1. Raise the presser foot to its highest position. Then pass the embroidery frame under the presser foot with the mounting pins on the right side and the fabric right side up.
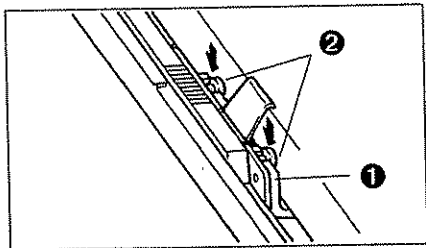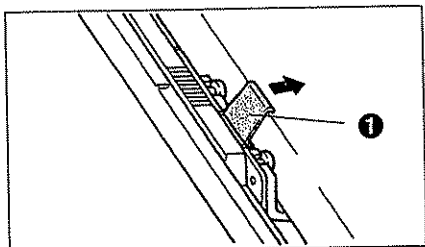
2. Align the two pins on the embroidery frame with the frame holder, and then insert the frame into the frame holder until a click is heard.
   * Be sure to insert both pins. If only the forward or the back pin is inserted, the pattern may not turn out correctly.
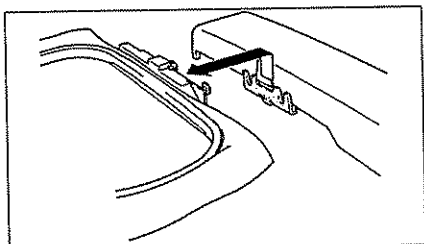
   ❶ Frame holder
   ❷ Pins
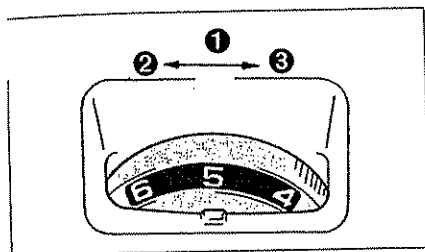
Push the release lever to the right and remove the embroidery frame by pulling up.

❶ Release lever
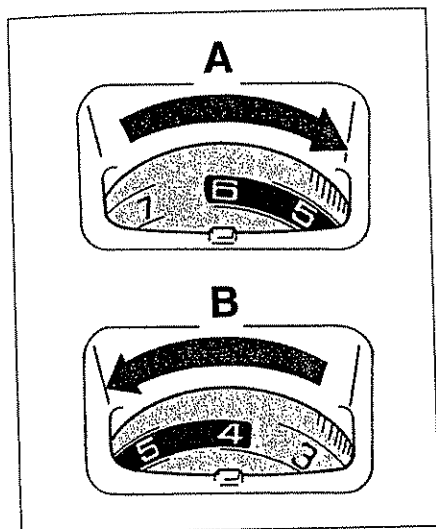
Use this procedure when changing the thread tension.

Upper thread tension dial

❶ Upper thread tension setting
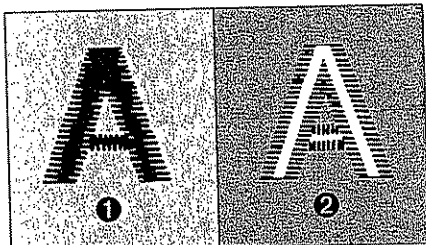❷ Weak (Decrease thread tension)
❸ Strong (Increase thread tension)

A— To tighten the upper thread tension, adjust the dial to the right.
B— To loosen the upper thread tension, adjust the dial to the left.

*   The standard position is between "4" and "6". However, a sewing test should always be done to check for the proper thread tension.
Thread tension may need to be adjusted with the use of different thread, fabric or stabilizer fabric.

Correct thread tension

Adjust so that the lower thread stitch width on the reverse surface of the fabric is about one-third of the total width.
Correct tension is important because too much or too little tension will cause poor quality embroidery or your fabric to pucker.
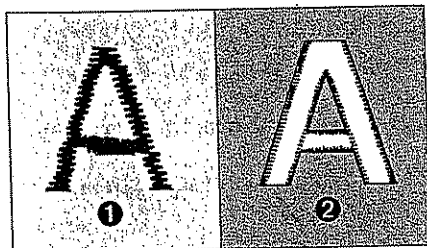
❶ Top surface of fabric
❷ Reverse side of fabric

If upper thread tension is too strong

The lower thread will be visible on top surface of the fabric.
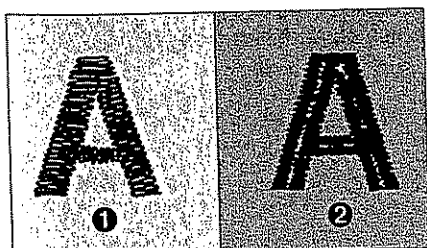Decrease the upper thread tension.

❶ Top surface of the fabric
❷ Reverse side of the fabric

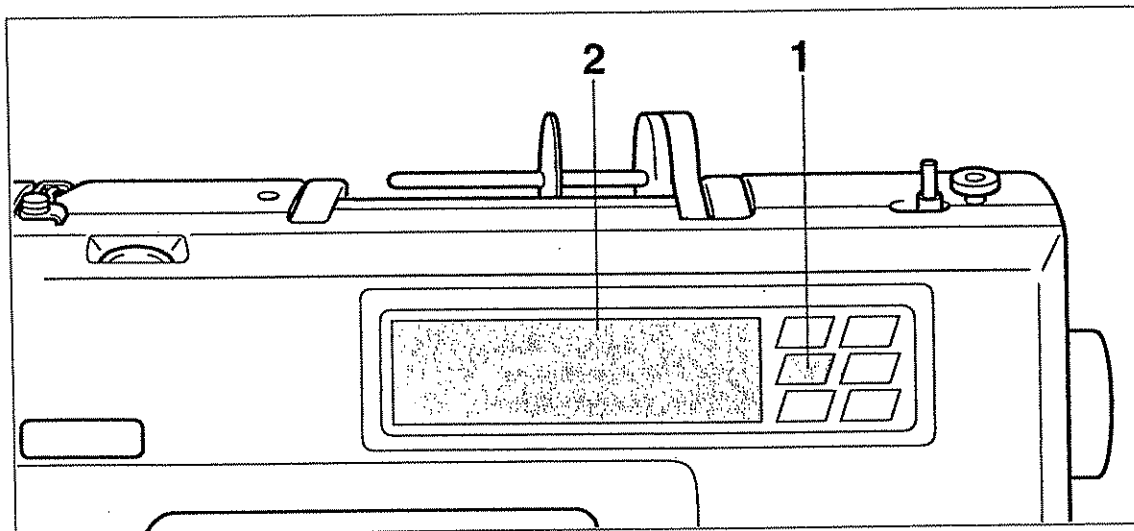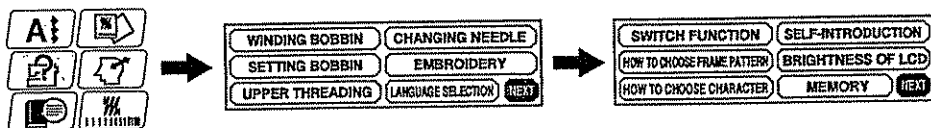### If upper thread tension is too weak

The upper thread will be loose.
Increase the upper thread tension.
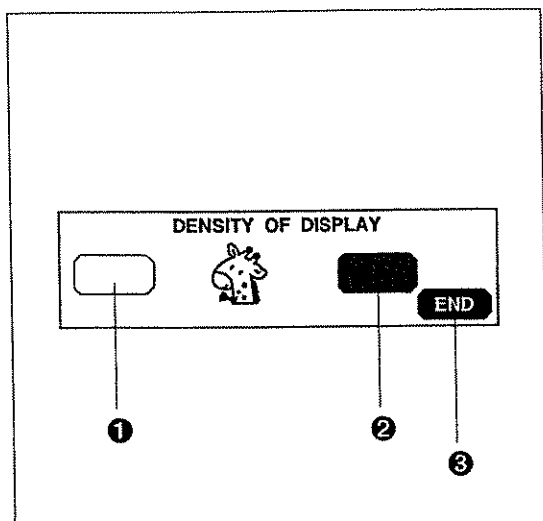
❶ Top surface of fabric
❷ Reverse side of fabric

To adjust the brightness of the LCD screen

A↕	▣▷	→	WINDING BOBBIN	CHANGING NEEDLE	→	SWITCH FUNCTION	SELF-INTRODUCTION
⧉	⬳		SETTING BOBBIN	EMBROIDERY		HOW TO CHOOSE FRAME PATTERN	BRIGHTNESS OF LCD
▤	⫙		UPPER THREADING	LANGUAGE SELECTION NEXT		HOW TO CHOOSE CHARACTER	MEMORY NEXT

1. Press "BASIC OPERATION".
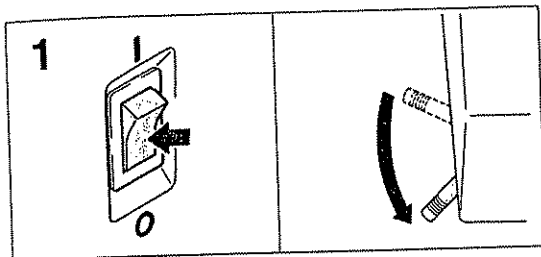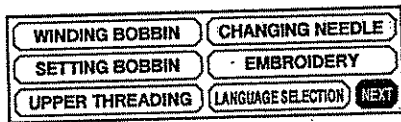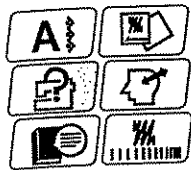2. Touch "NEXT", "BRIGHTNESS OF LCD" and "NEXT".

To adjust the contrast of the LCD screen

❶ "Dull" Touch this key to make contrast less (lighter).

❷ "Sharp" Touch this key to make contrast greater (darker).

❸ Touch "END" to return to the screen which was previously being displayed.

* If the contrast is adjusted too far, the display screen becomes invisible. Reset it by turning the power switch off and then on again.
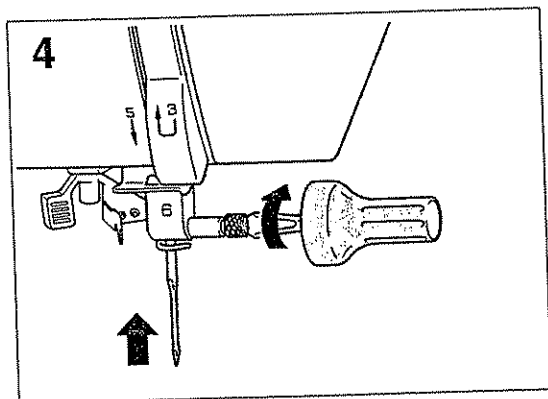
DENSITY OF DISPLAY

END

❶   ❷

❸

Set the needle securely.

```
┌──────────────┬──────────────────────────┐
│ A │ 🔲       │ WINDING BOBBIN   CHANGING NEEDLE │
│ 🔳 │ 🔳   ➡  │ SETTING BOBBIN   · EMBROIDERY    │
│ 🔳 │ ▦       │ UPPER THREADING  LANGUAGE SELECTION  NEXT │
└──────────────┴──────────────────────────┘
```

1. Turn the power switch off and lower the presser foot lever.
   Turn the balance wheel to raise the needle to its highest position.
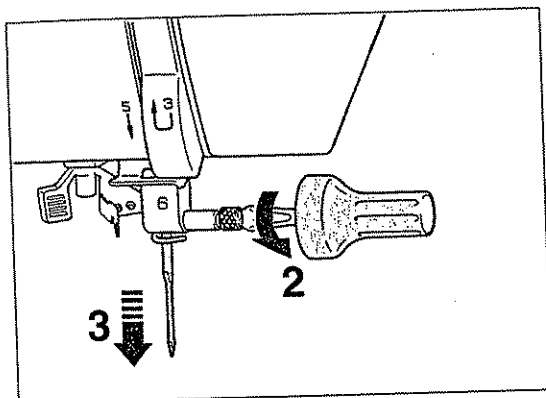
2. Loosen the needle screw with a screwdriver.
3. Pull the needle out.

4. Insert the new needle as far up as it will go with the flat side of the needle facing away from you. Then secure it by firmly tightening the screw with a screwdriver.
5. Turn the power switch on.

Needle system: 130/705 H

EMBROIDERY

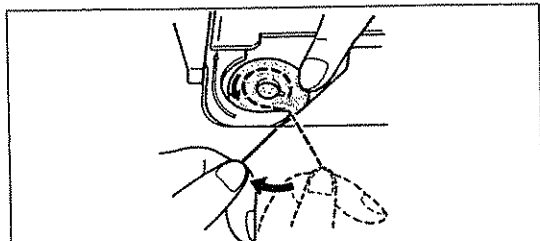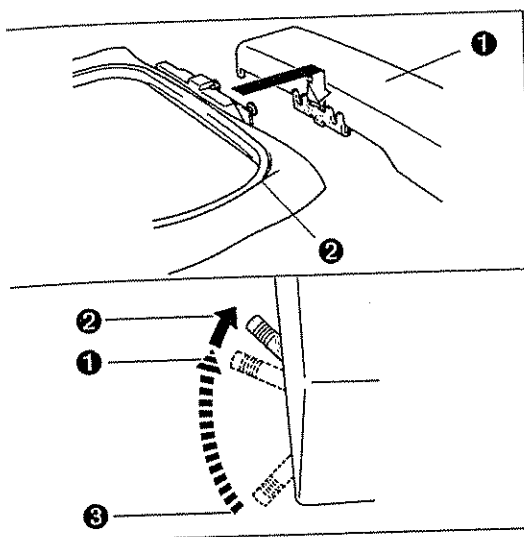|	
WINDING BOBBIN	CHANGING NEEDLE
SETTING BOBBIN	EMBROIDERY
UPPER THREADING	LANGUAGE SELECTION NEXT
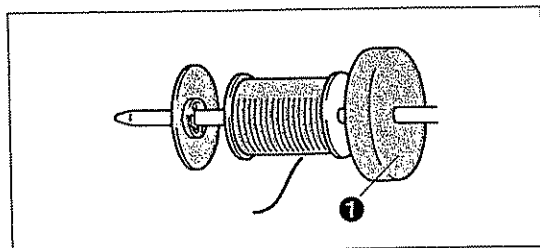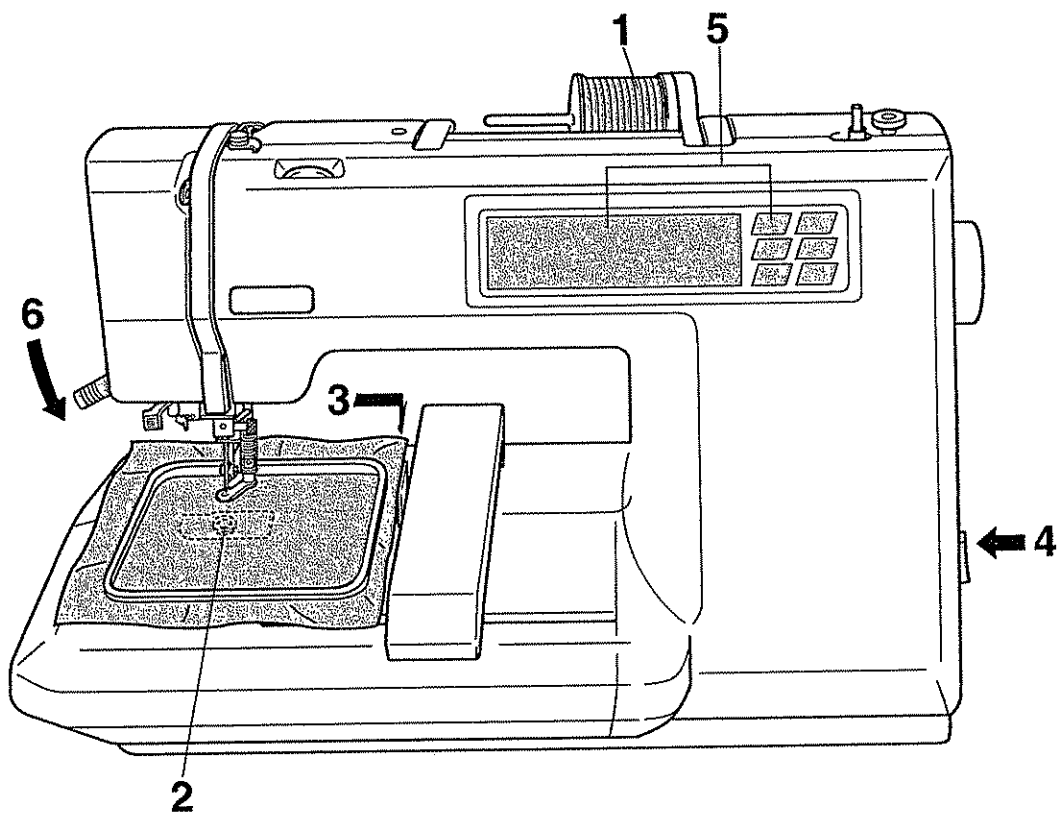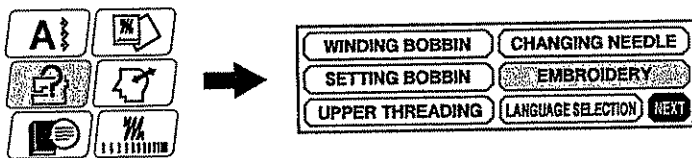
1. Thread the upper thread.
   Be sure to attach the spool felt as shown in the illustration.

❶ Spool felt (See page 16 – 17)

2. Thread the lower thread. (See page 15)

3. Place the fabric in the embroidery frame and then attach the frame to the machine.
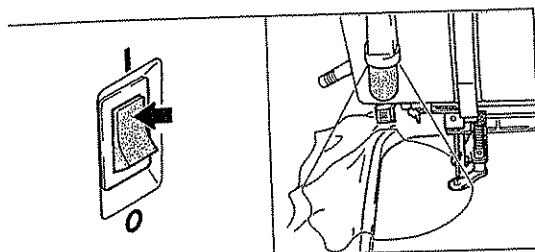(See page 20 – 22)

❶ Carriage
❷ Embroidery frame

NOTE
Do not push the carriage too hard.

* It is easier to move the embroidery frame under the presser foot if the presser foot lever is raised higher than its normal "up" position.

❶ Normal presser foot lever "up" position
❷ Presser foot lever pushed up
❸ Presser foot lever down position

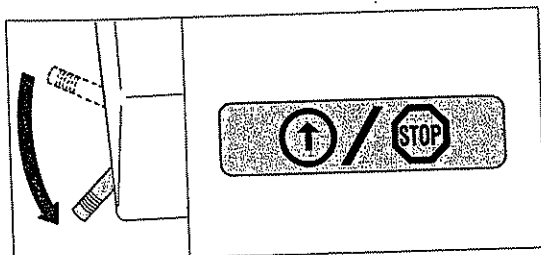4. Turn on the power. The light will shine when the power is turned on.

5. Select a pattern.

Select the frame. **NEXT**

LIST **PREV** **NEXT**
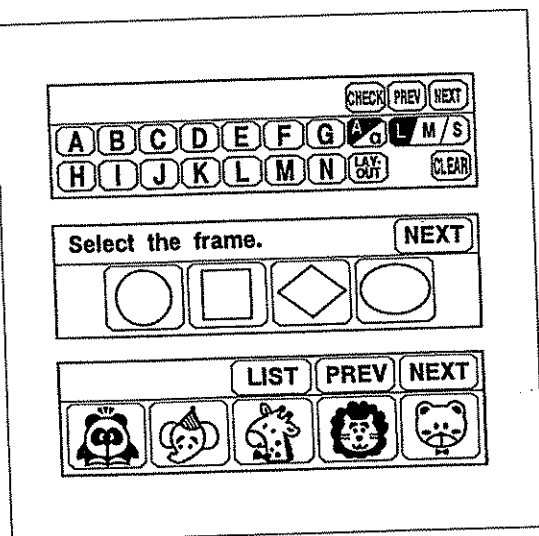
6. Lower the presser foot lever and press the "START/STOP" button to start the machine.

## Embroidering beautiful patterns

Thread	Needle
Embroidery thread #50	Home sewing machine needle 75/11, 80/12

* The recommended lower thread is #60 – #90 synthetic thread.
* For thin and stretch fabrics which are difficult to sew, attach the fabric to non-woven stabilizer fabric before embroidering.
* If embroidering on a thick fabric with stabilizer (see page 18), it is recommended that a stronger 90/14 home sewing machine needle be used.

Start embroidering
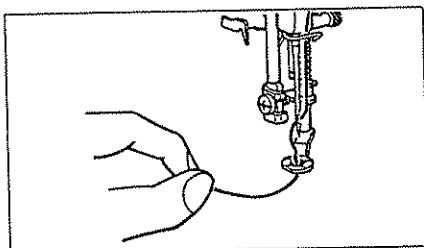
1. After threading the needle, pass the thread from the top to the bottom through the hole of the presser foot, and gently pull the end of the thread.
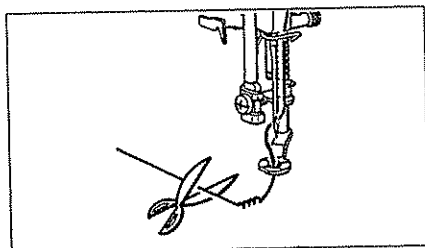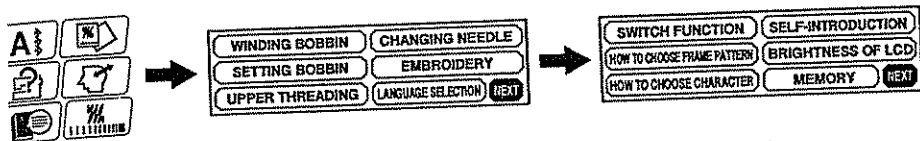
2. Lower the presser foot and press the "START/STOP" button to start the machine. After sewing 5 – 6 stitches, stop the machine and raise the presser foot again. Trim off any excess thread at the edge of the design.
   After trimming, lower the presser foot and press the "START/STOP" button again to start the machine.
3. The machine will stop sewing when completed all the stitching with this thread color.
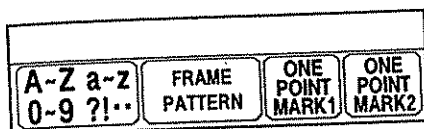
Cutting the thread after embroidering is completed
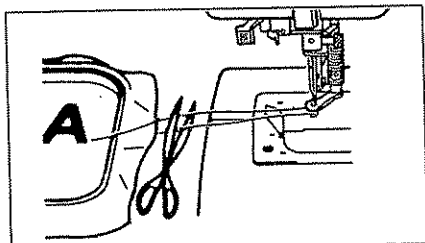
Raise the presser foot and cut the upper thread. Remove the embroidery frame from the frame holder.
When cutting the lower thread, leave about 10 cm (4 inches) of bobbin thread outside the needle hole in the needle plate.

WINDING BOBBIN | CHANGING NEEDLE
SETTING BOBBIN | EMBROIDERY
UPPER THREADING | LANGUAGE SELECTION | NEXT

→

SWITCH FUNCTION | SELF-INTRODUCTION
HOW TO CHOOSE FRAME PATTERN | BRIGHTNESS OF LCD
HOW TO CHOOSE CHARACTER | MEMORY | NEXT

Characters

A

A~Z a~z | FRAME | ONE | ONE
0~9 ?!·· | PATTERN | POINT | POINT
 | | MARK1 | MARK2

B

LIST | PREV | NEXT

A↕ | [N]▷
🔓 | ↻
📇 | ▦||||||||||

A~Z a~z | FRAME | ONE | ONE
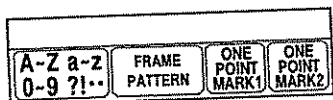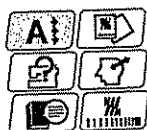0~9 ?!·· | PATTERN | POINT | POINT
 | | MARK1 | MARK2

A

Select the type of characters you wish to embroider.

* If the power is turned on without a memory card inserted, the display shown at the left will appear.
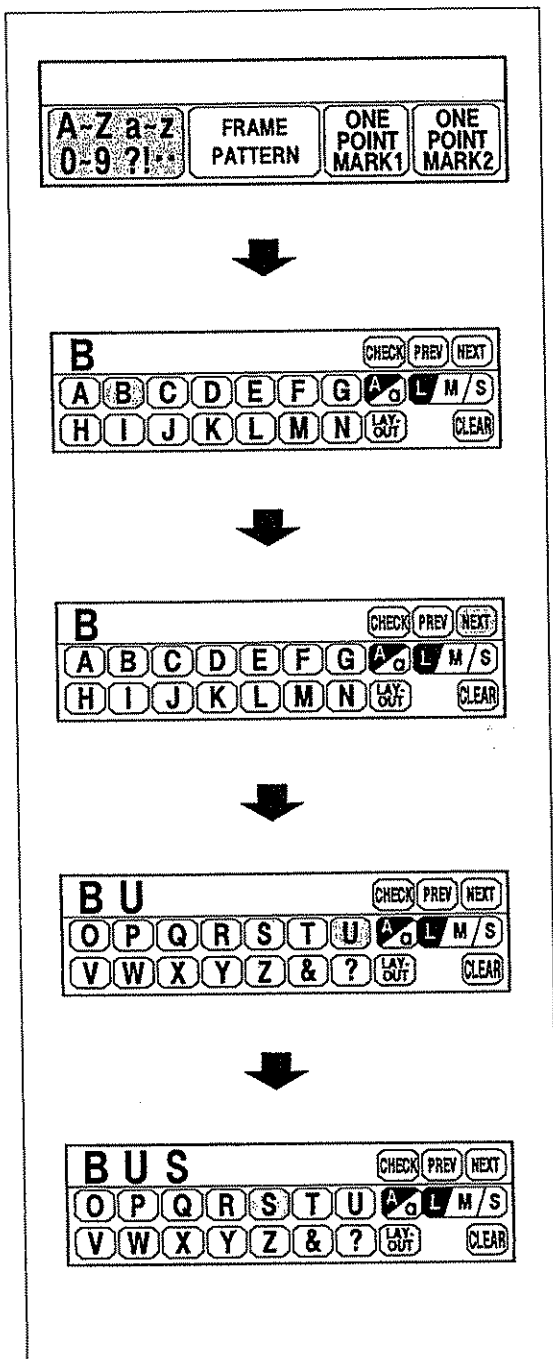
B

Example: No. 2   The Flower card

* If the power is turned on with a memory card inserted, the screen corresponding to the memory card will appear.
  To select characters press the "CHARACTERS & DESIGNS" button.

29

Alphabetic characters

To select alphabetic characters touch the "A ~ Z a ~ z 0 ~ 9 ? ! ·" key.
Touch the individual character to form a design.

Example: To select the characters to form the word "BUS"

1. Touch "A~Z a~z 0~9 ?!··".

| A-Z a-z 0-9 ?!·· | FRAME PATTERN | ONE POINT MARK1 | ONE POINT MARK2 |

2. Touch "B".

```
B                    CHECK PREV NEXT
A B C D E F G Aa L M/S
H I J K L M N LAY/OUT  CLEAR
```

3. Touch "NEXT".

```
B                    CHECK PREV NEXT
A B C D E F G Aa L M/S
H I J K L M N LAY/OUT  CLEAR
```

4. Touch "U".

```
B U                  CHECK PREV NEXT
O P Q R S T U Aa L M/S
V W X Y Z & ? LAY/OUT  CLEAR
```

5. Touch "S".

```
B U S                CHECK PREV NEXT
O P Q R S T U Aa L M/S
V W X Y Z & ? LAY/OUT  CLEAR
```
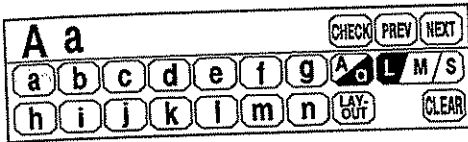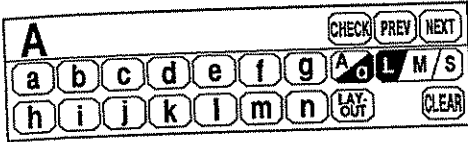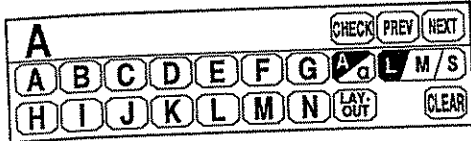
The characters to be selected can be switched from uppercase to lowercase and vice versa by touching "A/a".

1. Touch "A".

2. Touch "A/a" to switch to lowercase.
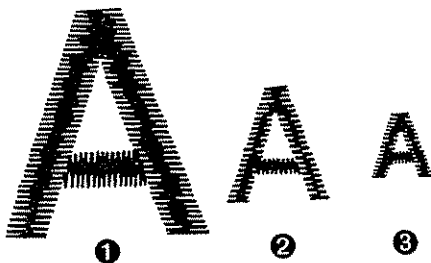
3. Touch "a".

Changing the size of characters

The size of the characters can be changed by touching the "L/M/S" key. Each time it is pressed it changes as shown below. (L → M → S → L··)
The size of all characters will be changed to the last character size selected.
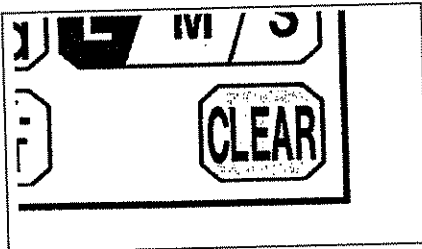
ALPHABETIC CHARACTERS

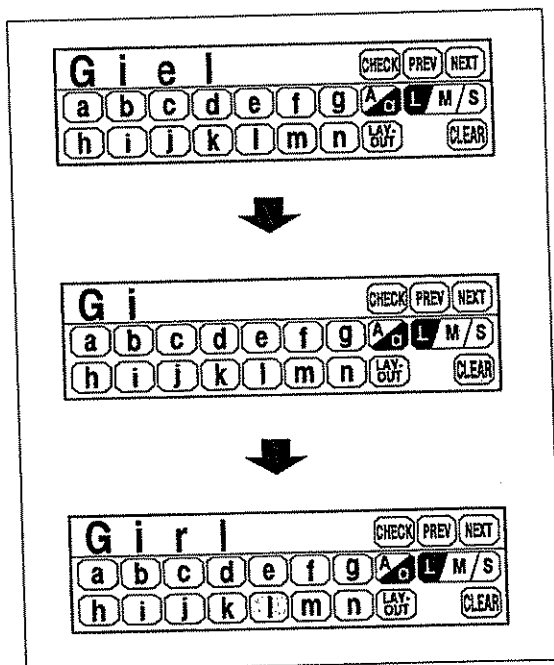**Actual size**

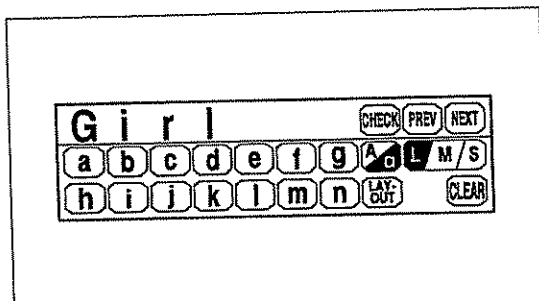❶ Large (L)
❷ Medium (M)
❸ Small (S)

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Correcting characters

One character can be cleared with a backspace each time "CLEAR" is touched.

Example: If "Giel" has been entered instead of "Girl".

G i e l

1. Touch "CLEAR" twice.

G i
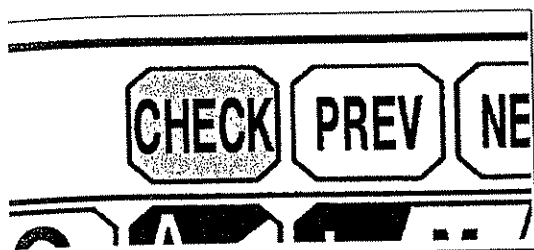
2. Enter the correct characters.

G i r l

Embroidering the pattern

G i r l

1. Thread the machine. (See page 16 – 17)
2. Install the embroidery frame. (See page 20 – 22)
3. Lower the presser foot.
4. Press the "START/STOP" button to sew the pattern: the machine will stop automatically when it is finished.
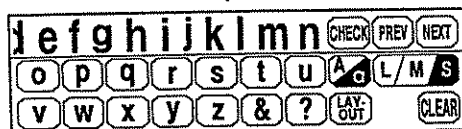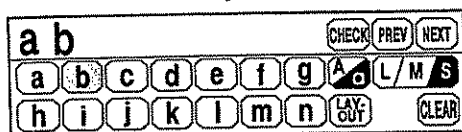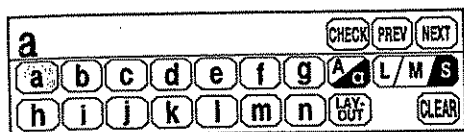5. Raise the presser foot.
6. Cut the threads.

Touch "CHECK" to check the characters which have been selected.

Example: If the characters "abcdef-ghijklmn" have been selected in lowercase characters

* The machine will not accept your next character if it exceeds the embroidery area. To continue the word or phrase change to a smaller size character.

The display appears as shown in the illustration at left after the "n" is touched.

By touching "CHECK", the display will move through all the characters from the first character selected.
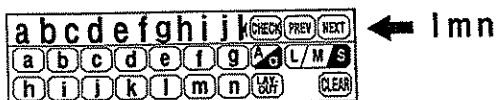
* If all the characters selected appear on the display at once, then the display will not move.