SINGER®

QUANTUM® XL-1000

Workbook

SINGER®

Quantum® XL-1000
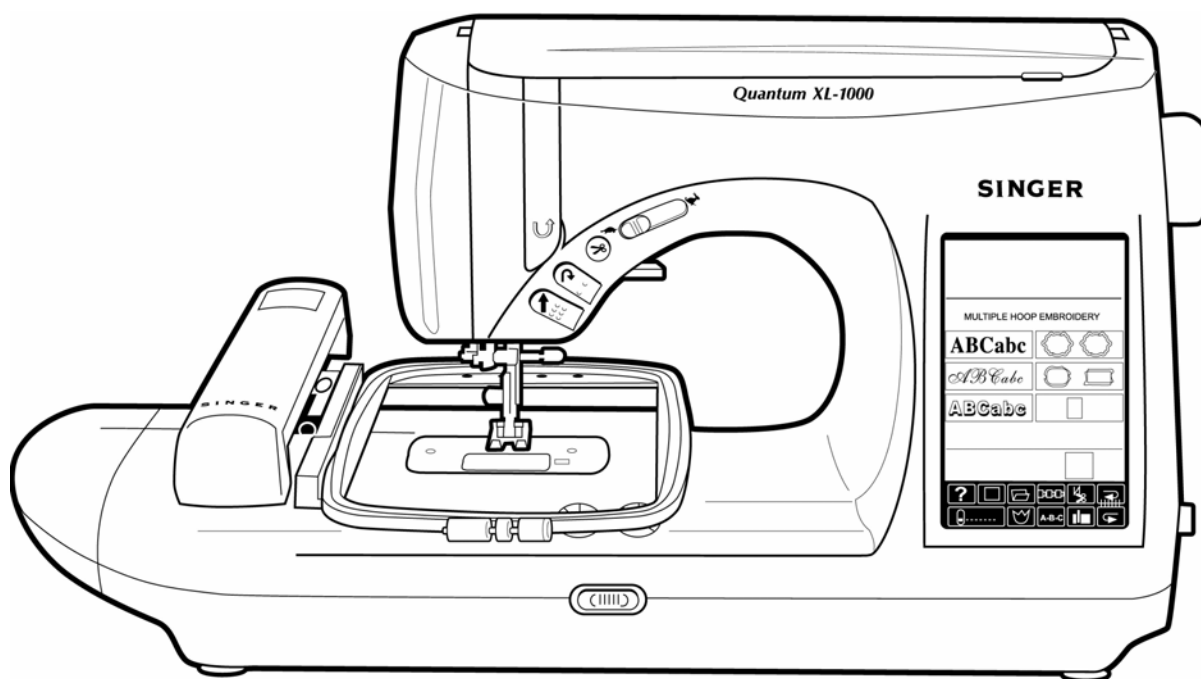
Training Guide

Quantum® XL-1000
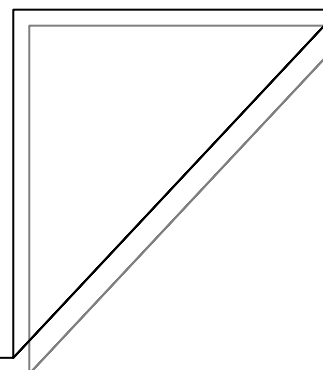
Table of Contents

Getting Started

1. Memory and pattern category buttons
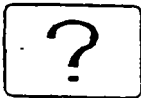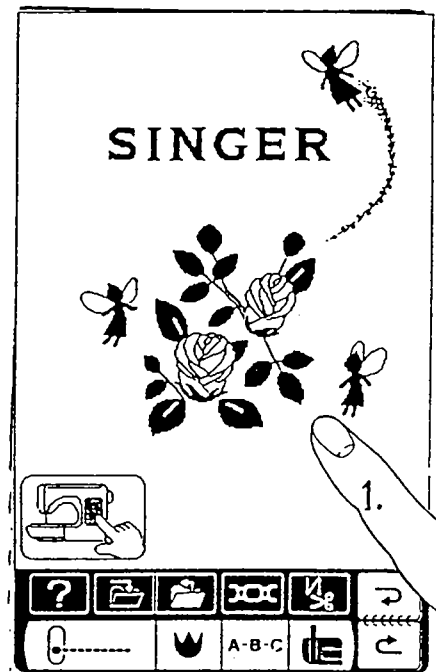
Help key - Opens a screen that will give detail instructions and sewing advice
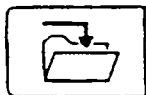
"IN"- file folder key - to place elements into permanent memory

"OUT"- file folder key - to take an element out of permanent memory
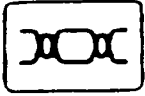
Tension key - Use to override the tension
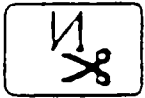
Automatic back tack button and thread cutter key - Automatically back tacks at the start of a stitch/ pattern and automatically back tacks and cuts threads at the end of a stitch/pattern. When this key is activated an icon appear on the left corner of the LCD screen.
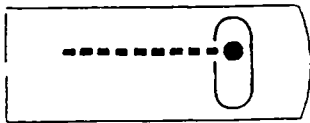
Utility key - Opens the screen to the basic utility stitches

Crown key - Opens the screen to the pattern selection screen; this is where the large motif, fun faces and flowers, animated animals, decorative and heirloom stitches are found

A-B-C
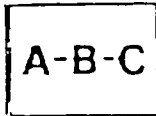
A-B-C key - Opens the screen to the built-in continuous sewing alphabet (block, large satin script, and small script)

Embroidery key - Opens the screen to the embroidery capabilities
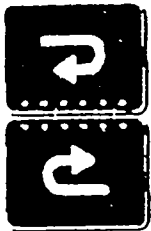
Page turning keys - Return to previous page or next page within a section. An icon at the top of the LCD screen will appear and inform you how many pages exist in the present section.

For example:
1. Large motifs have 5 pages
2. Fun faces have 1 page
3. Fun flowers have 1 page
4. Decorative stitches have 4 pages
5. Heirloom/cross stitches have 6 pages
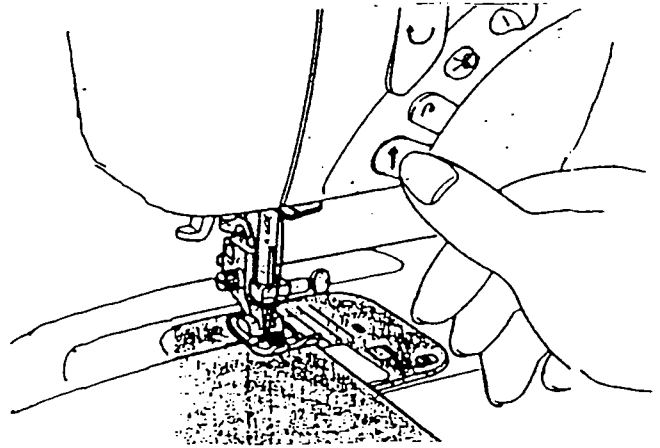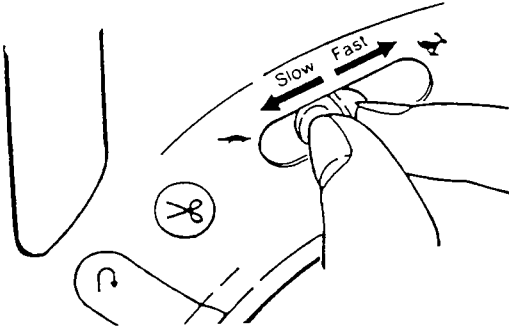
Sewing speed limiter- Limits the speed during embroidery (450,600 or 750 stitches per minute) or limits the speed during regular sewing with the foot control giving infinite settings

Thread trimmer - Trims the needle and bobbin thread

Back tack key - Use to secure the beginning and end of seams or when wishing to sew in reverse for a few stitches

Start/stop sewing key - Use to start or stop sewing.
Explanation of color arrow mark on start/stop button
- Green: Conditions are correct for sewing
- Red: Conditions are not correct for sewing
- Orange: Welcome screen is illuminated or bobbin winding shaft is in winding position

Note: When foot speed controller is plugged in..
- start/stop button can only be used to stop machine
- lever serves as a top speed limiter
- green arrow will only glow when controller is depressed

Help Screens

□ Turn the machine on and press anywhere on the screen

□ Press the help screen key on the bottom bar

On screen are three different types of guidance

Machine usage
Help in machine set up and
for customizing the options

Advice
Obtain sewing tips

Sewing method
Obtain information on
"how to sew" methods

《Operation Guidance》

? Machine Usage

? Advice

? Sewing Meth
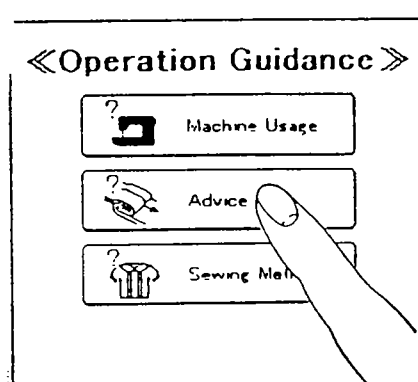
Each "guidance" category gives detailed information and easy-to-understand graphics.

《Gathering》

《Sewing an overlapped section》

Used for gathering cuffs or yokes

❶ Sew in illustrated direction to avoid foot catching in fold
❷ Lightly hold material while sewing
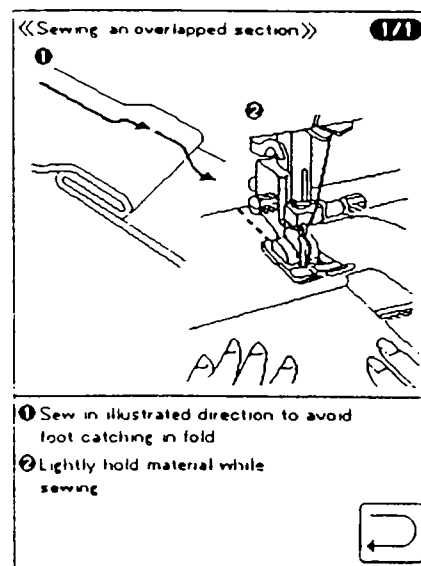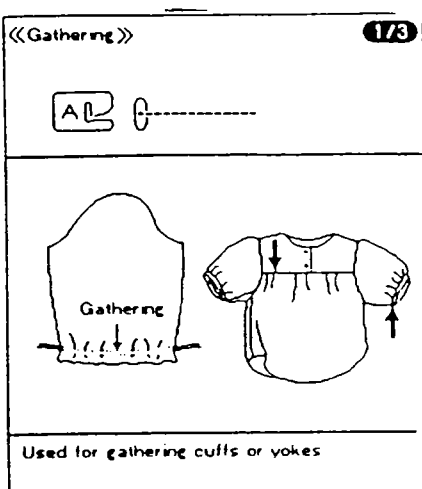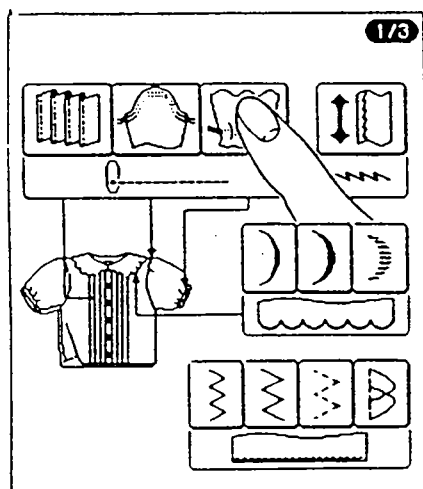
On screen are information on how to

Thread needle   Thread machine   Change needle   Wind bobbin
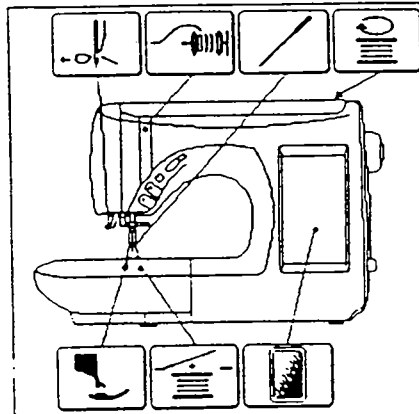
Change foot   Insert bobbin   Change "LCD" contrast

Embroidery preparation   Basic sewing   Options
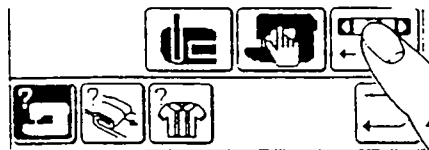
Machine usage   Sewing advice   Sewing method   Return key

◻ Press the "option" key

There are two option screens.
The options will automatically be set at the "default" setting
that is under the word "AUTO" and is highlighted.

Option   1/2

《Option》   **1/2**
┌Error message indioation time.─
         AUTO   [10]
[— ◄ ▮   ]   [► +]

┌Additional stitches which may be sewn─
 after indioation of low bobbin.
         AUTO   [20]
[— ◄▮   ]   [► +]

┌Setting of automatic backtack & thread─
 cutter.
    ☐ ON   🔳
    🔳 OFF 🔳

┌Welcome screen indication.─
   🔳 ON   ☐ OFF

              [AUTO | OK | ↵]

Refers to how long the error message
will stay on the screen

Refers to how many stitches the
machine will make after the
empty bobbin has shut off*

Refers to the automatic back tack and
thread trimmer. They both can be set
to always engage or not.
Applies only to regular sewing

Refers to how to remove the
screen saver (which is the
opening screen with the flowers and
fairies). If the screen saver is turned
off, the utility screen will be displayed
when the machine is turned on.

The XL-1000 has an automatic bobbin shut-off
when approx. 1/2 yard of bobbin thread remains

◻ Press the "PAGE TURNING" key to advance to next page

These settings apply only during embroidery

Option Embroidery   2/2

《Option·Embroidery》   2/2

┌─ Setting sewing range confirmation. ─────┐
               AUTO
                ▽
  [— ◀][■]──────────────[▶ +]

┌─ Setting needle position adjustment. ─────┐
               AUTO   [10]
                ▽
  [— ◀][■]──────────────[▶ +]

┌─ Setting size of letters. ─────┐
               AUTO
                ▽
  [— ◀] 7 10|15|20 25 30 35 40 [▶ +]

┌─ Setting density of letters. ─────┐
               AUTO
                ▽
  [— ◀]   0.6 |0.5| [▶ +]

                  [AUTO] [OK] [↵]

Refers to the speed of the
"RANGE TEST" during embroidery

Refers to number of stitches
the needle will advance or
backup each time the needle
icon is pressed*

Refers to the size of the letters

Refers to the density of the letters

*When the needle advance/backup icon is pressed, the needle will move 1
needle penetration (stitch) each time the icon is pressed the first six times.
After six single moves, set how many stitches at a time (10, 20 or up to
1000) the machine will move each time the needle advance/backup icon is
pressed.

··

◻ Change any or all the settings on the first option page

◻ Press "OK", and use the "PAGE -TURNING" key to advance to
the second screen of options

◻ Change any or all the settings on the second option page

◻ Press "OK", and then the "RETURN KEY" key

┌··┐
: **It is not necessary to reset options every time you turn on the machine.** :
└··┘

Standard Machine Operation

1. Utility stitches

□ Turn the machine on and press anywhere on the screen
□ Attach the "A" foot
□ Press the utility stitch icon

On screen are utility stitches

- Straight stitch with needle in left-side position
- Straight stitch with needle in center position
- Zigzag
- Blindhem
- Overedge
- Super stretch stitch
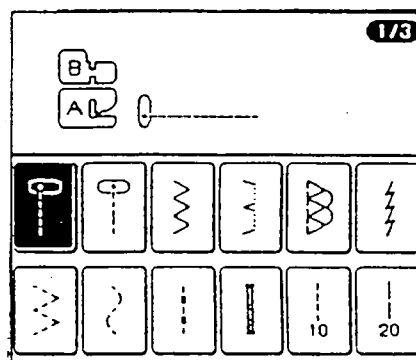
- Multi zigzag
- Serpentine stitch
- Running quilting stitch
- Bartack
- 10mm Basting
- 20mm Basting

Tension adjustment

Stitch width adjustment

Length adjustment

Exercise #1 - Running quilt stitch (Utility screen)

Singer patented feature

```
Every quilter needs the running quilt stitch
because
this stitch emulates "hand-sewn" quilting
```

- Press the running quilt stitch

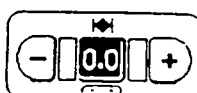- Place colored thread in the bobbin and monofil (or light weight thread) in the needle

- Change stitch length to 4mm (choice of 5 different lengths)

- Sew and no need to trim between stitches

```
Sewing application tip:

Use the circular stitch ruler with the
running quilt stitch to create unique designs.
```

Exercise #2 - Top-stitch, choice of 8 kinds (Utility screen)

❑ Use page-turning keys to advance to screen 3/3

❑ Press the top-stitch on the 2nd row, 5th stitch from left

❑ Sew - then clip the single running threads

❑ Each stitch is locked at beginning and end of stitch

> The **8 top stitches** give a professional finish to garments, quilts and crafts
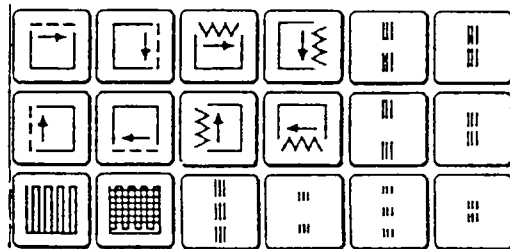
2. Buttonholes

Exercise #1 - Bar tack buttonhole

- Press utility icon

- Use the page-turning keys to advance to screen 2/3

- Press the third from the left, top row, bar tack buttonhole

- Place colored thread in top and bobbin

- Attach buttonhole foot "E" onto machine

- Fold the woven fabric in half, cross-wise, placing interfacing between layers

- Place fabric between foot and underplate

- Place button in buttonhole foot, push slide to set buttonhole length, remove button.

- Lower buttonhole lever and sew

- Machine will stop when buttonhole is complete, use thread cutter button

···

Exercise #2 - Stretch buttonhole

- Repeat the same procedure except:

- Choose the stretch buttonhole, second row, fifth stitch from the left

- Fold the knit fabric in half, cross-wise, placing interfacing between layers of fabric
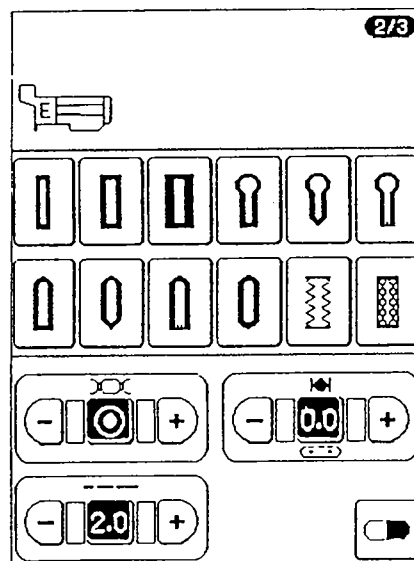
> **Special note:**
>
> Simply decreasing the stitch length can change the density of the zigzag stitches on any buttonhole. This will create a satin-looking buttonhole.

Samples of buttonholes:

Category Selection Screen

Large Motifs

Fun Faces

Fun Flowers

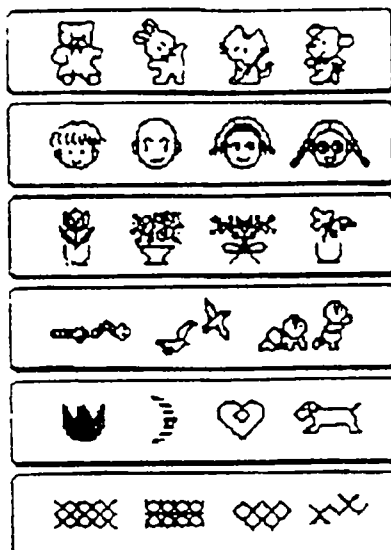**Animated Animals**

Decorative Stitches

Cross Stitch / Heirloom

❑ Turn the machine on, press anywhere on the screen

❑ Use the teflon foot "T"

❑ Press the "CROWN KEY" on the bottom bar

On screen are the six different categories

Large motifs (5 pages)

Fun faces

Fun flowers

Animated animals

Decorative stitches (4 pages)

Cross-stitches/heirloom (6 pages)

□ Press the large motif icon

On screen are large motifs 1/5
and pattern modifier keys
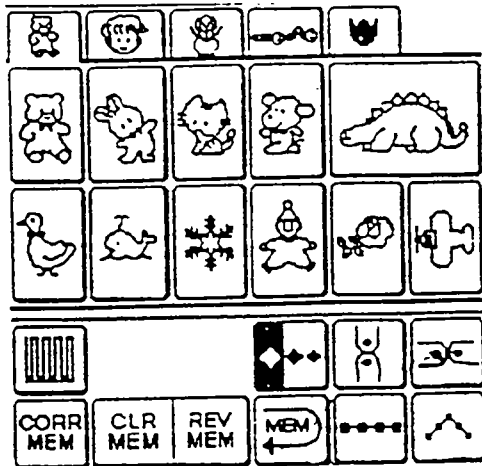
3 sizes: change the motif's size

Turn over key: turn over a motif or stitch

Mirror image key: mirror image a motif or stitch

Pattern position key: continuously position an element with a choice of six positions)

Repeat key: continuously repeat an element or a group of elements)

Memory return key: return to the beginning of memory sequence

Memory review: review elements in working memory

Memory clear: clear either an element or all elements in working memory; press key and hold 3 seconds to clear all elements

Correct memory: correct an element in memory

Balance key: balance a shape of a pattern

1. Large motifs

Exercise #1 - How to do three different size motifs

- ❏ Press the whale motif
- ❏ Press the 3 size key -until the largest size is highlighted
- ❏ Press the whale motif
- ❏ Press the 3 size key -until the middle size is highlighted

- ❏ Press the whale motif
- ❏ Press the 3 size key -until the smallest size is highlighted
- ❏ Top screen: three whales, each a different size
- ❏ Sew lengthwise across fabric
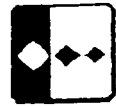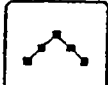
Exercise #2 - How to mirror-image a pattern

- Press "CLR MEM" until the whales are deleted

- Press the dinosaur motif

- Press the mirror-image key

- Press the dinosaur again

- Top screen: two dinosaurs facing one another

- Sew lengthwise across fabric
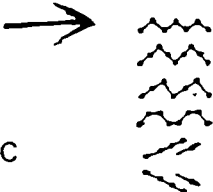
Exercise #3 - How to make a two-color motif

□ Press "CLR MEM" until the dinosaurs are deleted

□ Press page turning keys until screen 2/ 5 is shown
-all of the designs on this page can be sewn in two colors

□ Press the boat motif

□ Press the 3-size key until the largest size is chosen

□ Press the two-color key

□ Place a different color thread in the bobbin than in the needle
-the highlighted color on the screen is the bobbin thread.

□ Sew lengthwise across fabric

Exercise #4 - How to do pattern positioning

□ Press "CLR MEM" until the boat is deleted from the top screen

□ Press page turning keys until page 1/5 is shown

□ Press the plane motif

□ Press the 3-size key until the smallest size is chosen

□ Press the pattern position key
-top screen shows the different layouts

<u>Six different pattern layouts are available</u>
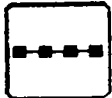
□ For this exercise press the pattern position key until this position appears:

Each press of
position key will
indicate a different
pattern layout.

□ Sew lengthwise across fabric

Special note:

**Only a single element can be used with the pattern position key.
That element can be enlarged, reduced,
mirror imaged or turned over.**

Exercise #5 - How to repeat a pattern

- Press the "CLR MEM" key until the plane is deleted

- Press snowflake motif from page 1/5   [❄]

- Press the bunny motif from page 1/5   [🐰]

- Press 3-size key until the largest size is chosen

- Press the repeat key

- Sew lengthwise across fabric

> ### The two motifs will repeat indefinitely.
> ### A sequence of up to 40 elements can be repeated.

> **Tip:**
>
> **Press the key a second time to deactivate the repeat.**
> **The machine will finish sewing the pattern sequence and stop.**
> **Very helpful feature.**

Exercise #6 - Balancing the shape of a pattern

It is recommended that a test sample of a chosen pattern be sewn using the same fabric, interfacing and thread before sewing on the finished project.

The balancing key is found on the screen.

▫ Press "CLR MEM" until all patterns are deleted from the top screen

▫ Press the balance key and begin to sew a complete trial pattern

▫ The bottom row of stitches should be horizontally lined up

▫ Adjust the stitch balance dial up if the stitches are angled up from left to right

▫ Adjust the stitch balance dial down if the stitches are angled down from left to right

▫ Continue to adjust and sew the trial pattern until the bottom row of stitches are horizontally lined up

Correct balance

Horizontal

Incorrect balance

Right side up

Turn stitch balance control up.

Incorrect balance

Right side down
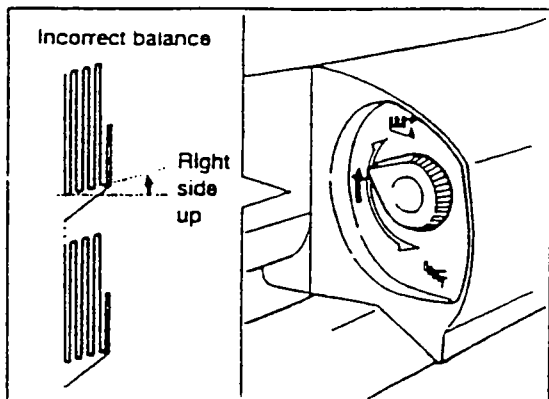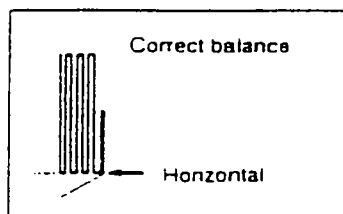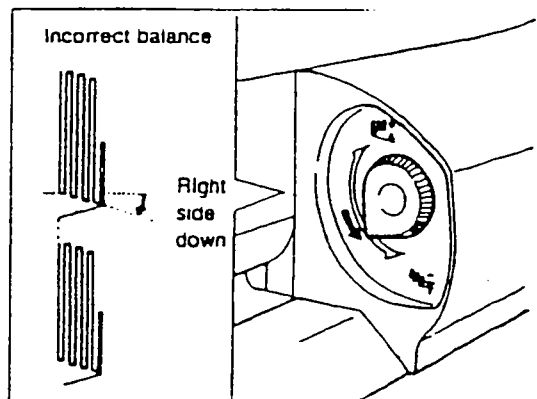
Turn stitch balance control down.

2. Fun faces

Exercise - How to create a fun face

□ Press "CLR MEM" until everything on top screen is deleted

□ Press the "FUN FACE" icon at the top of the LCD screen.
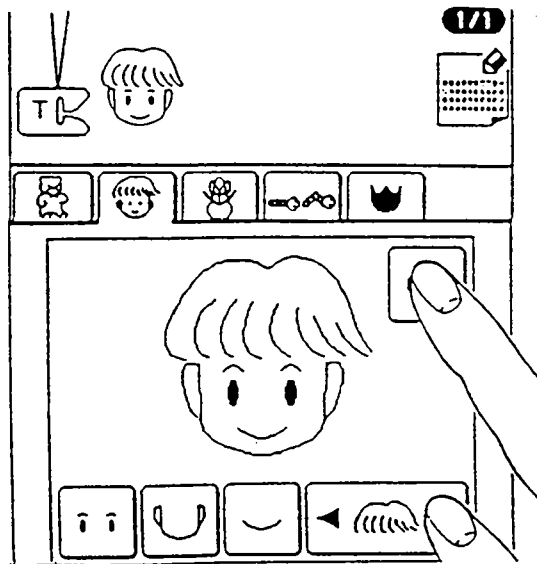
□ Create a face by changing the hair, the shape of the mouth, shape of the chin, and the eyes.

□ Use the arrow keys next to "HAIR" to see the 24 different hair choices

□ Press the MOUTH icon to see the 4 different mouth choices

□ Press the CHIN icon to see the 4 different chin choices

□ Press the EYE icon to see the 6 different eye choices

□ After finishing selection for the fun face, press "OK" -selected fun face is placed in working memory

□ Sew in the center of the fabric

3. Fun flowers

Exercise - How to create a fun flower

□ Press "CLR MEM" until your fun face is deleted from top screen

□ Press the "FUN FLOWER" icon at the top of the LCD screen
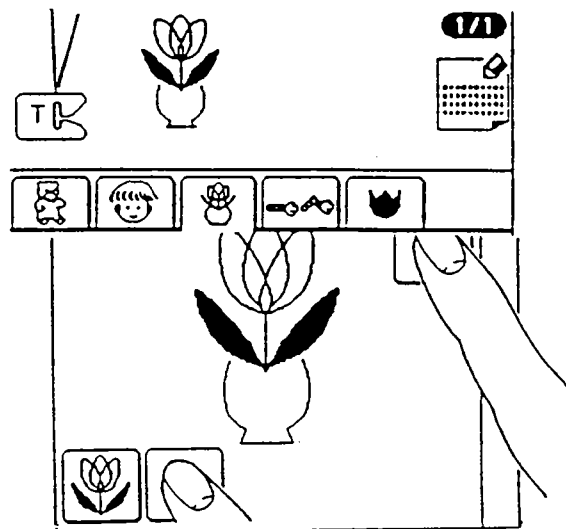
□ Create your own flower montage by changing the flowers and their basket.

□ Press the "FLOWER" icon to see the 5 different flower choices.

□ Press the "BASKET" icon to see the 3 different basket and bow choices.

□ After finishing selection for the fun face, press "OK"
   - selected fun flower is placed in working memory.

□ Sew in the center of the fabric

4. Animated animals

Exercise - How to make the animated animals

□ Press "CLR MEM" until your fun flower is deleted from the top screen

□ Press the "WORM" icon at the top of the LCD screen
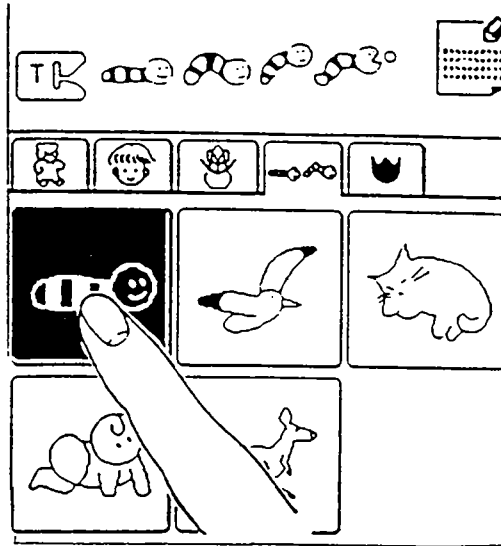
□ Press the large worm on left of the screen

□ Notice that the worms appear to be crawling.......
they are animate

□ Press the repeat key, and now the worms will sew continuously

□ Sew a row of worms length-wise across the fabric

5. Decorative stitches

Exercise #1 - How to elongate a stitch

❑ Press "CLR MEM" until the worms are deleted from the top screen

❑ Press the "CROWN" icon on the top of the LCD screen
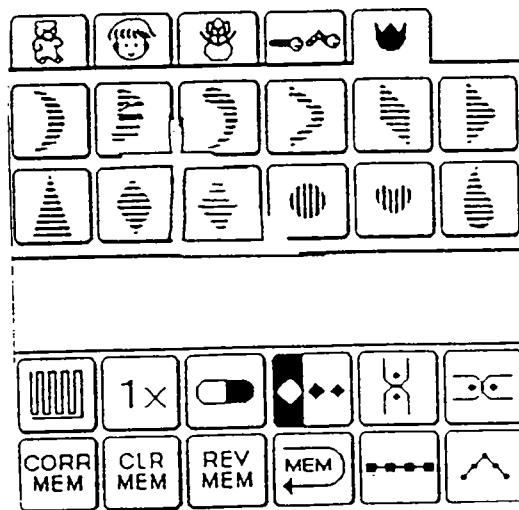
❑ Press the crescent from the first screen, first row, first stitch

❑ Press the crescent again

❑ Press the "1x" icon until it reads "2x"

❑ Press crescent, and then press 1x icon until it reads "3x"
❑ Press crescent, and then press 1x icon until it reads "4x"
❑ Press crescent, and then press 1x icon until it reads "5x"

❑ Sew lengthwise across the fabric

**Elongation of a design
Without losing the design's density**

**Note:
The stitch will not appear elongated on top screen**

Exercise #2 - How to do two color continuous sewing

❑ Press the "CLR MEM" until the crescent stitches are deleted from the top screen

❑ Press the filled-in heart (first screen, second row, fifth stitch from the left)

❑ Press the tension key on the bottom bar; a pop-up screen will appear

❑ Change the length to .3 on the pop-up screen

❑ Decrease the tension by one touch on the pop-up screen

❑ Press the tension key again, to eliminate the pop-up screen

❑ Press two-color sewing icon

❑ Place a different color of thread in the bobbin than the needle thread

❑ Sew lengthwise across fabric

Exercise #3 - How to turn over a stitch

▢ Press "CLR MEM" until hearts are deleted from the top screen

▢ Press "PAGE TURNING" keys until page 2/4 appears

▢ Press the "moustache-looking" stitch, from the second row, fifth stitch from left

▢ Press the turn over key

▢ Press the moustache again

▢ Press the repeat key
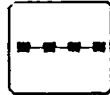
▢ Sew lengthwise across the fabric

> **Note:**
>
> **A new stitch is created**

6. CROSS-STITCHES AND HEIRLOOM

- ☐ Press "CLR MEM" until the top screen is clear

- ☐ Press the "CROWN" icon at the bottom bar

- ☐ Press the last icon on the bottom of the category selection screen. This is the cross- and heirloom stitch category

On screen are cross- and heirloom stitches

	Overedge	Feather	Single cross

Pin stitch

Entredeux

Turkish hem

Blanket
Binding
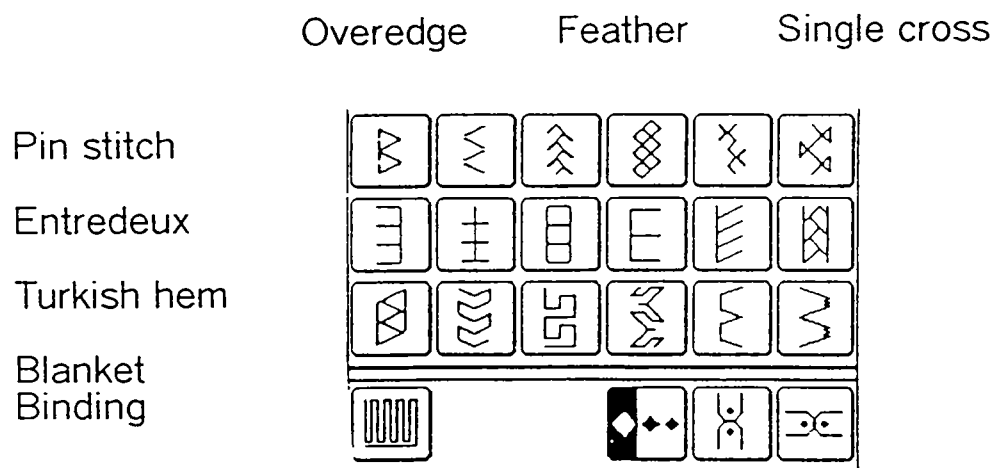
All these stitches can be modified

three sizes (7, 5 and 4 mm)
turn over
mirror image

Exercise #1 - How to use the pin stitch to applique

Fabric preparation:

❑ Fuse a heart shaped piece of fabric onto a 4"x 4" piece of background fabric

....

❑ Press the PIN STITCH, first page, second row, first stitch

❑ Press "3-size" icon until the smallest size is highlighted

❑ Sew around the heart

This is a popular way to create a "hand-sewn" applique
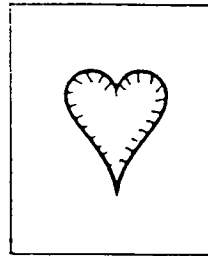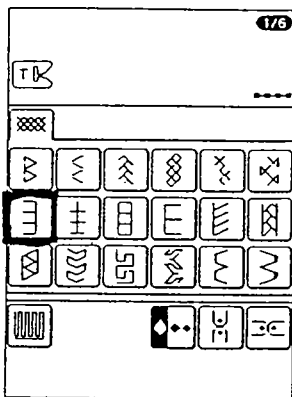
Exercise #2 - How to use the entredeux stitch to insert lace

❑ Attach the "I" foot and insert wing needle (found in white accessory pouch)

Remember not to use the needle threader or the auto thread cutter when using the wing needle

❑ Press the ENTREDEUX stitch - first page, second row, second stitch from the right

❑ Press the "3 size" key until the smallest size is darkened

❑ Place the lace on top and in the center of the linen-like fabric, and sew the ENTREDEUX stitch twice.
Once on the right side of the lace, the second time on the left side of the lace.

❑ After sewing, trim the woven fabric that is behind the lace.

The ENTREDEUX is a must for heirloom sewing
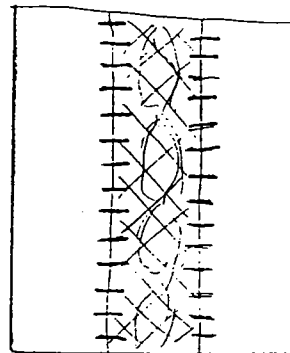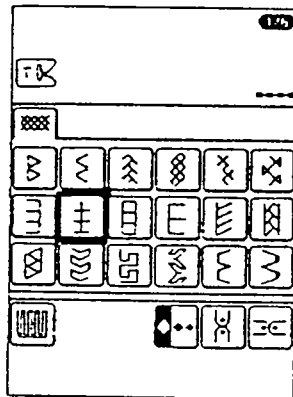
Exercise #3 - How to use the blanket binding stitch

Fabric preparation:

- Place two layers of wash-away solvy under the fleece, the solvy should extend about 1 inch beyond the fleece

···

- Press the BLANKET BINDING stitch; first page, second row, fourth from the left

- Press "3 size" icon until the largest size is darkened

- Place top stitching thread in the bobbin and in needle

- Sew on the edge of the fleece

- When finished remove the solvy

Note: a size 16 needle works great!

```
This is a popular method to create a binding
```
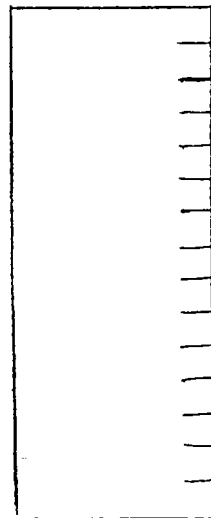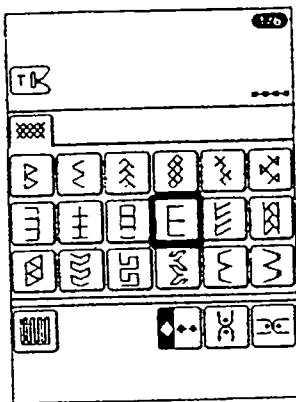
Built-in Alphabet

☐ Turn machine on, and touch anywhere on the screen

☐ Press the A-B-C key on the bottom bar

On screen are three styles of alphabet

Block letters
7mm tall

Satin script letters
15 and 25 mm tall

Script letters
7mm tall
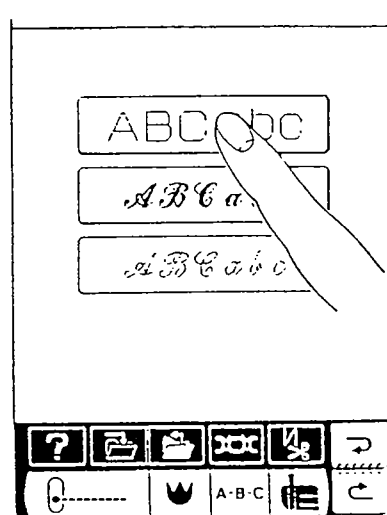
Exercise #1 - How to use the built-in block alphabet

❑ Press the block ABC abc

<u>On screen is alphabet</u>

Each style of alphabet will have its screen.

Memory
Icon

Folders

Upper case   Lower case   Punctuations   Foreign
letters   letters   fonts
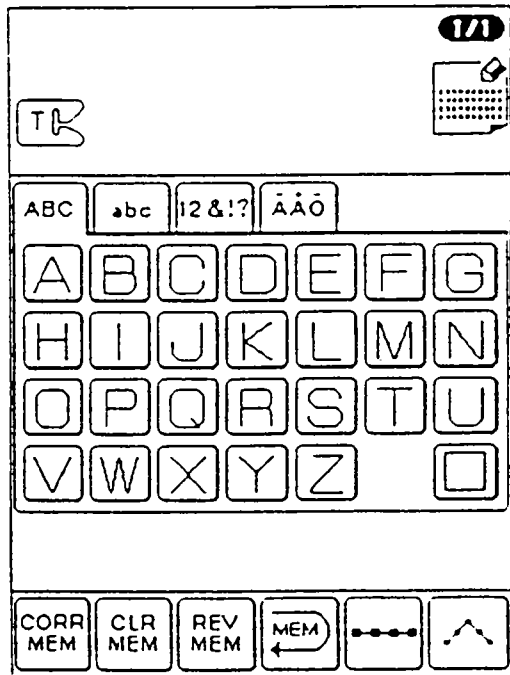
<u>Pattern position key </u>(use
to continuously position
a single letter; a choice of
six positions)

<u>Repeat key </u>(use to continuously
repeat a letter, a word or a
group of words)

<u>Memory return key </u>(use to
return to beginning of memory
sequence)

<u>Memory review key </u>(use to
review elements in working
memory)

<u>Memory clear </u>(use to clear
either a single letter or all
letters in working memory;
press key and hold for 3
seconds to clear all letters)

<u>Correct memory</u> (use to correct
a letter in memory)

Combination Embroidery and Permanent Memory

1. Combine embroidery designs

Combination embroidery is used to join various elements within one hoop.
Sample illustrates how the machine can combine built-in embroidery designs, embroidery cards and/or scanner cards - all within a single hoop.

Exercise - How to do COMBINATION EMBROIDERY

Built-in borders

Built-in alphabet

Import from
Embroidery card

Finished design
is the size of the large hoop

❑ Attach the embroidery unit to the machine
   - remember to have the machine turned off

❑ Attach the large hoop and turn machine on.

❑ Attach the "J" embroidery foot

❑ There are two ways to take the machine into the embroidery mode:

   1. Push the embroidery key
              or
   2. Touch anywhere on the screen saver

❑ Follow the "on-screen" instructions for raising presser foot and needle

❑ Screen will ask to properly position the carriage. When "OK" is pushed, the machine will automatically center the embroidery hoop.

❑ Screen appears showing the two types of embroidery
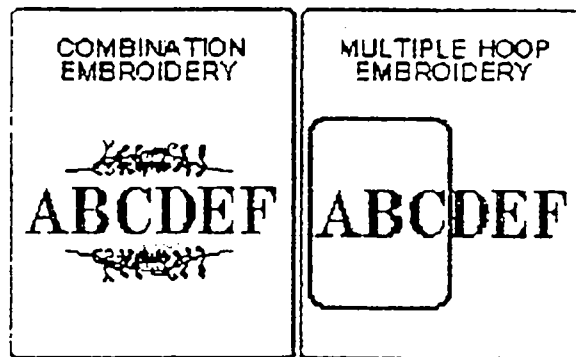
❑ Press COMBINATION EMBROIDERY

❑ Screen appears

《COMBINATION EMBROIDERY》
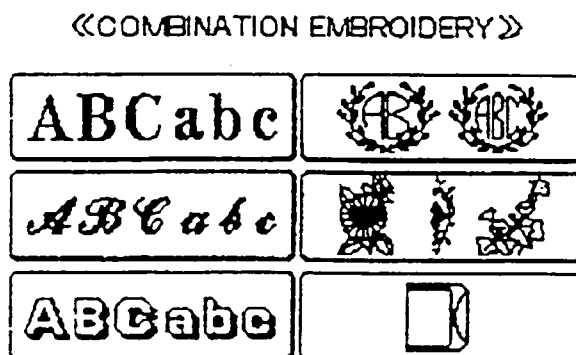
On screen different pattern categories

Block alphabet

Script alphabet

Euro alphabet

«COMBINATION EMBROIDERY»

A B C b c

A B C

ⒶⒷⒸⓐⓑ
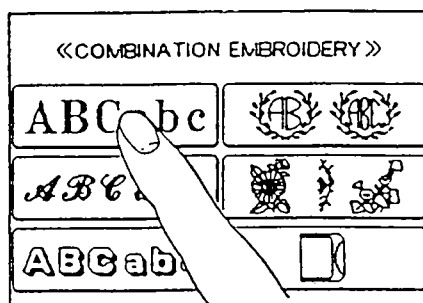
Monogram

Flowers and borders

Embroidery or
    scanner card

Special Note:

Card #1 (small alphabet) and #5 (larger alphabet) are built into the machine, just as is card #12 (monogram)

All cards from the XL-100 will work with the XL-1000.

❑ Press _____ (script alphabet)

On screen script alphabet

Memory icon
(holds up to 40 elements)

Folders

Upper case   Lower case   Punctuation   Foreign
letters ·   letters   fonts

```
┌─────────────────────────────────┐
│                          ⬤·⬤    │
│                          ╭───✐  │
│                          │▦▦▦│   │
│   ☞                      │▦▦▦│   │
│                          ╰────╯  │
│  ┌────┬────┬─────┬─────┐         │
│  │ABC │abo │12Δ!?│ÅÄÖ  │         │
│  ├────┴────┴─────┴─────┤         │
│  │ A  B  C  D  E  F  G │         │
│  │ X  I  J  H  L  M  N │         │
│  │ O  P  Q  R  S  T  U │         │
│  │ V  W  X  Y  Z      □│  ←── Space│
│  └─────────────────────┘         │
│                                  │
│  ┌──┬────┬────┐    ┌────┬────┐   │
│  │▞ │CLR │REV │    │ENTER│ ↵ │   │
│  │  │MEM │MEM │    │     │   │   │
│  └──┴────┴────┘    └────┴────┘   │
└─────────────────────────────────┘
```
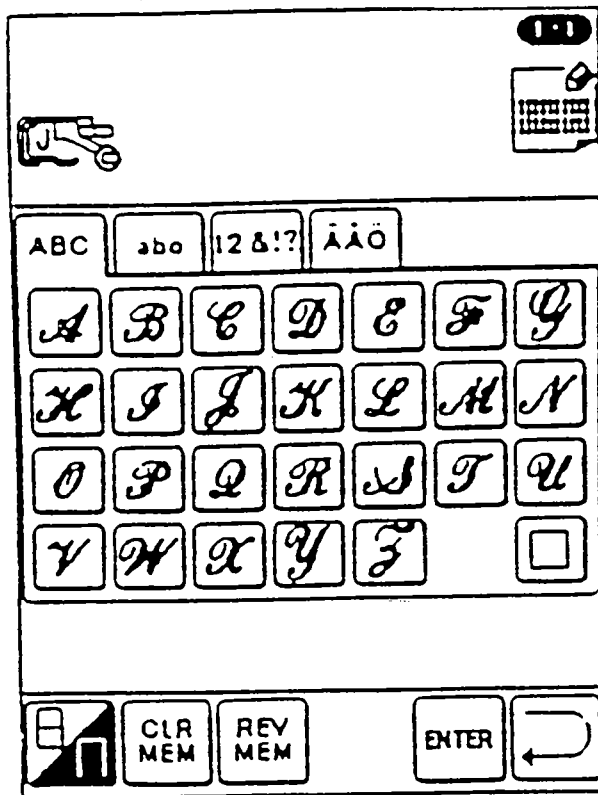
Review memory (use to see all the items in working memory)

Clear (use to delete letters)

Direction icon (the ability to sew letters horizontally or vertically)

┌──┐
│ **The direction that is highlighted will be the direction the** │
│ **machine will sew the letters** │
└──┘

- Press the upper case "S"

- Press the lower case folder

- Press "inger"

- Press "ENTER"

"Singer" is now transferred to the layout or working memory

<u>Color clock</u> - time to sew particular color/part of the pattern

<u>Total clock</u> - time it takes to sew the entire highlighted pattern

<u>Designs dimension</u> - size of the design

<u>Hoop</u> - large, medium, or small installed

<u>Trash can</u> - to delete entire design (all elements)

<u>Return key</u> - return to last section

<u>Combi</u> - combine or add elements to a design

<u>Range -</u> test the size of the design

<u>Help</u> - open the help screen

<u>Review memory</u> - review what is in that memory

<u>Edit</u> - manipulate the design: rotate, move, change size etc.

❑ Press "EDIT" - to edit or change the size of the letters

❑ Press "SIZE/SPACE"

❑ Press "+" until 25mm appears

Choice of 8 different sizes
Letter sizes can be:
7, 10, 15, 20, 25, 30, 35 or 40 mm.

❑ Press "POSIT END" - finished adjusting the size of the letters

❑ Press "POSITION/ROTATE" - to move the letters

❑ Press ↑ ARROW KEY until "Singer" is about one third from the top of the screen
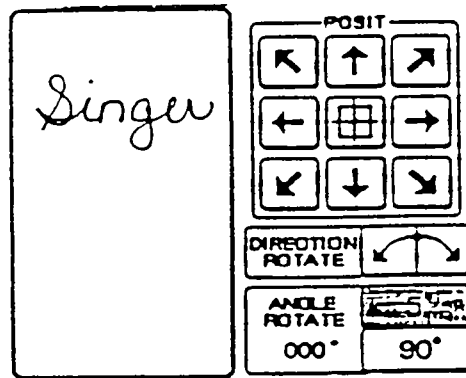
❑ Press "POSIT END" - finished moving the design

❑ Press "EDIT END" - finished editing this sign

❑ Press "COMBI" - to combine "Singer" with other designs

□ Press "COMBI" - the screen showing the different items that can be combined appears

《COMBINATION EMBROIDERY》

ABCabc

𝒜ℬ𝒞 𝒶 𝒷 𝒸

ⒶⒷⒸⓐⓑⓒ
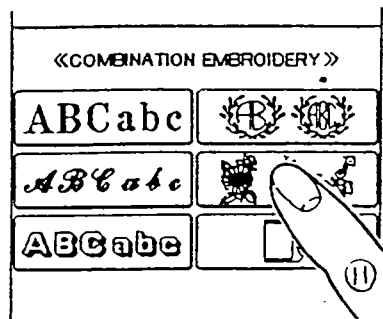
□ Press the "FLOWER/BORDER" icon

On screen the flowers and borders

3 different folders

Big single flower designs - 2 pages for a total of 8 flowers

Borders - 5 pages for a total of 28 borders

Flower groupings - page for a total of 5 groupings

REV STEP   ENTER
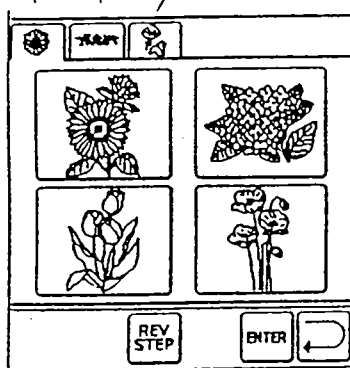
Remember:
Back-up key will return you to the previous section.
Page turning keys will turn the pages within a section.

FABULOUS FLOWERS and BORDERS

Continue building the design.
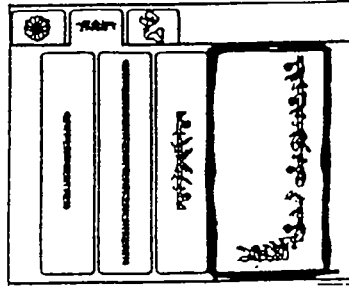
- Press center "BORDER" folder

- Use "PAGE-TURNING" keys to proceed to page 5/5

- Choose last border on right

- Press "ENTER"

- Press "EDIT" - to change or edit this border

- Press "POSITION/ROTATE" to move the border

- Use "ARROW KEY" - to move the border as far right as possible (machine will beep when you have reached the sewing limits)

- Press "POSIT END" - finished moving the border

- Press "EDIT END" - finished editing this border

■■■

Add the same border, but move it to the other side and rotate it.

- Press "COMBI" - to combine with another design

- Press FLOWER/BORDER icon

- Press BORDER folder

- Use "PAGE-TURNING" keys to proceed to page 5/5

- Choose last border on the right

- Press "ENTER"

- Press "EDIT"

- Press "POSITION/ROTATE"

- Press 90-degree, and press the direction of rotation to the left ✔ once. The angle of rotation reads "180"

The XL-1000 has the capability to rotate
a design in either 90 or 5-degree increments.
It also can rotate to the right or to the left.

Special note:

If you try to rotate a design that is close to the frame or too big,
the machine might not accept a 90-degree rotation.
It would force the design to be sewn outside the hoop.
Since sewing outside the hoop is impossible,
the machine rejects the 90-degree rotation and automatically will
try the acceptable degree that will fit in the hoop sewing area.

□ Press "POSIT END"

□ Press "POSITION/ROTATE"

□ Use "ARROW KEY" - to move the border as far left as possible

□ Press "POSIT END"

□ Press "EDIT END"

Add a design from an embroidery card.

**When inserting or removing an embroidery card the machine
does <u>NOT</u> need to be turned off**

□ Press "COMBI"

□ Insert embroidery card

□ Press EMBROIDERY CARD icon
Use "PAGE-TURNING" keys to proceed through designs

□ Select the embroidery design of your choice

□ Press "ENTER"

□ Press "EDIT"

❑ Press "POSITION/ROTATE"

❑ Press "ARROW KEYS" to position design below "Singer"

❑ Press "POSIT END"

❑ Press "EDIT END"

❑ Press "COMBI END" and begin sewing
   If the design looks as desired

The design can still be changed, before sewing it out.

How to change an element in the design.

❑ Press "EDIT"

❑ Press "NEXT PATTERN" until the pattern that you wish to change is highlighted (darker than all other patterns)

❑ Options will appear: "POSITION/ROTATE"- "SIZE/SPACE" - "MIRROR"

To delete an element

❑ Press the "TRASH CAN" to the right of "NEXT PATTERN". Only the element that is highlighted will be deleted.

❑ Message "DELETE PATTERN" - press "YES"

❑ Message "DELETE COMPLETED" - press "OK"

To add an element

❑ Press "COMBI" and proceed adding other elements.

❑ When all changes are made
   Press "EDIT END"

❑ Press "COMBI END" and start to sew.

2. Place design into permanent Memory

Exercise - Place the created COMBINATION DESIGN into PERMANENT MEMORY

❑ Press the "IN"-file folder key on the bottom bar

On screen are Memory Folders
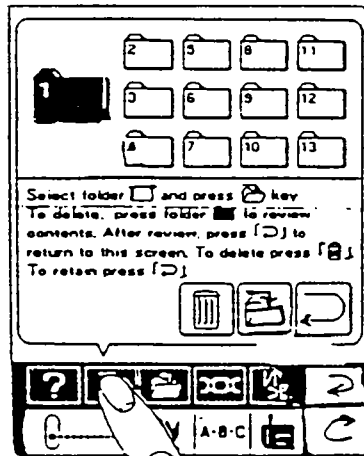
Trash can - to delete a design from memory folder

"IN"-file folder - to place a design into memory folder

Return key - return to last section

Screen shows 13 different file folders where designs can be stored. If the folder is darkened, then there is something already in that folder.

❑ Press an empty file folder

❑ Press the "IN"-file folder icon on screen

❑ Save completed, press "OK"

When you press "OK", your design will be held for 99 years or until you remove the design.

Advancing or Repeating Colors in Embroidery

> **The XL-1000 has the ability
> to advance or to repeat a particular
> color or segment in a design.**

Exercise - Advance past colors

☐ Attach the embroidery unit to the machine
Remember to have the machine turned off

☐ Attach the large hoop and turn the machine on

☐ Press anywhere on the LCD screen

☐ Press "OK" for carriage to move

☐ Press "COMBINATION EMBROIDERY"

☐ Press the "FLOWER/BORDER" icon

☐ Use "PAGE TURNING" key to proceed to page 2/2

☐ Choose the Rose

☐ Press "ENTER"

☐ To skip or advance to the third color of this design

☐ Press the "HELP" key

☐ Press the "SEL STEP" key

☐ A "POP-UP" screen will allow you to advance steps/colors

On screen is "SEL STEP" and "POP-UP"
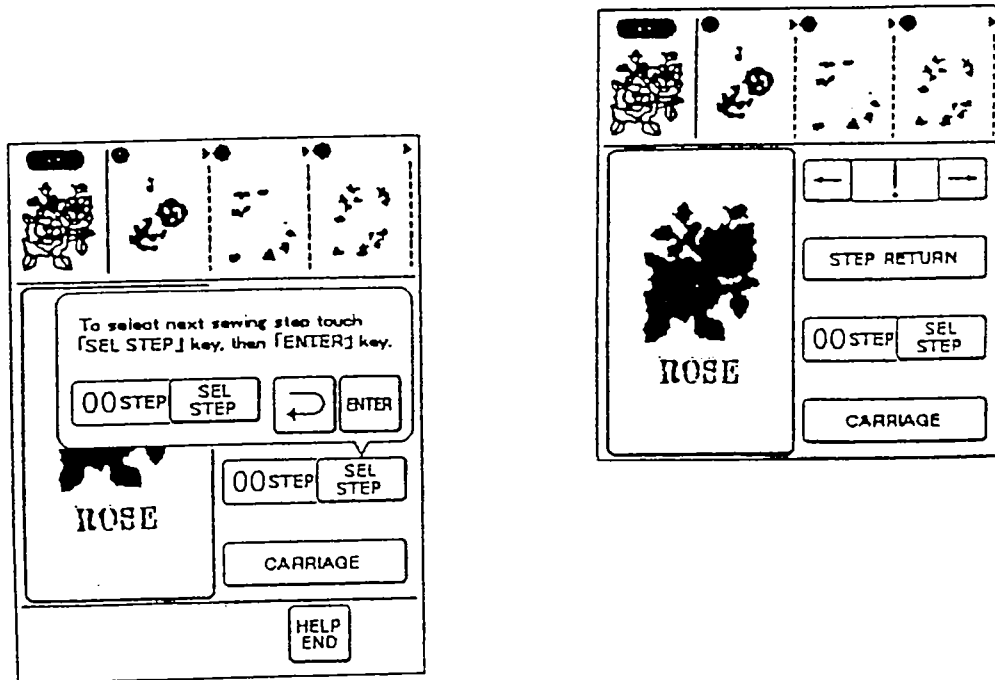
ENTER - after step election

STEP RETURN - key return to previous page

SEL STEP - selection of step or color

STEP - shows the step or color number to be sewn; the number will advance as the "SEL STEP" key is pushed

Carriage - to bring the embroidery unit carriage back to center; this is sometimes necessary when using the needle threader. Depending on the design, occasionally the carriage will move the hoop to the edges. The needle threader may hit the hoop, making it impossible to use. By pushing "CARRIAGE" the hoop moves to a position that the needle threader can be used.)

HELP END - only when finished with advancing steps or colors

❑ Press "SEL STEP" on "POP-UP" screen, until the number 3 appears next to "STEP" icon

❑ Press "ENTER"
The machine will sew only step 3 of the rose

To sew color 4

❑ Press "SEL STEP" on "POP-UP" screen, until the number 4 appears next to "STEP" icon

❑ Press "ENTER"
The machine will sew only step 4 of the rose

To sew color 1

❑ Press "SEL STEP" on "POP-UP" screen, until the number 1 appears next to "STEP" icon

❑ Press "ENTER"
The machine will sew only step 1 of the rose

Special note:

**Once the "SEL STEP" feature has been used, the remaining steps has to be entered using the "SEL STEP".
They will NOT advance automatically**
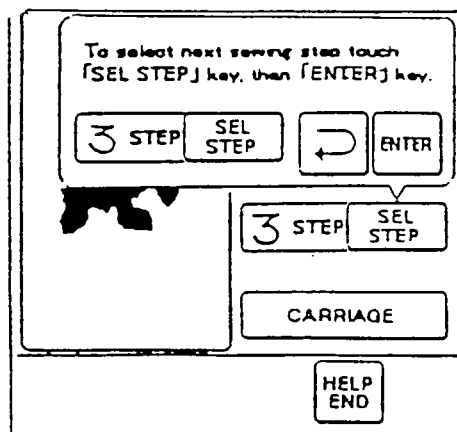
Multiple Hoop Embroidery

**Large designs are easily accomplished
with the multiple hoop embroidery function,
when patterns are too big to fit within a single hoop.**

Exercise - How to do multiple hoop embroidery

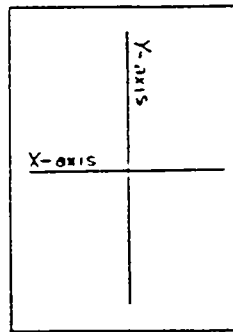Fabric preparation

A multi-hoop with 4 quadrants requires a piece of fabric that is at least 24 x 16 inches

□ Draw with a water-soluble or disappearing ink pen, a long horizontal line across the center of the fabric

□ Draw a long vertical line across the center of the fabric

The two lines should intersect in the center of the fabric and should meet at a 90-degree angle

□ With machine turned off, install the embroidery unit and large hoop, then turn machine on

□ Attach the "J" embroidery foot

□ Press anywhere on the screen or press the embroidery key

□ Press "OK" for the carriage to move

□ Press "MULTIPLE HOOP EMBROIDERY" icon

The first element will be the letters:

□ Press ABCabc

□ Press vertical-sewing position
Use this key to select the direction the letters will be sewn

□ Type "HOME" in upper case block letters, then "ENTER"

- Press "EDIT"

- Press "SIZE/SPACE"

- Press "+" to change the size to 40mm
  Letters enlarge in increments of 5

- Press "POSIT END"

- Press "POSITION/ROTATE"

- Press "ARROWS" to move "HOME"

- Press "POSIT END", "EDIT END", "COMBI"

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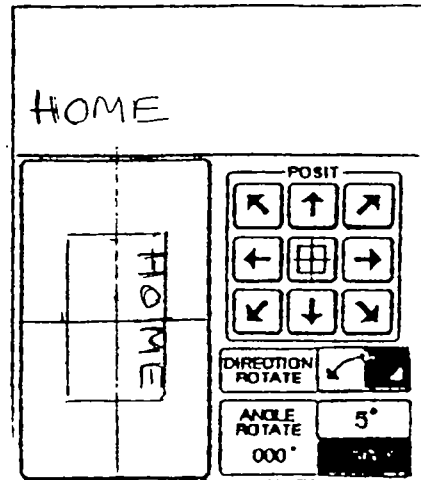
- Select ABCabc

- Press vertical-direction sewing

- Press lower case folder

- Type "for the" in lower case block letters
  Space is at lower right side - looks like an empty box.

- Press "ENTER"

- Press "EDIT", press "SIZE/SPACE", change size to 30mm

- Press "POSIT END", "EDIT END", "COMBI"

····································

- Select ABCabc

- Press vertical-direction sewing

- Type in "HOLIDAYS" in block letters

- Press "ENTER"

- Press "EDIT", press "SIZE/SPACE",

- Press "POSIT END"   change size to 40mm
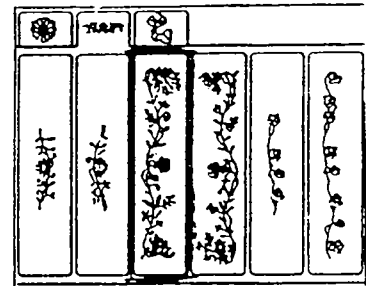
- Press "POSITION/ROTATE"
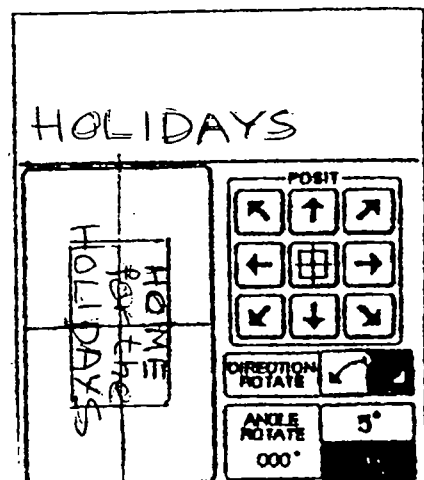
□ Press "ARROWS" to move "HOLIDAYS" as shown

□ Press "POSIT END", "EDIT END" and "COMBI"

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Adding the borders in 6 sections

Section 1
□ Press the FLOWER/BORDER icon

□ Press BORDER folder

□ Choose the third border from left on the first screen "ENTER"

□ Press "EDIT"

□ Press "MIRROR"

□ Press "POSITION/ROTATE"

□ Press "ARROW KEYS" to move the border to the upper most right corner

□ Press "POSIT END", "EDIT END" and "COMBI"

···

Section 2
□ Press the FLOWER/BORDER icon

□ Press BORDER folder

□ Choose the third border from left on first screen "ENTER"

□ Press "EDIT"

□ Press "POSITION/ROTATE"

□ Press "ARROW KEYS" to move the border to the upper most left corner.

□ Press "POSIT END", "EDIT END" and "COMBI"

···

Section 3
□ Press the FLOWER/BORDER icon

- Press BORDER folder

- Choose the third border from left on the first screen "ENTER"

- Press "EDIT"

- Press "POSITION /ROTATE"

- Press 90-degree

- Press ⬎ right direction. Reads ANGLE ROTATE 180-degree

- Press "POSIT END"

- Press "POSITION/ROTATE"

- Press "ARROW KEYS" to move the border to the <u>lower most right corner</u>

- Press "POSIT END", "EDIT END" and "COMBI"

···

Section 4
- Press the FLOWER/BORDER icon

- Press BORDER folder

- Choose the third border from left on the first screen "ENTER"

- Press "EDIT"

- Press "MIRROR"

- Press "POSITION /ROTATE"

- Press 90-degree

- Press ⬎ right direction. Reads ANGLE ROTATE 180-degree

- Press "POSIT END"

- Press "POSITION/ROTATE"

- Press "ARROW KEYS" to move the border to the <u>lower most left corner</u>

◻ Press "POSIT END", "EDIT END" and "COMBI"

··

Section 5
◻ Press the FLOWER/BORDER icon

◻ Press BORDER folder

◻ Choose the second border from left on the first screen "ENTER"

◻ Press "EDIT"

◻ Press "POSITION/ROTATE"

◻ Press 90-degree

◻ Press ⬂ right direction. Reads ANGLE ROTATE 90-degree

◻ Press "POSIT END"

◻ Press "POSITION/ROTATE"

◻ Press "ARROW KEYS" to move the border to the center bottom position

◻ Press "POSIT END", "EDIT END" and "COMBI"

··

Section 6
◻ Press the FLOWER/BORDER icon

◻ Press BORDER folder

◻ Choose the second border from left on first screen "ENTER"

◻ Press "EDIT"

◻ Press "POSITION/ROTATE"

◻ Press 90-degree

◻ Press ⬋ left direction. Reads ANGLE ROTATE 90-degree

◻ Press "POSIT END"

□ Press "POSITION/ROTATE"

□ Press "ARROW KEYS" to move the border to the <u>center top position</u>

□ Press "POSIT END", "EDIT END"

■■■••

□ Press "EDIT"

□ Press "ZOOM" and touch the screen at the corner where any two borders meet.

On screen the zoom function

> **Zoom function is used to get a close-up view.**
> **To enlarge a selected area for a more detailed visual check.**
> **A very valuable tool for editing a design.**
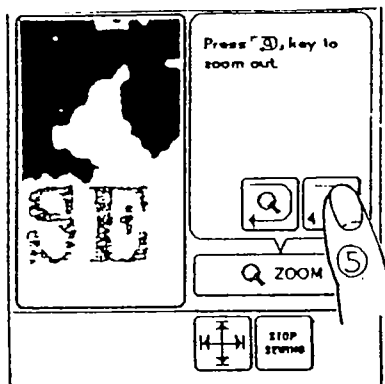
<u>Return key</u> - to return to the previous screen. In this case the screen with "POSITION/ROTATE". Very helpful to be able to move an element while in the zoom mode.
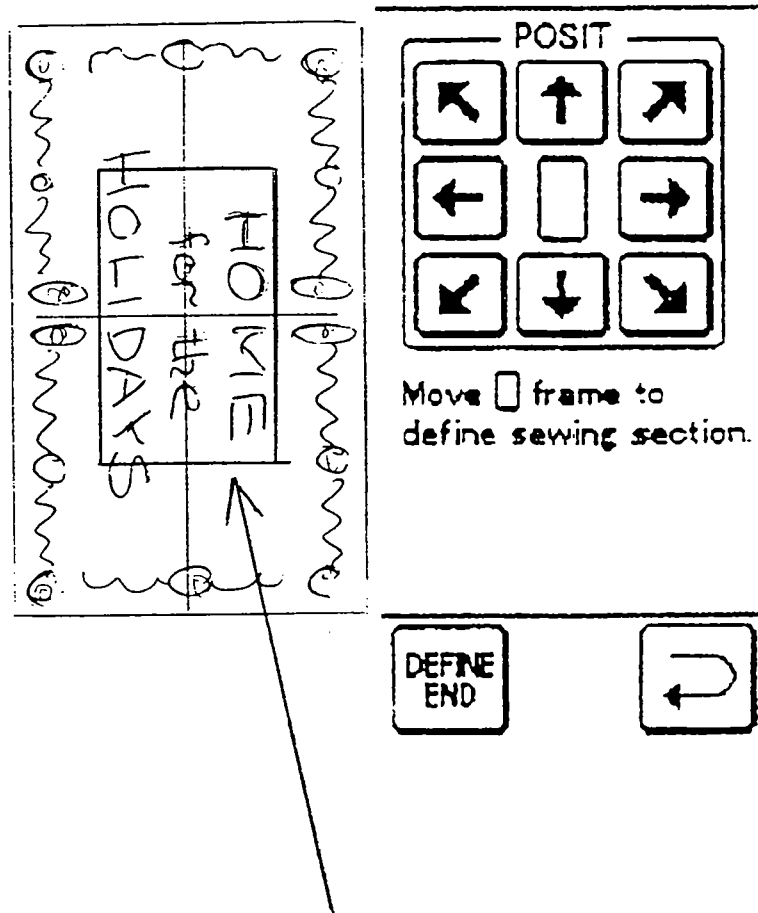
<u>Zoom-out key</u> - to return to previous touch screen

> **Note:**
> **Touch zoom and get up close.**
> **Touch zoom again and get even closer.**
> **Touch zoom a third time and needle penetrations**
> **are visible for detail editing.**

□ Press "EDIT END" when finished with changes

□ Press "MULTI-HOOP END"

On screen how to define hoop placement

This screen will ask where the frame (on screen) should be defined. Right now it shows it defining the center of the design.

By using the "ARROW KEYS" the frame can be moved anywhere on the design to define the area to be sewn first.

Your screen represents your fabric - with the lines at a 90-degree drawn on it

The frame on the screen represents the area that can be sewn in a single hoop placement. It is moved from section to section until the entire project has been sewn. Depending on how large the project is will determine how many frame placements are needed.

The design is 20 x 12 inches and will not fit into one hoop, and several hoop placements are needed to cover the entire design. This used to be a very tedious exercise that required a great deal of skill and luck. Now it is made simple.

For this exercise we need 6 frame/hoop placements:
Individual hoop placement shown on page 61 and 62
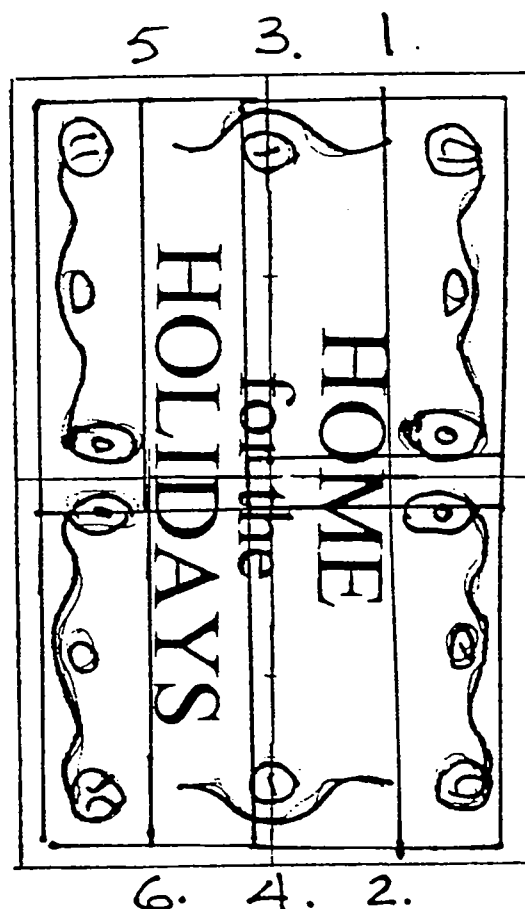
**Do not be concerned if an element is only partially in the frame.
The XL-1000 will only sew designs that it can complete. It will
not attempt to sew only _part_ of a design.
It will sew part of a _word_, but not part of a _letter._
It will remember what has been sewn
and will not attempt to sew the letter or element again.
When placing the frame do not be concern with overlapping.**

□ Press the "ARROW KEYS" so that the frame moves to a position like the one below:

Move ☐ frame to define sewing section.
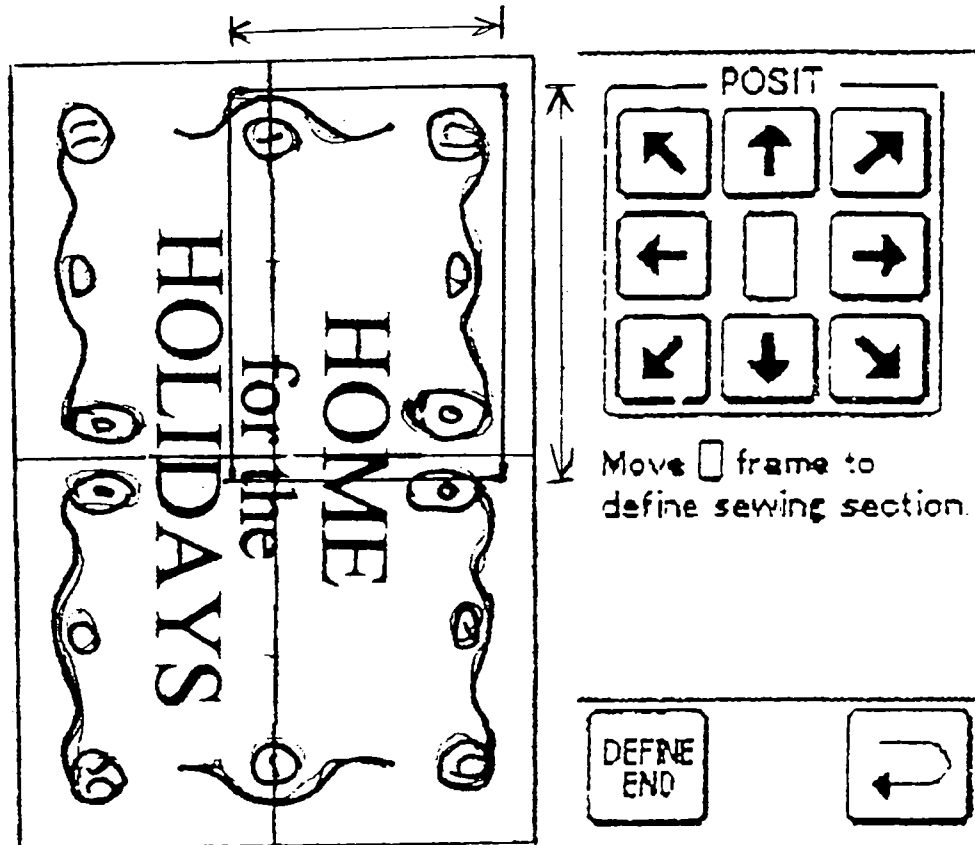
□ Press "DEFINE END"

The screen now shows just the area that will be sewn in the first frame/hoop placement. The X and Y lines on the screen are used as guide lines. Hoop your fabric similar to the display on the screen regarding placement of those lines within the frame.


Refer to the LCD screen when securing material in embroidery frame.
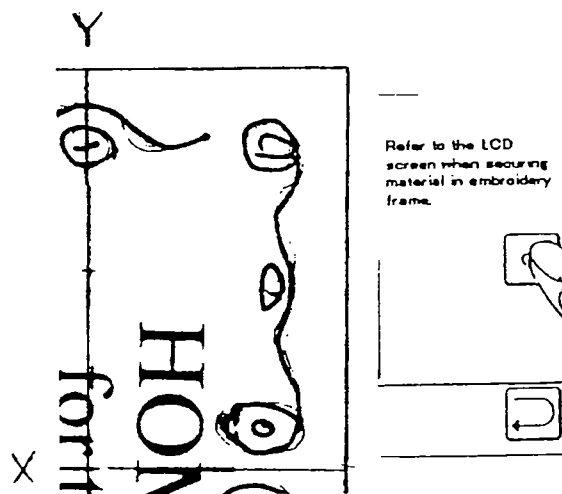
□ Hoop fabric

□ Insert the hoop

□ Press "OK"

Triangle marks
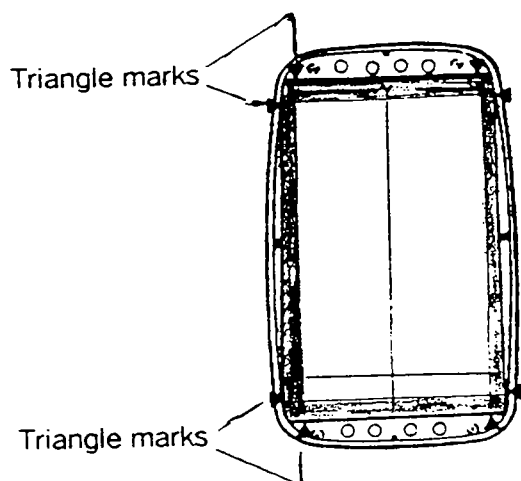
Triangle marks

When securing material in
embroidery frame, take
care to install it so that
vertical and lateral
marker lines on material
align inside triangle marks
on frame. (see page 95 for
preparation of material and
marking of lines)

After securing material in
frame, press [✕] key.
Attach embroidery frame
on embroidery frame holder

The machine needs to know where the fabric is in the hoop and
that is what the lines are used for

Touch the screen on the lower left portion on or near the X line -
a dot will appear on the screen where you touched it and the hoop
will move placing the needle close to the X line.

Turn handwheel to check that needle entry point is on the X line

Use ARROW KEYS to adjust so needle entry is ON the line and
check it is properly placed turning the handwheel to lower needle
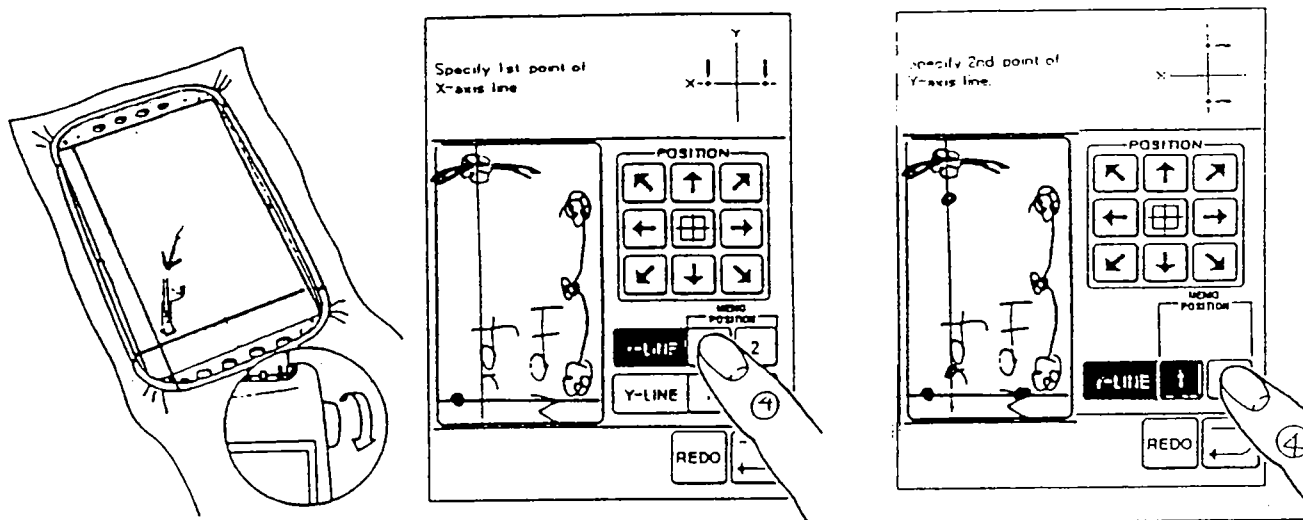
When the needle is on the X line
Press "X-LINE" MEMO POSITION 1
The first of two points the machine needs in order to record X line

Touch the screen on the lower right hand side of the X line and
align the second needle position as above using ARROW KEYS
and checking needle entry is ON the X line turning the handwheel

Press "X-LINE" MEMO POSITION 2
X-LINE MEMO POSITION 1 - 2 disappear from the screen
The location of the line is recorded in the machine

Record the Y-LINE
Touch the screen approximately at the place where you want the
needle to be. A dot will appear on the screen where you touched
it and the hoop will move placing the needle close to the Y line.

Use ARROW KEYS to adjust so needle entry is ON the Y line and
check it is properly placed turning the handwheel to lower needle

When the needle is on the Y line
Press "Y-LINE" MEMO POSITION 1
The first of two points the machine needs in order to record Y line

Move ARROW KEYS either up or down and at least 2 inch away
from first Y mark and repeat procedure

Press "Y-LINE" MEMO POSITION 2
The location of the Y-line is recorded in the machine

Start sewing, only the items that appear dark on the screen will
be sewn during this frame/hoop placement.

After the first frame/hoop placement is sewn, it will be necessary
to "DEFINE" a new frame/hoop placement, re-hoop fabric and to
tell the machine the new X and Y- LINE locations

This project has six hoop/frame placements. They are as follows:

5.

HOME
for the
HOLIDAYS

6.
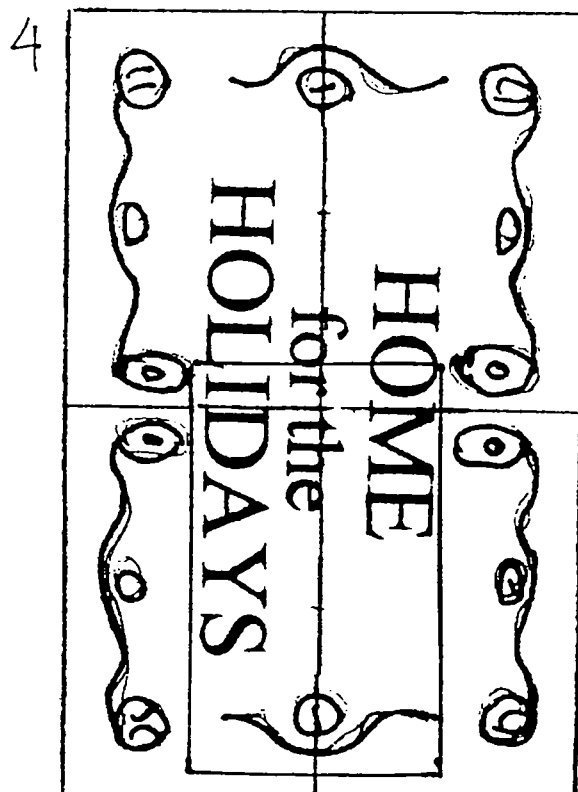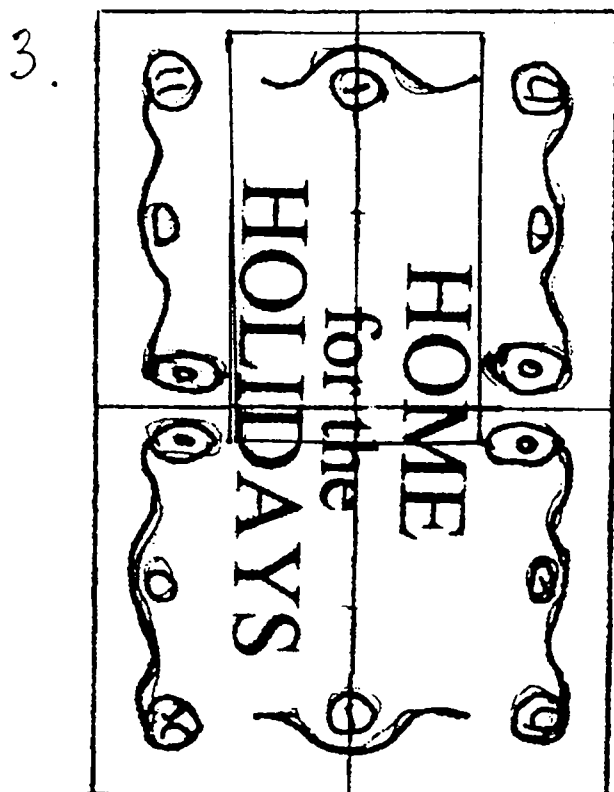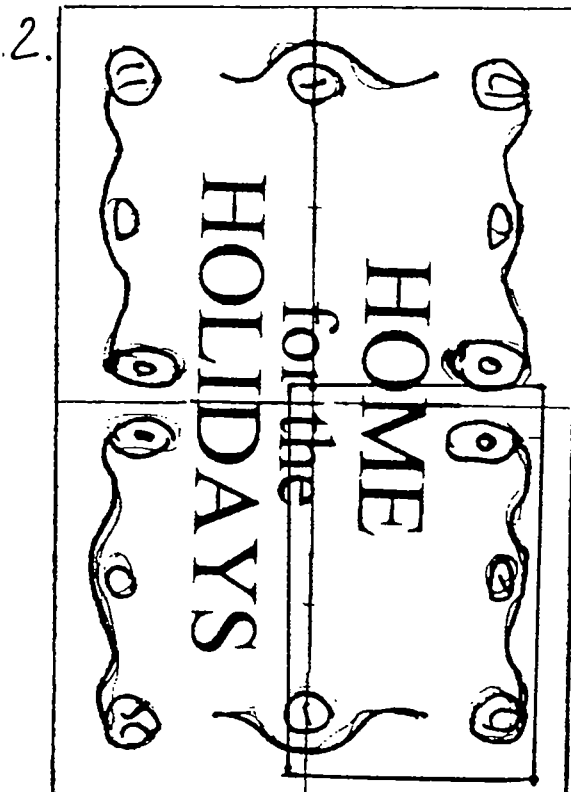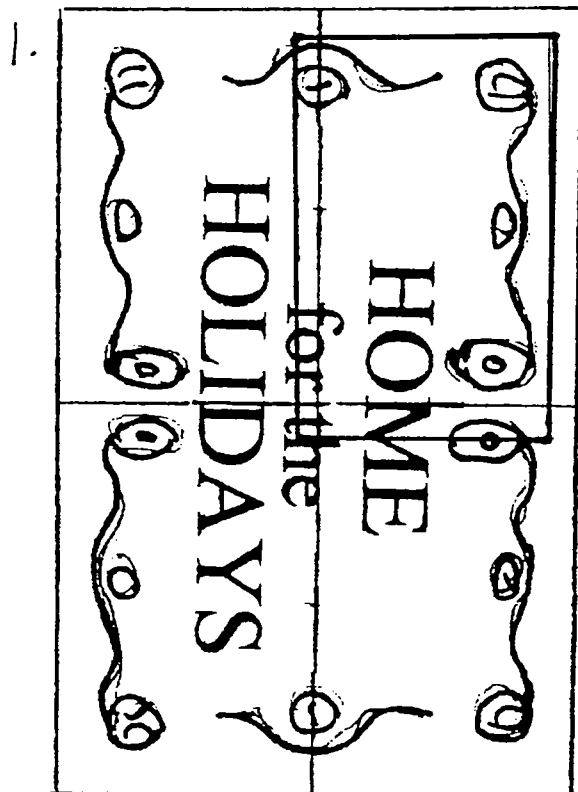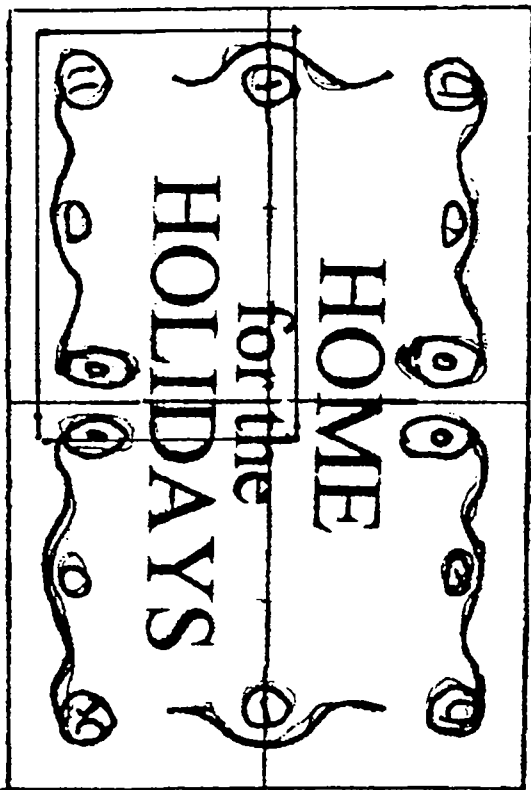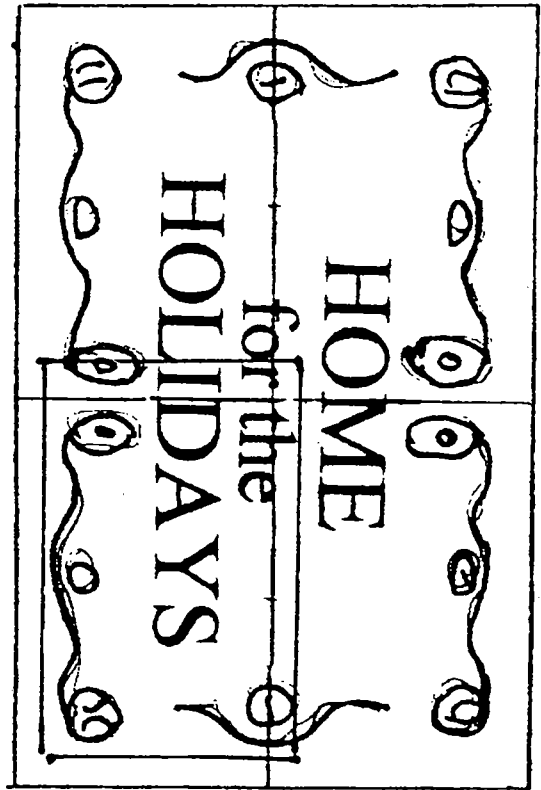
HOME
for the
HOLIDAYS

1. Standard machine memory

There are two types of memory used when the machine is in the standard sewing mode:

```
1. WORKING MEMORY
        and
2. PERMANENT MEMORY
```

1. WORKING MEMORY for standard machine

When an element (such as a fun face, scallop stitch or letter) is chosen, it immediately goes into "WORKING MEMORY". The working memory is also called the layout memory, because this is where the operator is joining together or laying out the order of the chosen elements.
To clear this memory, press the "CLR MEM" key. Each time the key is pushed the last entered element will be erased. To clear all the elements chosen, hold the "CLR MEM" key for 3 seconds.

> **Turning the machine off will
> erase the standard machine working memory.**

2. PERMANENT MEMORY for standard machine

> **The permanent memory has 15 file folders.
> They each hold up to 40 elements.**

To store in permanent memory press "IN"-file folder on the bottom bar.

> **The PERMANENT MEMORY will hold for 99 years
> or until removed from the file-folders
> by pushing the "TRASH CAN" icon.**

2. Embroidery machine memory

There are two types of memory used when the machine is in the embroidery mode:

> 1. WORKING MEMORY
> and
> 2. PERMANENT MEMORY

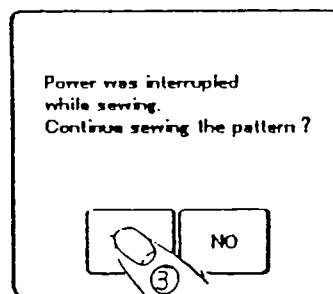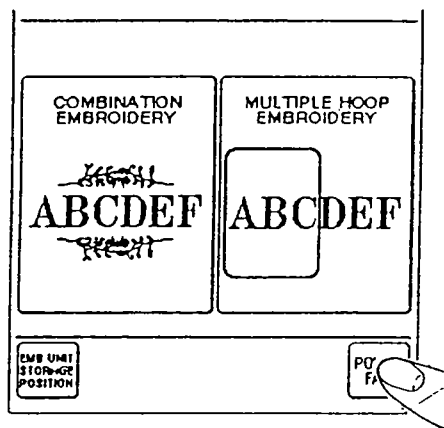## 1. WORKING MEMORY for embroidery machine

When an element is selected it goes into "WORKING MEMORY". The working memory is also called the layout memory, because this is where the operator is joining together or laying out the order of the chosen elements.
To clear this memory, press the "TRASH CAN" icon.

**If the machine is turned off,
or there is a power failure,
WORKING MEMORY
for the embroidery machine will stay for**

12 hours

**When the machine is turned back on, simply press the
"POWER FAIL"
key to retrieve the stored working memory.**

COMBINATION EMBROIDERY	MULTIPLE HOOP EMBROIDERY
ABCDEF	ABCDEF

EMB UNIT STORAGE POSITION

PO' F/

Power was interrupted while sewing.
Continue sewing the pattern ?

|	NO

③

Press [YES] key.

2. PERMANENT MEMORY for embroidery machine

There are two types of Permanent memory used

> A. COMPLETE or FILE-FOLDER #1
> and
> B. PARAMETER or FILE-FOLDERS #2-13

A. COMPLETE (file-folder #1)

Folder #1 holds 150,000
needle penetrations. The
complete memory of each
and every needle penetration,
not just the parameter or
outline of the design.
Using folder #1 it will NOT
be necessary to insert the
embroidery card if used in
the design.
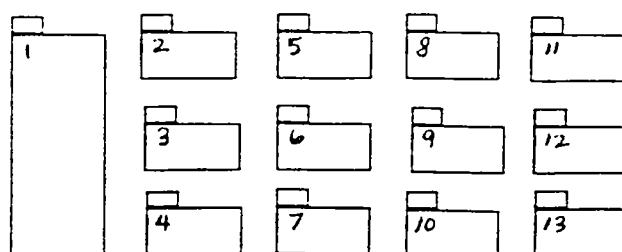
> **Special note:**
> **Pictall scanner cards can only go**
> **into complete memory - file folder #1**

B. PARAMETER (file-folders #2-13) *PATENTED FEATURE*

To maximize the storage availability, the parameter folders will
remember only the outline or the "parameter" of each design. For
example, a duck from the sampler card #2, a flower from the
floral card#3 and a built-in flower border are joined and placed
into parameter file folder #2. When file folder #2 is opened, the
machine will remember only the parameter or outline of the three
motifs and will prompt the operator to insert the appropriate
embroidery cards. Parameter memory offers unlimited storage of
designs. The machine will remember both the placement of each
design and any editing that has been done (such as mirror image,
rotation etc.).

> **The PERMANENT MEMORY will hold for 99 years**
> **or until removed from the file-folders**
> **by pushing the "trash can" icon.**