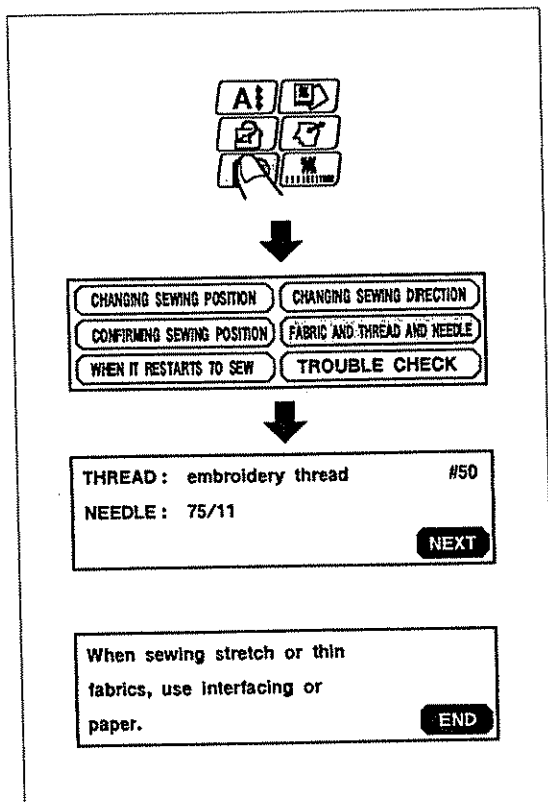


Example: To find out how to wind a bobbin

1. Press "BASIC OPERATION".
2. Touch "WINDING BOBBIN".

The operation procedure for winding a bobbin will be displayed.

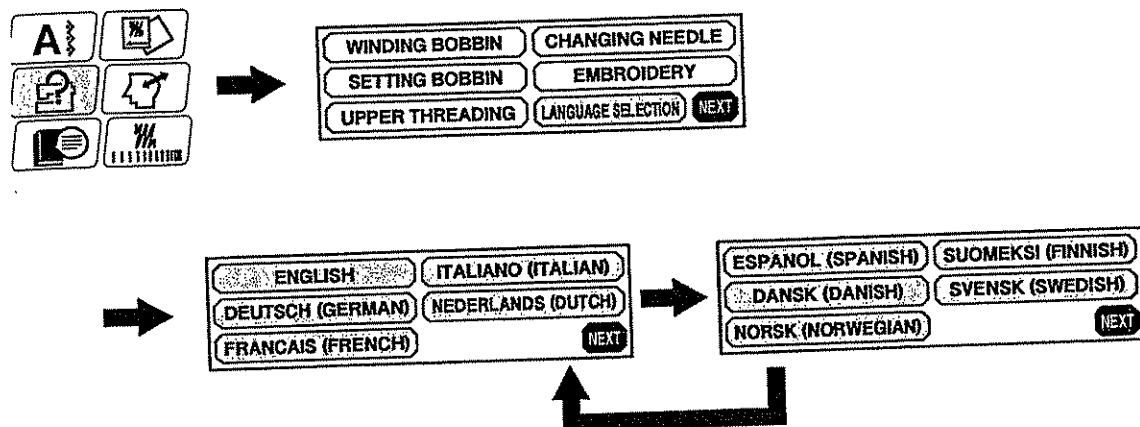


Example: To find out the combination of fabric, needle and thread

1. Press "MODIFY & ADVISE".
2. Touch "FABRIC AND THREAD AND NEEDLE".

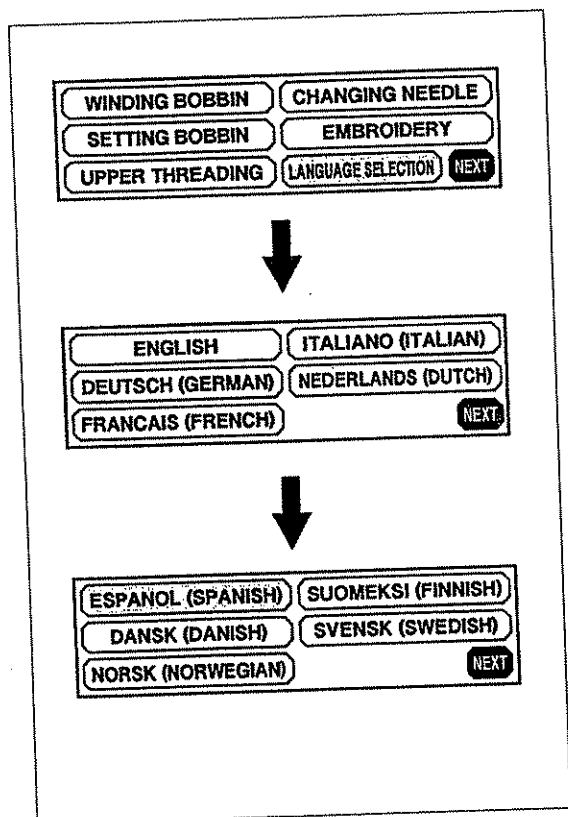
HOW TO USE THE LANGUAGE SELECTION KEY

You can use the "LANGUAGE SELECTION" key to easily change the display language for all the keys and messages on the LCD screen to the language you need.



1. Press "BASIC OPERATION".
2. Touch "LANGUAGE SELECTION".
3. The language display screen will then appear. Touch the key which corresponds to the desired language.

* You can move to the next screen by touching "NEXT".



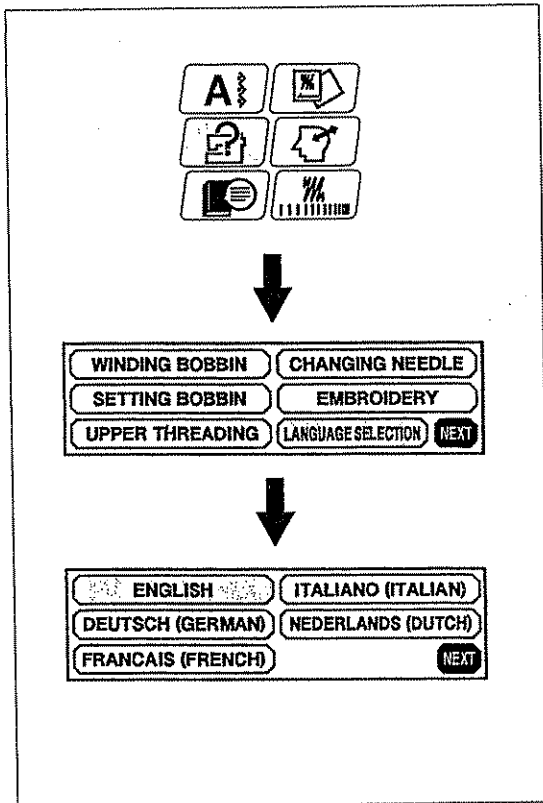
Example: To change the display language to Spanish

1. Touch "LANGUAGE SELECTION".
2. Touch "NEXT".
3. Touch "ESPANOL (SPANISH)".
This will change the language setting to Spanish.
4. The display will then return to the screen which was previously being displayed.

NOTE

- * When the "LANGUAGE SELECTION" is used to set the display language, error messages will also be displayed in the language selected.
- * The display language can be selected from a list of 10 languages (English, German, French, Italian, Dutch, Spanish, Danish, Norwegian, Finnish and Swedish).

How to clear the language selection



Example: To change the display language from Spanish back to English

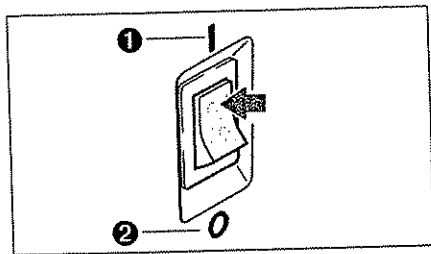
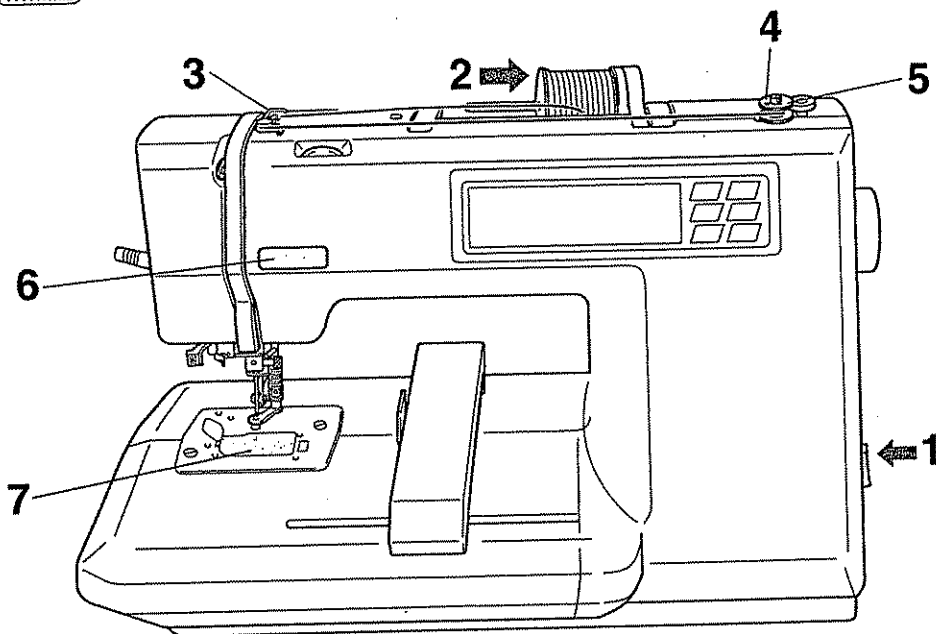
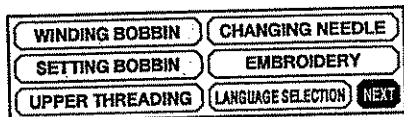
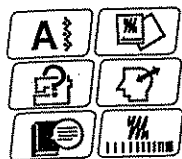
1. Press "BASIC OPERATION".
 2. Touch "LANGUAGE SELECTION".
 3. Touch "ENGLISH".
- This will cancel the Spanish language setting and return all screen displays and error messages to the English language.

CAUTION

- This function should not be used as a translation function.
- If the power supply is turned off, the current language setting will be retained and will not be cleared.

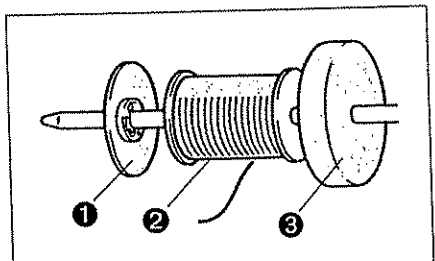
BOBBIN WINDING AND INSTALLATION

How to wind a bobbin and set the lower thread.



1. Connect the machine to the power supply and turn on the main power.

- ① ON
- ② OFF



2. Set the thread spool. The thread end should come from the bottom front of the spool. The spool cap closest to the thread spool size should be used to hold the spool securely on the spool post.

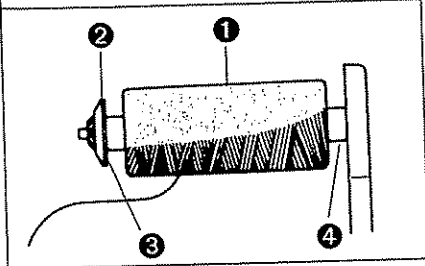
* The spool cap should be pushed on as far as it will go.

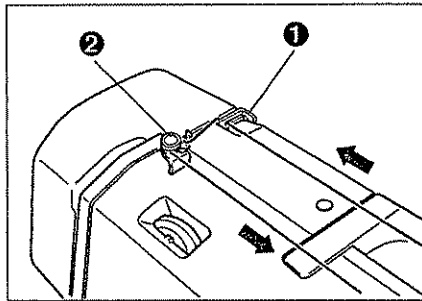
- ① Spool cap
- ② Spool
- ③ Spool felt

NOTE

* If using a fine thread such as cross wound thread, remove the spool felt and slightly separate the spool cap from the thread on the spool before using.

- ① Cross wound thread
- ② Spool cap (small)
- ③ Separate slightly
- ④ No spool felt



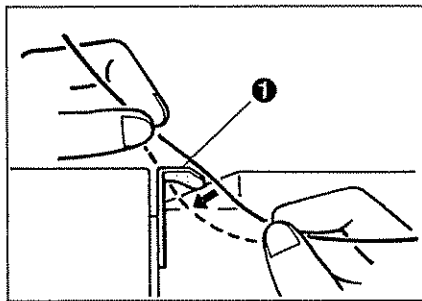


3. Hook the thread onto the thread guide plate and the bobbin thread winder guide, following the dotted line which is printed on the machine.

* When hooking the thread onto the thread guide plate, hold the thread with both hands and slide it into the plate.

① Thread guide plate

② Bobbin thread winder guide

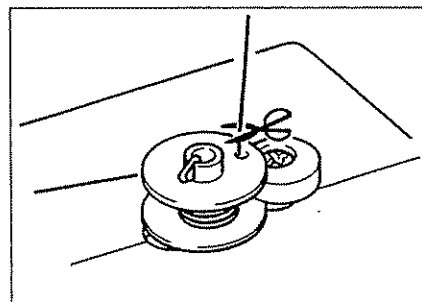
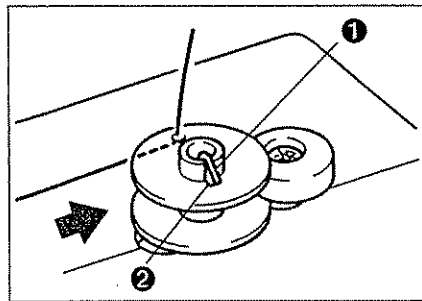


4. Guide the thread through the small hole in the side of the bobbin from the inside. Holding the thread end, push the bobbin winder shaft to right.

* Match the groove of the bobbin with the spring on the shaft.

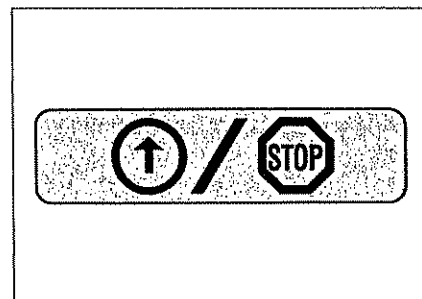
① Spring on the shaft

② Groove in the bobbin



5. Holding the thread end, press the "START/STOP" button. Wind the thread a few times around the bobbin and press the "START/STOP" button again.

Trim the excess thread from the top of the bobbin after the machine stops.



6. Press the "START/STOP" button. The machine will stop automatically when the bobbin is full. Press the "START/STOP" button to stop at any time or when the bobbin has stopped moving and the motor is still running.

7. Push the bobbin shaft to the left. Remove the bobbin and continue sewing.

8. Set the bobbin into the shuttle as shown on page 15.

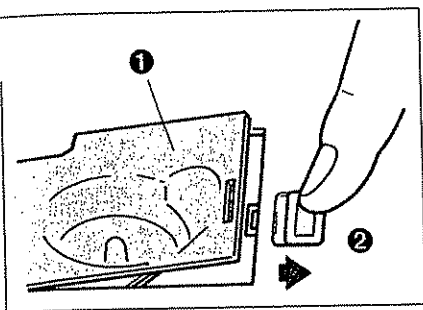
It's a good idea to have several full bobbins on hand before start your project.

Setting the bobbin

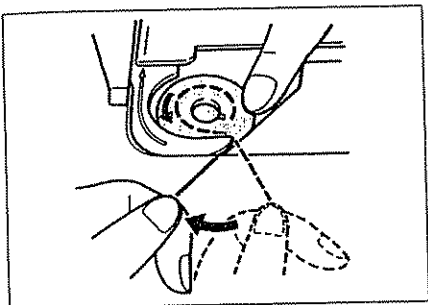
The bobbin cover is located in front of the needle plate.

1. Slide open the bobbin cover by pushing the bobbin release button to the right.

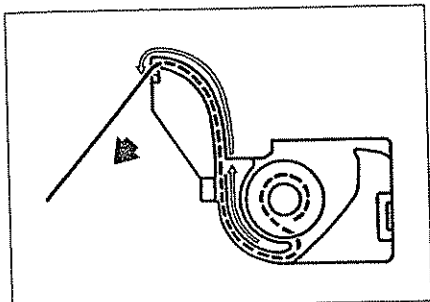
- ① Bobbin cover
- ② Bobbin cover release button.



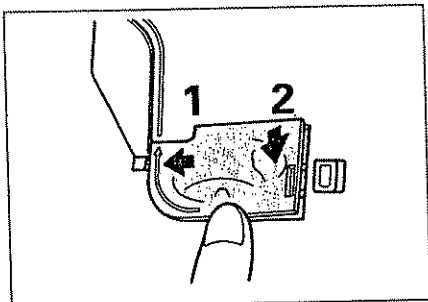
2. Insert the bobbin into the shuttle with the thread direction as noted in the etching under the bobbin cover.
 - * (Use a plastic bobbin as shown on page 6)



3. Guide the thread end around the finger through the channel toward the back, then pull the thread toward you which will cut off any excess.



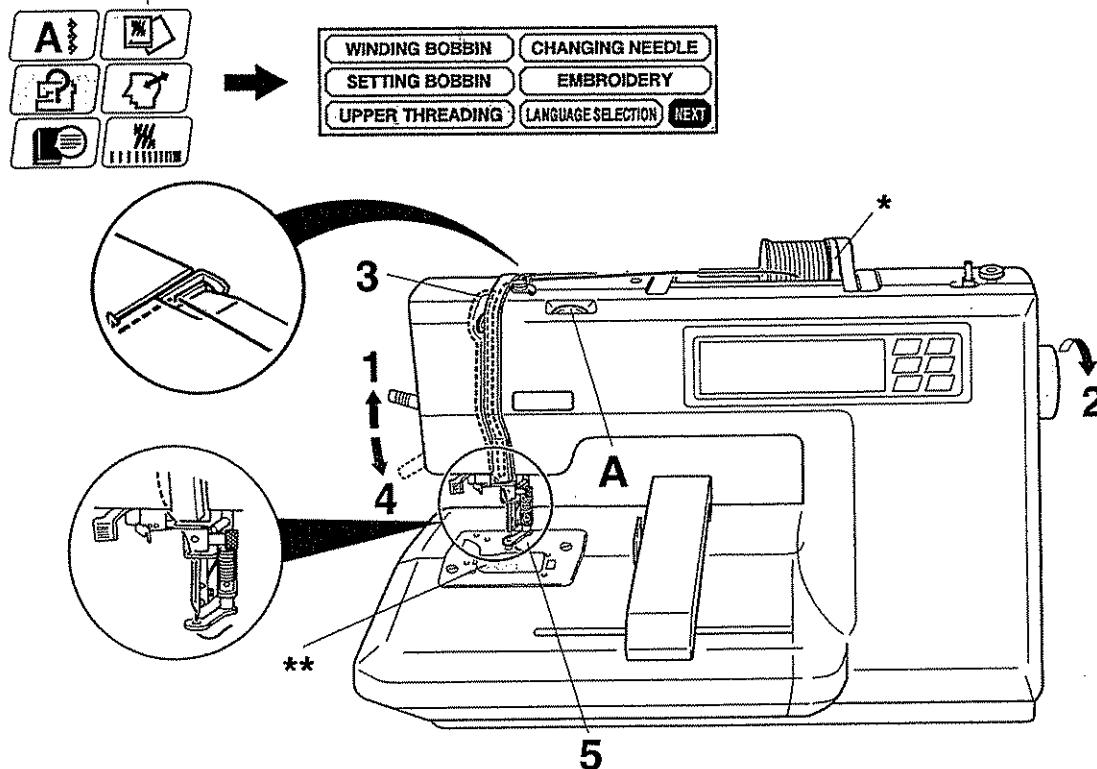
4. Close the bobbin cover by placing the left end in place and pressing down lightly on the right end to snap in place.



- * There is no need to pull up the lower thread, it is done automatically. Embroidering can begin without pulling out the lower thread.

UPPER THREADING

Thread according to the number and arrow marks on the machine.



1. Raise the presser foot lever (If the presser foot is not raised, the upper thread cannot be threaded.)
2. Turn the balance wheel to raise the needle to its highest position.
3. Guide the thread as illustrated with the solid line on the machine following the number sequence.
4. Lower the presser foot.
5. Thread the needle using the auto needle threading device (See page 17) or manually.

* Be sure the spool felt is behind the spool. (shown above *)

** You do not need to pull the lower thread up before you start embroidering.

CAUTION

Always be sure to raise the presser foot before removing the upper thread to prevent damage to the thread tension system.

Using the extra spool pin and net

Extra spool pin

Use when embroidering with metallic thread.

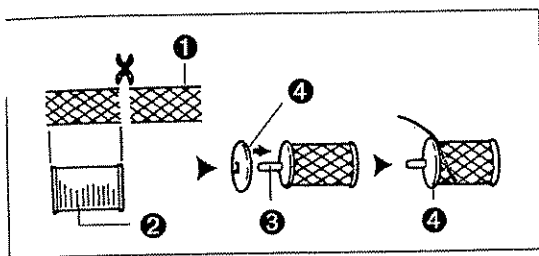
1. Insert the extra spool pin into the hole on the top of the machine.
2. Install the spool felt and the thread spool in that order, and then thread the upper thread.

- * When sewing using metallic threads, the thread tension might need some adjustment.
- * When setting the thread spool, set it so that the thread winds off from the front of the spool.
- * If using metallic thread, we recommend that you use a 90/14 home sewing machine needle.

- ① Insert the extra spool pin into the hole on the top of the machine
- ② Spool felt
- ③ Thread spool

NOTE

This method keeps the thread from twisting as it comes off the spool pin.

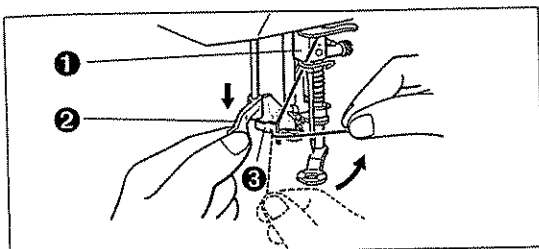


Net

If using special threads which wind quickly off the thread spool, attach a net to the spool before using.
* Cut the net to match the size of the spool.

- ① Net
- ② Thread spool
- ③ Spool pin
- ④ Spool cap

Auto needle threading device



1. Guide the thread through the wire loop thread guide (number "6") and gently pull the thread towards you.
2. Lower the presser foot.
3. Lower the needle threader lever until it stops. Hook the thread into the guide and pull it through to the right.

- ① Wire loop thread guide
- ② Needle threader lever
- ③ Guide

* The needle threading device cannot be used while the needle is lowered.

4. Turn the needle threader lever toward the back. Check to be sure that the hook has passed through the eye of the needle and route the thread under the metal guides and the hook.
- * Pull the thread toward you and check that it is being held by the thread hook.

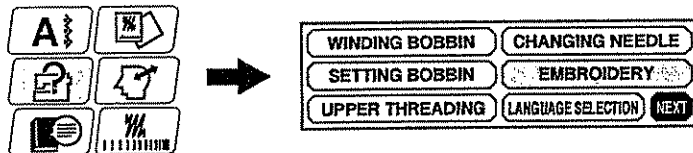
- ① Hook
- ② Metal guides
- ③ Thread correctly under the metal guides and the hook.

5. While gently holding the thread, pull the needle threader lever forward.

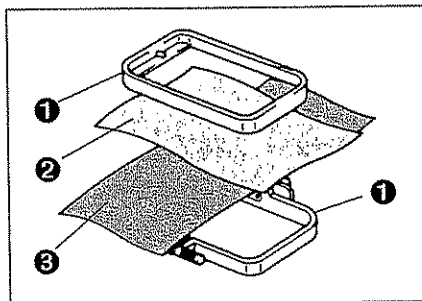
6. Release the thread from the needle threader lever.
7. Pull the upper thread through the needle eye toward the rear of the machine.

PREPARATION BEFORE EMBROIDERING

Be sure to turn off the power before carrying out the following.



Attaching stabilizer material



Attach a stabilizer fabric to the reverse side of the area of fabric to be embroidered.

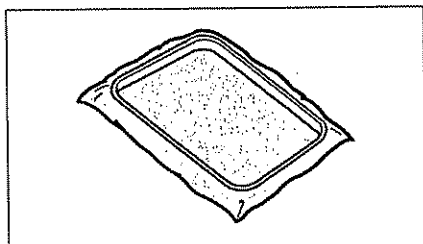
It is not necessary to attach a stabilizer fabric to fabric which is already sufficiently stiff. For thin, knit and stretch fabric which may move in the frame, attach the fabric to a non-woven stabilizer fabric before embroidering.

The stabilizer fabric also needs to be framed along with the fabric for the best result.

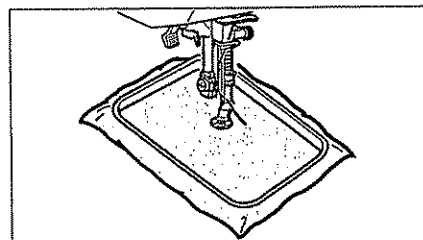
There are many types of non-woven stabilizers available on the market. The goal of the stabilizer is to prevent stretch or movement of the fabric. Best results for stretch, knit or light weight fabrics will be obtained by using a light iron-on stabilizer.

- ① Embroidery frame
- ② Fabric
- ③ Non-woven stabilizer fabric

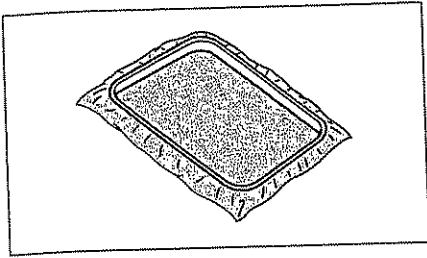
Embroidering different types of fabric



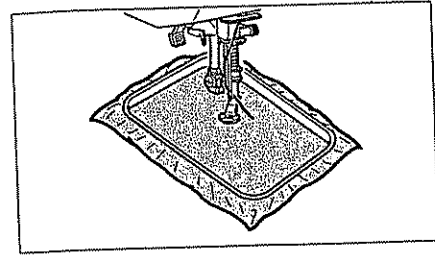
From normal fabrics to thick fabrics



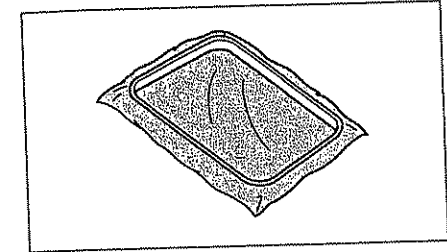
It's a good idea to place a piece of stabilizer fabric under the frame holding the fabric being embroidered.



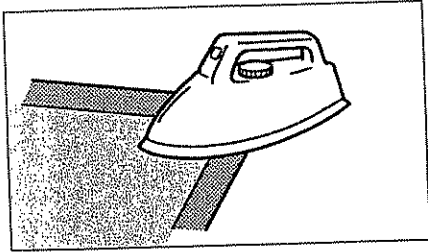
Thin fabrics such as organdie or cotton batiste.



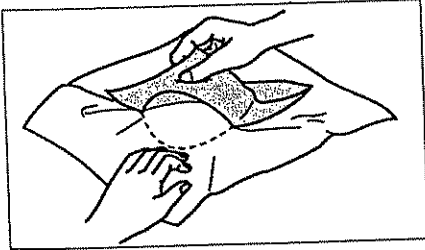
Use a fabric that doesn't stretch too much. Place a piece of stabilizer fabric within the frame holding the fabric being embroidered. We also recommend using a spray on stabilizer, first, allow it to dry or iron to dry then use a non-woven stabilizer with it in the frame.



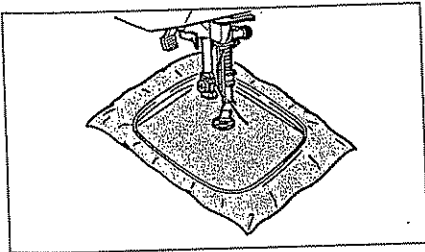
Stretchable fabrics such as jerseys



Iron a piece of adhesive stabilizer material which is slightly larger than the frame onto the fabric to be embroidered, and then stretch it over the frame.

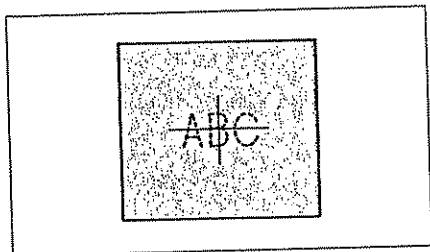


A stabilizer fabric that can be torn off the back without affecting the embroidering is ideal.

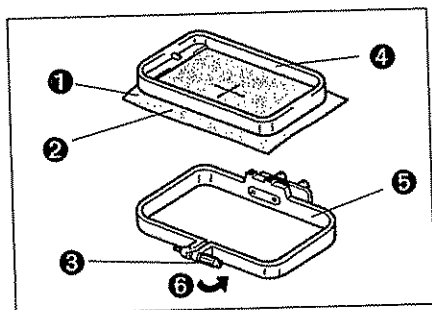


Use the smallest frame possible that can still accommodate the pattern being embroidered, as this will give better results.

Setting the fabric in the embroidery frame



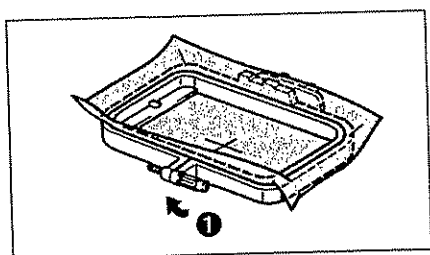
1. Make a mark on the fabric with chalk or marking pencil indicating the center of the area to be embroidered.



2. Loosen the adjusting screw of the outer frame, place the fabric on top of the outer frame with the right side of the fabric up, and then place the inner frame into the outer frame to clamp the fabric.

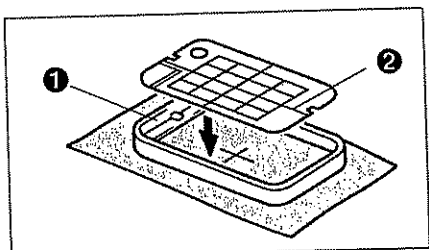
* Make sure that the ▽ marks of the outer and inner frames are aligned.

- ❶ Fabric
- ❷ Right side surface for embroidering
- ❸ Adjusting screw
- ❹ Inner frame
- ❺ Outer frame
- ❻ Loosen



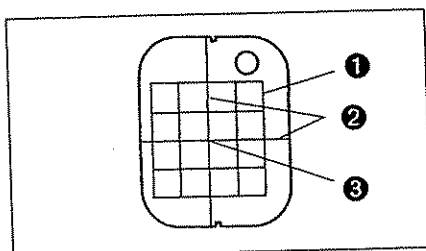
3. Firmly tighten the adjusting screw, and then temporarily remove the fabric and the inner frame from the outer frame.

- ❶ Tighten

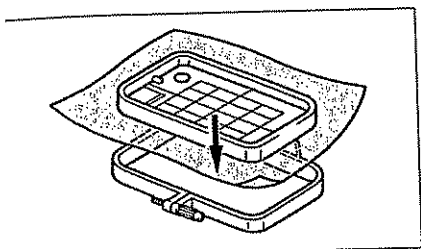


4. Place the embroidery sheet on top of the inner frame so that the center crosshairs on the embroidery sheet and the mark on the fabric are aligned.

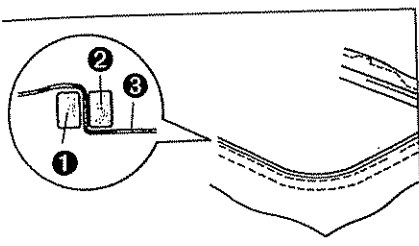
- ❶ Inner frame
- ❷ Vertical + horizontal crosshair lines



- ❶ Area available for embroidering
- ❷ Vertical + horizontal crosshair lines
- ❸ Center of the crosshairs and the pattern



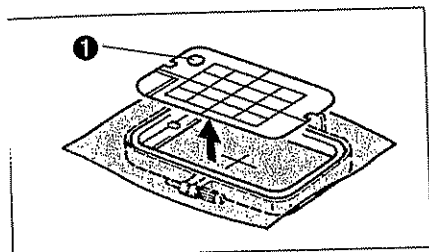
5. Insert the fabric and inner frame back into the outer frame while ensuring that the mark on the fabric does not slip out of position.



Correct setting

- * Clamp securely so that the edges of the outer frame and inner frame are even.

- ❶ Outer frame
- ❷ Inner frame
- ❸ Fabric



6. Check to be sure that the center of the design is in the correct location based on the crosshairs of the embroidery sheet. Remove the embroidery sheet using the finger hole to pull up.

- ❶ Finger hole for pulling up