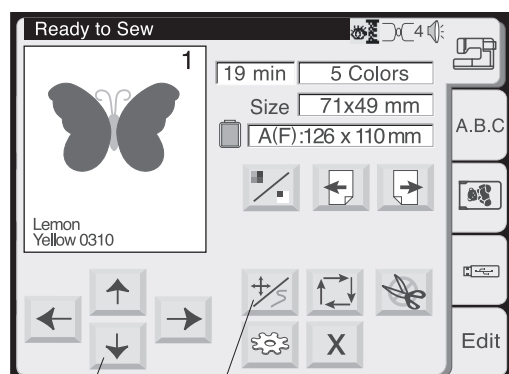
The icon indicates



Thread check ON



Thread check OFF



1 Jog / Stitch Key

Press this key to toggle between the jog keys and the stitch forward/backward keys.



Note:

The display automatically switches between jog keys before stitching and the stitch forward / backward keys while stitching a design out.

2 Jog Keys

Before starting to embroider adjust the hoop to the desired center position using the jog keys.

3. Needle drop position (center position of design)
4. Centerlines

5 Trace key

After adjusting the position check the extents of the of the embroidery area by pressing this key. The carriage will trace the outline in a rectangle, circumscribing the selected embroidery pattern without stitching.

The carriage will return to the starting position after tracing and the screen will return to the previous display.

6 Close key

Press this key to close the window without tracing.

7 Stitch back/forward keys

Press the Jog / Stitch key to activate this mode. Use this mode to trace the design as it is stitched out step by step.

Press the plus key to move the hoop 10 stitches forward in the design

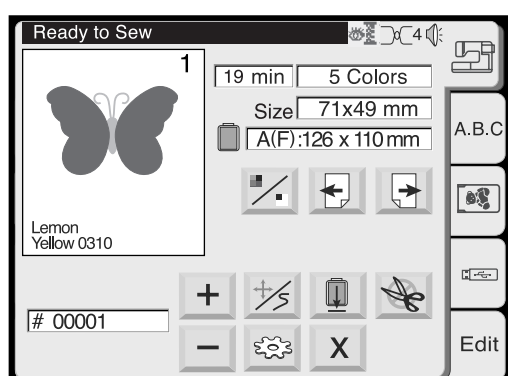
Press the minus key to move the hoop 10 stitches back.



Notes:

You can use these keys to move the embroidery hoop to where the thread has broken or run out.

- At the start of the design pressing the + key will advance to stitch 1. Press + key a second time to advance to stitch 10.

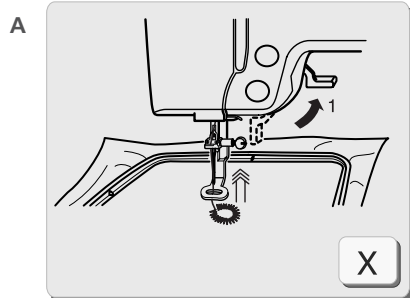


Starting to Embroider

Select the desired pattern.

The image of the selected pattern will be shown in the embroidery window.

Adjust the center lines on your fabric to the needle using the jog keys. See last page for details.



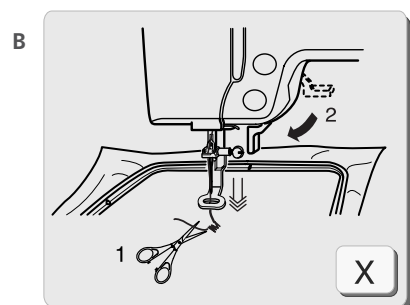
Lower the presser foot. Press the start/stop button to start embroidery.

The computer will stop automatically after stitching 5 stitches and requests the user to cut the thread tail by showing the instruction window (A)



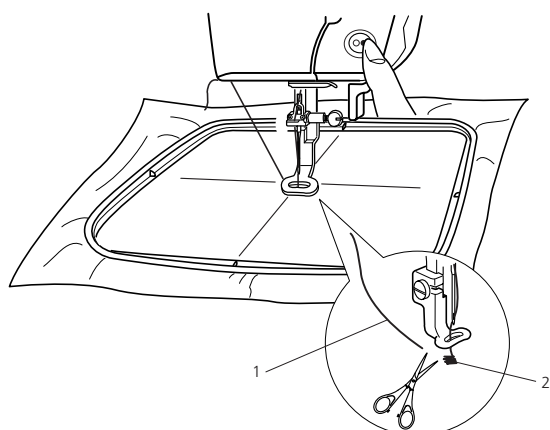
Note:

The embroidery computer will not stop if Auto Stop is deactivated in the setup.



Raise the presser foot. The screen will show the instruction window (B).

Trim the thread tail close to the starting point and lower the presser foot.




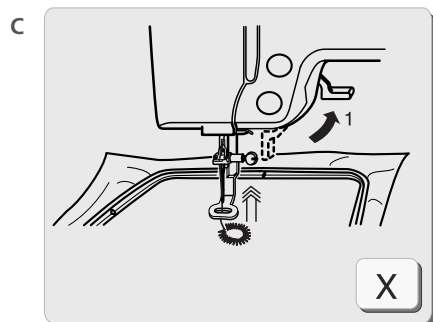
Press the Start/Stop button to start embroidering again and the machine will stop automatically when the first section is finished.

- 1 Thread tail
- 2 Starting point

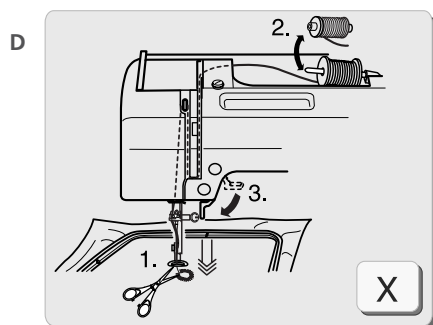


Note:

Press the close  key to close the instruction window. This operation is only required, when the stitching process is discontinued. Otherwise the screens will disappear automatically when the presser foot is moved.



After finishing the first section, the screen will show the instruction window (C).



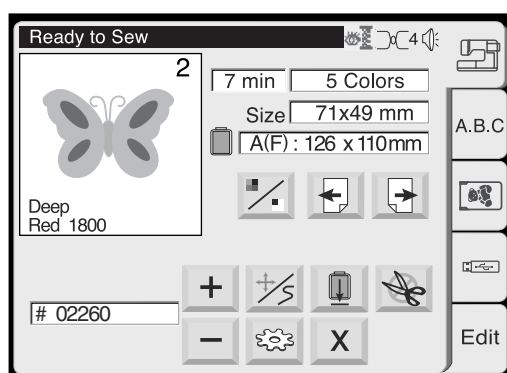
Raise the presser foot. The screen will show the instruction window (D).

- If Auto Thread Cutter is set to ON, the machine has trimmed the threads automatically.
- If Auto Thread Cutter is set to OFF, trim the threads with scissors or by pressing the Thread Cutter button



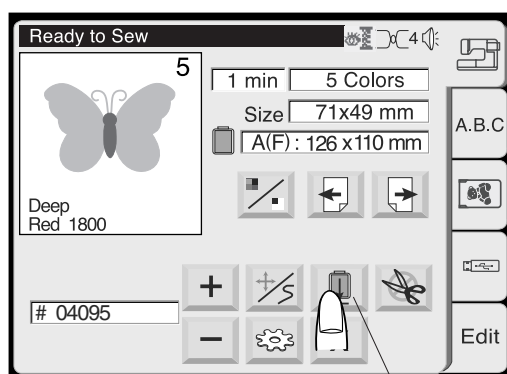
Note:

Instruction window (D) closes automatically after a few seconds in order to give you free sight to the new colour to be used for threading. Press Close **X**, to speed up this process.



Change the thread to the next color.

Lower the presser foot and press the start/stop button to stitch the second color section.



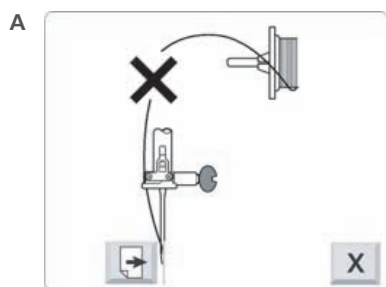
Press the Carriage to Front key after finishing the last section to return the carriage to the unload position.

1. Carriage to Front key



Note:

Be sure to return the carriage to the unload or idle position before turning the power switch off. Use the keys Utility and Return Carriage as described on page 25.

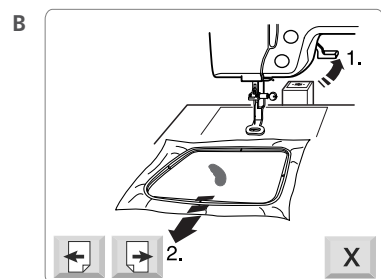


Upper Thread End or Thread Breakage

If during embroidery the upper thread runs out or breaks, the machine stops automatically and the following sequence of instruction windows will be displayed.

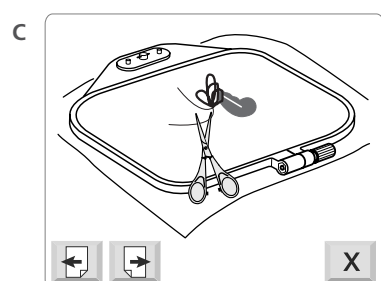
Caution:

Please follow the instructions carefully. Otherwise the thread may jam in the hook system.

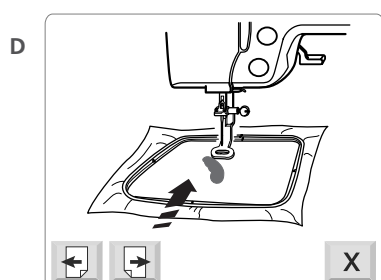


A Information, that the upper thread broke. Press next page key to continue the instructions.

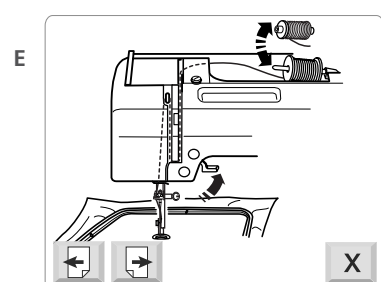
B Raise the foot and remove the hoop from the carriage



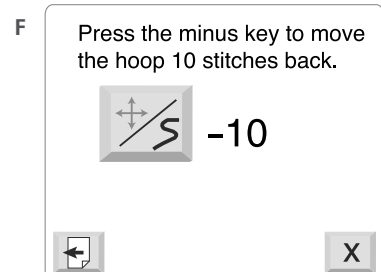
C On the back side of your project remove the excessive threads with scissors.




D Place the hoop back onto the carriage

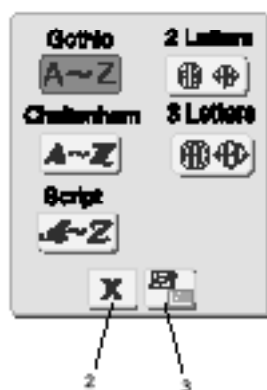
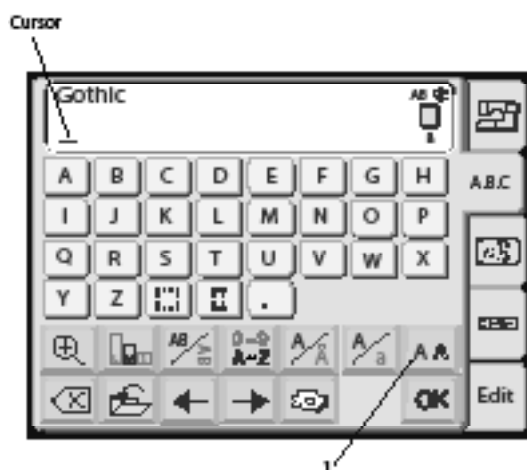


E Replace upper thread spool if required and thread upper thread (see page 11 for details)



F The last screen reminds you to move back several stitches in your project before continuing your work. The number of stitches required is depending on how many of them you have cut out of your project. After you pressed the Cancel key use the  key in the Embroidery window to move the appropriate number of stitches back.

Now press the start Start/Stop button to continue.



Lettering

In the Pattern Selection Window press the Lettering tab to open the Lettering window.

In the Lettering selection window, you can program words by pressing the alphabet keys.

After you press an alphabet key, the letter is memorized and the cursor moves to the right.

This mode allows to create lettering using the three built-in fonts or using fonts from optionally available Design Cards. Further there is a mode to create 3 letter and 2 letter monogramming including a selection of frames.

1 Front key

Press this key to open the front selection window. The following 5 styles are available.

- Gothic
- Script
- Cheltenham
- 2 Letter Monogram
- 3 Letter Monogram

To select the desired letter style, press the corresponding key.



Note:

When the screen language is switched to Russian, there are three more fonts displayed to choose from.

2 Built-in/card key

Press this key to select the source of the monogramming, i.e. built-in monogramming or monogramming card.

3 Close key

Press this key to close the letter style selection window

4 Letter case key

Press this key to select either upper or lower case letters.

5 European alphabets key

Press this key to select either Roman alphabets or European alphabets such as diaeresis.

6 Use page key to switch between two pages in European alphabet.



Note:

In keys with a dash the active function is highlighted bold.

7 Letter size key

The letters and numbers can be stitched in 3 sizes.

Each time you press this key, the letter size changes in the following order:

- L: 30 mm (Large)
- M: 20 mm (Medium)
- S: 10 mm (Small)

8 Delete key

Press this key to delete the character underlined by the cursor.



Programming Lettering

(Programming «Bear» in Gothic style)

Press «B».



Press the letter case key to select lower case letters.



Select «e», «a» and «r».

Press the OK key.



The display will change to the embroidery screen.

Selecting the Starting Point

Choose the location of the start position in the letter string by pressing the alignment key.

1 Alignment key

Each time press this key, the position of the first stitch will change in the following order:

- Left (horizontal) or Top (vertical) aligned
- Center aligned
- Right (horizontal) or Bottom (vertical) aligned

When starting to embroider the carriage will first move to this position = Stich # 00001. Using the jog keys you may now align the position of the letter string exactly to your project.

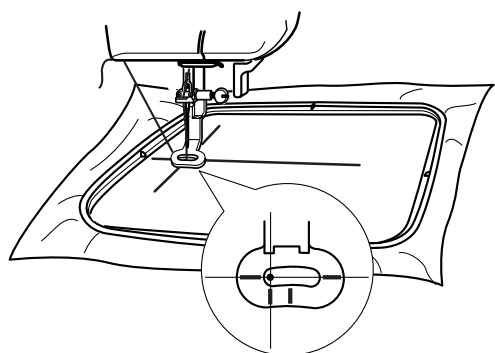


1 Color change key

Press this key to stitch a multi-color lettering. The machine will stop automatically when each character is finished. Change the thread and stitch the next character.

2 Jog keys

Press these keys to adjust the hoop to the start position for lettering



Starting to embroider

Lower the presser foot and press the Start/Stop button. The computer will stop automatically after stitching 5 stitches and requests the user to cut the thread tail. Refer to detailed process description on Page 38, «Starting to Embroider»)

Depending on the setting of the Color change key the embroidery computer will stop after each letter and ask to change the thread or it will stop only after the last letter has been stitched.



Editing the Monogram

Deleting a letter

Example: To delete «E» from «BEAT»

Press the cursor key to shift the cursor under the letter to delete.

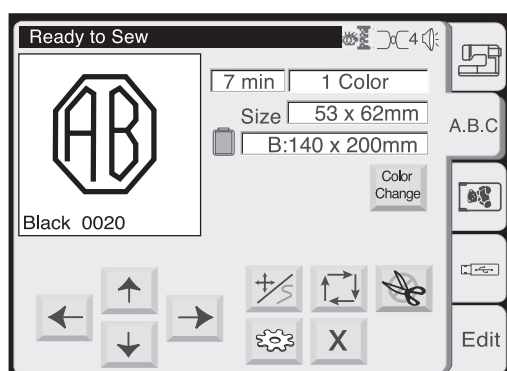
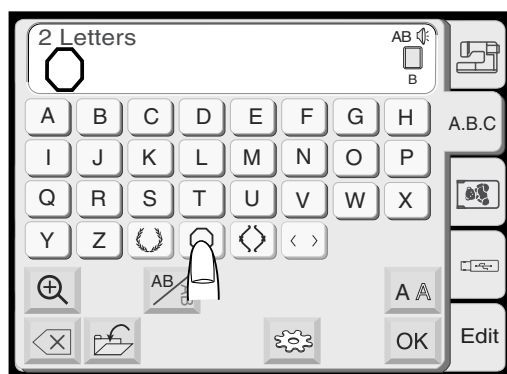
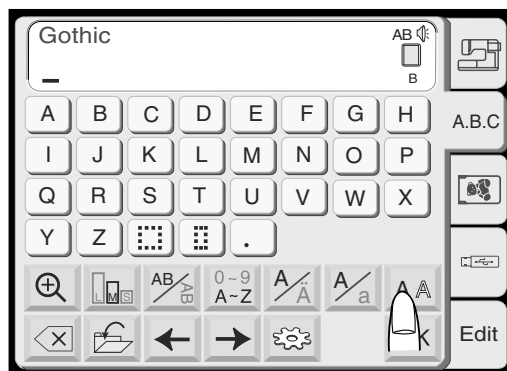
Press the delete key.
The letter «E» will be deleted.

Inserting a letter

Example: To insert «E» to «BAT»

Press the cursor key to shift the cursor under the next letter where you wish to insert a letter.

Select the letter «E»
The letter «E» will be inserted between «B» and «A».



2 / 3 Letters Monogram

Example: 2 Letters with a crest

Select «2 Letters».



Note:

When the screen language is switched to Russian, there are three more fonts displayed to choose from.

Select the crest.

Select the letter «A».

Select the letter «B».



Note:

Editing function is not available in 2/3 letters.

Press the delete  key and enter a new letters instead of editing.

Press the OK key.

The screen will change to the embroidery window.

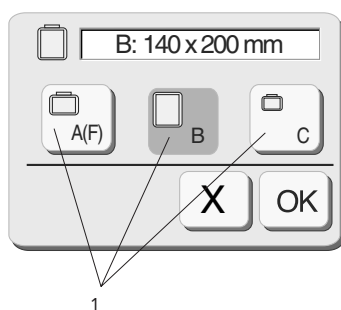
Press the start/stop button to start stitching.



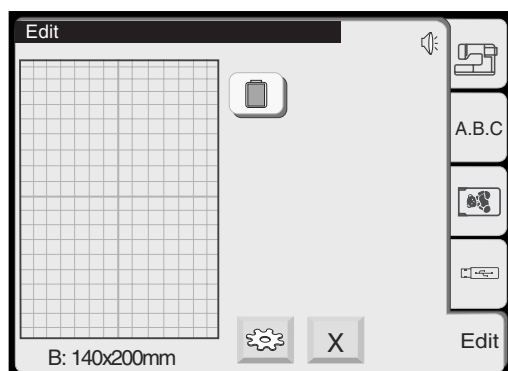
Notes:

The 3 Letter monogram can be programmed in the same way as the 2 Letter monogram.

The 2/3 letters monogram will be stitched center aligned.



Editing window for the hoop B



Editing Mode

The editing window can be used to combine embroidery designs. Built-in designs, letters as well as designs from USB Sticks or Design Cards can be merged on the Deco 340 into one single design.

These new designs are limited to:

- max. 50 single designs that they are made of
- a total of 64'000 stitches and
- max. 104 colour sections

Open Editing Window

From the Pattern Selection Window press the editing tab to open the Editing Window.

The Hoop Selection Window will open first to allow you selecting the hoop size.

You can select one of the following hoops:


Hoop A (Standard): 126 x 110 mm (5.0 x 4.3")

Hoop B (Standard): 140 x 200 mm (5.5 x 7.9")

Hoop C (Option): 50 x 50 mm (2.0 x 2.0") = Free Arm Hoop

Hoop F (Option): 126 x 110 mm (5.0 x 4.3")

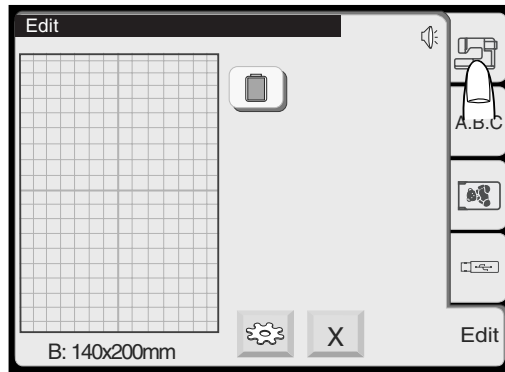
Press the OK  key and the Editing Window for the selected hoop will open.

Press the close  key to cancel the selection and return to the Pattern Selection Window.



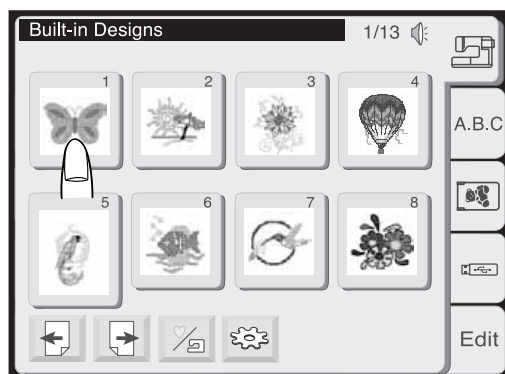
Note:

Refer to page 48 for hoop selection after selecting the embroidery pattern.



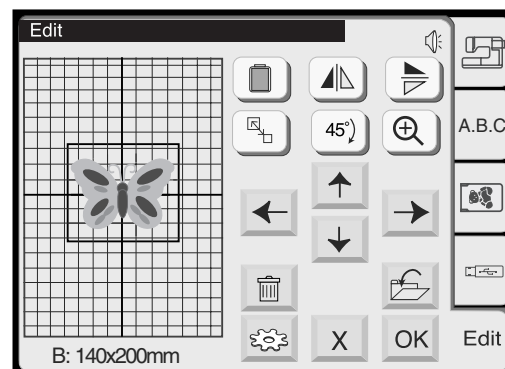
Selecting a Design to Edit

To select a design, press the tab for the location of the desired design



The Pattern Selection Window will open.

Select the desired pattern.

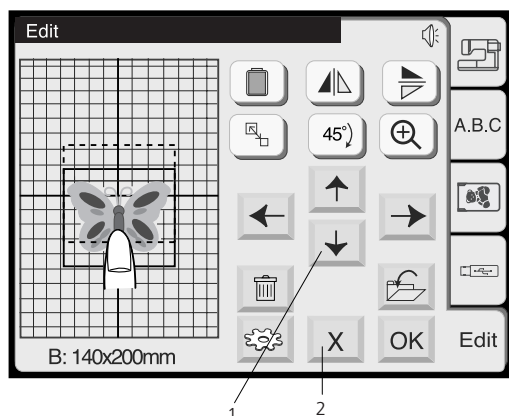


The selected pattern will be shown in the Editing Window.

A frame around the pattern indicates it is selected.

Alternate Edit Entry Procedure

Starting from the Embroidery Window (with a design already selected) you may press the Edit tab to open the current design for modification. Even if you enter the Editing Mode like this, you may add further design elements and save the new combination as one design.



Editing Window

1 Position keys

Move the selected design with the Position keys to the desired location.

The carriage will not move when you press the Position keys since the design position is just moved relatively to the hoop.



Note:

The Position keys look exactly the same as the Jog keys but the function is different. To move the carriage, use the Jog keys.

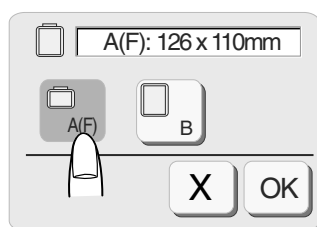
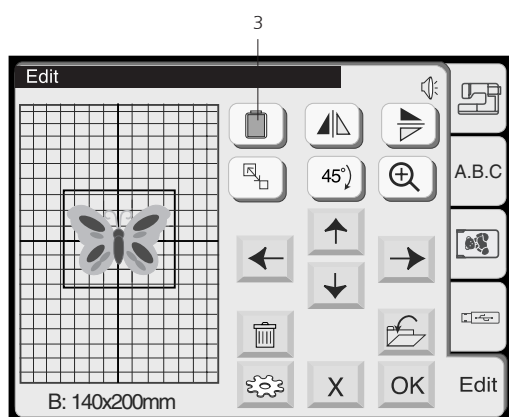
Drag-and-Drop Moving of the Selected Design

To move the pattern in the Editing Window, touch and drag the pattern to a desired location with your fingertip.



Note:

Do not drag the pattern on the screen with a sharp pointed object.



2 Close key

Press this key to cancel editing and the screen will return to the last Pattern Selection Window.

3 Hoop selection key

In the Editing Window, you can select the appropriate hoop. Press this key to open the Hoop Selection Window.

Select the desired hoop from 3 options available.

Hoop A (Standard) / F (Option): 126 x 110 mm (5.0 x 4.3")

Hoop B (Standard): 140 x 200 mm (5.5 x 7.9")

Hoop C (Option): 50 x 50 mm (2.0 x 2.0")

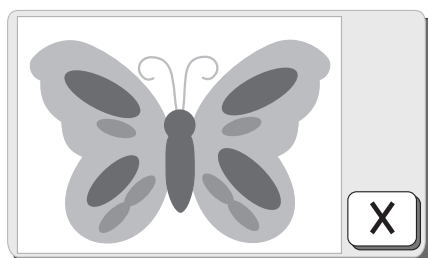
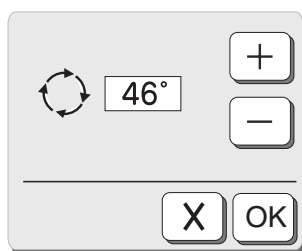
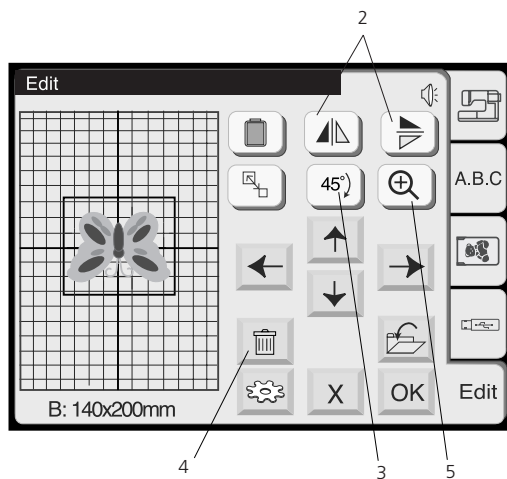
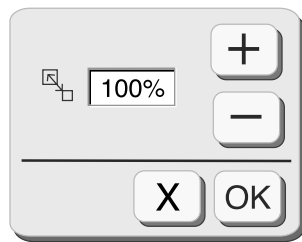
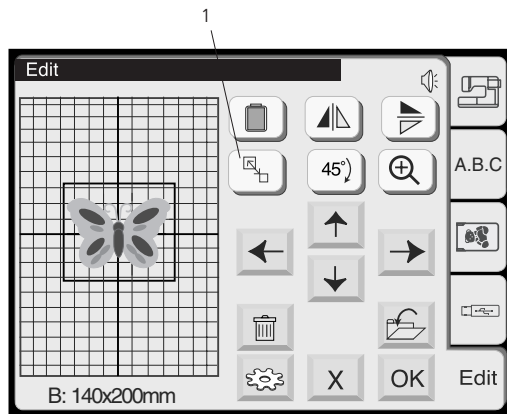
Press the OK key and the Editing Window for the selected hoop will open.

Press the close key to return to the default setting (Hoop B).



Note:

Only the hoops which will fit the current design are shown for selection



1 Resize Key

Press this key to open the Resize Window.

To alter the pattern size, press the plus **+** or minus **-** key.

The size of the pattern can be altered from 90% to 120% of the original size.

The size will change 1% each time you press the plus or minus keys. Press the OK **OK** key and the pattern at the new size will be shown in the Editing Window.


Press the Close **X** key to close the Resize Window without resizing the pattern.




Note:

All resizing, mirroring and rotating operations bear the risk of a certain degradation in stitch quality.

2 Mirror image key

Press the vertical mirror  key to flip patterns from left to right.

Press the horizontal mirror  key to flip the pattern from top to bottom.

3 Rotate key

Press this key to rotate the pattern 45 degrees clockwise.

Micro rotation

When you press and hold the rotate key for one second or longer, the rotate dialog box will open.

- Press the plus key to rotate the pattern in steps of 1° clockwise.
- Press the minus key to rotate the pattern in steps of 1° counter clockwise.

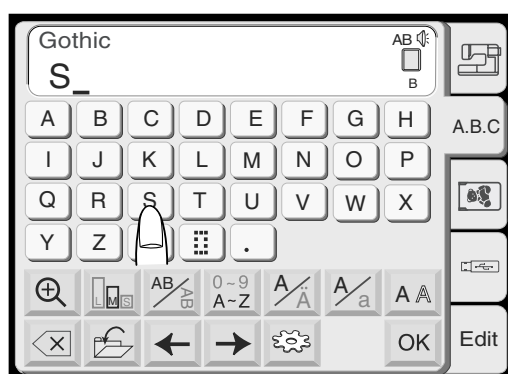
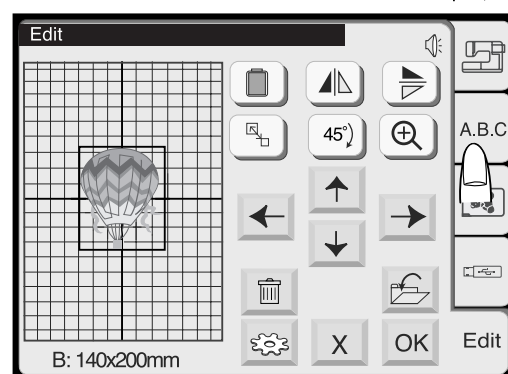
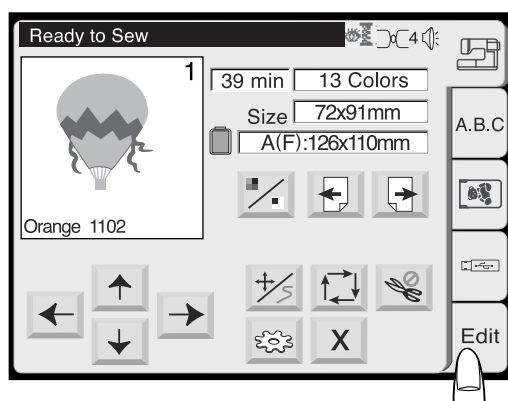
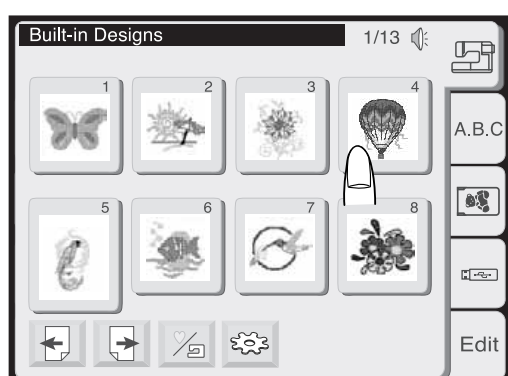
4 Delete key

Press this key to delete the selected pattern.

5 Magnifier key

Press this key to show a magnified image of the selected pattern.

Press the close **X** key to return to the previous screen.



Editing and Combining Designs

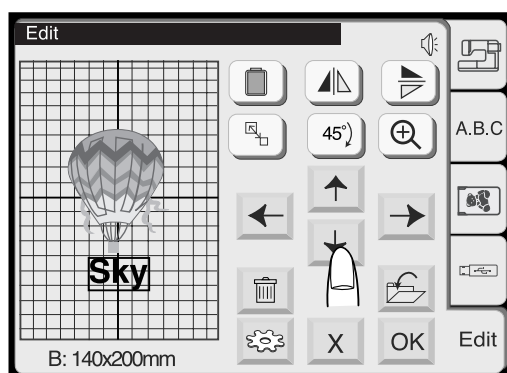
Example: Combine the built-in design #4 and text «Sky»

1. Select design #4 from the built-in designs.
2. Press the Editing tab.
3. Select the hoop B.
4. Press the Lettering tab.
5. Select «S» (Upper case letter in Gothic style).
6. Press the letter case key to select lower case letters.

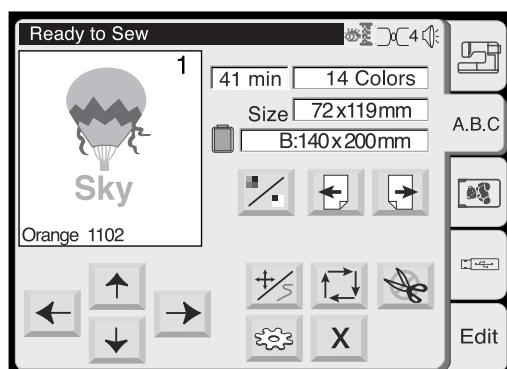


7. Select «k» and «y».

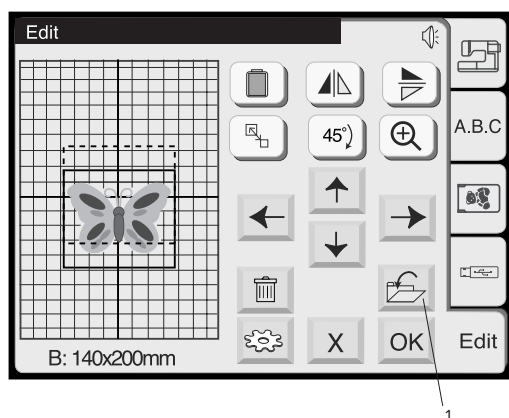
8. Press the OK key.



9. Position the letters by dragging or with by using the position keys.



10. Press the OK key and the screen will change to the Embroidery Window. Start the machine to embroider.



Save Embroidery Designs

From the editing window embroidery design can be stored at two different locations:

- A. Personal designs on the Deco 340
- B. ATA Personal Design Card
- C. USB Stick

The built-in memory of the Deco 340 can hold a large number of your own embroidery design creations. Designs with a combined number of max. 290'000 stitches can be stored.

Caution:

It is recommended to make backup copies of important designs to a Personal Design Card or USB Stick. This will reduce the potential risk of data corruption.

1 Save File key

Press this key to open the File Save dialog box. The screen shows the designs already stored in a certain memory location.

To select a memory location, press one of the following keys:

2 Personal Memory key

Press this key to select the internal memory to save the file.

3 ATA Card key

Press this key to select the ATA Personal Design Card to save the file.

4 USB Stick key

Press this key to select the USB Stick to save the file.

Note:

If no writeable Design Card or USB Stick is inserted an error message will appear and the Page and File Name keys are not shown.

5 New Folder key

Press this key to create a new folder (only available on USB Sticks).

6 Page keys

Press these keys to scroll between pages with designs. On USB Sticks folders are shown first, then individual designs.

7 Page Number Indication

Shows the actual page and the total number of all pages.

8 Close key

If you do not wish to save the file, press this key to close the File Save box.

9 Folder keys

Press one of these keys to open the corresponding folder. (only on USB Sticks)

Note:

The screen shows the folders and file names of formerly stored designs for your reference.

10 File Name key

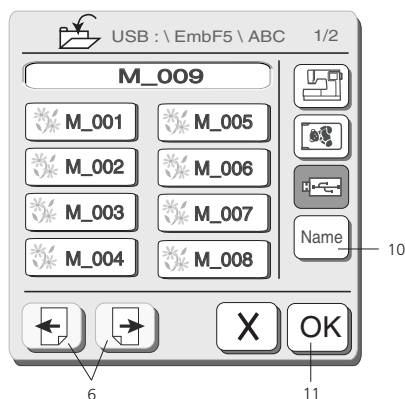
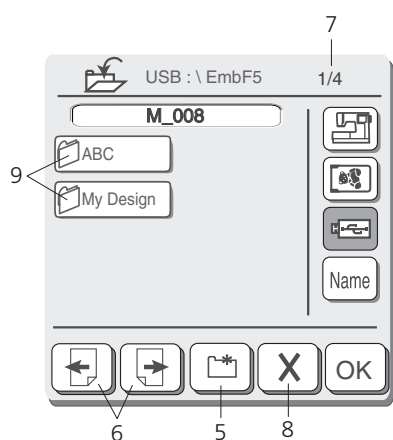
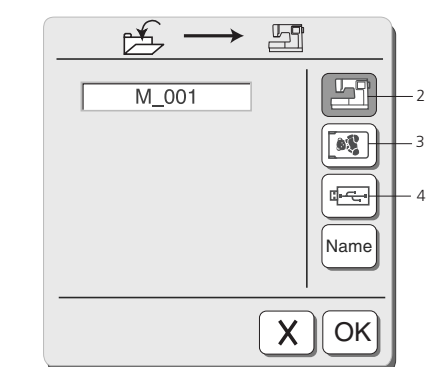
The file name will be automatically assigned, starting from M_001 in order. Press this key to assign your own file name (refer to next page for more details). The assigned file name is shown in the window above the file list.

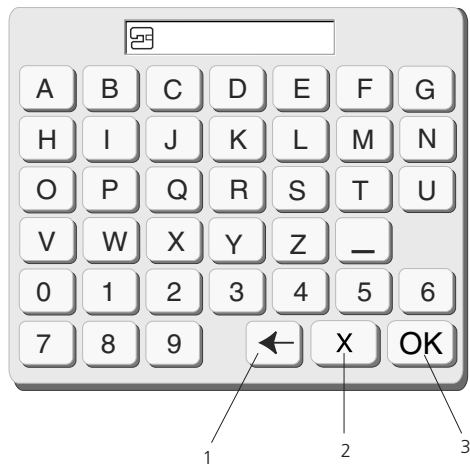
11 OK key

Press this key to save the design with the assigned file name. After saving the design the Edit Window is shown.

Caution:

Never turn off the power, eject the Design Card or remove the USB Stick when the warning sign or hourglass appears on the screen. Otherwise, data stored in the memory may be lost or damaged.





Assigning a File Name

You can assign a name to the file in the File Name window.

Press the File Name **Name** key to open the File Name window.

A keyboard will be displayed in the window. Enter the file name.



Note:

Only 8 characters can be entered.

1 Back Space key

If you need to correct an entry, press this key to delete the last character and enter a new character.

2 Close key

Press this key to close the File Name window without assigning a file name.

The screen will return to the File Save window.

3 OK key

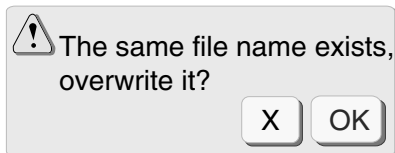
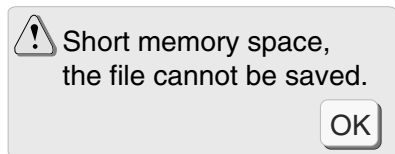
Press this key to confirm the file name.

The new file name will be shown in the File Save window.



Notes:

If the memory is full, a warning message will appear. Press the Close key **OK**. The Edit Window will show up again. Save your design temporarily to another memory location. Then close the Edit Window and in the File Open Window delete some files that you do not need anymore. This will create space for future saves.



If the same name already exists, a warning message will appear.

Press the OK **OK** key to overwrite the existing file.

Press the close **X** key if you do not wish to overwrite it. Then change the file name before saving the file.

Design Transfer to the bernette 340 Deco

The bernette 340 Deco can read all BERNINA design cards. To run non licensed designs from BERNINA CD you require BERNINA Embroidery Software or OESD Explorations Software which can be used to convert the .ART files and write them onto an ATA Personal Design Card or USB Stick. Please note, that licensed designs on CD cannot be transferred to the Deco 340.

Most other brand cards and designs on the market can be used by converting these files or cards through optionally available PC software and accessories.

To write modified designs back from the Deco 340 a USB Stick or an ATA Personal Design Card (= artista 200 Personal Design Card) can be used.

Technical Notes:

On USB Sticks as well as ATA Personal Design Cards files for the Deco 340 must be stored in a folder named «...\EmbF5». This folder is automatically generated when a file is saved on the Deco and / or through Bernina Embroidery Software («Card/Machine Write»). Further this folder is automatically generated when the USB Stick or Personal Design Card is formatted on the Deco 340. The USB Stick also allows the use of one level of subdirectories in the :EmbF5 folder.







Important Note about Design Copyrights:

All designs have a copyright. It is up to the artist of the design as to which extend he is allowing you to use the embroidery design files you have purchased. Please refer to the copyright information provided with the design collection or contact the design distributor if you are unclear as to what rights you have with the embroidered designs and design files. You could be violating federal law if you copy files unauthorized or if you sell products with embroidered with licensed designs.

Further general information about copyright can be obtained from Embroidery Software Protection Coalition (ESPC), which is a non-profit group of embroidery software and design manufacturers, whose purpose is to defend the integrity and quality of embroidery products by promoting copyright compliance. This company can be reached at www.embroideryprotection.org or toll free in the US at 1-888-921-5732.

Memory Media Overview

Media	Capacity (Designs)	File Type(s)	Function on Deco	Notes
USB Memory Stick ¹⁾ 	not limited depending on actual memory size and handling considerable slower if many files in folder	.EXP+, .(ART)*	Read / Write	Preferred Media Files for Deco must be stored in a folder ...:EmbF5 or any subfolder 1 level underneath
ATA Personal Design Card ¹⁾ (= artista 200 PDC) 	not limited depending on memory size	.EXP+, .(ART)*	Read / Write	Preferred Media Files for Deco must be stored in a folder ...:EmbF5

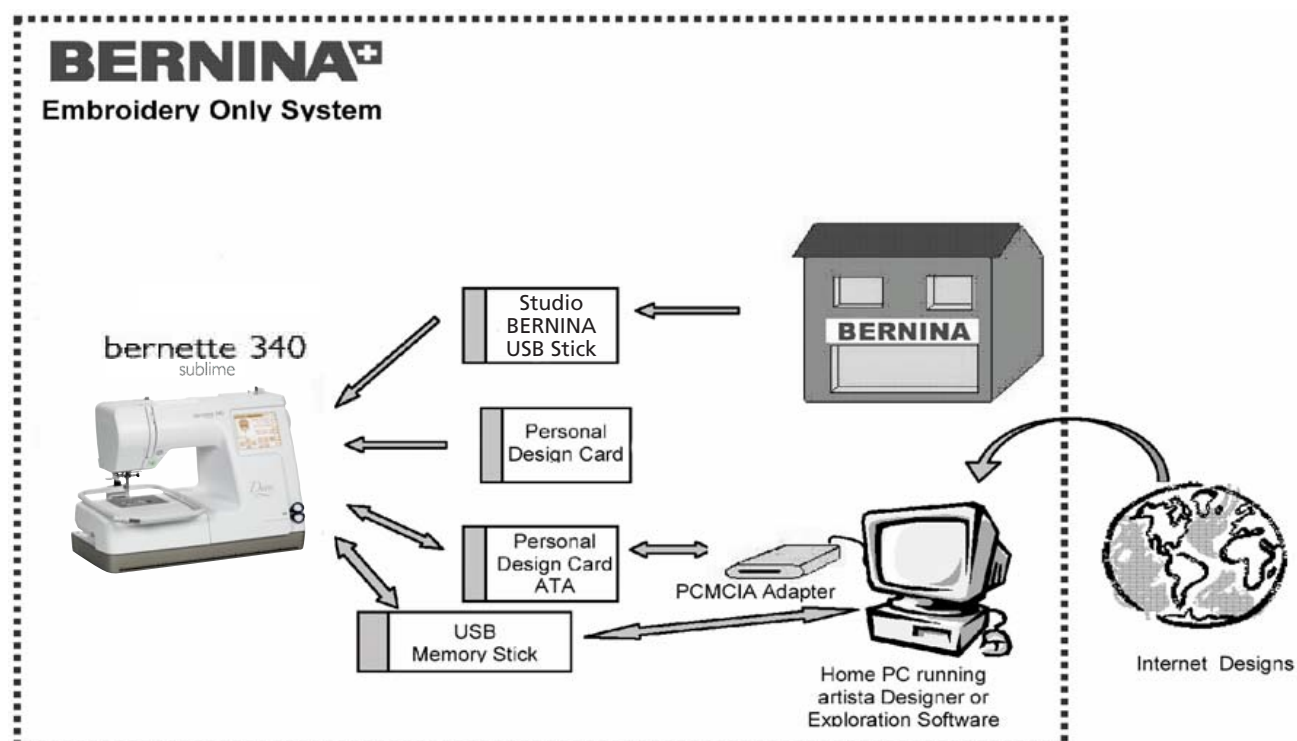
Media	Capacity	File Type(s)	Function on Deco	Notes
<u>Studio BERNINA USB Stick</u> 	not applicable	.EXP+, (.ART)*	Read only	The .EXP+ design files are stored in the folder : <i>artista 630-640</i> (Deco will automatically find the path)
<u>Studio BERNINA Card</u> 	not applicable	.EXP(+)	Read only	Requires Reader / Writer Box on PC Do not use in PCMCIA slot of laptop PC!
<u>(Studio BERNINA CD)*</u> Only non-licenced CD's can be used! Note: CDs produced in 2006 and thereafter contain also .EXP+ data. These can be copied directly onto a USB Stick or an ATA card.	not applicable	.EXP(+), (.ART)*	Read only	Convert .ART files on PC with BERNINA Embroider Software and transfer and transfer by any of the above memory media to Deco 340

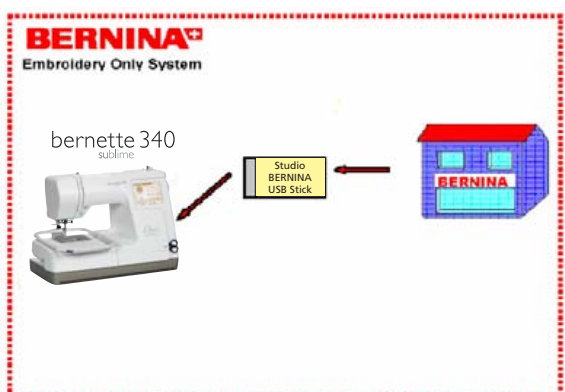
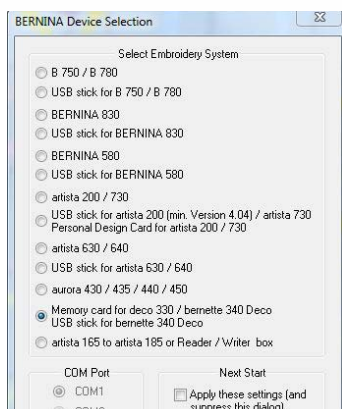
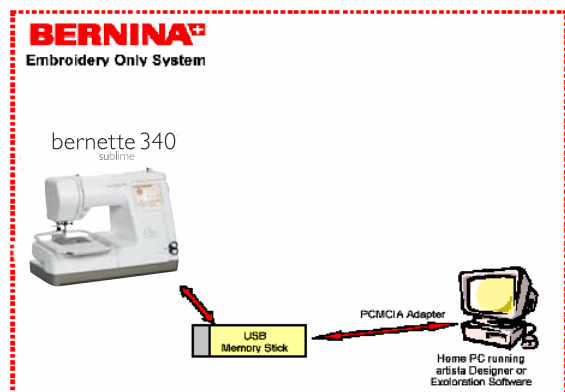
* not relevant for direct use with Deco 340

1) Any brand of USB Stick or ATA PCMCIA card may be used, including PCMCIA Adaptors for other memory media, such as CF, SD, MMC. While we have run extensive tests with memory media available on the markets the function of every of these cards can however not be guaranteed

Transfer of Embroidery Designs

Below is a graphical summary of all different ways to transfer embroidery designs into the Deco 340 and back. The most common procedures are described individually on the following pages.





File Transfer with USB Stick

Use a USB Stick to store embroidery designs from the Deco 340.

These files may be stored on a PC and can be further processed with Bernina Embroidery Software or OESD Explorations Software.

Embroidery designs created on the PC with Bernina Embroidery Software or OESD Explorations Software can be transferred to the Deco 340 by the USB Stick.



Note: In the Device Selection Menu use «deco 330 (write to BERNINA card)» for exporting complete designs including color information.

artista embroidery designs on a CD can be read on the PC and stored as .EXP+ files on the USB Stick using Bernina Embroidery Software or OESD Explorations Software.

File Transfer with ATA Card

Use an ATA Card or a PCMCIA adapter card with other memory media to store embroidery designs from the Deco 340.

These files may be stored on a PC and can be further processed with Bernina Embroidery Software or OESD Explorations Software.

A PCMCIA Card Reader or the appropriate reader for your memory media is required when working with a desktop PC.

Embroidery designs created on the PC with Bernina Embroidery Software or OESD Explorations Software can be transferred to the Deco 340 by the ATA Card.

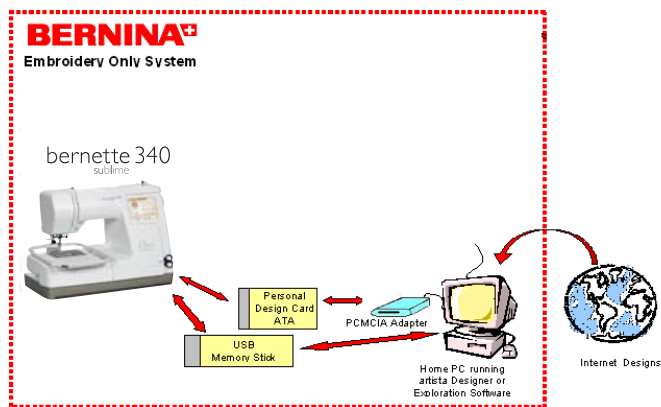


Note: In the Device Selection Menu use «deco 330 (write to BERNINA card)» for exporting complete designs including color information.

artista embroidery designs on a CD can be read on the PC and stored as .EXP+ files on the ATA Card using Bernina Embroidery Software or OESD Explorations Software.

Studio BERNINA USB Stick

Every Studio BERNINA USB Stick can be read directly by the Deco 340. Just plug them in and select the design.



Embroidery Designs from the Internet

Embroidery designs from the Internet, i.e. from www.embroideryonline.com either

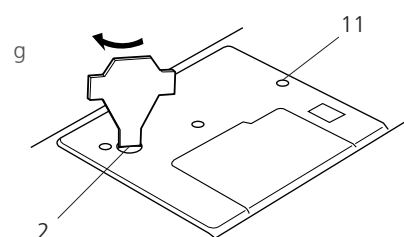
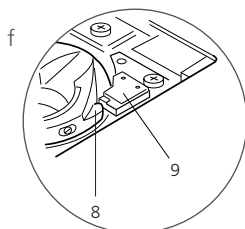
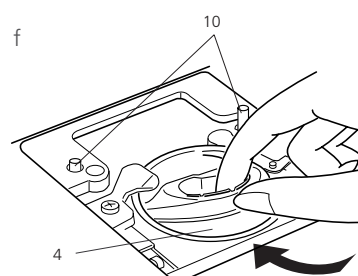
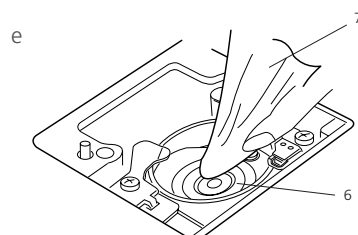
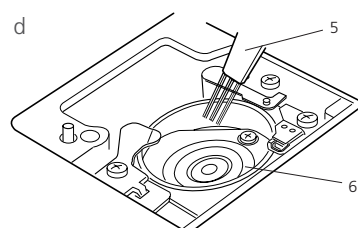
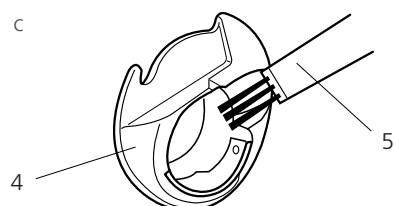
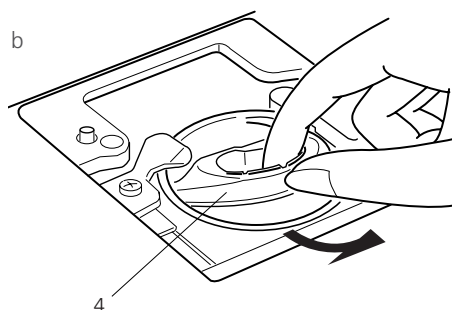
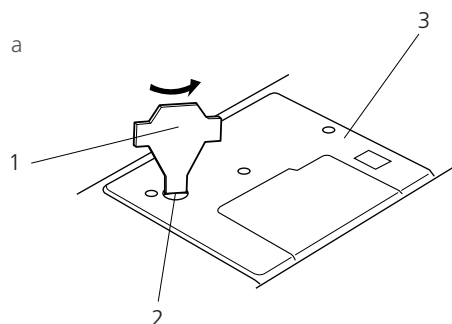
1. download as .ART file. Using BERNINA Embroidery Software or OESD Explorations software write as .EXP+ file to USB Stick or ATA Personal Design Card
2. or download as .EXP file and copy with BERNINA Embroidery Software or OESD Explorations software to a USB Stick or an ATA Personal Design Card in the subdirectory «Emb5». .EXP files do not carry colour info. Please print from the internet for your reference.

Note:
If you don't use a Laptop PC you may require a BERNINA Card Reader.

Important Note:
This overview only briefly describes the possible operations. Please refer to the documentation supplied with the respective products to learn more about their installation and use. This concerns mostly the BERNINA Embroidery Software, the PC Card Reader, the Reader/Writer Box, the OESD Explorations Software as well as the OESD Magic Box™.

Overview of Embroidery Design File Types

File Type	Used on...	Notes
.ART format	artista 200 / artista 730	special embroidery design format carrying not only the stitch coordinates, but it also the shape of the individual parts for auto-generation of stitches.
.EXP	Industrial	Industrial embroidery design format to store sitch by stitch as X/Y coordinates, color change and jumps. Bernia uses an extended version of this .EXP format.
.EXP+	Deco 330/340 artista 630/640, artista 160 - 185 aurora 430/435/440/450 B750/B780 B830 B580	<p>Bernina extended .EXP embroidery design format based on .EXP with added color information.</p> <p>In applications that use USB Stick or ATA Personal Design Card (Windows based) you will see a second file with the same file name, but the extension .INF.</p> <p>For artista 630/640 there is even a third file with the extension .BMP.</p> <p>Caution: To transfer the design completely to the sewing computer both or all three files must be copied to the design card / USB Stick.</p> <p>On LinFlash PC cards the stitch coordinates and color information are always stored together and can only be accessed through the use of special driver and the Reader/Writer box.</p>



Cleaning the Hook Race and Feed Dog

Turn the handwheel to raise the needle, turn the power switch to 'O' and then unplug the embroidery computer.



Note:

Do not dismantle the machine other than what is explained in this section.

- a Remove the setscrew with the screwdriver supplied with the machine. Remove the needle plate.

- 1 Screwdriver
- 2 Setscrew
- 3 Needle plate

- b Lift up the bobbin holder and remove it.

- 4 Bobbin holder

- c Clean the bobbin holder with a lint brush.

- 5 Lint brush

- d Clean the hook race with the lint brush.

- 6 Hook race

- e Clean the hook race with a dry cloth. (You may also use a vacuum cleaner.)

- 7 Soft dry cloth

- f Insert the bobbin holder so that the knob fits next to the stopper in the hook race.

- 8 Knob
- 9 Stopper

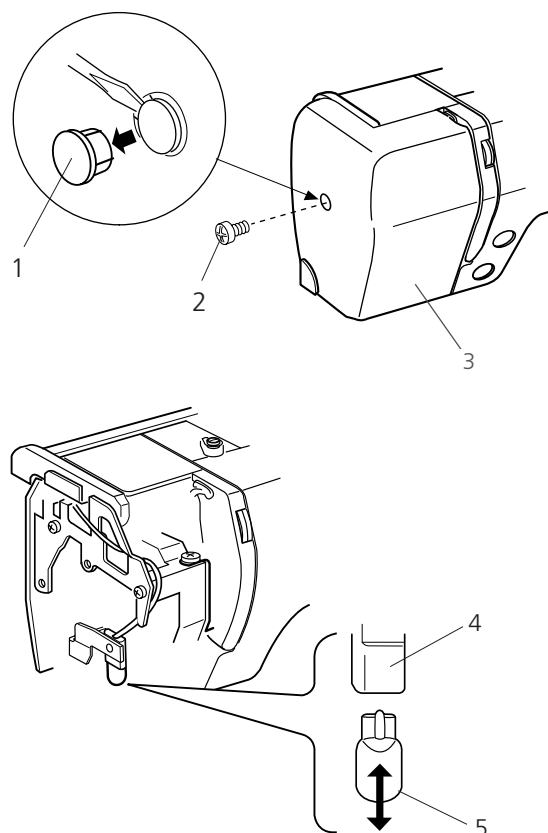
- g Re-attach the needle plate, aligning the needle plate guide pins with the guide holes on the needle plate and tighten the screw.

- 10 Needle plate guide pins
- 11 Needle plate guide holes



Note:

After cleaning the machine, make sure to insert the needle (preferably a new one) and presser foot again.



Replacing the Light Bulb



Warning:

Turn off the power and unplug the embroidery computer before replacing the light bulb.

The bulb could be HOT, wait until it has cooled down before touching it.

To remove:

Remove the cap and setscrew. Remove the faceplate. Pull out the bulb from the socket.

To replace:

Insert the bulb into the opening of the socket. Attach the faceplate with the setscrew, and attach the cap.

- 1 Cap
- 2 Setscrew
- 3 Faceplate
- 4 Lamp Socket
- 5 Light bulb

Problem	Cause	Reference
The machine is noisy.	<ol style="list-style-type: none"> 1 Threads have been caught in the hook mechanism. 2 <u>Lint has collected in the bobbin holder.</u> 	<p>See page 59</p> <p><u>See page 59</u></p>
The needle thread breaks	<ol style="list-style-type: none"> 1 The needle thread is not threaded properly. 2 The needle thread tension is too tight. 3 The needle is bent or blunt. 4 The needle is inserted incorrectly. 5 The needle thread is not set in the thread holder when starting the machine. 6 Sewing speed is too high for the design <u>being sewn.</u> 	<p>See pages 11, 12.</p> <p>See page 15.</p> <p>See page 16, 23, 24</p> <p>See page 16.</p> <p>See page 12.</p> <p>See page 28</p>
The bobbin thread breaks.	<ol style="list-style-type: none"> 1 The bobbin thread is not threaded properly in the bobbin holder. 2 Lint has collected in the bobbin holder. 3 The bobbin is damaged and does not <u>turn smoothly.</u> 	<p>See page 10</p> <p>See page 59</p> <p>Replace the bobbin.</p>
The needle breaks.	<ol style="list-style-type: none"> 1 The needle is inserted incorrectly 2 The needle is bent or blunt. 3 The needle clamp screw is loose. 4 <u>The needle thread tension is too tight.</u> 	<p>See page 16, 23, 24</p> <p>See page 16, 23</p> <p>See page 16</p> <p><u>See page 15</u></p>
The screen display is not clear.	<ol style="list-style-type: none"> 1 The screen contrast of the visual touch screen is not adjusted correctly. 2 The screen contrast has been faded due <u>to a continuous use of the machine.</u> 	<p>See page 27</p> <p>Adjust the screen contrast. (See page 27)</p>
Skipped stitch	<ol style="list-style-type: none"> 1 The needle is inserted incorrectly. 2 The needle is bent or blunt. 3 The needle thread is not threaded properly. 4 The defective needle (rusted, burred needle eye) is used. 5 The embroidery hoop is not set properly. 6 The fabric is not tightly pulled on the embroidery hoop. 7 <u>A stabilizer is not being used.</u> 	<p>See page 16, 23, 24</p> <p>See page 16, 23, 24</p> <p>See pages 11, 12</p> <p>Replace the needle.</p> <p>See page 19</p> <p>See page 18</p> <p><u>Use a stabilizer.</u></p>
The machine does not run.	<ol style="list-style-type: none"> 1 A thread is caught in the hook race. 2 The control circuit is not working <u>correctly.</u> 	<p>See page 59</p> <p>Turn the switch off and turn it on again.</p>
Abnormal noise when turning the machine on	<ol style="list-style-type: none"> 1 Something is caught between the carriage and the arm. 2 The carriage is bumping into something <u>around the machine.</u> 	<p>Remove the object.</p> <p>Remove the object.</p>
Patterns distorted	<ol style="list-style-type: none"> 1 The fabric is not pulled tightly on the embroidery hoop. 2 The embroider hoop is not fixed securely. 3 The carriage is bumping into something around the machine. 4 The fabric is caught or pulled for some reason when embroidering. 5 The needle thread tension is too tight. 6 A stabilizer is not used. 7 The needle thread on the wrong side of <u>fabric is not cut correctly.</u> 	<p>See page 18</p> <p>See page 19</p> <p>Remove the object.</p> <p>Stop the machine and free the fabric.</p> <p>See page 15</p> <p>Use a stabilizer.</p> <p>Cut extra needle thread on the wrong side.</p> <p>See page 40</p>
Function keys do not work properly.	<ol style="list-style-type: none"> 1 Key position is not adjusted properly. 2 The control circuit is not working <u>correctly.</u> 	<p>See page 28</p> <p>Turn the switch off and turn it on again.</p>
The machine stops and «Lock» is indicated on the status line on the LCD touch panel	<ol style="list-style-type: none"> 1 the machine is shutdown due to overloading by thread jamming. 	<p>Remove jamme threads and start the machine again.</p>

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