

# OPERATION MANUAL

Automatic Embroidery Machine  
for model IB-C1201/IB-TU1204/IB-TU1206



**inbro**  
Integrated Embroidery

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# 1. Introduction

## I . Safety Instructions

To operate the machine correctly, understand the important safety instructions in this book and then operation the machine.

Do not operate the machine before you completely understand the contents in these instructions.



### EXPLOSION HAZARDS

To avoid explosion, do not operate this embroidery machine in an explosive atmosphere unless it has been specifically certified for such operation.



### THERMAL HAZARDS

Surface temperature of main motor may be up to 70 °C. To avoid thermal hazard, do not touch the surface of main motor. Allow to cool it down before servicing.



### HEARING LOSS HAZARDS

The measured airborne noise level is exceeding 85dB(A). To avoid hearing loss hazard, ear protection must be worn when operating this machine.



### STABBING OR PUNCTURE HAZARDS

Injury may be caused by moving needle. Ensure that the machine is in a stop condition (lockout/tagout of a supply disconnection device and/or unplugged) before changing, threading or rethreading of needle or changing of needles.



### LOCAL LIGHTING

Due to the feature of the machine, you should operate the machine at the working place being set the lighting fixtures.

## II . Warning Symbol

The content required a user's special caution when operating the machine is specified as the warning symbols below.



This mark means dangerous consequences will arise, with the possibility of death or serious injury to the user, if the embroidery machine is handled incorrectly.



This mark means dangerous consequences could arise, with the possibility of death or serious injury to the user and/or damage to the embroidery machine and facilities, if the embroidery machine is handled incorrectly.



This mark means dangerous consequences may arise, with the possibility of somewhat serious injury to the user and/or damage to the embroidery machine and facilities, if the embroidery machine is handled incorrectly.



## 2. Features, Functions

### I . Descriptions

#### 1. Power

Input Power : 1 $\Phi$  AC 100/110/120/200/220/240

Consumption of electricity: 1kw

#### 2. System

Memory : 200 designs (capable of storing up to about 2,000,000 stitches)

Subsidiary storage unit : 3.5 inch floppy disk drive

display screen : 640 \* 480 color LCD monitor

#### 3. Motor

Main motor : Servo Motor/ Induction Motor

Frame motor : Stepping Motor

#### 4. Other devices

The number of needles : 6, 9, 12

A automatic trim device

Wiper device

A device sensing upper thread break and under thread break

#### 5. Installation environment

Grounding : more than 10M $\Omega$  (measured by 500V insulation tester)

Humidity : 30~95 %RH (relative humidity) without condensation

Temperature: 0 to 40 C $^{\circ}$  (during operation)

-10 to 60 C $^{\circ}$  (during storage)

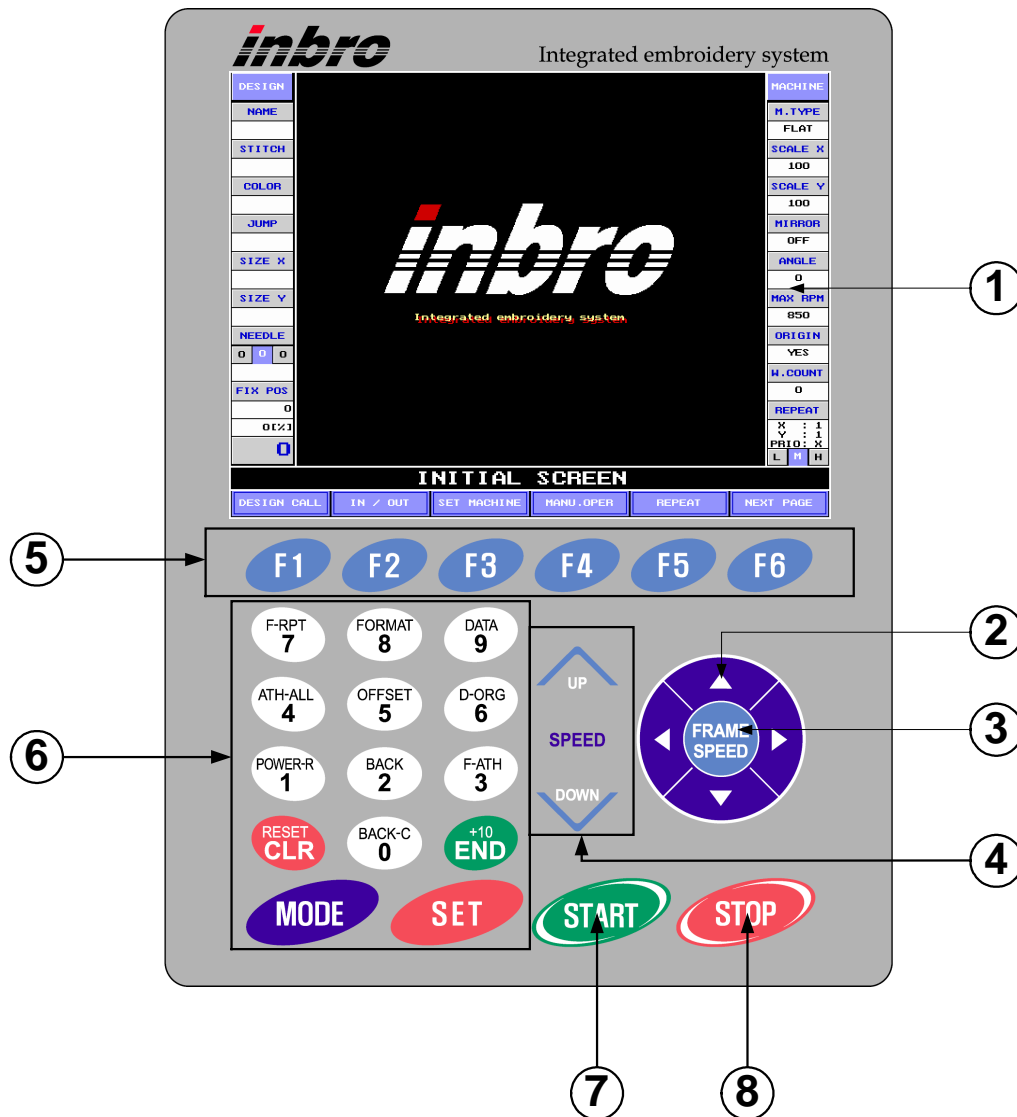
## II . Features

- ◆ Embroidery handling is simple and convenient.  
Built-in operating system of the embroidery machine makes handling of keys convenient and shows all procedure on the screen to make handling easier.
- ◆ A lot of embroidery designs can be stored.  
Up to 200 designs and about 2,000,000 stitches can be saved.
- ◆ Adopting the color LCD monitor makes users more convenient.  
Users can see the screen provided by operating panel with 640 \* 480 color LCD monitor, in which there is information about working, at a glance.  
It promotes efficiency of the work.
- ◆ Transforming the design (rotation, mirror, reduction, magnification) are possible.  
Embroidery design can be rotated from 0° to 359° by 1° and mirror transformation is possible.  
Also, reduction & enlargement of the design in 1% in seals is possible from 50% to 200% in X & Y axis.
- ◆ Offset function makes appliqué and changing embroidery frame convenient.  
Using functions of manual offset and automatic offset, several convenient works can be done.
- ◆ Embroidery speed control  
Embroidery speed can be controlled freely and indicated by unit of [RPM] on the screen.
- ◆ The function of the embroidery frame origin  
Sensing the limit of the embroidery frame will be origin automatically, and this will center the design on the frame.

# 3. Preparation (Before getting started)

## 1. Operation panel function

- ◆ The picture below is the Inbro embroidery machine operating box appearance.
- ◆ Functions are as follows.





① **Screen**

Color LCD monitor it shows all necessary information.

② **Main motor speed keys**

It is used when changing the embroidery speed during working.



: speed up

: speed down

③ **Frame speed key**

It is used to change the frame speed to low, medium and high speed for manual frame moving.

④ **Frame movement keys**

It is used to moves the frame in four directions, upper, lower, right and left.

⑤ **Function keys**

It is used to select functions at bottom round of the screen.

⑥ **Number keys**

It is used to input a number when setting the parameters.



key is used as a shortcut to embroidery screen from any other screen.

⑦ **Start key**

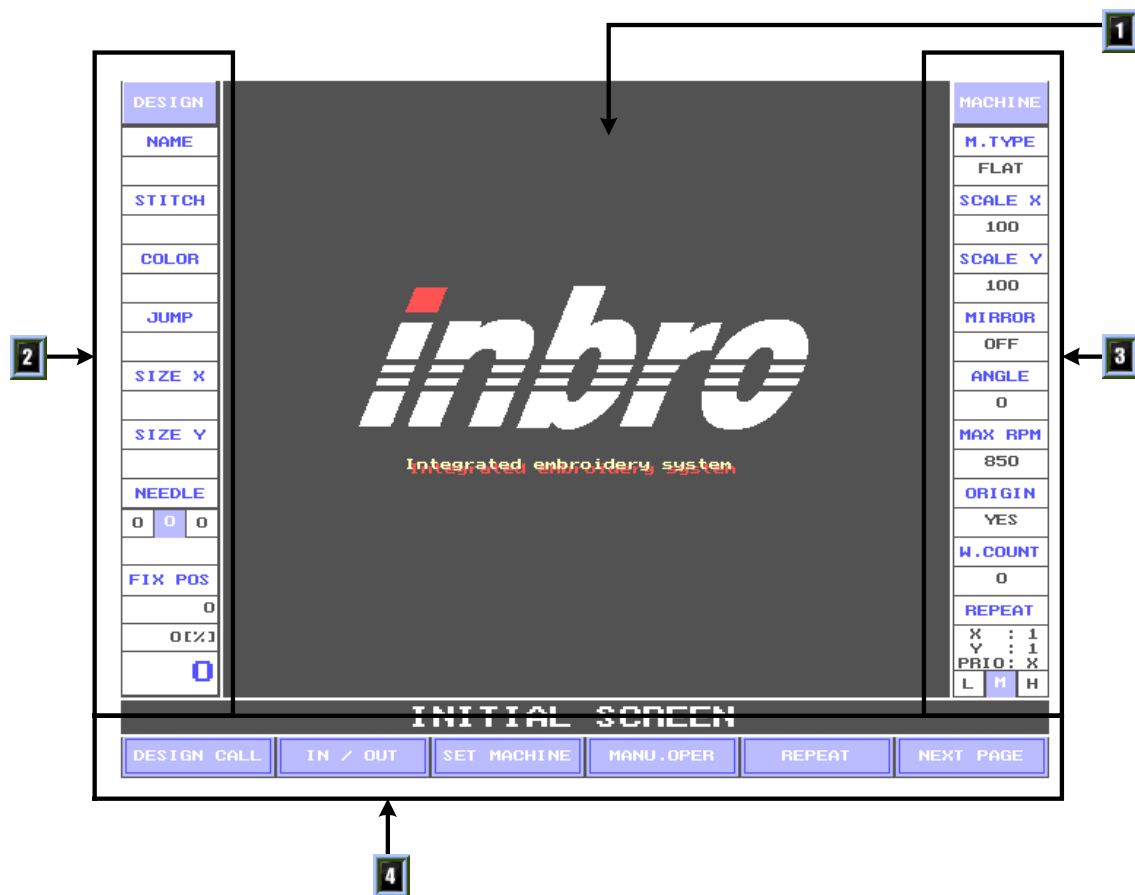
It is used to start embroidery.

⑧ **Stop key**

It is used to stop working.

## II . Composition and contents of the embroidery screen

- ◆ The picture below is the initial screen of the operating system of the machine
- ◆ The format of the screen consists of four parts.



- ① Embroidery screen  
This shows embroidery design in buffer. If there is no design in buffer, Inbro logo is displayed.
- ② Design information window  
This window shows information about the embroidery file of the design in buffer.

DESIGN	The window on the left hand shows information about the embroidery design
NAME	The name of the selected design
STITCH	The total stitch count of the selected design
COLOR	The color count of the selected design
JUMP	The number of jump of the selected design
SIZE X[mm]	The X length of the selected design (in mm)

DESIGN	The window on the left hand shows information about the embroidery design
SIZE Y[mm]	The Y length of the selected design (in mm)
NEEDLE A,B,C	A : Previous needle B : Present needle C : Next needle
FIX POS	It shows the stop position of the main axis. If it does not stop at 100°, the background color turns red and an error message appears. *Warning : Color change must be at 100° position only.
Processed stitch count	Shows the actual stitch count
Processing degree	Shows job done in %
Embroidery speed	The speed of the main axis in rpm.

- ③ Machine information window (right hand at the screen)  
This window shows the setting of the machine for the design in buffer.

MACHINE	It is located on the right hand and shows the machine parameters.
M. TYPE	Frame setting cap/flats
SCALE X	X scale set in %
SCALE Y	Y scale set in %
MIRROR	Shows mirror state
ANGLE	Shows angle of inclination set
MAX RPM	Shows max embroidery speed set
ORIGIN	Shows auto set to origin (yes/no)
W. COUNT	Shows actual stitch count
REPEAT	X: repeat number in X Y: repeat number in Y PRIO : It indicates embroidery priority.

- ④ Main menu bar

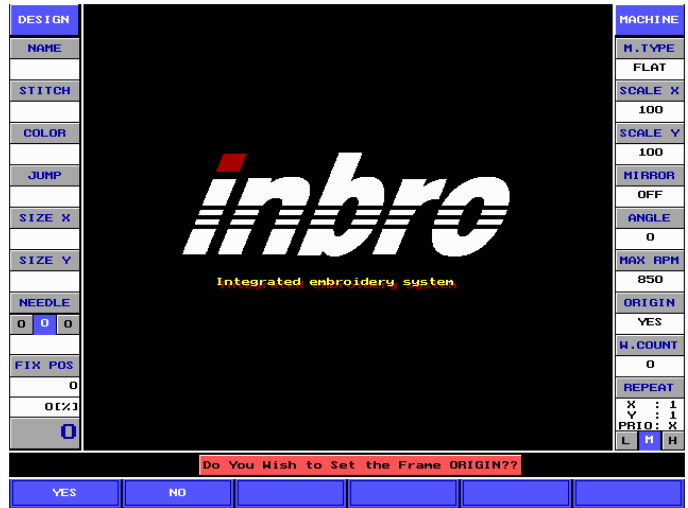
It is a bar related to the operation of the embroidery and consists of six equal divisions. Below bar, there are function keys correspondent to each menu. Pushing these keys select the menu and use several functions related to embroidery work.

There are 3 different main menu bars, these are; initial screen – the menu bar before loading a design in buffer after calling the design main menu bar 2.

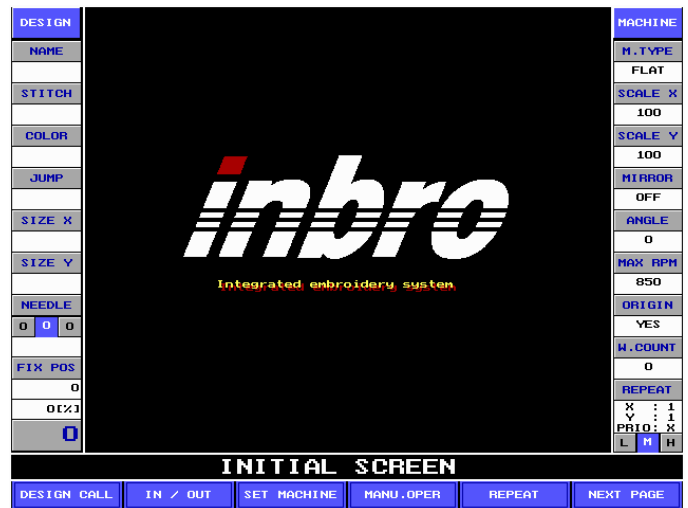
### III. Composition of the main menu and menu bar

#### 1 Initial screen menu before calling a design

- ◆ After turning on the main switch, the screen seen is the screen that set the origin of the embroidery frame. The screen is as follows.



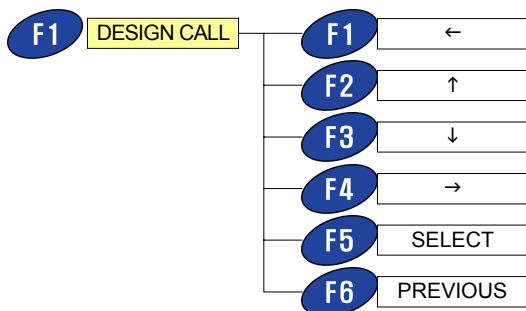
- ◆ The first thing is set up embroidery frame origin press **F1** to set origin or **F2** to bypass. After origin is set, the screen shows initial screen as follows.



- ◆ The Inbro logo is shown in this screen and the main menu bar.

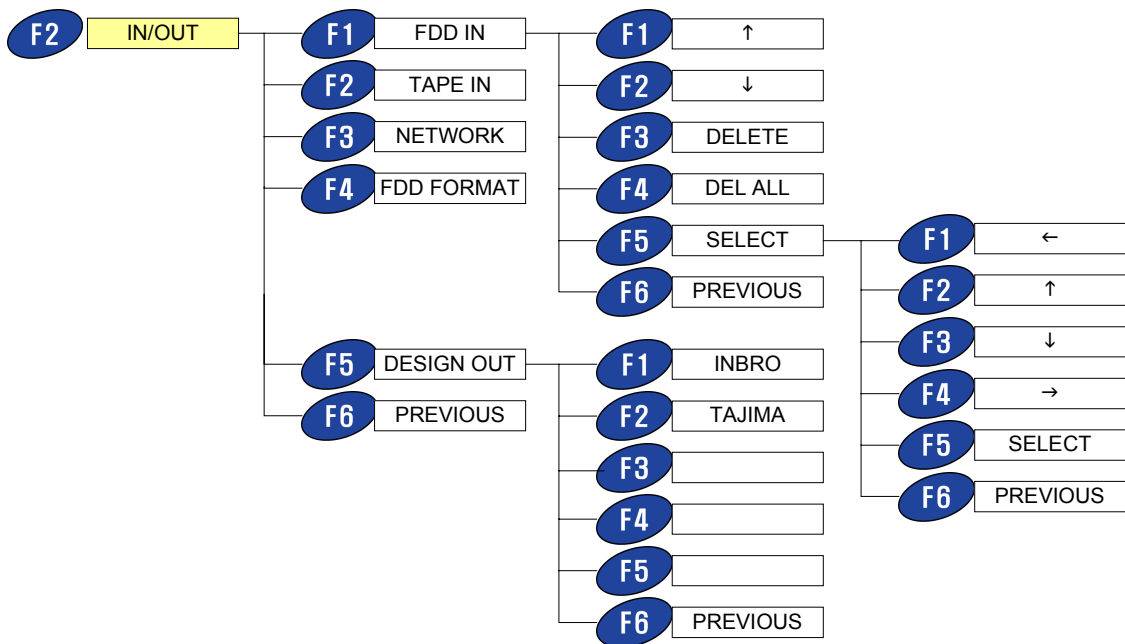
<b>F1</b> DESIGN CALL	Used when loading the design from memory
<b>F2</b> IN/OUT	Used to input/output, copying or deleting designs from floppy, memory & external input/output
<b>F3</b> SET MACH	Used to set machine parameters
<b>F4</b> MANU. OPER	Used to test some devices manually and to edit designs in memory disk, design name & insert color change codes
<b>F5</b> REPEAT	Used to set repetition of work
<b>F6</b> NEXT PAGE	Opens more main menu functions

◆ Submenu of **F1** DESIGN CALL is as follows



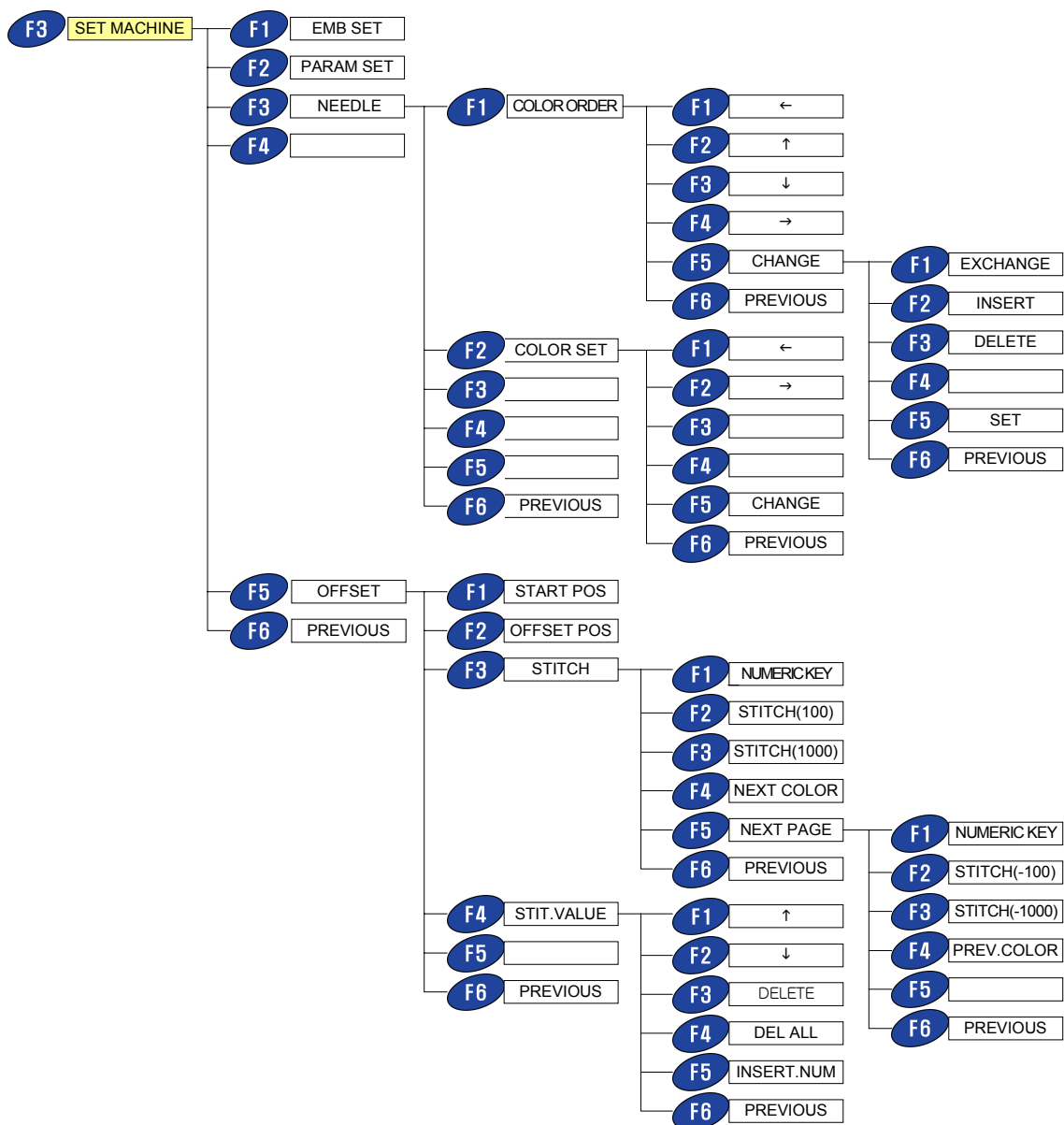
- F1** ← : This key moves the cursor to the left.
- F2** ↑ : This key moves the cursor up.
- F3** ↓ : This key moves the cursor down.
- F4** → : This key moves the cursor to the right.
- F5** SELECT : This key is used when selecting the design.
- F6** PREVIOUS : It cancels the call to design and returns to the initial screen.

◆ Submenu of **F2** IN/OUT is as follows.



- F1** FDD IN : FDD functions select and delete.
  - F1** Cursor movement key ↑: Moves the cursor up.
  - F2** Cursor movement key ↓: Moves the cursor down.
  - F3** DELETE: Deletes the design pointed by the cursor.
  - F4** DEL ALL: Deletes all designs in floppy
  - F5** SELECT: Selects design pointed by the cursor. After selecting the design to memorize, use the arrow functions and the select functions to assign the location in memory you want to use to save the file.
  - F6** PREVIOUS: Goes to previous screen
- F2** TAPE IN: Inputs design through the punch tape port
- F3** NETWORK: Inputs a design through the network connection.
- F4** FDD FORMAT: Formats the floppy diskette inserted in the floppy disc.
- F5** DESIGN OUT: Copies the design from the embroidery memory to floppy diskette.  
(It can be copied as INBRO format or TAJIMA format)
  - F1** INBRO : Makes the format of the file INBRO when copying to floppy diskette.
  - F2** TAJIMA: Makes the format of the file TAJIMA when copying to floppy diskette.
  - F6** PREVIOUS: Goes to previous screen
- F6** PREVIOUS: Goes to previous screen

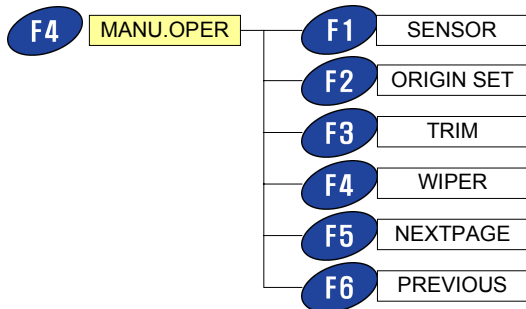
◆ Submenu of **F3** SET MACH is as follows. .



- F1** EMB SET: Used when setting the parameters such as magnification, reduction, 2 angle setting, etc.
- F2** PARAM SET : Used when setting machine parameters
- F3** NEEDLE : Sets up the automatic color change
  - F1** COLOR ORDER : Used to change color change order through the methods of change, insertion and deletion.
  - F2** COLOR SET : This function makes information easy to understand by matching display & thread colors.
- F5** OFFSET : Sets up start point, Offset position, Offset stitch count and so on.

**F6** NEXT PAGE : Opens next menu page

◆ Submenu of **F4** MANU. OPER is as follows.



**F1** SENSOR : It checks the input signals of all sorts of sensors used in the embroidery machine

**F2** ORIGIN SET : It goes to the origin of an embroidery machine

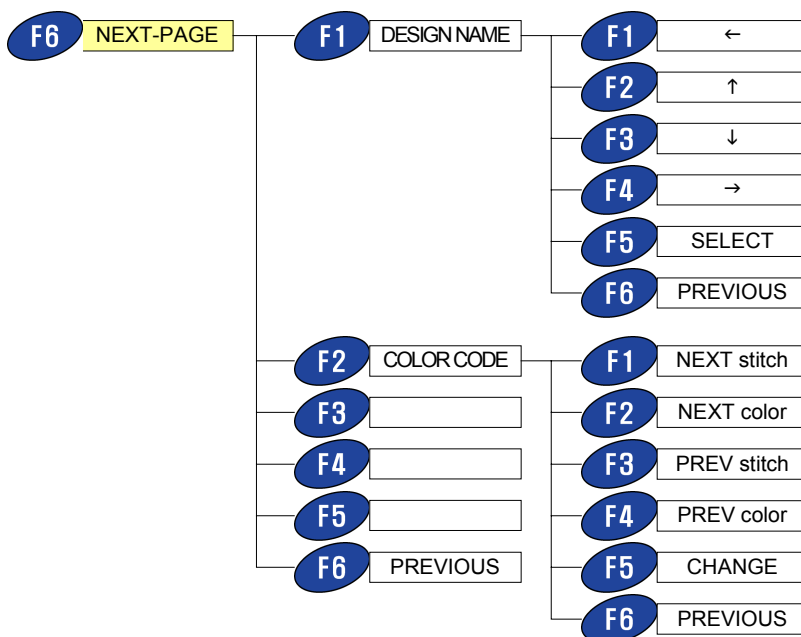
**F3** TRIM : It tests trim solenoid

**F4** WIPER : It tests the wiper motor

**F5** NEXT PAGE : It goes to the next menu page.

**F6** PREVIOUS : It returns to the initial screen.

◆ Submenu of **F6** NEXT PAGE is as follows.





- F1** DESIGN NAME : It changes the name of a design.
- F2** COLOR CODE : It adds or deletes color code arbitrarily.
- F1** NEXT STITCH : Used to advance any amount of stitches set by the key pad
- F2** NEXT COLOR : Used to go to the color change code
- F3** PREV. STITCH : Used to move back any amount of stitches set by the key pad
- F4** PREV. COLOR : Used to go to the previous color change code
- F5** CHANGE : Used to set or delete a color change code.  
If the present stitch count by toggling set/delete, deleted or set color code message will show up.
- F6** PREVIOUS : If there is a color code changed by user, saving message will show up, but if not, it will return to the previous screen.
- F6** PREVIOUS : It returns to the initial screen.

## 2 Function menu after calling a design

- ◆ When a design is loaded, it will show up at the center of the screen instead of Inbro logo like the picture below.

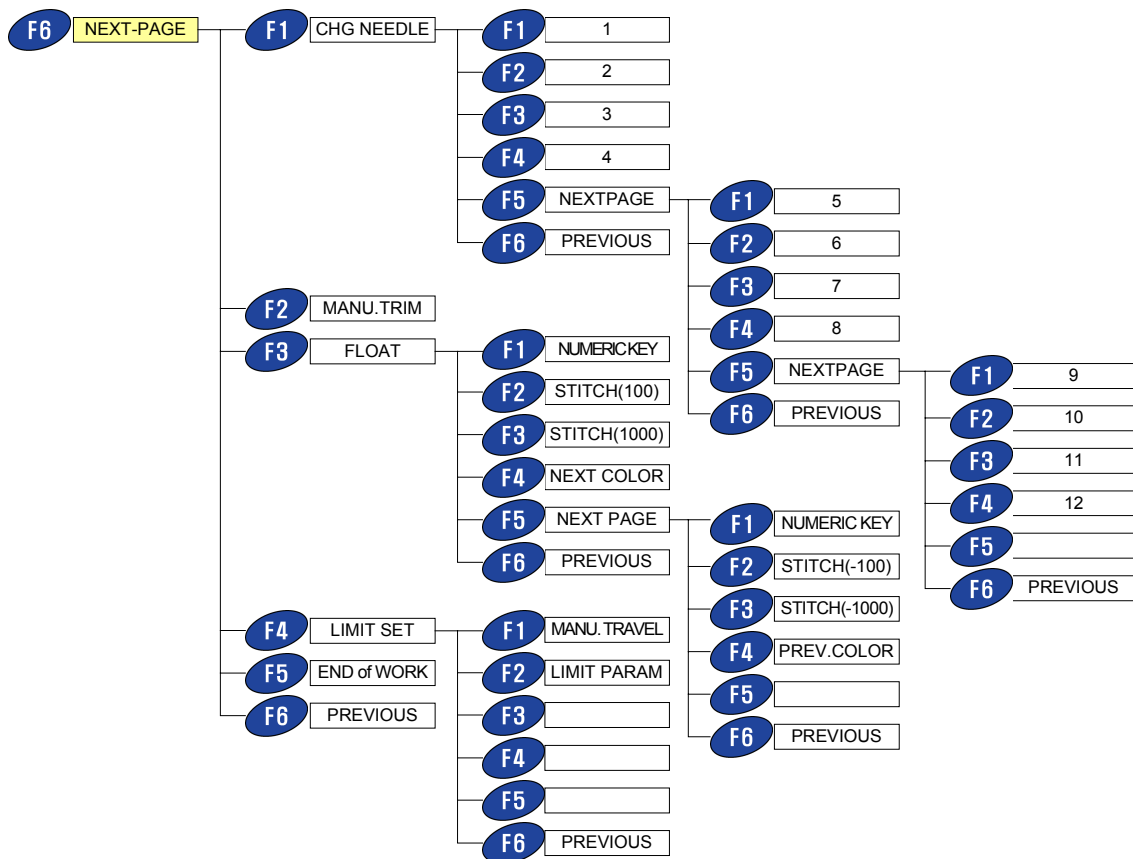


<b>F1</b> DESIGN CALL	Used when loading the design from memory
<b>F2</b> IN/OUT	Used to input/output, copying or deleting designs from floppy, memory & external input/output
<b>F3</b> SET MACH	Used to set machine parameters

<b>F4</b> MANU. OPER	Used to test some devices manually and to edit designs in memory disk, design name & insert color change codes
<b>F5</b> REPEAT	Used to set repetition of work
<b>F6</b> NEXT PAGE	Opens more main menu functions


- ◆ The function menu that shows up at this time is the same as that of initial screen but Submenu shown by selecting **F6** [NEXT PAGE] have a lot of differences. Please refer to pages 12 to 17 for the first menu page (initial menu).

- ◆ Submenu of **F6** NEXT PAGE is as follows.










- F1** CHG NEEDLE : Used for manual color change
- F2** MANU.TRIM : Used for manual trimming at present position
- F3** FLOAT : Used to float the design to a different stitch point without embroidery
- F4** LIMIT SET : It sets the limits of frame.
- F5** END OF WORK : Used to abort embroidery
- F6** PREVIOUS : It returns to the initial screen.

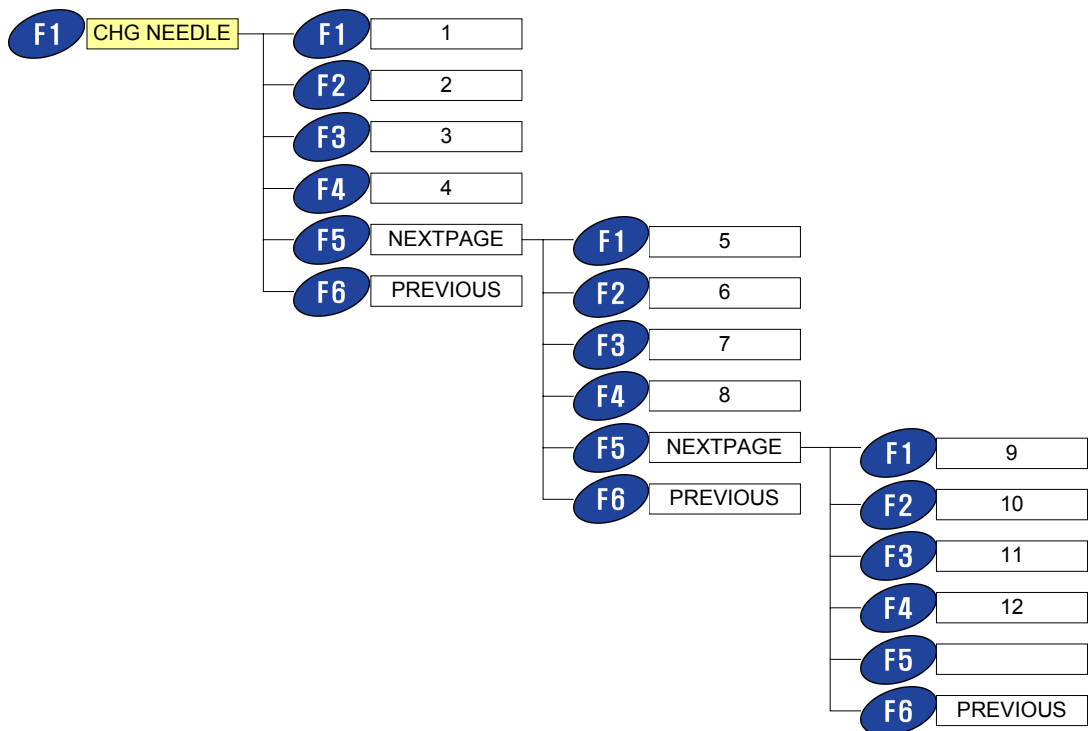
### 3 Menu state of stop during embroidery

- ◆ This screen shows up when pushing the red stop switch or the  key during embroidery.



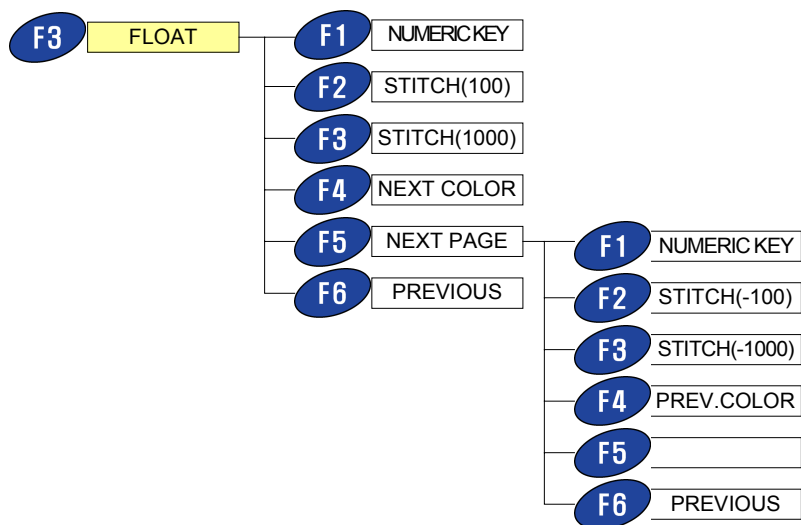
 CHG NEEDLE	Used for manual color change
 MANU. TRIM	Used for manual trimming at present position
 FLOAT	Used to float the design to a different stitch point without embroidery
 OFFSET	Sets up start point, offset position, offset stitch count and so on
 END OF WORK	Used to abort embroidery
 NEXT PAGE	It goes to the next menu page

- ◆ Submenu of  CHG NEEDLE is as follows.



- F1** 1 : Manual change to needle No. 1
- F2** 2 : Manual change to needle No. 2
- F3** 3 : Manual change to needle No. 3
- F4** 4 : Manual change to needle No. 4
- F5** NEXT PAGE : It goes to the next page.
- F6** PREVIOUS : It returns to the previous step.

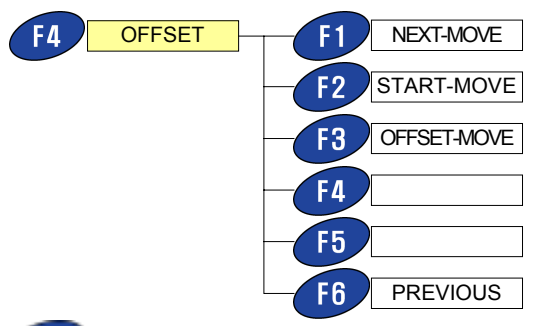
◆ Submenu of **F3** **FLOAT** is as follows.



- F1** NUMERIC KEY : Floats any amount of stitches forward as enter in the key pad & pressing set
- F2** STITCH(100) : Floats 100 stitches forward
- F3** STITCH(1000) : Floats 1000 stitches forward
- F4** NEXT COLOR : Floats to the next color change code in the design
- F5** NEXT PAGE : It goes to the next menu page.

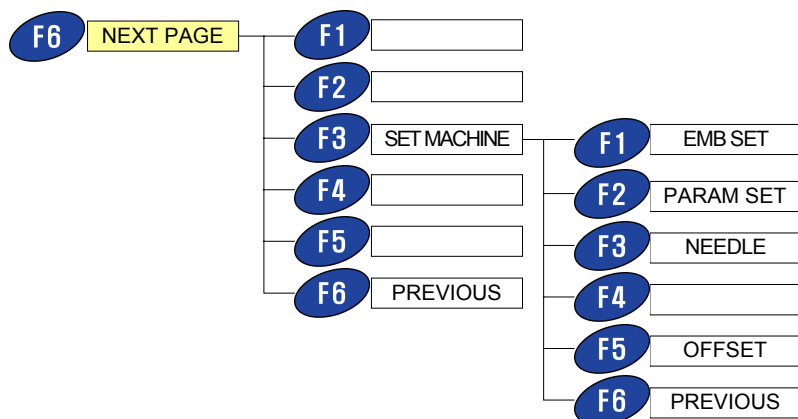
- F1** NUMERIC KEY : Floats any amount of stitches back as enter in the keypad and pressing set
- F2** STITCH(-100) : Floats 100 stitches backward
- F3** STITCH(-1000) : Floats 1000 stitches backward
- F4** PREV.COLOR : Floats back to the previous color change code in the design.
- F6** PREVIOUS : It goes to the previous screen.

◆ Submenu of **F4** **OFFSET** is as follows.



- F1** NEXT-MOVE : Used to move back to the last stitch point after moving the frame manually for application
- F2** START-MOVE : Goes to the start point of a design
- F3** OFFSET-MOVE : Move the frame to the position preset by offset
- F6** PREVIOUS : Return to the previous step.

◆ Submenu of **F6** NEXT PAGE is as follows.



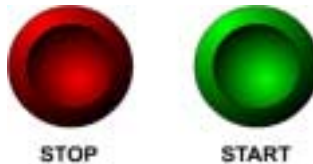
**F3** SET MACH : Used to set parameters

- F1** EMB SET : Used to set design parameters as reduction, enlargement, angle, etc.
- F2** PARAM SET : Used to set the machine parameters.
- F3** NEEDLE : Sets up automatic color change order.
- F5** OFFSET : It sets up start point, offset position, offset stitch and so on.
- F6** PREVIOUS : It returns to the previous step.

**F6** PREVIOUS : It returns to the previous step.

## IV. How to use start push button(green) and stop push button(red)

- ◆ The picture below shows the  ,  switches used in this embroidery machine and these do the save function as the start/stop keypad buttons on the control box.



- ◆ Switch operation is as follows

### 1 Embroidery start and stop function

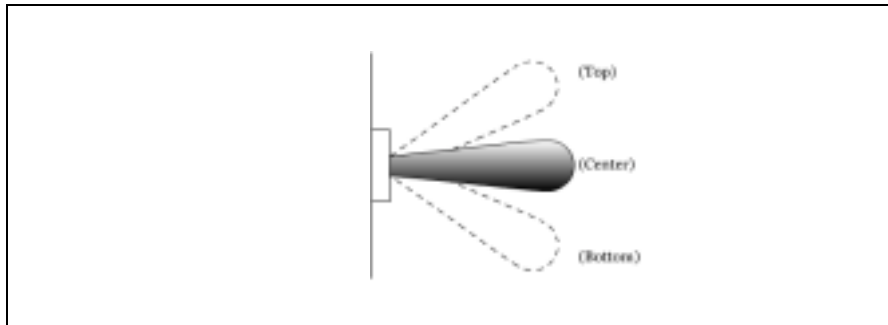
Switch operation	Machine function
Push start button one time.	The machine runs and the embroidery starts.
Push start button continuously.	The machine starts including (low speed) until switch is released.
Push stop button one time.	The machine stops.

### 2 Backward operation

Operation of a switch	Work of a machine
Push stop button several times	The frame goes backward by the moving unit that is set.
Push stop button continuously.	The frame start to go backward. The machine immediately halts if the switch is released before the frame moves 10 times as much as the moving unit that is set. (The frame goes backward by the moving unit that is set.) It keeps going backward if the switch is released after the frame goes backward repeatedly more than 10 times as much as the moving unit that is set. At this time if pushing start button to stop going backward. Moving backward stops.
Push start button one time.	The machine comes to a halt.

## V . Head switch & thread break led

### 1 Switch function



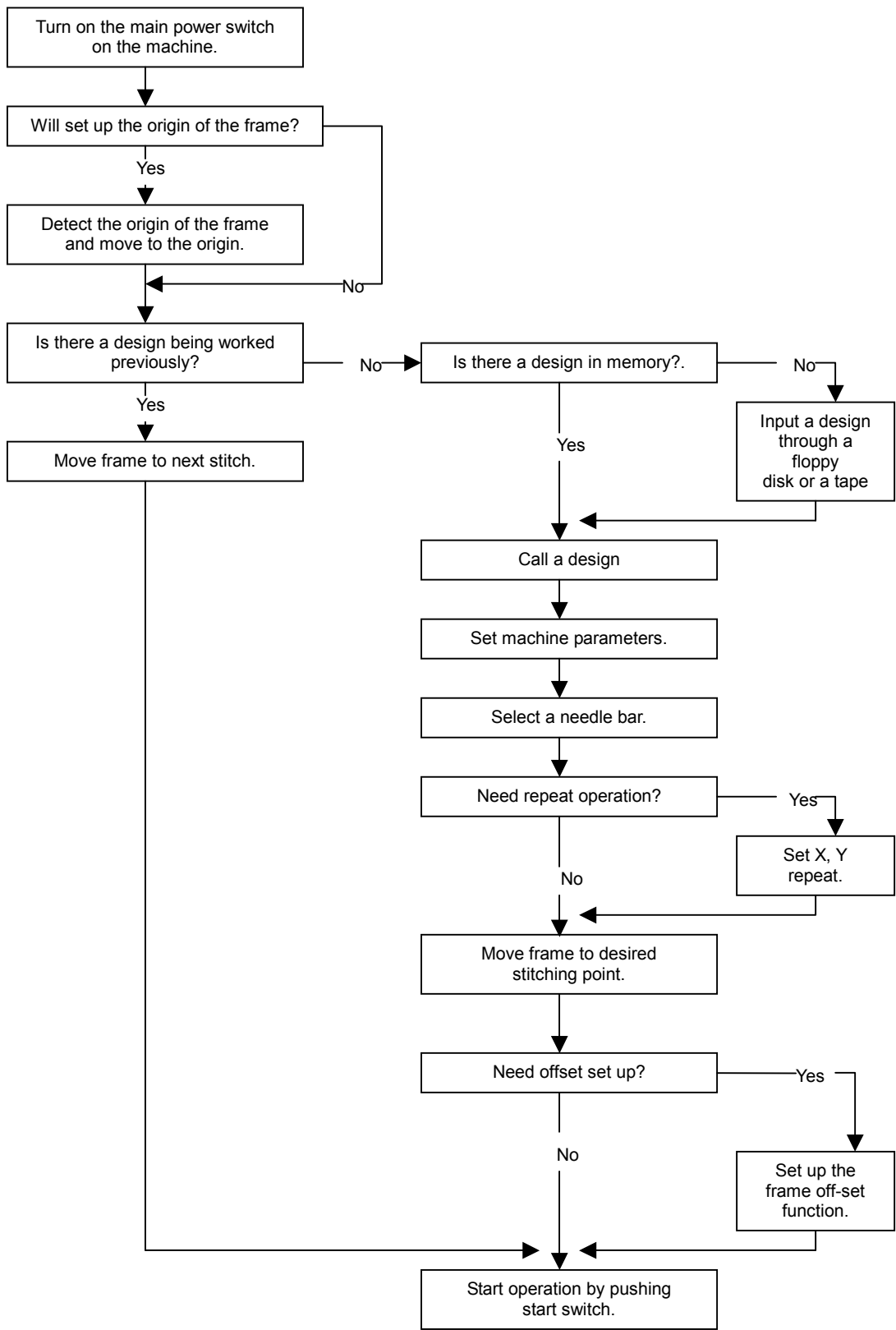
- ◆ For normal operation, place the switch at center to turn Head On/Off (LED on).
- ◆ For mending – after thread break go back using the stop switch or floating the machine back to the point you decide to order sewing and push the head button up at the head you want it to sew, then press start.
- ◆ For supplementing – the machine will sew only that head until it reads the beginning of the backing point
- ◆ For off position place the switch down (led off)

### 2 Thread break led function

- ◆ When sensing under thread break and upper thread break, LED of that head blinks. At this time, on, off operations of the switch prevent LED from turning on and turning off.



# VI. Embroidery operation basics





## 4. Basics (Getting started)

### 1. Embroidery origin setting

- ◆ The screen below shows up first after turning on the switch.



When performing this operation, do not place your hands or fingers on the machine table.

- ◆ Here it is asked if setting up the origin of the frame.

< Turn on the main switch of the embroidery machine >



Selection of [YES] or [NO]



- ◆ When **F1** [YES] is pressed if there is an incomplete job in memory, the display will ask if go to next stitch point. If **F1** [YES] is pressed again, the frame will move to the next stitching point and if **F2** [NO] is pressed the frame will move to the origin of the machine that is the top left corner of the embroidery area. If there is not design work in memory the frame will directly move to the origin.
- ◆ When **F2** [NO] is pressed, the initial screen will show without the process of setting the origin.



Before pressing the **F1** [YES] key, be aware that nothing is in the path of the frame crashing the trim can damage the machine or cause body injuries.

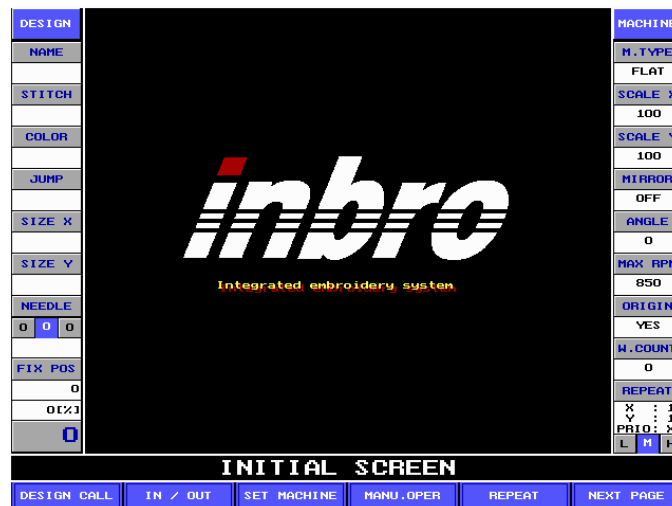
## II . Design input/output

- ◆ To do embroidery, the design to be sewed should be selected. There are several methods to call a design.

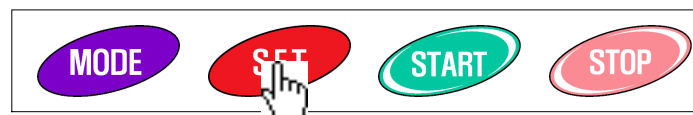
### 1 Calling an unfinished embroidery job


- ◆ If there is an unfinished design and you want to keep working on it, push the [SET] key from the initial screen, this will call the previous design and will set the trim to the next move position.

< Setting up the origin of a frame >



The screen that shows up right after setting the origin of the embroidery (same as above) is called the initial screen.



After the initial screen shows up, push the  key below the number key.





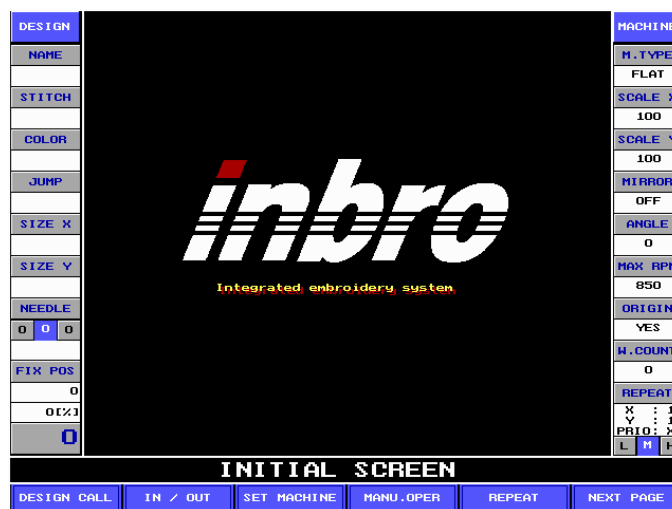
<Completion of calling the design being worked previously>

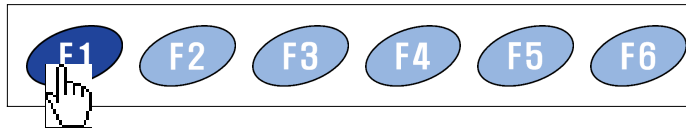
- ◆ If there is no design being used previously or you want to select another design, please follow the next.

## 2 Calling a design from memory

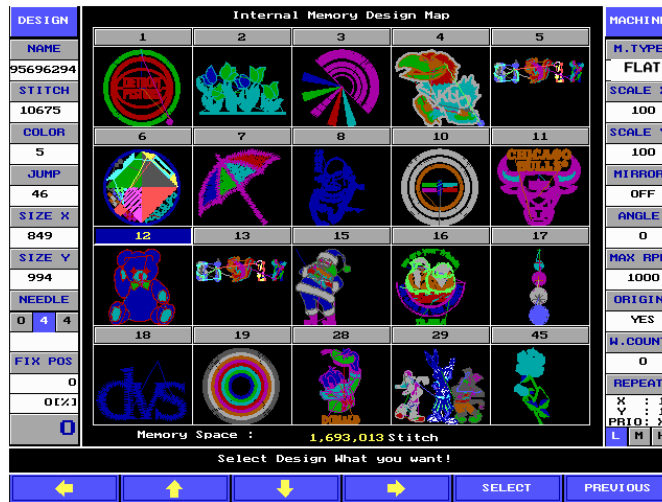
< Method 1 >

<Setting up the origin of a frame>



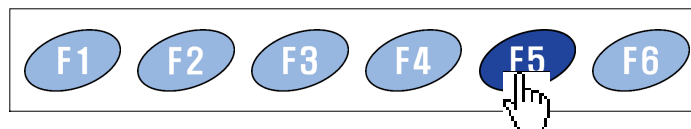


Selection of [DESIGN CALL] on the initial screen of the embroidery



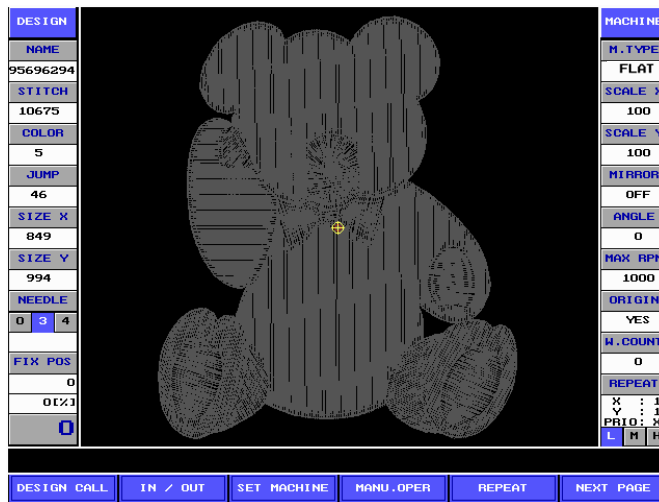
Moving to the design you want using direction keys,

F1, F2, F3, F4, If you want to cancel calling a design,  
it is possible to return back using the F6 [PREVIOUS] key)



To call a design not to cancel, push the F5 [SELECT] key.





<Completion of the first method that calls a design in memory>

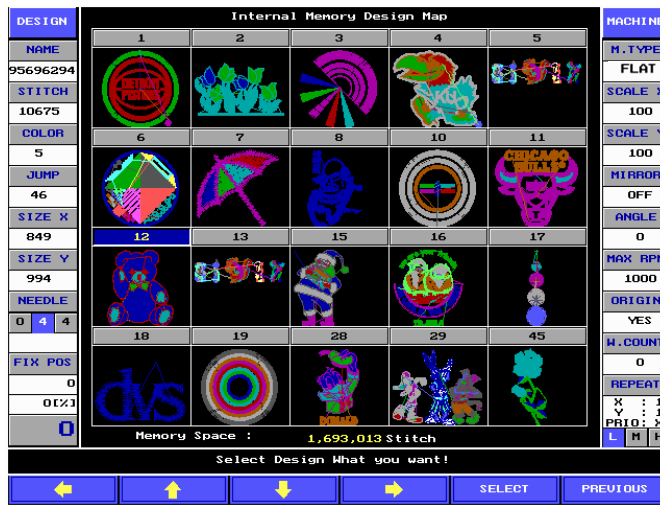
< Method 2 >

<Setting up the origin of a frame>

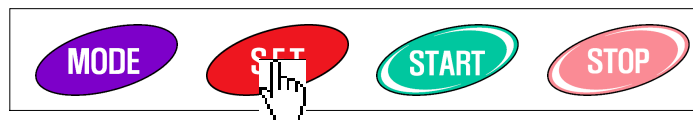


Selection of [DESIGN CALL] on the initial screen of the embroidery.





Input of design number you want using the number key.



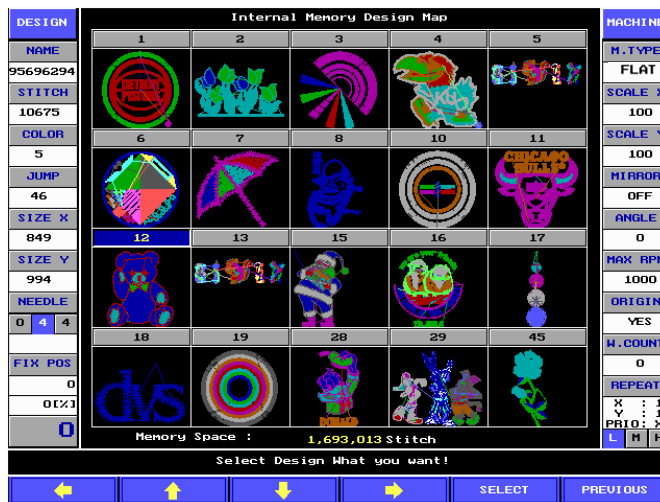
Press the [SET] key below the keypad new bars.






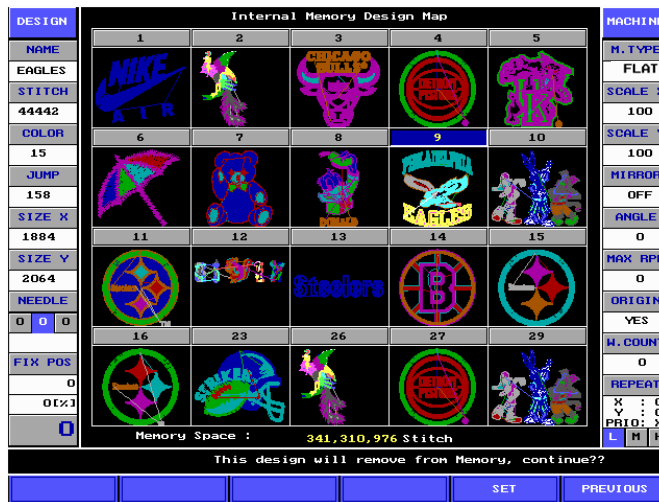
<Completion of the second method that calls a design in memory>

### 3 Deleting a design from memory

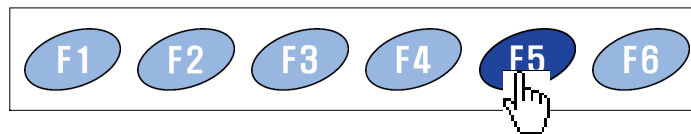


After selecting a design on the screen above, push the  key.





A message will show up asking if you want to delete the design.



If you want to delete the selected design, push the **F5** [SET] key to delete.  
 If you want to cancel deletion, push the **F6** [PREVIOUS].



< Completion of deleting a design in memory >

#### 4 Formatting a floppy disk

It formats the floppy diskette inserted in the floppy disc drive.  
 How to format a floppy diskette is as follows.


<Setting up the origin of a frame>





Selecting the [IN/OUT] on the initial screen



<  Inserting the floppy diskette to be formatted >



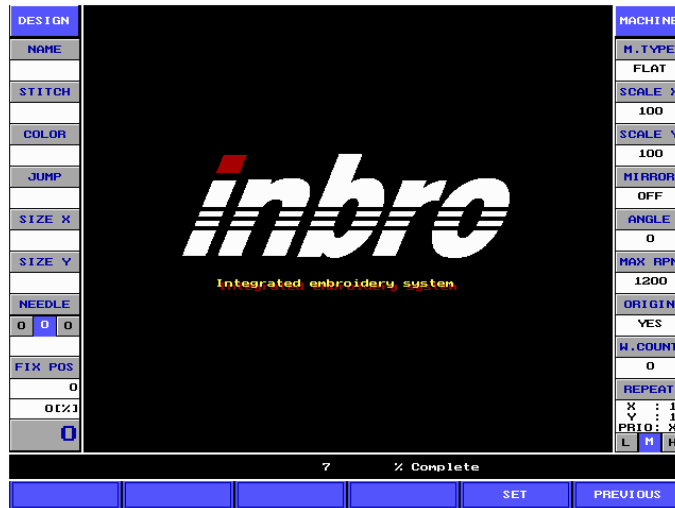
Selecting the [FDD FORMAT]



A message will show up asking if you want to format the diskette.



If you want to continue format, push the **F5** [SET]. If you want to cancel format, push the **F6** [PREVIOUS] and move to previous step.



Process for formatting the floppy diskette shows up on the screen. Please wait till 100% completed.



<Completion of formatting the floppy diskette>



When power supply is intercepted or electricity failure occurs or the floppy diskette is removed from the disk drive by force, partial or whole design data in the floppy diskette may be damaged.


## 5 Calling a design from floppy

< Setting up the origin of a frame >



Selection of [ IN / OUT ] on the initial screen



<  Insert the floppy diskette that contain the design in the floppy drive.>





Selection of [ F D D I N ]



If **F1** (FDD IN) is selected before a diskette is inserted or if there are no embroidery files in diskette 2-error message will show up.



Designs lists in diskette will show up on the screen.



[Reference] : Let us see the composition of screen

- ◆ No. : Design number is assigned according to the number of the designs stored in floppy.
- ◆ NAME OF DESIGN : It indicates the name of a design stored in floppy.
- ◆ INFORMATION : It indicates the date when the design was created and stitch count of a design stored in floppy.
- ◆ FORMAT : It indicates the format of a design.




LIST OF DESIGN IN THE INSERTED FDD.					MACHINE	
DESIGN	NO.	NAME OF DESIGN	INFORMATION	FORMAT	M. TYPE	
NAME	1	F001(B0905DY >	2619 [ST] 1998/09/05	BARUDAN	FLAT	
STITCH	2	ZIPPO(>	1071 [ST] 2001/07/03	BARUDAN	SCALE X	
COLOR	3	H001(EAGLES >	44456 [ST] 1998/08/18	TAJIMA	100	
JUMP	4	FILA(FILA >	1714 [ST] 1996/03/16	TAJIMA	SCALE Y	
SIZE X	5	1(DETROIT)	5674 [ST] 2002/04/03	INBRO	100	
SIZE Y	6	3(STEELERS)	4856 [ST] 2002/03/15	INBRO	MIRROR	
NEEDLE	7	9(B0714DY3)	3126 [ST] 2002/03/28	INBRO	OFF	
0 0 0					ANGLE	
FIX POS					0	
0[%]					MAX RPM	
0					1000	
					ORIGIN	
					YES	
					M. COUNT	
					0	
					REPEAT	
					X : 1	
					Y : 1	
					PRI0: X	
					L H H	

Memory Space : 277,162 Stitch

Select Design What you want!

↑ ↓ DELETE DEL ALL SELECT PREVIOUS

◆ In case of selecting only one design, move the cursor to the design you want, by using the cursor move key. The above screen shows up the case of selecting no. 3 design.


◆ If you try to copy more than two designs in a lump, move the cursor to the design you want and push the  key below the keypad numbers.

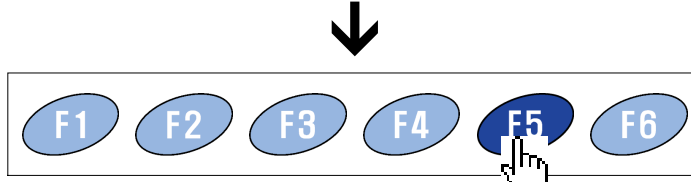
LIST OF DESIGN IN THE INSERTED FDD.					MACHINE	
DESIGN	NO.	NAME OF DESIGN	INFORMATION	FORMAT	M. TYPE	
NAME	1	G061(15061)	2627 [ST] 1995/05/31	TAJIMA	FLAT	
STITCH	2	B002(Kees)	6741 [ST] 1999/09/18	TAJIMA	SCALE X	
COLOR	3	B001(Yan)	6113 [ST] 1999/09/18	TAJIMA	100	
JUMP	4	BIEN(BIEN)	15707 [ST] 1996/03/16	TAJIMA	SCALE Y	
SIZE X	5	MICKEY-(mickey-2)	8180 [ST] 1999/06/15	TAJIMA	100	
SIZE Y	6	MEDAL(medal.ds)	9624 [ST] 1999/06/15	TAJIMA	MIRROR	
NEEDLE	7	MAGIC1(magic.ds)	5042 [ST] 1999/06/15	TAJIMA	OFF	
0 0 0	8	MICKEY-(mickey-m)	4475 [ST] 1999/06/15	TAJIMA	ANGLE	
FIX POS	9	MIKE-M(VG001-S/)	11730 [ST] 1995/05/26	TAJIMA	0	
0[%]	10	BARUB(barub.ds)	2905 [ST] 1999/06/17	BARUDAN	MAX RPM	
0	11	BAR(BAR)	1163 [ST] 1999/12/18	BARUDAN	1000	
	12	15061(BAR)	1163 [ST] 1995/04/06	MELCO	ORIGIN	
					YES	
					M. COUNT	
					0	
					REPEAT	
					X : 1	
					Y : 1	
					PRI0: X	
					L N H	


Memory Space : 715,718,656 Stitch


Select Design What you want!

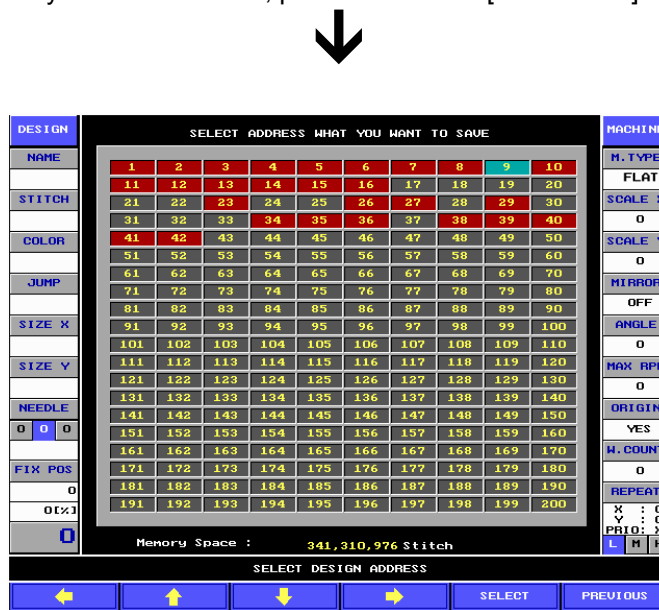
↑ ↓ DELETE DEL ALL SELECT PREVIOUS

The above screen show up the case of selecting no 2, 3, 4, 8, 9 & 10 designs by using the  key.

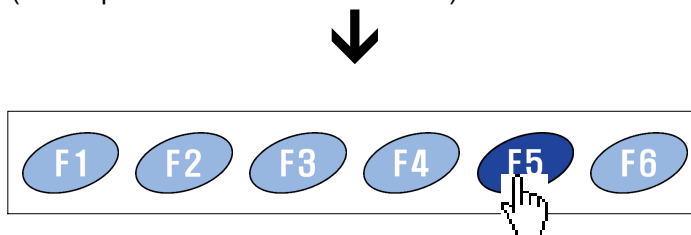



After the designs are selected, push the  [SELECT] key.

If you want to cancel, push the  [PREVIOUS] key.



Rooms that remain in memory are indicated. Place the cursor on the room you want using cursor moving key (on the picture above room number 9) is selected.

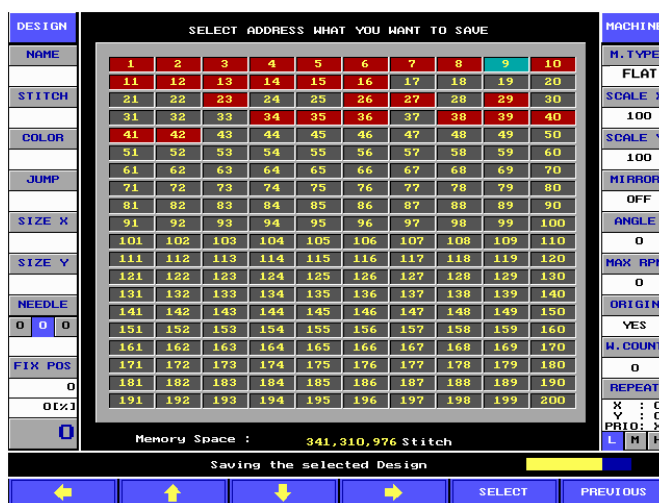


If the cursor is placed on the room you want, push the  [SELECT] key.



Please check out memory space that is indicated on the bottom of the screen before storing the design. If the design of the embroidery is larger than memory space available, the error message shows up and storing will not be completed.





The procedure that reads a design from floppy diskette and then stores the design in memory shows up on the screen.



Please wait for the copy procedure to finish.




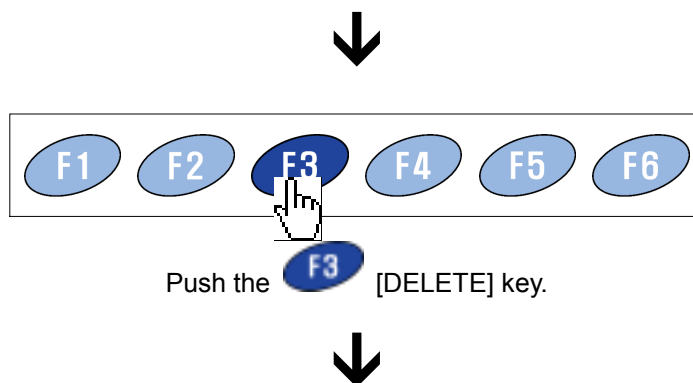
< Completion of calling a design in floppy >

## 6 Deleting a design from floppy



Move the cursor to the design you want to delete using cursor moving key. If you try to move

several designs in a lump, select the  key.



DESIGN	LIST OF DESIGN IN THE INSERTED FDD.				MACHINE
NAME	NO.	NAME OF DESIGN	INFORMATION	FORMAT	M. TYPE
	1	FOOI (B0905DY >	2619 [STJ] 1998/09/05	BARUDAN	FLAT
STITCH	2	ZIPPOC >	1071 [STJ] 2001/07/03	BARUDAN	SCALE X
	3	HOOL(EAGLES >	44456 [STJ] 1998/08/18	TAJIMA	100
COLOR	4	FILA(FILA >	1714 [STJ] 1996/03/16	TAJIMA	SCALE Y
	5	1(DETROIT >	5674 [STJ] 2002/04/03	INBRO	100
JUMP	6	3(STEELERS >	4856 [STJ] 2002/03/15	INBRO	MIRROR
	7	9(B0714DV3 >	3126 [STJ] 2002/03/28	INBRO	OFF
SIZE X					ANGLE
					0
SIZE Y					MAX RPH
					0
NEEDLE					ORIGIN
0 0 0					YES
FIX POS					M. COUNT
0					0
0(X)					REPEAT
0					X : 0
					Y : 0
					PRI0: X
					L W H

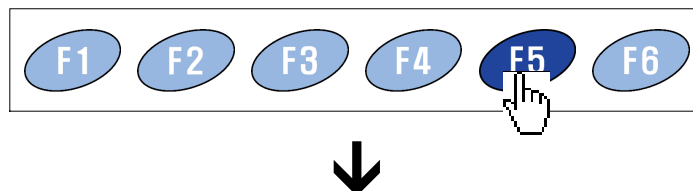
Memory Space : 217,770 Stitch

This design will remove from Disk, continue??

SET PREVIOUS

The message that asks if executing deletion or not shows up.

If you want to complete deletion, push the **F5** [SET] key and if you want to cancel, push the **F6** [PREVIOUS] key.



LIST OF DESIGN IN THE INSERTED FDD.					
DESIGN	NO.	NAME OF DESIGN	INFORMATION	FORMAT	MACHINE
NAME	1	ZIPPOC >	1071 [STJ] 2001/07/03	BARUDAN	M. TYPE
STITCH	2	HOOL(EAGLES) >	44456 [STJ] 1998/08/18	TAJIMA	FLAT
COLOR	3	FILA(FILA) >	1714 [STJ] 1996/03/16	TAJIMA	SCALE X
JUMP	4	1(DETROIT)	5674 [STJ] 2002/04/03	INBRO	100
SIZE X	5	3(STEELERS)	4856 [STJ] 2002/03/15	INBRO	SCALE Y
SIZE Y	6	9(B0714DV3)	3126 [STJ] 2002/03/28	INBRO	100
NEEDLE					MIRROR
0 0 0					OFF
FIX POS					ANGLE
0[OK]					0
0					MAX RPM
					0
					ORIGIN
					YES
					H. COUNT
					0
					REPEAT
					X : 0
					Y : 0
					PRIO: X
					L M H

Memory Space : 220,672 Stitch

Select Design What you want!

↑ ↓ DELETE DEL ALL SELECT PREVIOUS




< Completion of deleting a design in floppy >

## 7 Copy from memory to floppy

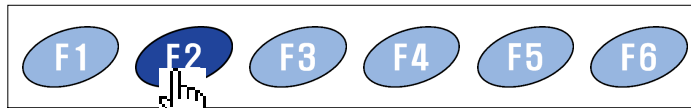
- ◆ It is used to copy a design in memory to floppy
- ◆ For example, in the case of copying a design in the design memory of room 2 to floppy diskette by INBRO format.

<Setting up the origin of a frame>



DESIGN	INITIAL SCREEN				MACHINE
NAME					M. TYPE
STITCH					FLAT
COLOR					SCALE X
JUMP					100
SIZE X					SCALE Y
SIZE Y					100
NEEDLE					MIRROR
0 0 0					OFF
FIX POS					ANGLE
0[OK]					0
0	MAX RPM				
	850				
	ORIGIN				
	YES				
	H. COUNT				
	0				
	REPEAT				
	X : 1				
	Y : 1				
	PRIO: X				
	L M H				

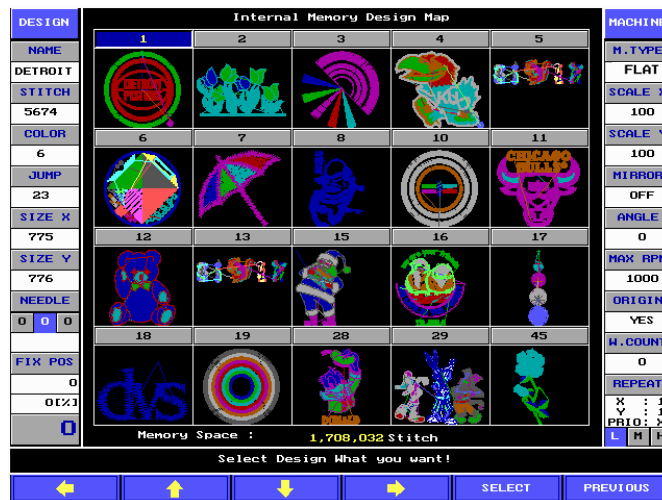
DESIGN CALL IN / OUT SET MACHINE MANU.OPER REPEAT NEXT PAGE



Selection of [ I N / O U T ] on the initial screen




Selection of [ D E S I G N O U T ]



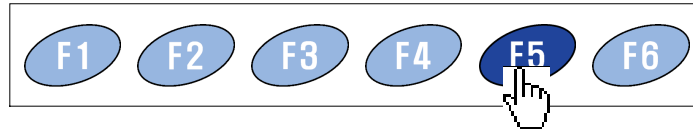
Selecting the design you want using keys,



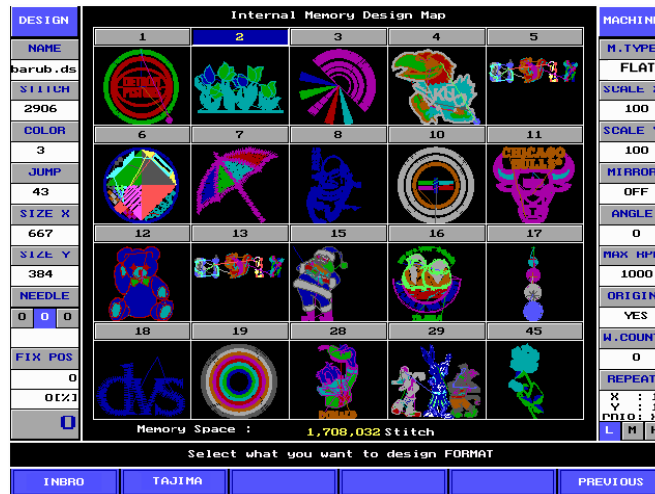
<  Inserting floppy diskette into floppy drive >



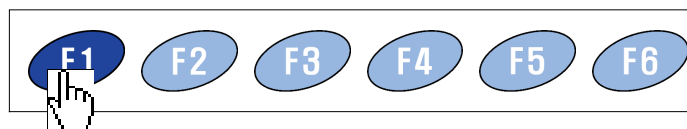
At this time, storage space in diskette should be much more than the design that is selected.





Selection of the [SELECT] key



The screen that asks for output format shows up. (It is possible to copy out in TAJIMA design format or INBRO design format)



<Output format type is set by pushing one of them,  [TAJIMA],  [INBRO]>





The procedure of storing in floppy disk shows up.



If diskette is removed during storing, information can be erased or diskette can break down.

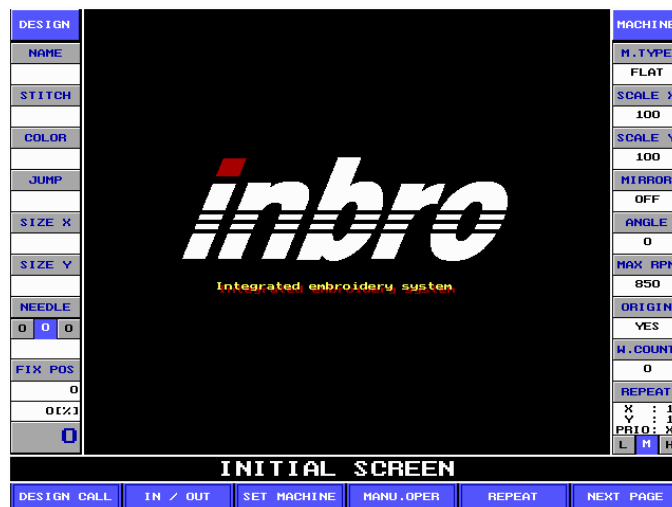


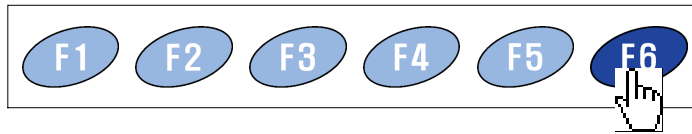
< Completion of the output of a design >

## 8 Renaming the design

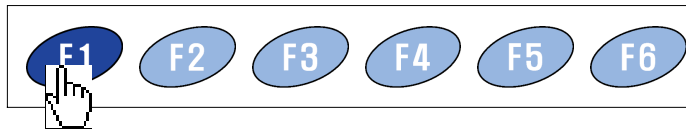
- ◆ It is used to change the name of a stored design.
- ◆ How to change the name of design is as follows.

<Setting up the origin of a frame>

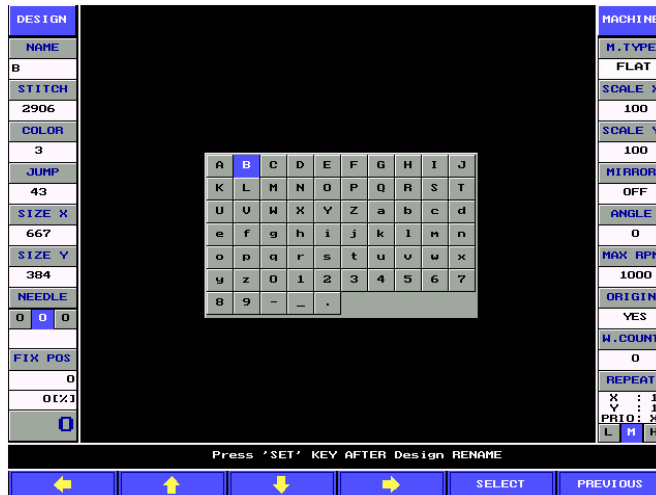





Selecting the [NEXT PAGE]

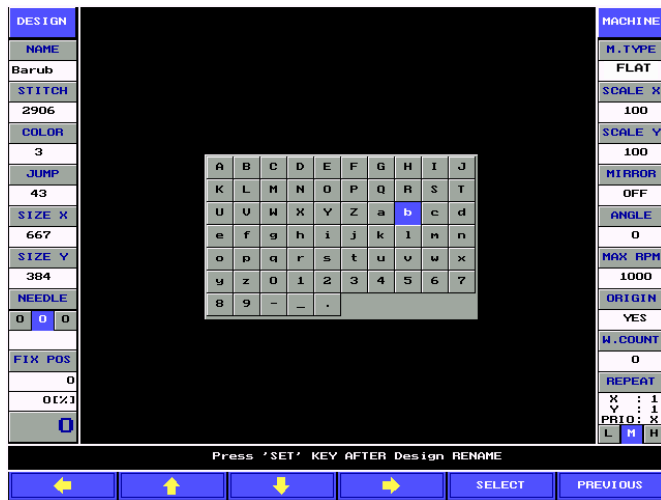


Selecting the [Design RENAME]

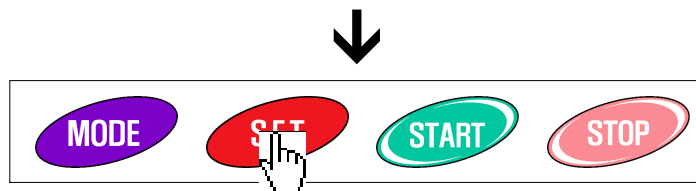


Move the cursor to the character you want and push the  [select].





Using the same method, select the rest of the characters in the new name and notice that the new name is being written at the upper-left side on the screen



To change the name, push the **SET** key and if you want to cancel it, push **F8** [PREVIOUS] key.



<Completion of renaming the design>



### III. Automatic needle change & display color setting

- ◆ After a design is selected the needle order should be set to match the thread colors with the design colors.
- ◆ If a needle should not be changed, the work will be done according to the order of color code that is set on design. If color change is not set the design will sew with the original order in the digitizing file.
- ◆ When a user wants to change the design with the hue a user want, the procedure of the change of a needle should be gone through.
- ◆ The change of a needle has to be made right after the call to a design, if the change of a needle is made on the initial screen before calling the design to be worked with, the needle order of the design being worked previously is going to be changed.
- ◆ There are two changes of needles that are manual change and automatic change. Manual change is to change present needle with another needle and automatic change is the function that moves to the needle that is set if the color change code is encountered as changing the needle table that is set corresponding to the hue code of the design of the embroidery.

#### 1 Replacing a needle change

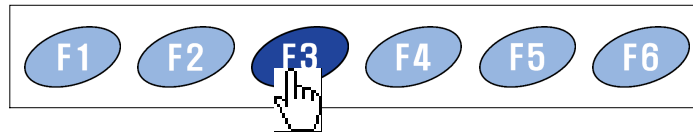
- ◆ It is used when changing the specific needle of the needle table with another needle. The usage is as follows.

< Setting up the origin of the frame >

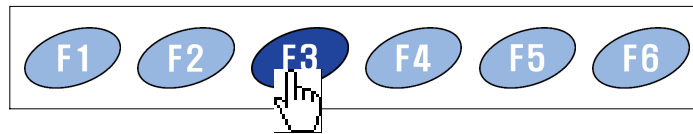
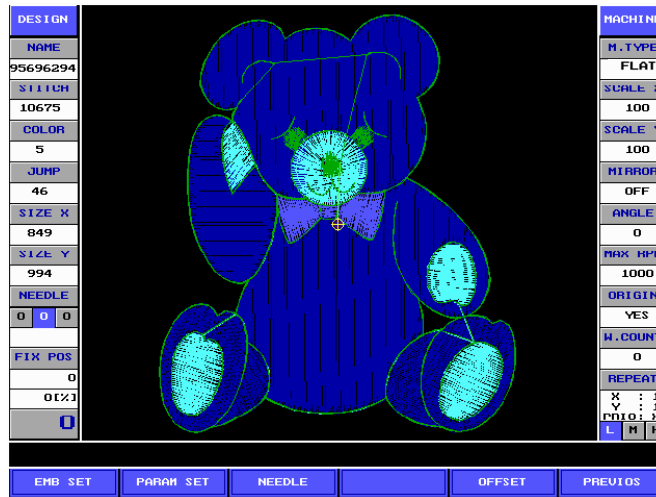


< Calling a design after selecting >

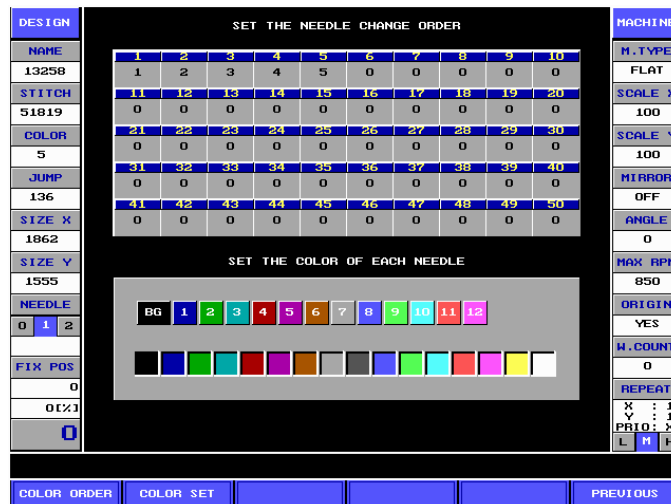




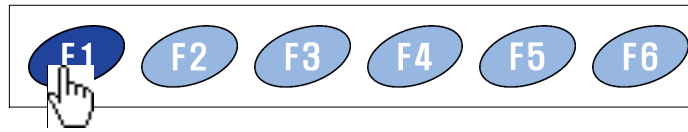
Selection of [SET MACHINE] on the screen after calling a design.



Selection of [NEEDLE]



- ◆ Each needle is assigned a specific number in the Inbro embroidery machine. Because the table in the menu of 'SET THE NEEDLE CHANGE ORDER' in the picture above is corresponding to a needle number on the head of the Inbro embroidery machine, when color change code is encountered in the design, the needle will be changed according to the order of the number in the table.



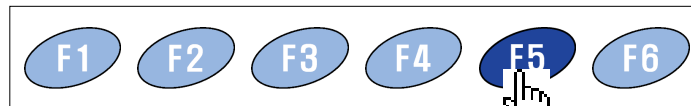
Selection of [COLOR ORDER]



DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
barub.ds	3	7	2	3	12	5	6	4	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
2906	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
3	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
43	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
667	0	0	0	0	0	0	0	0	0	0	90
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
384	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	N. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0%	81	82	83	84	85	86	87	88	89	90	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
0	91	92	93	94	95	96	97	98	99	100	Y : 1
0	0	0	0	0	0	0	0	0	0	0	PRIO: X
0											L H H

Choose Number then Press CHANGE key

Move the cursor to the place you want to change using the keys **F1**, **F2**, **F3**, **F4** key.

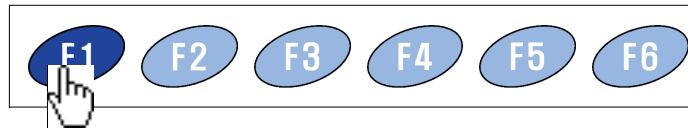


Selection of [CHANGE]



DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
barub.ds	3	7	2	3	12	5	6	4	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
2906	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
3	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
43	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
667	0	0	0	0	0	0	0	0	0	0	90
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
384	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	N. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0%	81	82	83	84	85	86	87	88	89	90	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
0	91	92	93	94	95	96	97	98	99	100	Y : 1
0	0	0	0	0	0	0	0	0	0	0	PRIO: X
0											L H H

Select Exchange, Insert or Delete



Selection of [EXCHANGE]




DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
barub.ds	3	7	5	3	12	5	6	4	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
2906	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
3	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
43	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
667	0	0	0	0	0	0	0	0	0	0	90
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
384	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	M. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
OFF	81	82	83	84	85	86	87	88	89	90	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
0	91	92	93	94	95	96	97	98	99	100	Y : 1
0	0	0	0	0	0	0	0	0	0	0	PRIO: X
0											L H H

Press Number (NUMERIC KEY) and SET key

EXCHANGE      SET      PREVIOUS

Selected table space is deleted and will standby for input of a numeric key.



At this time, input the number of the desired needle using the number key. If you try to change to number 5, pushing .

DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
barub.ds	3	7	5	3	12	5	6	4	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
2906	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
3	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
43	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
667	0	0	0	0	0	0	0	0	0	0	90
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
384	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	M. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
OFF	81	82	83	84	85	86	87	88	89	90	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
0	91	92	93	94	95	96	97	98	99	100	Y : 1
0	0	0	0	0	0	0	0	0	0	0	PRIO: X
0											L H H

Press Number (NUMERIC KEY) and SET key

EXCHANGE      SET      PREVIOUS



If you continue to change, push  [SET]. Then it moves to the next color order.

DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
barub.ds	3	7	5		12	5	6	4	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
2906	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
3	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
43	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
667	0	0	0	0	0	0	0	0	0	0	90
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
384	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	N. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0 [X]	81	82	83	84	85	86	87	88	89	90	REPEAT
	0	0	0	0	0	0	0	0	0	0	X : 1
	91	92	93	94	95	96	97	98	99	100	Y : 1
	0	0	0	0	0	0	0	0	0	0	PRIO: X
											L M H

Press Number (NUMERIC KEY) and SET key

EXCHANGE      SET      PREVIOUS



If you want to end color change set up, push **F6** [PREVIOUS] to exit.

## 2 Inserting a needle change

- ◆ Insertion function is used when inserting a needle number to be added in the middle of needle selection numbers that is input already.
- ◆ Let us see how to insert. The procedure is similar to the method of changing a needle that is described previously.
- ◆ As the fore part is same as the method of changing a needle, please refer to the method.

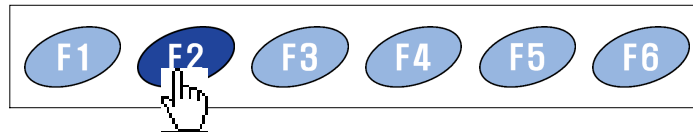
< After moving the cursor to the place you want, select **F5** [CHANGE] >



DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
95696294	1	8	10	2	9	3	6	1	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
10675	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
5	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
46	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
849	0	0	0	0	0	0	0	0	0	0	0
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
994	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	N. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0 [X]	81	82	83	84	85	86	87	88	89	90	REPEAT
	0	0	0	0	0	0	0	0	0	0	X : 1
	91	92	93	94	95	96	97	98	99	100	Y : 1
	0	0	0	0	0	0	0	0	0	0	PRIO: X
											L M H

Select Exchange, Insert or Delete

EXCHANGE    INSERT    DELETE    SET    PREVIOUS



Select the [INSERT] key.



A blank space is inserted as the picture below

DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
95696294	1	8	10	2	9	3	6	1	0	FLAT	
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
10675	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
5	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
46	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
849	0	0	0	0	0	0	0	0	0	0	0
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
994	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	71	72	73	74	75	76	77	78	79	80	YES
FIX POS	81	82	83	84	85	86	87	88	89	90	M. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0 [X]	91	92	93	94	95	96	97	98	99	100	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
											Y : 1
											PTDIO: X
											L M H

Press Number (NUMERIC KEY) and SET key

INSERT      SET      PREVIOUS



Insert the needle number using the number key.

If you want to insert the needle 7 in the foremost part, push **F5** [SET] key after pushing the **F-POST 7** key.

DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
95696294	1	8	10	2	9	3	6	1	0	FLAT	
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
10675	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
5	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
46	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
849	0	0	0	0	0	0	0	0	0	0	0
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
994	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	71	72	73	74	75	76	77	78	79	80	YES
FIX POS	81	82	83	84	85	86	87	88	89	90	M. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0 [X]	91	92	93	94	95	96	97	98	99	100	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 1
											Y : 1
											PTDIO: X
											L M H

Press Number (NUMERIC KEY) and SET key

INSERT      SET      PREVIOUS



If you want to continue inserting, push the **F5** [SET] key to continue and if you want to end, push **F6** [PREVIOUS].



<Completion of inserting a needle>

### 3 Deleting a needle change

- ◆ Deletion function is used when partly deleting a needle number in the middle of needle selection numbers that are input already.
- ◆ As the fore part is same as the method of changing a needle, please refer to the method.

< After moving the cursor to the place you want, select **F5** [CHANGE] >



DESIGN	SET THE NEEDLE CHANGE ORDER										MACHINE
NAME	1	2	3	4	5	6	7	8	9	10	M. TYPE
95696294	6	2	2	4	11	8	6	1	0	0	FLAT
STITCH	11	12	13	14	15	16	17	18	19	20	SCALE X
10675	0	0	0	0	0	0	0	0	0	0	100
COLOR	21	22	23	24	25	26	27	28	29	30	SCALE Y
5	0	0	0	0	0	0	0	0	0	0	100
JUMP	31	32	33	34	35	36	37	38	39	40	MIRROR
46	0	0	0	0	0	0	0	0	0	0	OFF
SIZE X	41	42	43	44	45	46	47	48	49	50	ANGLE
849	0	0	0	0	0	0	0	0	0	0	0
SIZE Y	51	52	53	54	55	56	57	58	59	60	MAX RPM
994	0	0	0	0	0	0	0	0	0	0	1000
NEEDLE	61	62	63	64	65	66	67	68	69	70	ORIGIN
0 0 0	0	0	0	0	0	0	0	0	0	0	YES
FIX POS	71	72	73	74	75	76	77	78	79	80	M. COUNT
0	0	0	0	0	0	0	0	0	0	0	0
0	81	82	83	84	85	86	87	88	89	90	REPEAT
0	0	0	0	0	0	0	0	0	0	0	X : 3
0	91	92	93	94	95	96	97	98	99	100	Y : 3
0	0	0	0	0	0	0	0	0	0	0	PRI: X
0											L M H

Select Exchange, Insert or Delete

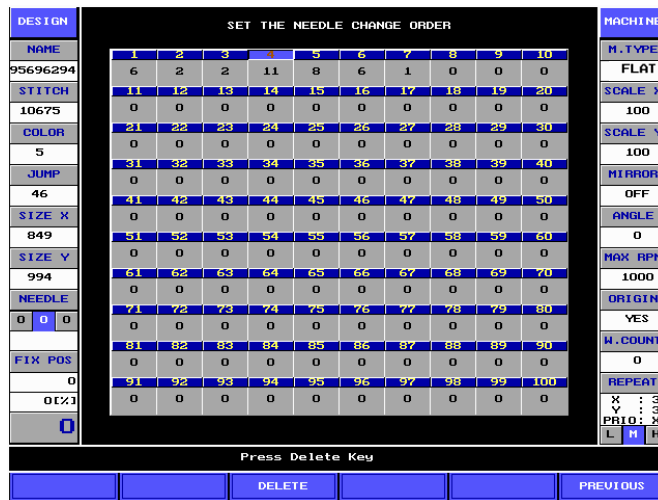
EXCHANGE INSERT DELETE SET PREVIOUS

F1 F2 F3 F4 F5 F6

Select the [DELETE] key



The appropriate needle is deleted and the next needle will be drawn forward as the picture below



If you want to continue modifying, push the **F3** [DELETE] key to continue and if you want to end, push **F6** [PREVIOUS].



<Completion of deleting a needle>

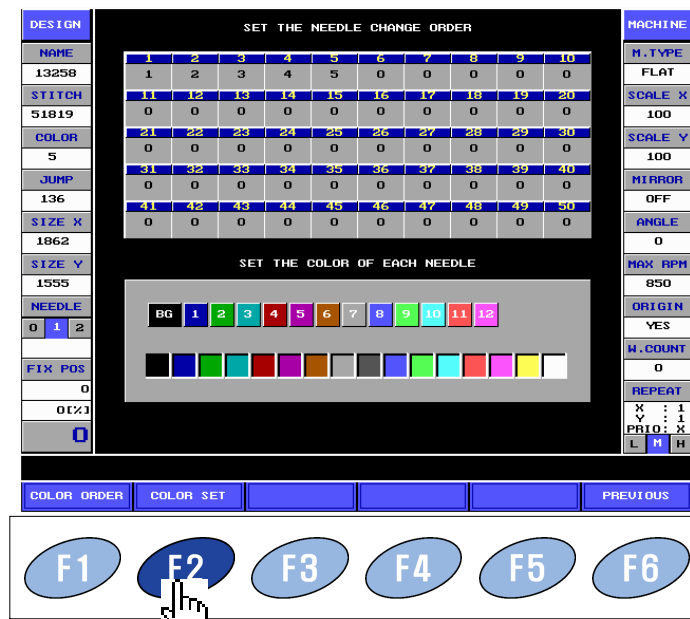
#### 4 Setting the display color of each

- ◆ It is possible to set up hue depending on each needle, this function matches the drawing color to the thread color making the picture on the screen looks like embroidery.
- ◆ How to use is as follows.

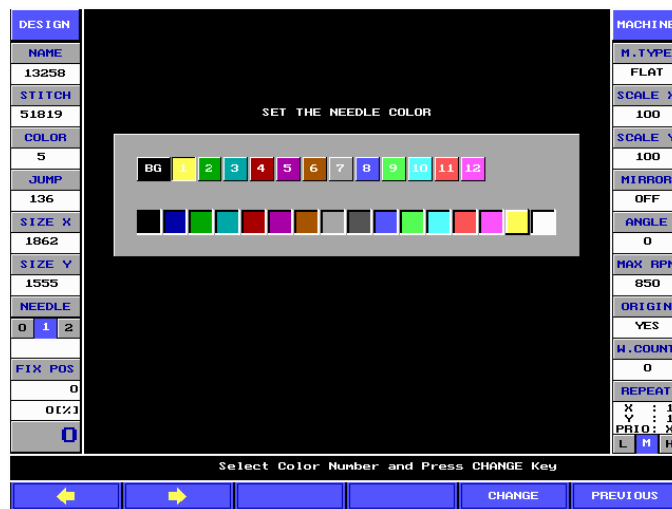
<Calling a design by selecting **F3** [SET MACHINE] → selecting **F3** [NEEDLE]>





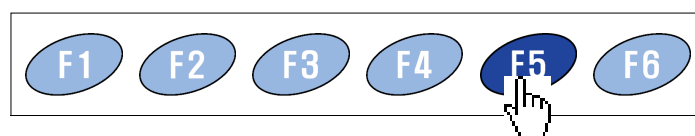


Selection of [COLOR SET]



The top row indicates the needle number, the bottom row shows blocks of colors that can be selected. The [BG] block located at the first upper box is used for setting the background color when the embroidery design shows up on the screen.

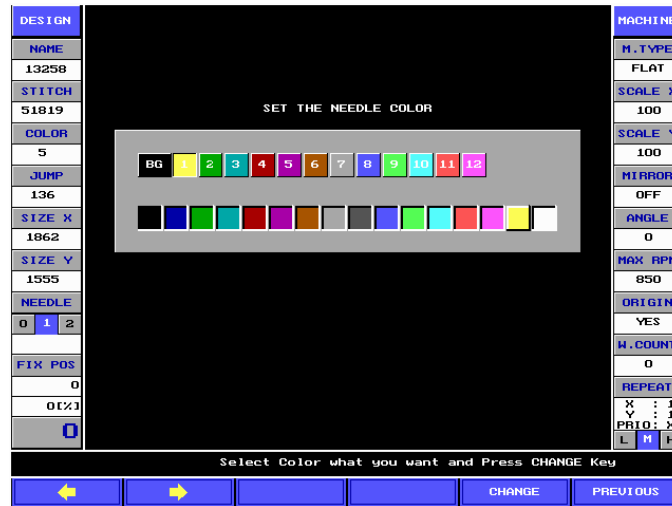
Move the cursor to the needle of which color you want to change using F1, F2 on the box below.



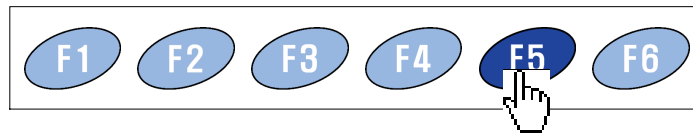
Push the [CHANGE] key.



The message shows up on the bottom of the screen and the cursor will move to the box below like the picture below.



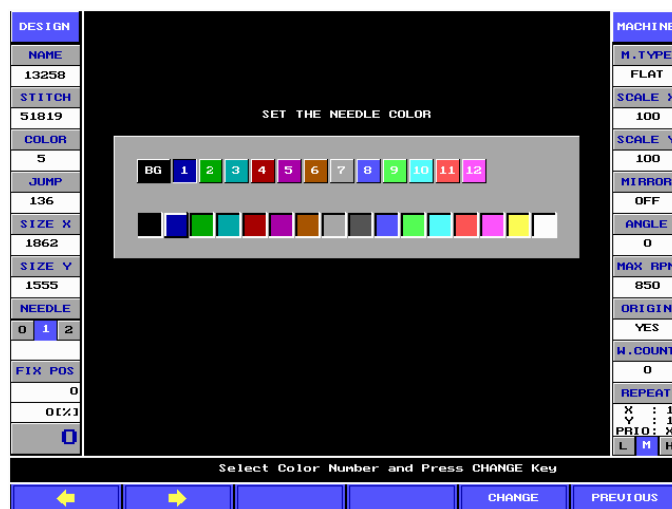
Move the cursor to the color you want to change using **F1**, **F2** on the box below.



When pushing the [CHANGE] key, the color assigned to each needle shows up simply on the screen.



The picture below is the screen where the needle of number 1 is set to deep blue.




<Completion of setting a needle color>

## 5 Inserting & deleting color change code

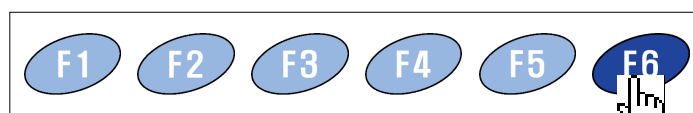
It is used to modify the color change code being set up previously to the embroidery design. Using this function, a user is able to modify the color order.

How to modify the color change code is as follows.

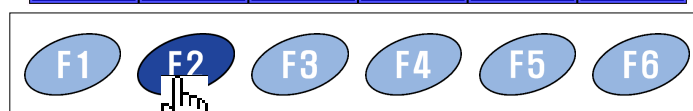
Before calling a design, a user can modify the color code of the design being worked previously on the initial screen. When calling a new design, move to the initial screen by pushing

the  key and then you can modify the color code according to the process below.

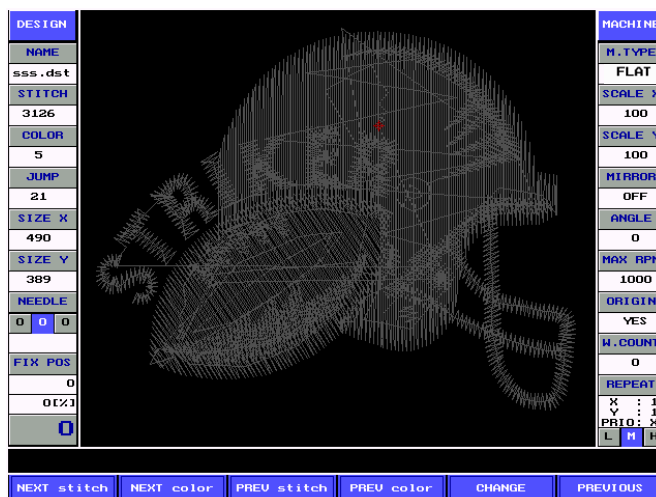




Selecting the [NEXT PAGE]



Selecting the [COLOR CHANGE]



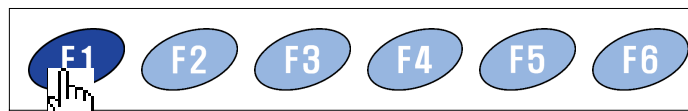
The menus shown up on the screen are as follows.

- F1** NEXT STITCH : It is used when moving the cursor forward to the chosen design by using a number key.
- F2** NEXT COLOR : It is used when moving the cursor forward to the next color code unit being set up previously.

- F3** PREV. STITCH : It is used when moving the cursor backward to the chosen stitch by using a number key.
- F4** PREV. COLOR : It is used when moving the cursor backward to the previous color code unit being set up previously.
- F5** CHANGE : It is used when changing the color code at present cursor position. If color code at the present cursor position has not been set previously, inserting color code message shows up but if so, deleting color code message shows up.
- F6** PREVIOUS : If there is a color code changed by a user, saving message shows up but if not, it returns to the previous screen.



Let us look into a brief process of inputting the color code.

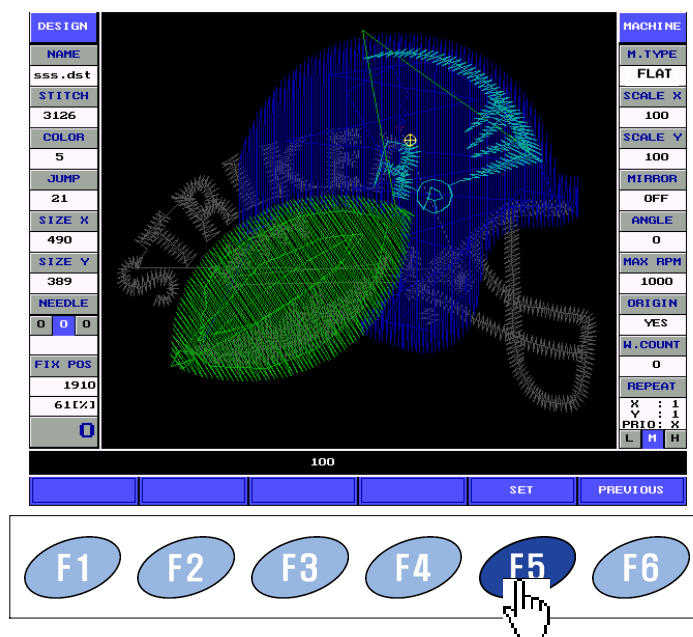


Selecting the [NEXT STITCH]

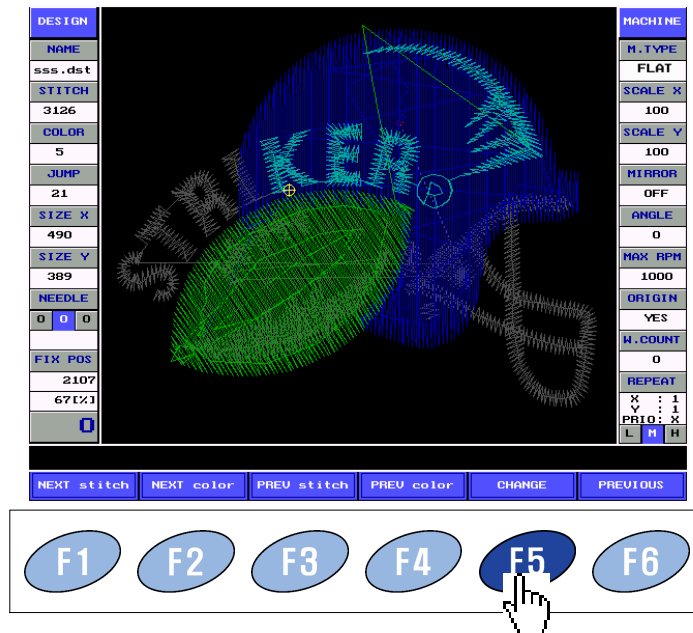


Input the color code as many as stitches a user wants (using the number key).



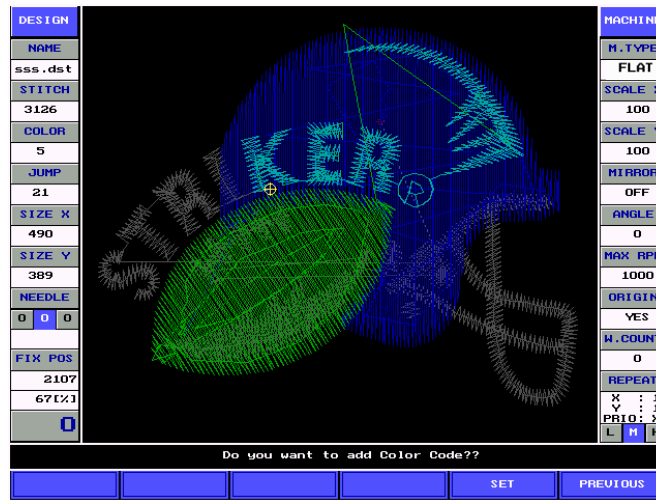


Input the number key and if you want to move the cursor to that position, push the [SET] and if you want to cancel it, push the **F6** [PREVIOUS].



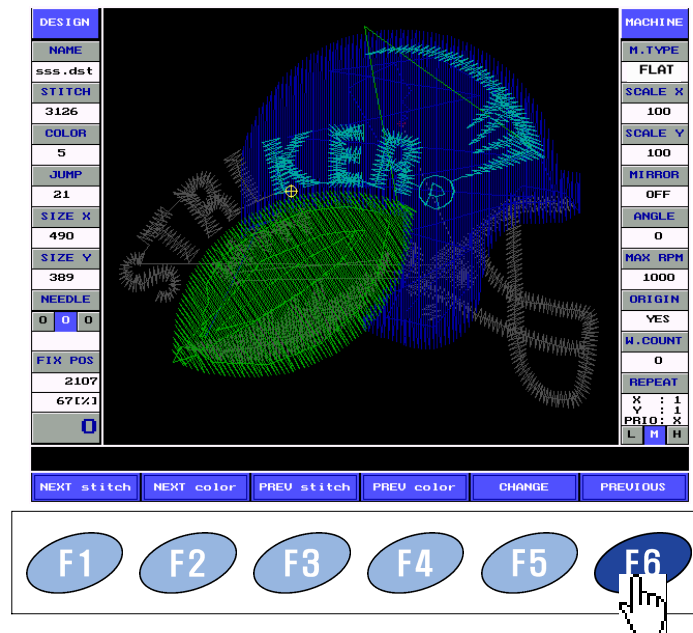
When the cursor is located at the accurate position you want to input the color code, select the [CHANGE], if you try to cancel it, select the **F6** [PREVIOUS].

Selecting the [NEXT STITCH]



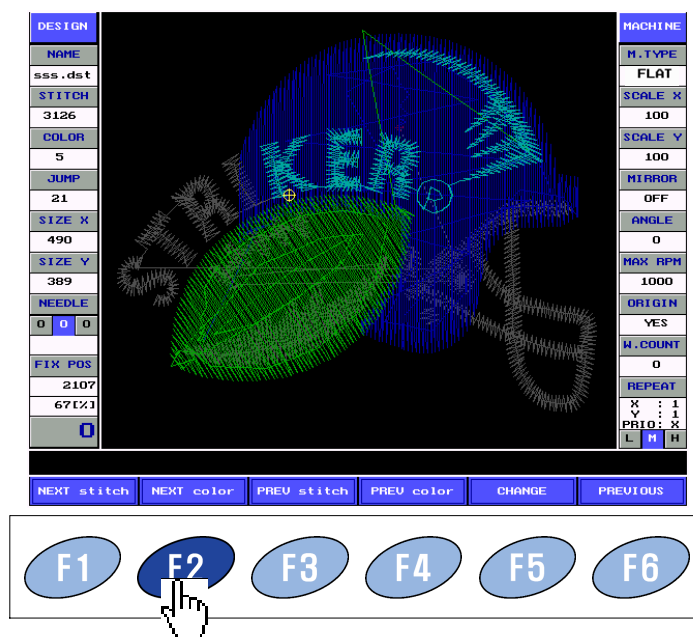
At this time, if the color code at the present cursor position has been set previously, deleting message shows up but if not, inserting message shows up.

If you want to input the code, push the [SET] and if you want to cancel it, push the [PREVIOUS].

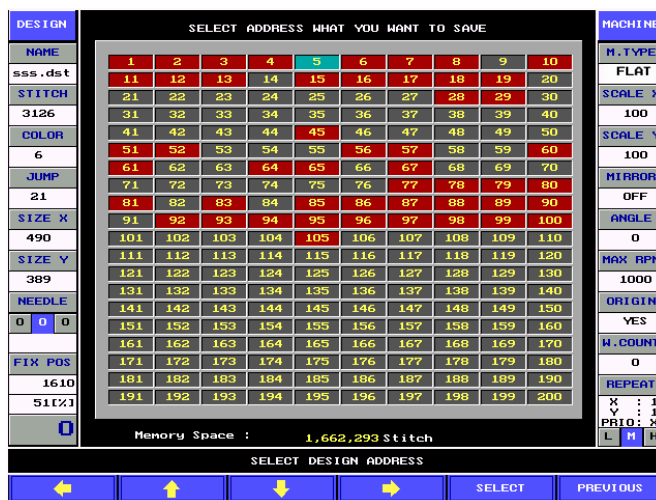


If you added or deleted the color change code at all position you want to modify, select the [PREVIOUS] and store up it.





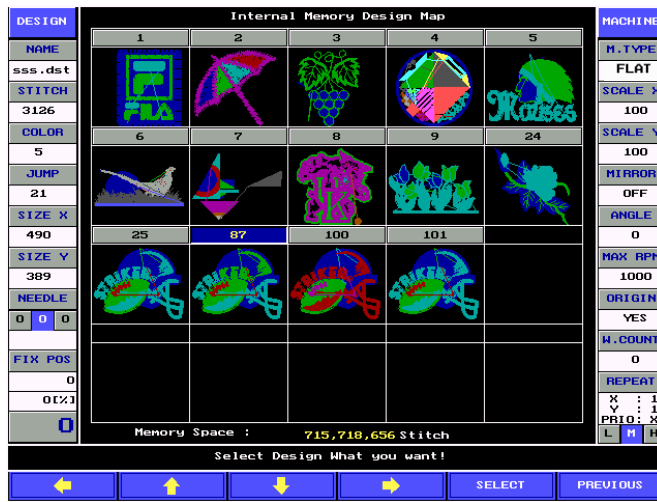
When storing up a design, select the [SAVE] if you want to modify the design being called previously, and select the [SAVE AS] if you want to save the design separately.



In case of selecting [SAVE AS], you will go through the process of setting the design room and storing it up.








<Completion of converting the color change code>

## IV. Manual frame moving



Frame moving key is used in order to place a frame to the place you want before starting the embroidery and in order to stop the work and then move a frame during the embroidery. Also it is used when setting up offset for appliqué work.

### 1 Frame speed control

- ◆ Push the speed control key  in order to control the moving speed in moving a frame.
- ◆ It has three steps of variations, lower speed (L), medium speed (M), high speed (H) and present state of frame speed is indicated on the right bottom of the screen.



When performing this operation, do not place your hands or fingers on the machine table. If you put them on the machine table, you may be injured due to the moving frame.

### 2 Moving the frame (up, down, left, right)

- ◆ If control of a frame speed was completed, let us move a frame to the position you want.



: move a frame up.



: move a frame down.




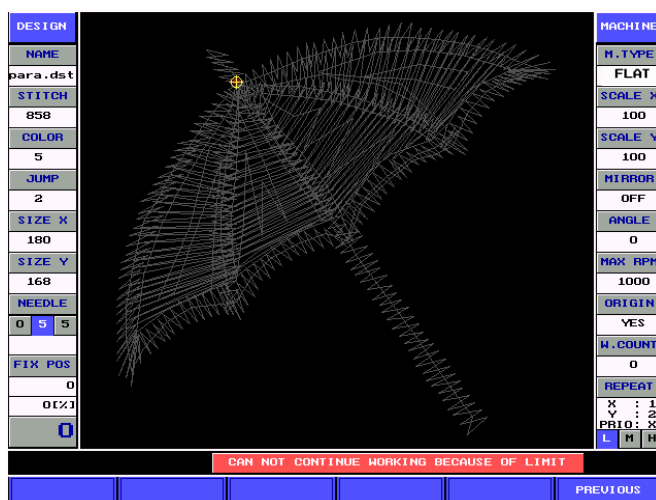
: move a frame right.



: move a frame left.

- ◆ If the frame limit is being set up, the following message will wink when it reaches the superior limit. It means that it is not able to move to that direction anymore. Exit

pushing the  [PREVIOUS] and move the key to the opposite direction.



## V. Frame limits setting

- ◆ Setting up the frame limit is the function that fixes the working range that a user wants and conducts embroidery operation within the appointed scope.
- ◆ Using this function, prevent several accidents like needle breakage caused by chopping a needle at the frame and conduct embroidery operation at the specific position accurately.
- ◆ Follow the procedure below and make yourself familiar with the usage.

<Turn on the power of the machine>



<If the screen for setting up the origin of a frame show up, press the **F1** [Yes].>



### CAUTION

- ◆ To use the frame limit function[LIMIT SET], select the **F1** [YES] on the screen for setting up the origin of the frame, it appears as soon as you turn on the power.
- ◆ If you want to use this function with selecting **F2** [NO] (if don't set up the origin), Following one of the following below.
  1. Initial screen -> **F4** MANU. OPER -> If push the **F2** ORIGIN SET, the frame is moving and storing up the origin at the same screen as the first.
  2. Initial screen -> **F3** SET MACHINE -> **F2** PARAM SET -> **F4** NEXT PAGE -> **F4** NEXT PAGE -> Set up the FRAME LIMIT to ON.

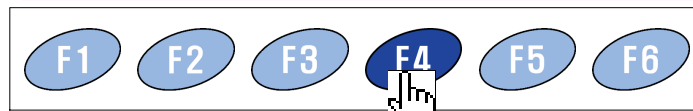
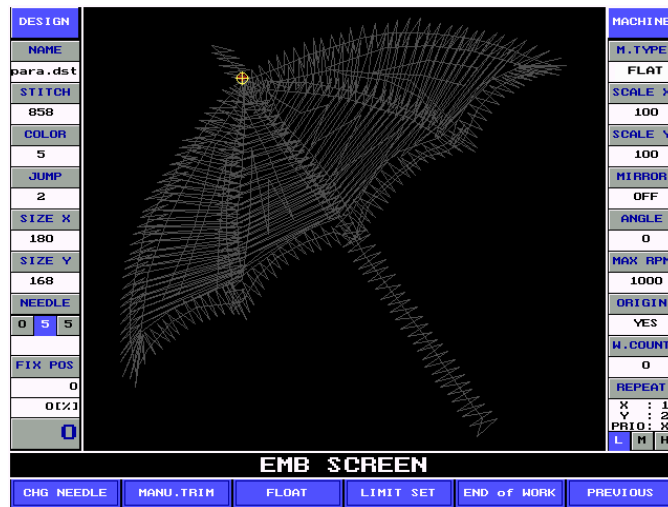


<If you set up the origin of a frame, call a design you want.>



<After calling a design, call the next menu selecting the **F6** NEXT PAGE.>





Select the **F4** [LIMIT SET]



The necessary menus for setting up the frame limit show up.

◆ The sub menus shown up at this time are as follows.

- F1** [MANU. TRAVEL] : It is the function that decides the embroidery position of a design within the limit being set previously.
- F2** [MANUAL SET] : It is the function that sets the limit of a frame.

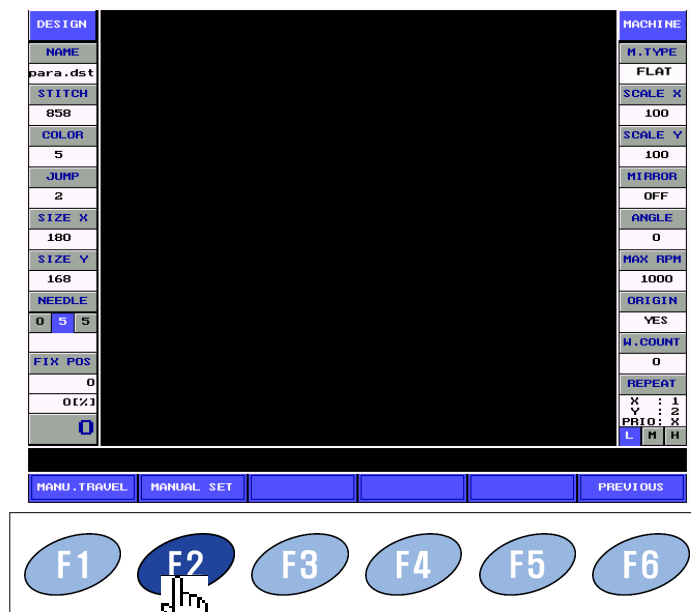
## 1 Frame limits setting by manual moving

- ◆ Moving the frame directly using the direction key, you can input the limit value.

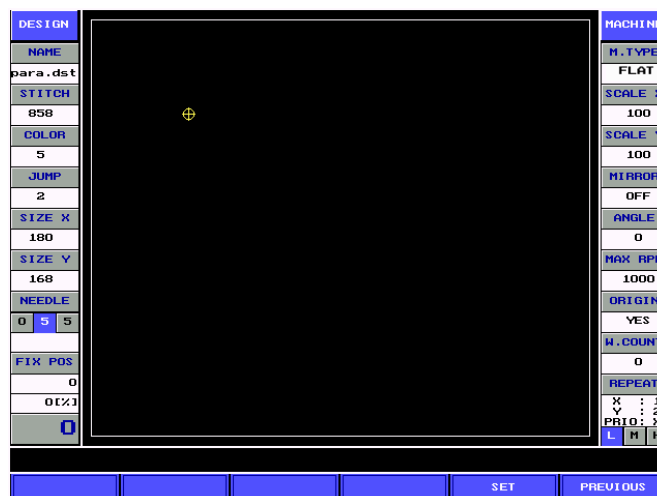


The initial limit value of the frame is being set suitable for a big frame. If a user want to use a smaller frame than that one, make sure to set the limit to prevent the accident like chopping a needle at the frame.

- ◆ Follow the procedure below and make yourself familiar with the usage.



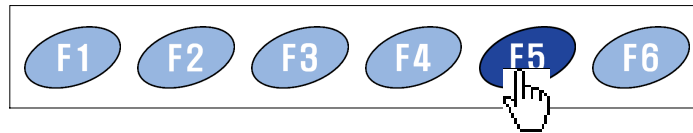
Select the [MANUAL SET].



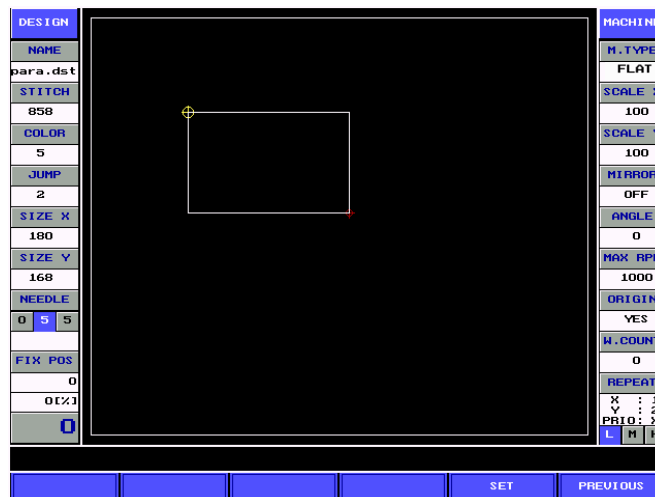
The yellow cursor shows up.



Moving the frame by using the moving key of the frame, you will see the yellow cursor is moving at the same limit. Doing this process, you can move the start point that will set the frame limit, to the position you want.



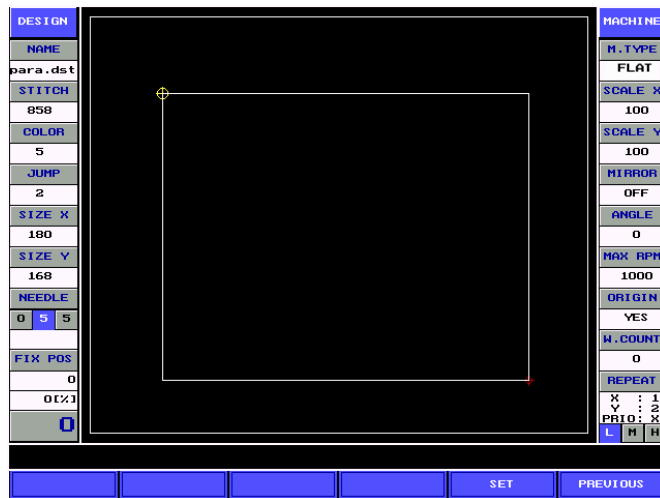
If the frame has being moved to the position you want, set up the start point pushing the **F5** [SET]. If you want to cancel it, come out pushing the **F6** [PREVIOUS].



If you move the frame after setting up the start point, you can see that a square is being created standardizing the start point as shown in the illustration.



Continue moving the frame and set up the size you want.



After the scope is selected as much as you want, store up the setting pushing the **F5** [SET].

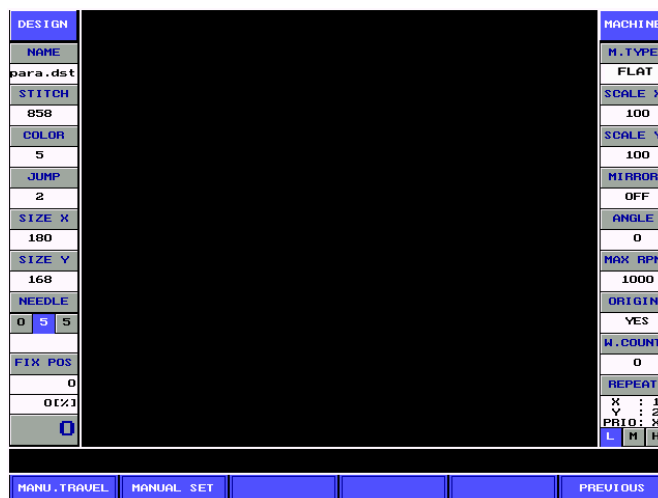
If you want to cancel it, come out pushing the **F6** [PREVIOUS].

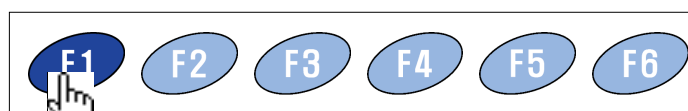


Check the value of setting at the menu of **F1** [MENU. TRAVEL].

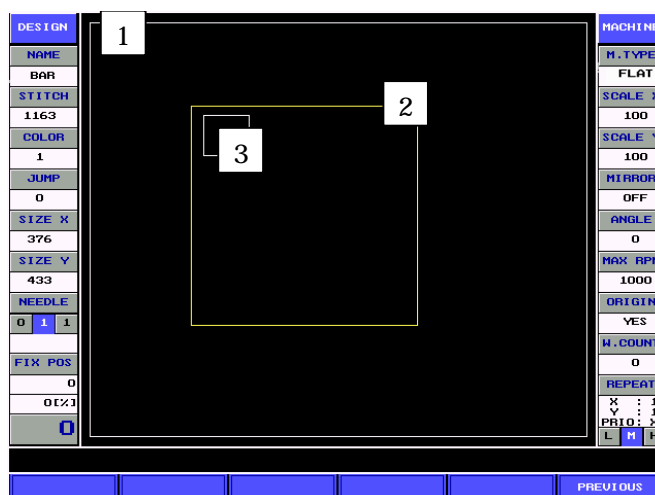
## 2 The relative position between the limit of a frame and the embroidery design

- ◆ You can see the relative position between the limit range of the embroidery being set previously and the design on the screen and conduct embroidery operation at the position you want.
- ◆ Let us see the usage.





Select the [MANU. TRAVEL].



The three square-outlines show up.

◆ Let us look into the meaning of the squares.

1. Big white square: It is the size of a big frame being set up as initial value. (If the origin of a frame is not set, it will not show up).
2. Yellow square: It is the size of a frame being set up by a user at the menu of [SET MENU].
3. Small white square: It is the relative size against the frame of the design called.



Move the white small square (design) of number three to the position you want using the manual frame key. When using limit-set up, lay the white design inside of the yellow square not to make it get out of the frame limit during embroidery working. If you move it by using the manual key, the frame is moved within the frame limit.



Come out pushing the  [PREVIOUS] and start to work embroidery.

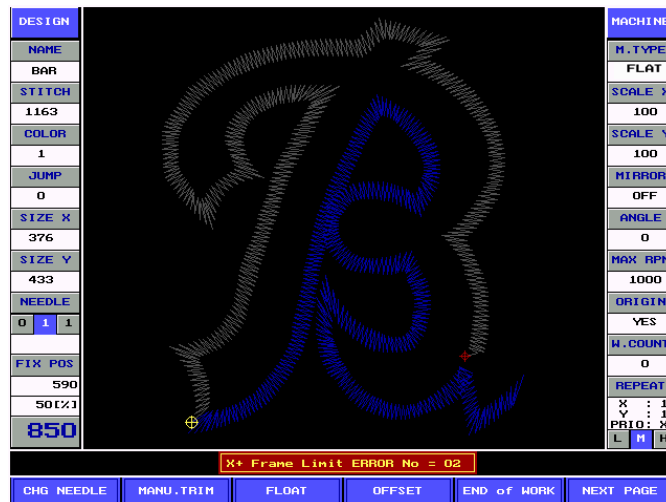




## CAUTION, REFERENCE

- ◆ If start to work embroidery with getting out of the limit as below, the following error of the frame will arise.

- ① In case the embroidery limit touches the limit position during embroidery working even though the start point is in the limit.



In this case, you can start embroidery working as the picture above however, if it reaches to the limit being set before, embroidering working will stop showing the error as below.

**X+ Frame Limit ERROR No = 02**

: When the left side of the design reaches to the frame limit

**X- Frame Limit ERROR No = 03**

: When the right side of the design reaches to the frame limit

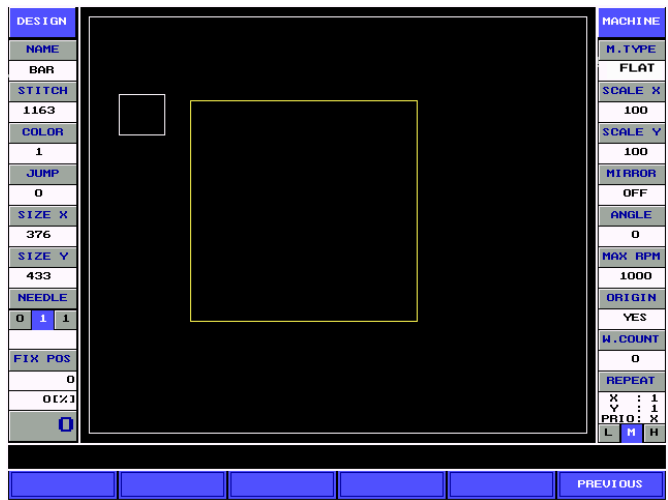
**Y+ Frame Limit ERROR No = 04**

: When the upper side of the design reaches to the frame limit

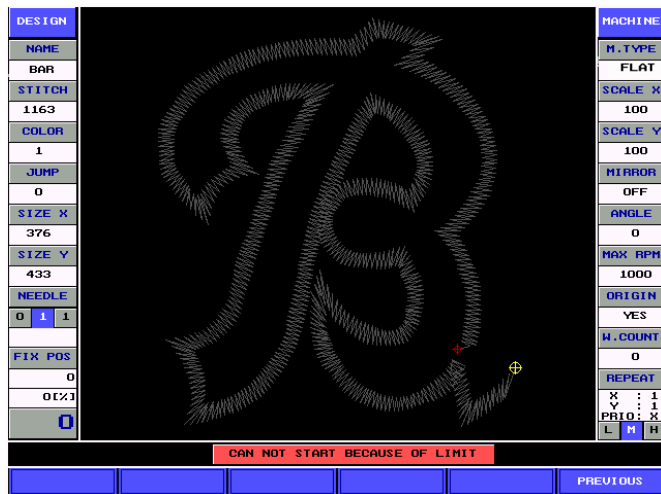
**Y- Frame Limit ERROR No = 05**

: When the lower side for the design reaches to the frame limit

- ② In case the start point is located out of the limit position



If you push the start button even though you confirm the position is getting out of the frame limit as the picture above, embroidery working will not start with showing the following message as shown the picture below.



If you try to continue embroidery working outside of the limit position being set up before, you can do that modifying the limit position or making OFF the limit setting up.

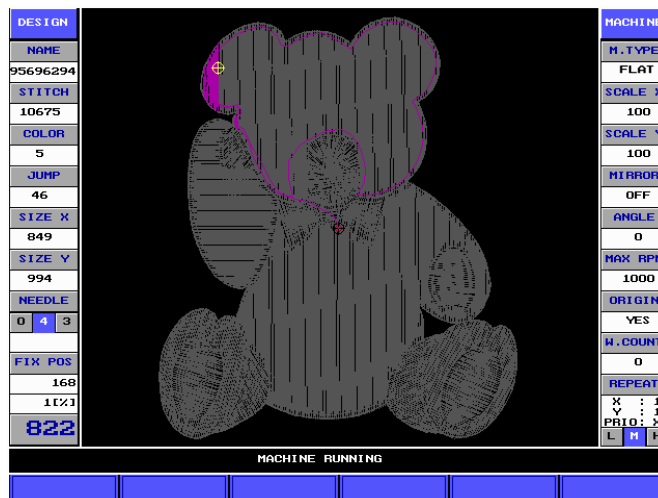
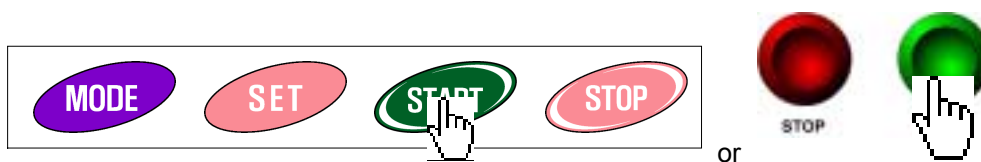
## VI. Getting started

- ◆ After the design to be worked with is selected and selection of a needle is completed and the frame is moved to the place you want, let us get the embroidery started.



Do not put your hands or face near the moving parts of the machine. Especially, the areas near moving needles, rotary hooks, take-up levers, pulleys, and speed reducing box are very dangerous.

- ◆ How to start is simple. Pushing the  key in the operation box or pushing the START switch (green) hung on the embroidery machine gets the embroidery started.



- ◆ When getting the embroidery started, the embroidery is progressing with the embroidery speed that is set after several float operations. And all sorts of procedure, the procedure of stitch process, present embroidery speed, present needle, embroidery progress rate and so on, shows up on LCD monitor.
- ◆ The embroidery is progressing now with the speed of 822[rpm] and 168(1%) stitches over total design stitches of 10,675 stitches are progressed on the screen above.

## 1 Embroidery speed setting



If you want to gain or reduce the embroidery speed a little more, the control key of the embroidery speed is used. The embroidery speed is indicated by [rpm] on the left bottom of the screen.



### Gaining the speed

It is used when you want to gain embroidery speed. Whenever it is pushed a time, the speed is gained by 3[rpm] and if it is being pushed continuously, the speed is gained continuously.



### Reducing the speed


It is used when you want to reduce embroidery speed. Whenever it is pushed a time, the speed is reduced by 3[rpm] and if it is being pushed continuously, the speed is reduced continuously.

- ◆ The speed of the main frame can be changed within the range of the value of setting of r.p.m parameter.
- ◆ The maximum speed can be affected by the design, raw material and so on.



If embroidery speed is changed excessively during the embroidery, the embroidery machine can be overworked.

## 2 Stopping during embroidery

- ◆ If you want to stop during the embroidery due to the some situations, use the  key in the operation box or push the STOP switch hung on the embroidery machine (red).



or





The screen above is the screen that gets the embroidery stopped.

### 3 Manual trim

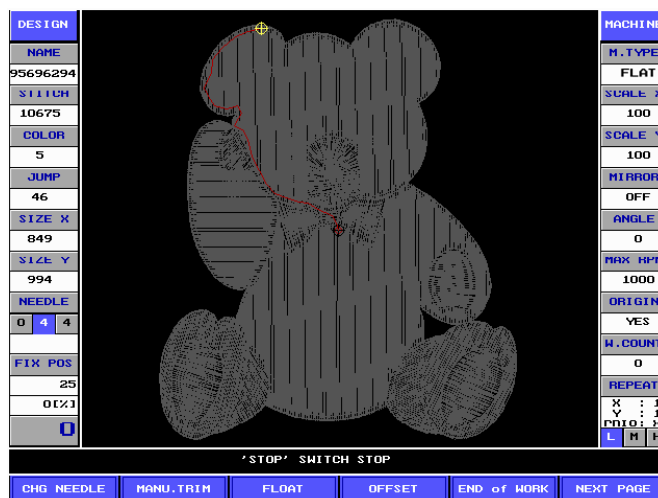
- ◆ Manual trim function is used to make a trim arbitrarily other than automatic trim by design code during the embroidery.

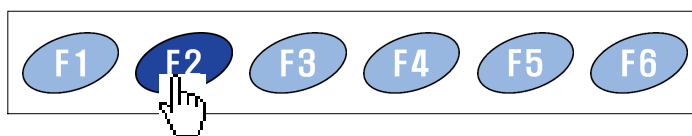


When make a manual trim, be careful not to put the hands under the needle or table of the machine. In case of putting a hand under the needle or the machine during making a trim, injury may occur by the needle or the frame under operation.

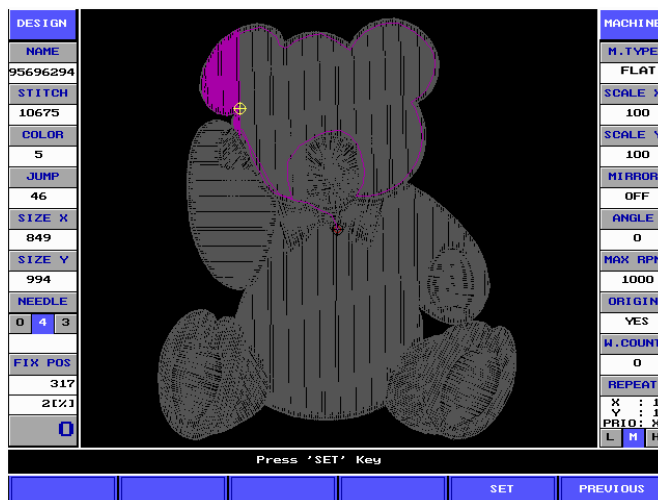
- ◆ The procedure of making trim is as follows.

<Make a stop during the embroidery>

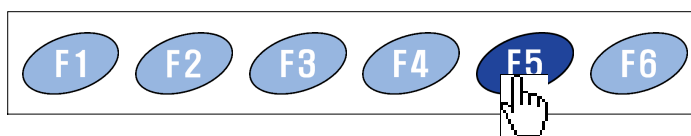




Select the [MANU. TRIM] key



The message, " Press 'SET' Key", shows up.



Select the [SET] key.

<Select **F6** [PREVIOUS] if you try to cancel a trim>



<Completion of manual trim>

#### 4 Float operation

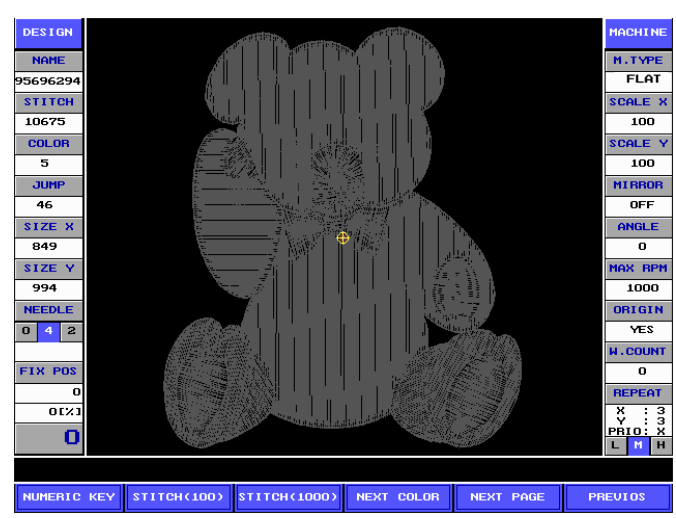
- ◆ Float is the function that lets the frame position to be changed by the design of the embroidery without the rotation of main axis, that is, without getting a needle down.
- ◆ It can be used if you select **F3** [FLOAT] on the stop screen during the embroidery or select **F6** [NEXT PAGE] → **F3** [FLOAT] on the screen before starting the embroidery.
- ◆ When selecting float operation function, menus like the below exist.

- F1** NUMERIC KEY : Without the embroidery work, go forward as many as stitches a user wants. (Using the number key and SET' key)
- F2** STITCH(100) : Without the embroidery work, go forward as many as one hundred stitches.
- F3** STITCH(1000) : Without the embroidery work, go forward as many as one thousand stitches.
- F4** NEXT COLOR : Without the embroidery work, go forward to the next color code.
- F5** NEXT PAGE : It is used when you want to float backward.

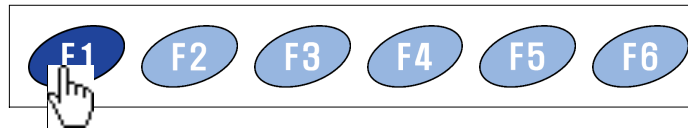
- F1** NUMERIC KEY : Without the embroidery work, go backward as many as stitches a user wants. (Using the number key and SET' key).
- F2** STITCH(-100) : Without the embroidery work, go backward as many as one hundred stitches.
- F3** STITCH(-1000) : Without the embroidery work, go backward as many as one thousand stitches.
- F4** PREV.COLOR : Without the embroidery work, go backward to the previous color code.
- F6** PREVIOUS : It is used when removing to the previous step.

◆ How to use is as follows.

<The screen below shows up if selecting **F3** [FLOAT] before starting the embroidery or during the embroidery>.



If you try to go 1281 stitches forward without the actual embroidery.

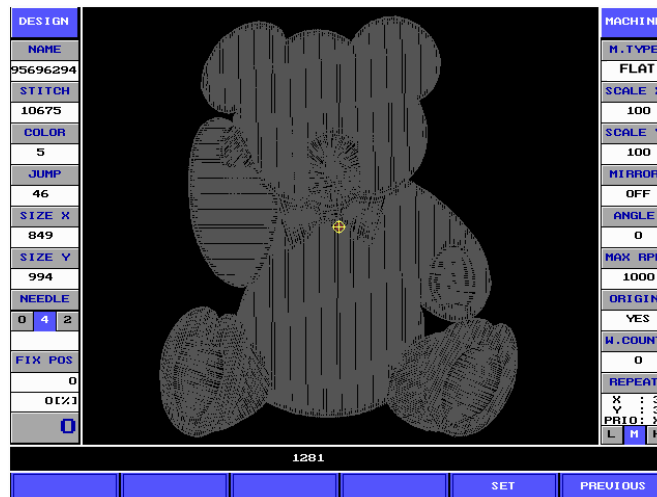


Select the [NUMERIC KEY]

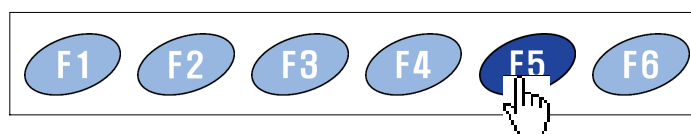


Using the number key input stitches you want. If you try to go 1281 stitches forward,

push  →  →  →  one by one.

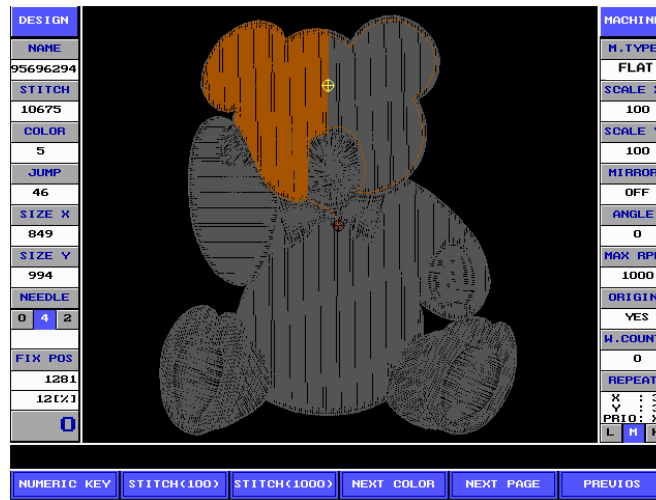


After checking out the number that shows up on the bottom of the screen.



Select [SET]





It can be possible to see the exact progress of 1281 stitches.

If float operation is needed more, please use after reading the description of menus carefully. For example, if you want to go 100 stitches forward, select **F3** [STITCH(100)] and if want to get float operation to go forward to the next color code,

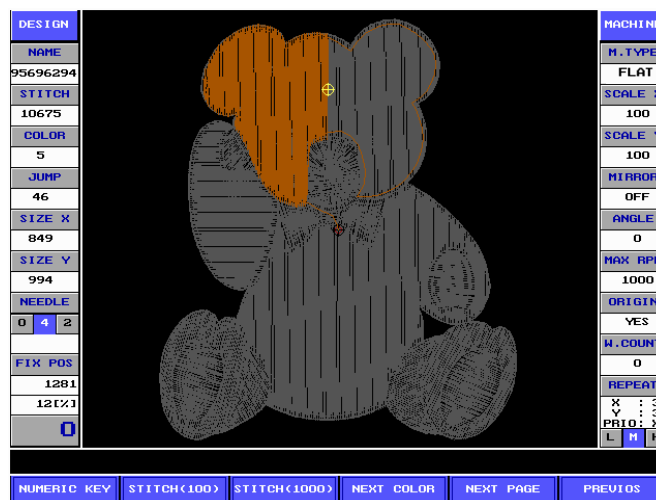
select **F4** [NEXT COLOR].

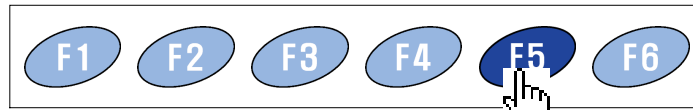
If you want end the float, select **F6** [PREVIOUS].



<Completion of getting the float to go forward>

But if you want to cancel the float progressed already.





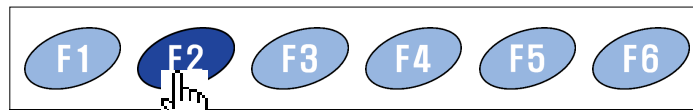
Select [NEXT PAGE]



DESIGN		MACHINE	
NAME		M. TYPE	FLAT
95696294		SCALE X	100
STITCH	10675	SCALE Y	100
COLOR	5	MIRROR	OFF
JUMP	46	ANGLE	0
SIZE X	849	MAX RPM	1000
SIZE Y	994	ORIGIN	YES
NEEDLE	0 4 2	W. COUNT	0
FIX POS	1281	REPEAT	X : 3
	121%		Y : 3
	0		PRI: X
			L M H

NUMERIC KEY	STITCH(-100)	STITCH(-1000)	PREV. COLOR	PREVIOUS
-------------	--------------	---------------	-------------	----------

If you want to go 100 stitches backward



Select [STITCH(-100)]



DESIGN		MACHINE	
NAME		M. TYPE	FLAT
95696294		SCALE X	100
STITCH	10675	SCALE Y	100
COLOR	5	MIRROR	OFF
JUMP	46	ANGLE	0
SIZE X	849	MAX RPM	1000
SIZE Y	994	ORIGIN	YES
NEEDLE	0 4 2	W. COUNT	0
FIX POS	1181	REPEAT	X : 3
	111%		Y : 3
	0		PRI: X
			L M H

NUMERIC KEY	STITCH(-100)	STITCH(-1000)	PREV. COLOR	PREVIOUS
-------------	--------------	---------------	-------------	----------

It can be possible to see the exact going of 1281 stitches backward.



<Completion of getting the float to go backward>

## 5 Stitch back

- ◆ It can be possible to push the number of stitches progressed by the operation of start or stop back when the embroidery machine is at stop state during the embroidery.



Do not put your hands or face near the moving parts of the machine. Especially, the areas near moving needles, rotary hooks, take-up levers, pulleys, and speed reducing box are very dangerous.

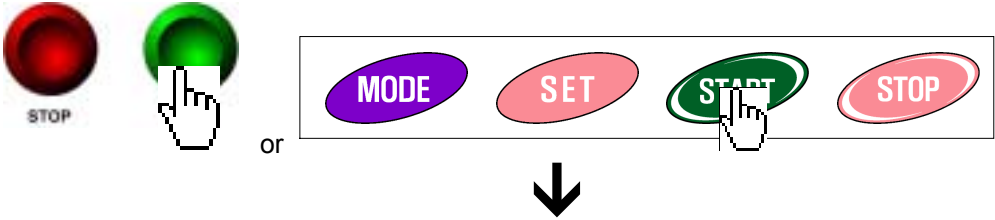
**Push stop button one time**

- ◆ The frame goes backward by a unit of transfer that is set on the screen.
- ◆ A unit of transfer is set on **F3** [SET MACHINE] → **F2** [PARAM SET] → UNIT OF BACK STITCH. (Refer to the application section)

**Push the stop button continuously**

- ◆ The frame starts going backward.
- ◆ If the switch is released before the frame progresses as much 10 times as a unit of transfer of the embroidery set, the machine stops immediately. (The frame goes backward by a unit of transfer that is set)
- ◆ If the switch is released after the frame goes backward over 10 times repeatedly, it continues to go backward.
- ◆ At this time, stop button is pushed in order to stop going backward, going backward stops.

**Push start button one time on going backward**



◆ The Machine halts.


## 6 Manual color change (needle)

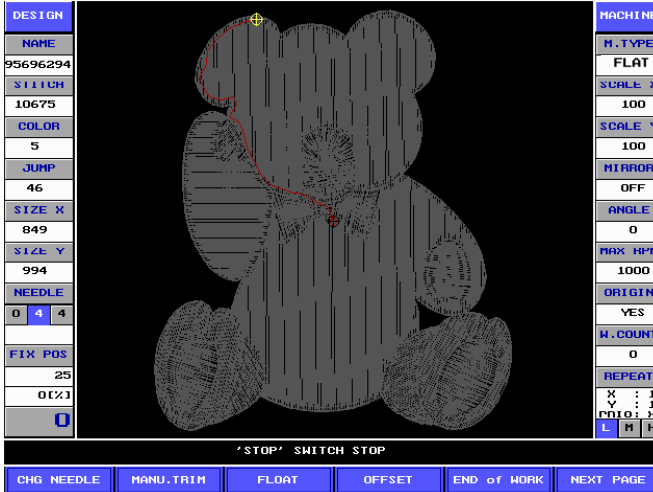
- ◆ It can be possible to change a needle by hand when a stop during the embroidery. (It can be also possible to change a needle through selecting **F6** [NEXT PAGE] → **F1** [CHG NEEDLE] on the screen before the embroidery begins).

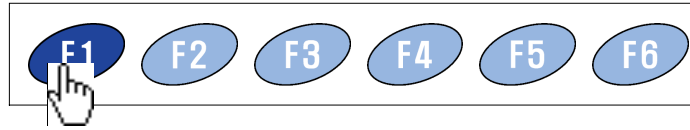


When changing the color by hand, be careful not to put the hands or other physical part in the interval between a head of number one (right side) and change box. Otherwise, the hands may be cut in the interval-between the No.1 head and the change box.

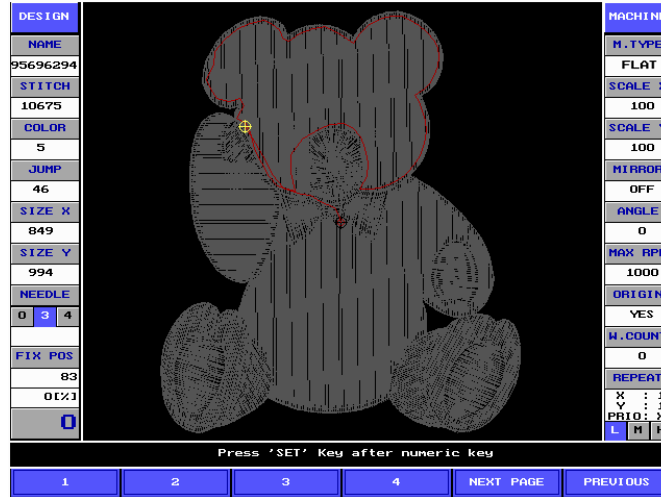
- ◆ The procedure of change is as follows.

<Push the  key or the stop switch during the embroidery>



Select [CHG NEEDLE] if the menu of a stop state shows up



If there is the needle number you want, push that function key and if not, after selecting the **F5** [NEXT PAGE] to get the needle number that you want to show up, the change will be immediately made if that key is pushed.



[Reference] : It is possible to make a change at one time by pushing the **SET** key after input of the needle number you want.



<If you want to change a needle with that of number 5>  
 Operate keys as the order of **F1** [CHG NEEDLE] → **F5** [NEXT PAGE] → **F1**  
 [5] or **F1** [CHG NEEDLE] → **OFFSET 5** → **SET** key.



If you do not want to change, push **F6** [PREVIOUS].



<Completion of the change of manual needle>



## 5. Application (Using more conveniently)

### 1 . Offset function use

- ◆ Offset function is the function that places the frame automatically to the point that is set. This function makes it more convenient that the work of the exchange of frames, a trim, appliqué embroidery and so on.



When conducting this operation, do not put the hands or fingers on the table. If you put the hands or fingers on the table when the frame is moving, injury may arise by driving the frame.

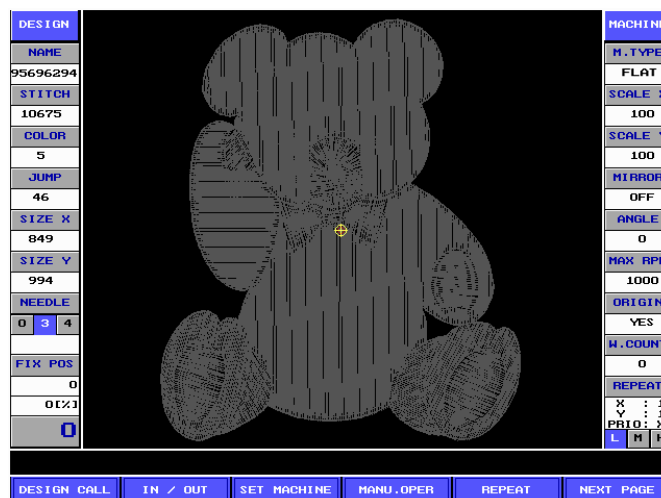
- ◆ Offset function in the Inbro embroidery machine consists of manual offset function and automatic offset function.

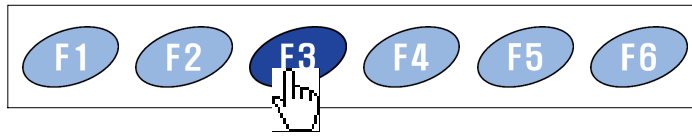
**Manual offset** : Manual offset is used when a user moves the frame to the point set after stopping it arbitrarily or when go back to the place where the embroidery has been doing and continue the work after moving the frame by hand.

**Automatic offset** : Automatic offset is the function that makes a trim at the point which is preset, if a offset preset is encountered during the embroidery the machine will trim and move to the preset position.

#### 1 Offset position setting

- ◆ In the manual offset, the offset point should be set in order to make use of **F3** [OFFSET MOVE] or automatic offset function.
- ◆ How to set is as follows.



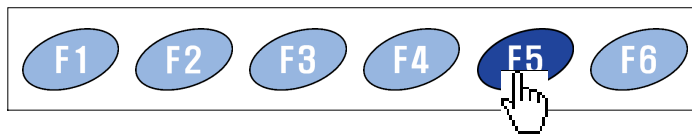


Select [SET MACHINE]



DESIGN	MACHINE
NAME	N. TYPE
95696294	FLAT
STITCH	SCALE X
10675	100
COLOR	SCALE Y
5	100
JUMP	MIRROR
46	OFF
SIZE X	ANGLE
849	0
SIZE Y	MAX RPM
994	1000
NEEDLE	ORIGIN
0 0 0	YES
FIX POS	M. COUNT
0	0
0(%)	REPEAT
0	X : 1
	Y : 1
	PRIO: X
	L M H

EMB SET	PARAM SET	NEEDLE	OFFSET	PREVIOUS
---------	-----------	--------	--------	----------



Select [OFFSET].




DESIGN	MACHINE
NAME	N. TYPE
95696294	FLAT
STITCH	SCALE X
10675	100
COLOR	SCALE Y
5	100
JUMP	MIRROR
46	OFF
SIZE X	ANGLE
849	0
SIZE Y	MAX RPM
994	1000
NEEDLE	ORIGIN
0 0 0	YES
FIX POS	M. COUNT
0	0
0(%)	REPEAT
0	X : 1
	Y : 1
	PRIO: X
	L M H

START POS	OFFSET POS	STITCH	STIT. VALUE	PREVIOUS
-----------	------------	--------	-------------	----------

◆ Submenu of offset setting screen is as follows.

**F1** [START POS] : It is the function that assigns the start position of the frame of the design called. If the start point is set the frame moves automatically to the start position that is set wherever the frame is when the frame starts the work.

**F2** [OFFSET POS] : It sets up the offset position to the design called. If the offset setting stitch is reached on the work of the design called, it moves to the position that is set already after trim. After this, if the  key is pushed after appliqué work and so on it moves to the next stitch to work and continues the work.

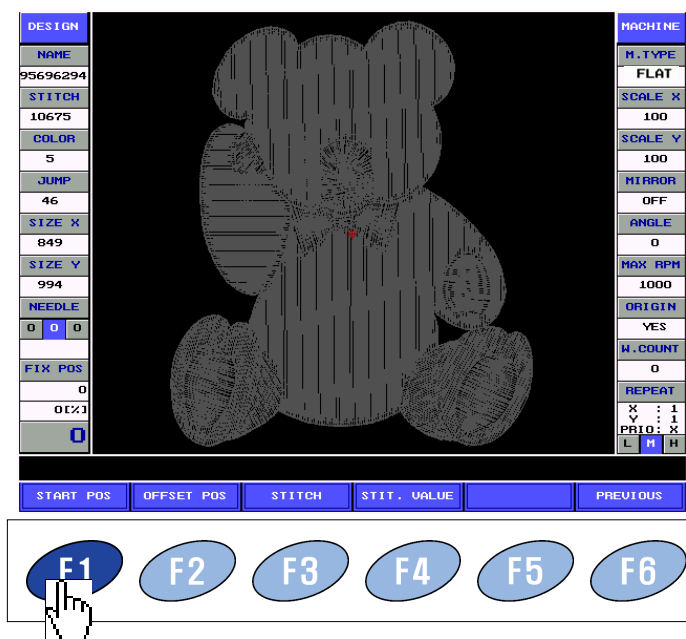
**F3** [STITCH] : It sets up the stitch that is going to move to the offset position at the design called. It is used conveniently when appliqué work and so forth.

**F4** [STIT. VALUE] : It can be possible to check out the offset position that is set and delete the position that is set. Also it can be possible to set up the offset position by setting up the stitch position using the number key.

## CAUTION

1. If OFFSET in [EMB SET] of [SET MACHINE] should not be set up to "YES", though the offset point is set up, it does not execute during the embroidery.
2. If the origin of a frame was not set up, it is difficult to search for offset coordinate.

### ① How to use START POS

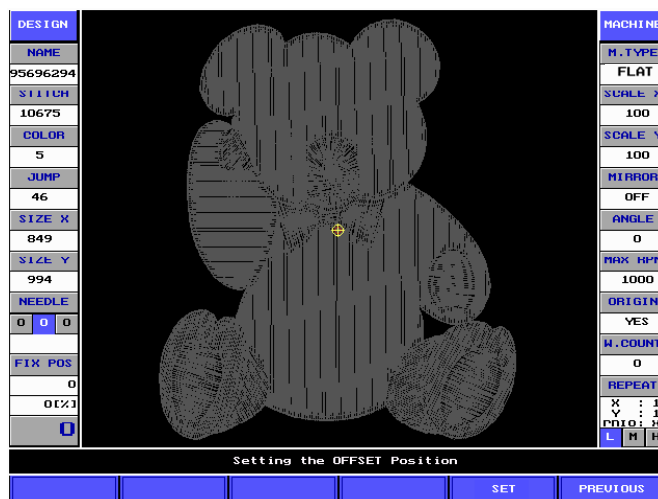


Push [START POS].





The menu disappears like the picture below and the message, "Setting the OFFSET Position", shows up.

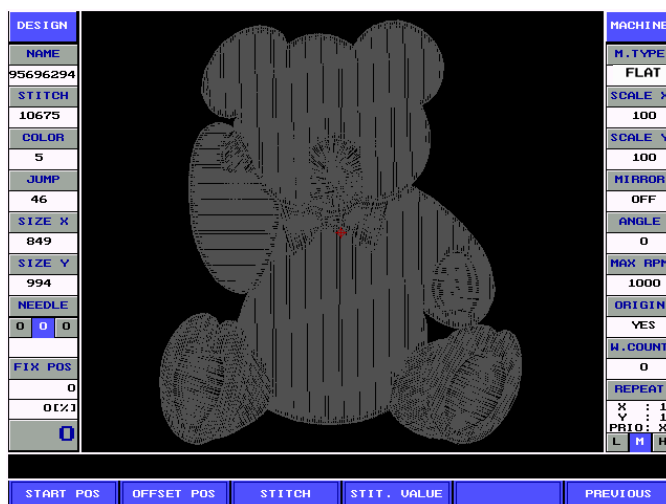


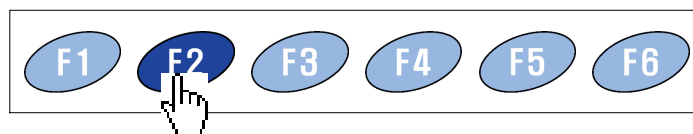
Using the frame moving key move a frame to the position you want.



If the frame is moved to the position you want, push the **F5** [SET] key to set up. If you want to cancel, push **F6** [PREVIOUS].

## ② How to use OFFSET POS





Select [OFFSET POS].



The menu disappears like the picture below and the message, "Setting the OFFSET Position", shows up.



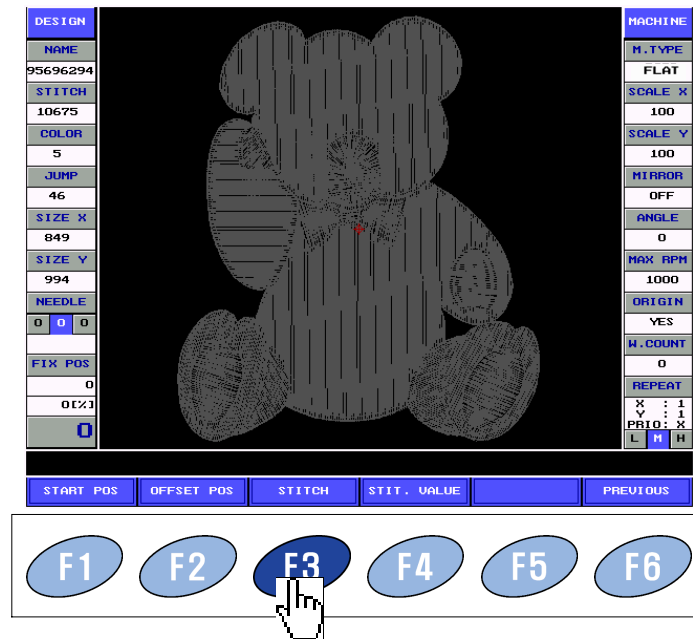
Using frame moving key move a frame to the position you want.



If the frame is moved to the position you want, push the **F5** [SET] key to set up. If you want to cancel, push **F6** [PREVIOUS].

### ③ How to use STITCH

- ◆ This fixed offset function of is the function that moves automatically a frame to the offset position and then stops after making trim when the stitch position, which is set previously during the embroidery, is reached. It can be possible to set up offset position of each design to the maximum 10 positions.



Select [STITCH].



- F1** [NUMERIC KEY] : [NUMERIC KEY] : It indicates the position of going forward as many as stitches a user wants.
- F2** STITCH(100) : It indicates the position of going forward as many as one hundred stitches.
- F3** STITCH(1000) : It indicates the position of going forward as many as one thousand stitches.
- F4** NEXT COLOR : It indicates the position of going forward to the next color code.
- F5** NEXT PAGE : It is selected if you want to go backward.

- F1** NUMERIC KEY : It indicates the position of going backward as many as stitches a user wants. (Using the number key and 'SET')
- F2** STITCH(-100) : It indicates the position of going backward as many as one hundred stitches.
- F3** STITCH(-1000) : It indicates the position of going backward as many as one thousand stitches.
- F4** PREV.COLOR : It indicates the position of going backward to the next color code
- F6** PREVIOUS : It is used when removing to the previous step.

◆ The method of setting is as follows.

If the first offset is set to the point of the 123<sup>rd</sup> stitch and the second offset is set to the position where the color is changed and the third offset is set to the point where the next color code is changed

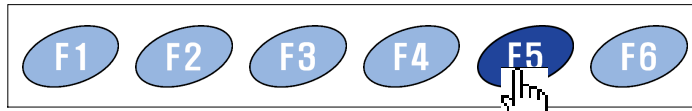
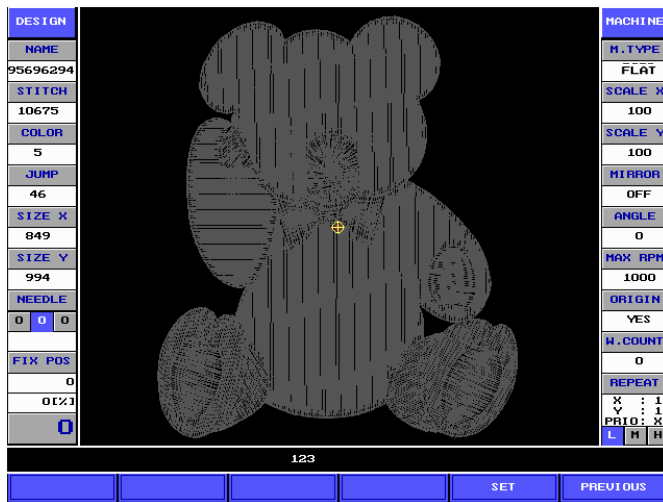


Select the [NUMERIC KEY]



Push number keys, **1**, **2**, **3** one by one in order to go 123 stitches forward





Select [SET]



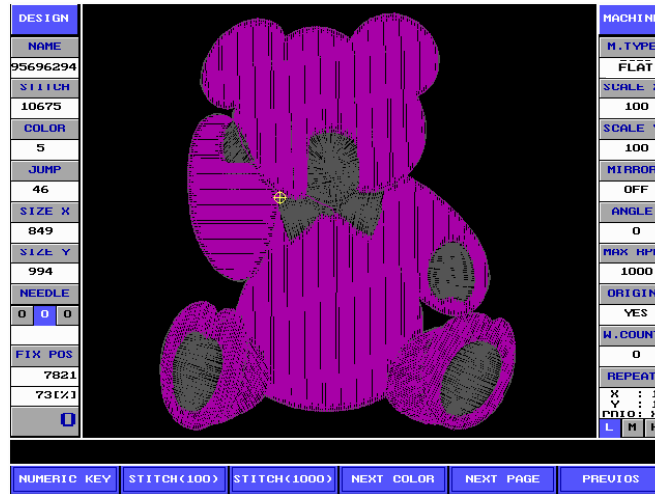
The cursor is going to stop after exact going of 123 stitches forward.



After that, push the  key to set up the first offset.



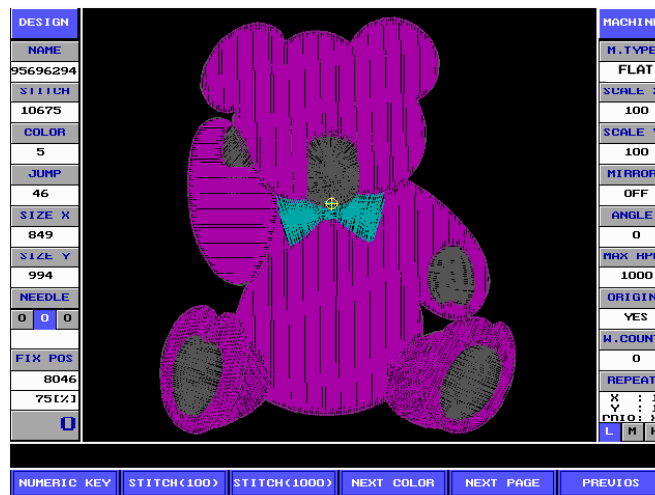
If **F4** [NEXT COLOR] is pushed in order to set up the second offset, the cursor is going to stop after going forward to the next color like the picture below.



Also, push the **SET** key to set up the second offset.



The third offset is the repetition of the same procedure as the second offset. The result screen is as follows.



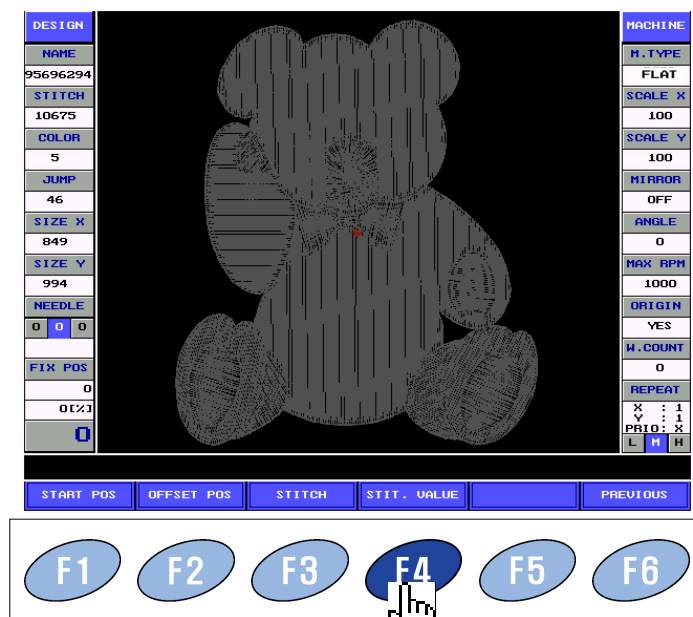
If the setting up offset point is finished, push **F6** [PREVIOUS] to exit.



<Completion of setting up offset point>

④ How to use STIT. VALUE

- ◆ This function makes it possible to check out all offset positions, which are set previously.
- ◆ Simultaneously with checking out, new offset point can be set and offset point, which is set, can be deleted.
- ◆ Please use by referring to the next procedure carefully.



Select [STIT. VALUE]



[It can be possible to see that all offset points, which was set previously, shows up]

◆ Let us see submenu.

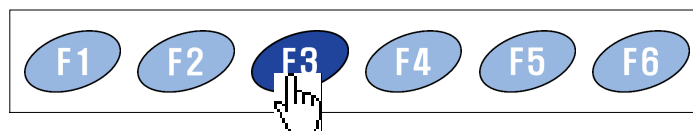
- F1** Cursor moving key ↑ : It is used when removing a cursor to the offset point you want.
- F2** Cursor moving key ↓ : It is used when removing a cursor to the offset point you want.
- F3** DELETE : It is used when deleting the offset point on which the cursor is now.
- F4** DEL ALL : It is used when deleting all offset points stored now.
- F5** INSERT NUM : It is used when inserting an offset point.
- F6** PREVIOUS : It is used when moving to the previous step.

◆ Now let us see each usage.

### <1. Deleting an offset point>



Placing the cursor to the offset point to be deleted using **F1**, **F2**.



Select [DELETE]



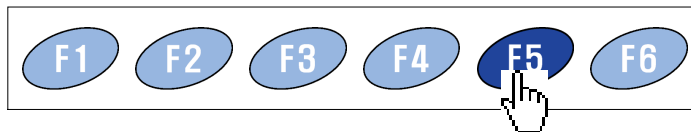




The message, asking if executing the deletion or not, shows up on the bottom of screen.



If you want to delete, select **F5** [SET] and if you want to cancel select **F6** [PREVIOUS]



If [SET] is selected



Completion of deletion can be seen.



<Completion of deletion>

<2. Deleting all offset points>

- ◆ If you want to delete all offset points that are set, it can be possible by selecting [DEL ALL]. As the method is similar to the method deleting an offset point above, please refer to the above method. F4

<3. Inserting an offset point>

- ◆ This function is the function that a user can set up the specific stitch position of a design directly using the number key.
- ◆ How to use is as follows.

DESIGN	LIST OF OFFSET STITCH	MACHINE
NAME		M. TYPE
95696294		FLAT
STITCH		SCALE X
10675	1 7822 STITCH	100
COLOR	2 8048 STITCH	SCALE Y
5		100
JUMP	3	MIRROR
46	4	OFF
SIZE X	5	ANGLE
849	6	0
SIZE Y	7	MAX RPM
994	8	1000
NEEDLE	9	ORIGIN
0 0 0	10	YES
FIX POS		W. COUNT
8048		0
75 [2]		REPEAT
0		X : 1
		Y : 1
		PRIO: X
		L M H

↑
↓
DELETE
DEL ALL
INSERT NUM.
PREVIOUS

F1
F2
F3
F4
F5
F6

Select [INSERT.NUM]



DESIGN	LIST OF OFFSET STITCH	MACHINE
NAME		M. TYPE
95696294		FLAT
STITCH		SCALE X
10675	1 7822 STITCH	100
COLOR	2 8048 STITCH	SCALE Y
5		100
JUMP	3	MIRROR
46	4	OFF
SIZE X	5	ANGLE
849	6	0
SIZE Y	7	MAX RPM
994	8	1000
NEEDLE	9	ORIGIN
0 0 0	10	YES
FIX POS		W. COUNT
8048		0
75 [2]		REPEAT
0		X : 1
		Y : 1
		PRIO: X
		L M H

←
0
1
2
3
4
5
6
7
8
9
←
SET
PREVIOUS





Set up the position of stitch count you want using the number key. For example, if trying to insert an offset point at the 123<sup>rd</sup> stitch, it is as follows.



DESIGN		LIST OF OFFSET STITCH			MACHINE			
NAME	95696294				M. TYPE	FLAT		
STITCH	10675	1	7822	STITCH	SCALE X	100		
COLOR	5	2	8048	STITCH	SCALE Y	100		
JUMP	46	3			MIRROR	OFF		
SIZE X	849	4			ANGLE	0		
SIZE Y	994	5			MAX RPM	1000		
NEEDLE	0 0 0	6			ORIGIN	YES		
FIX POS	8048	7			M. COUNT	0		
	75 [X]	8			REPEAT	X	: 1	
	0	9				Y	: 1	
		10				PRIO	: X	
						L	M	H

Push **POWER 1** → **BACK 2** → **PATH 3** in order and push the **F5** [SET] key to finish setting.




DESIGN		LIST OF OFFSET STITCH			MACHINE			
NAME	95696294				M. TYPE	FLAT		
STITCH	10675	1	123	STITCH	SCALE X	100		
COLOR	5	2	7822	STITCH	SCALE Y	100		
JUMP	46	3	8048	STITCH	MIRROR	OFF		
SIZE X	849	4			ANGLE	0		
SIZE Y	994	5			MAX RPM	1000		
NEEDLE	0 0 0	6			ORIGIN	YES		
FIX POS	8048	7			M. COUNT	0		
	75 [X]	8			REPEAT	X	: 1	
	0	9				Y	: 1	
		10				PRIO	: X	
						L	M	H

It can be seen that one more offset point is inserted at the 123<sup>rd</sup> stitch of a design.



Completion of inserting an offset point>

## 2 Using manual offset

- ◆ If you use  [OFFSET] function on the screen of a stop during the embroidery, it is useful when trying to move a frame to the specific position or when trying to move a frame arbitrarily and continue the embroidery work.



When performing this operation, do not place your hands or fingers on the machine table. If you put them on the machine table, you may be injured due to the moving frame.

- ◆ Let us see how to use.

<Push stop button during the embroidery>



If a user moved a frame arbitrarily using frame moving key in order to check out the embroidery state or for the specific work (Example, arrange of appliqué material etc.) or if want to move a frame from the place where the embroidery stops to the specific place,



DESIGN	MACHINE
NAME	M. TYPE
95696294	FLAT
STITCH	SCALE X
10675	100
COLOR	SCALE Y
5	100
JUMP	MIRROR
46	OFF
SIZE X	ANGLE
849	0
SIZE Y	MAX RPM
994	1000
NEEDLE	ORIGIN
0 4 4	YES
FIX POS	N. COUNT
25	0
0(%)	REPEAT
0	X : 1
	Y : 1
	PRIO: H
	L H H

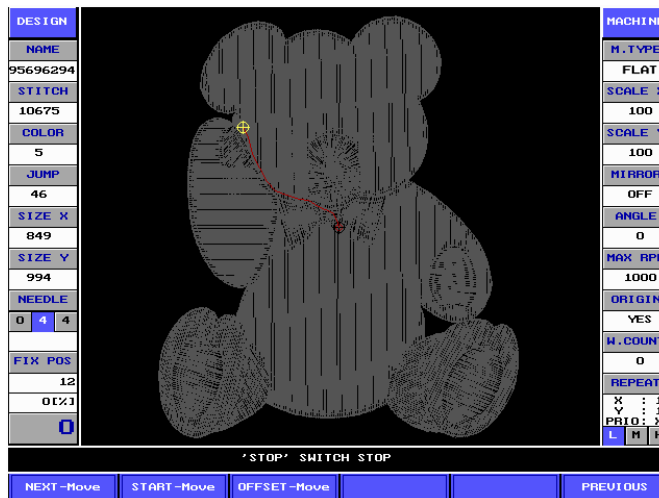
'STOP' SWITCH STOP

CHG NEEDLE MANU. TRIM FLOAT OFFSET END of WORK NEXT PAGE

F1 F2 F3 F4 F5 F6

Select [OFFSET].





◆ When selecting offset function, the menu below shows up.

**F1**

[NEXT-Move] : It moves to the frame position of the next stitch right after work is done. It is used when trying to continue working after removing a frame arbitrarily.

**F2**

[START-Move] : It moves the frame to the start point of the embroidery of a design.

**F3**

[OFFSET-Move] : It moves a frame to the position where offset is set. (Refer to the section of setting offset)

### 3 Using automatic offset

- ◆ To use automatic offset, in the menu before starting the embroidery "OFFSET" parameter on the screen, **F3** [SET MACHINE] → **F1** [EMB SET], should be assigned "YES" and an offset point should have been set up.
- ◆ Please assign 'YES' to "OFFSET" parameter as referring to the application section and setting an offset point follows the method of setting above carefully.
- ◆ If setting is finished, let us try.
- ◆ Start the embroidery by pushing the **START** key or start button on the screen before starting the embroidery.
- ◆ After it halts automatically if the stitch count set is encountered during the embroidery, it can be seen to make trim and exit to the place set.
- ◆ After the work, arrange of appliqué material etc., is done if pushing **START** again, the frame moves to the end point of the embroidery and continues the embroidery work.





When performing this operation, do not place your hands or fingers on the machine table. If you put them on the machine table, you may be injured due to the moving frame.

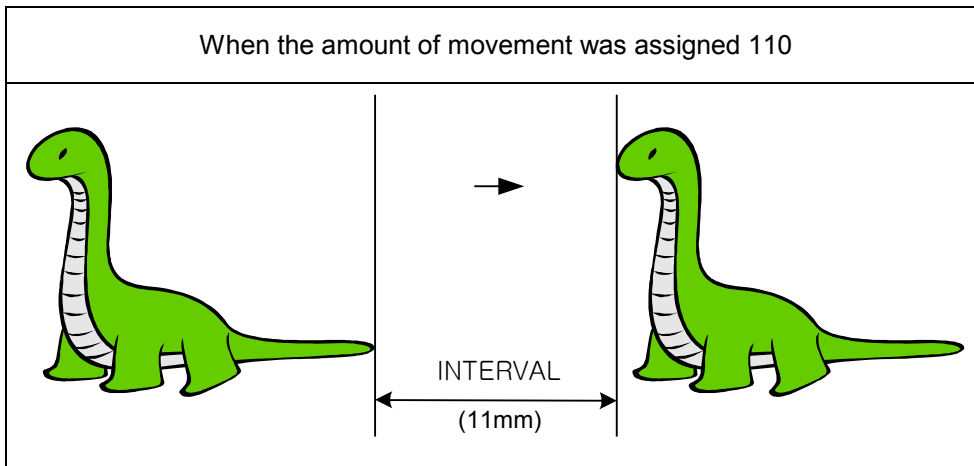
## II . Doing embroidery X, Y repeat

- ◆ Repetition work function is the function that is useful when imprinting the same design several times repeatedly or when you want to combine different designs and then work with it several times repeatedly.
- ◆ Let us see about each item as referring to the picture below.

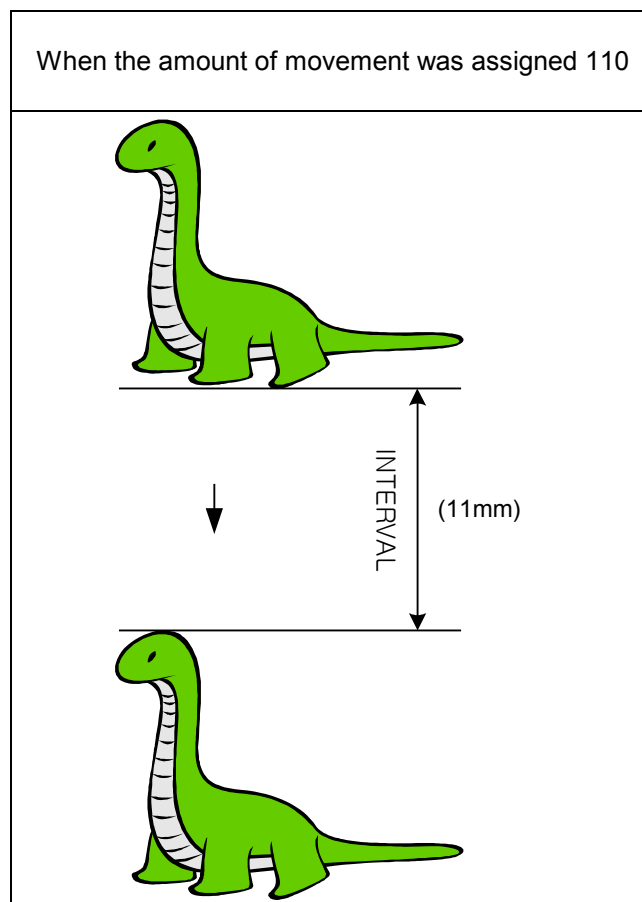
DESIGN	LIST OF REPEAT SETTING			MACHINE
NAME	NO.	ITEM	SET	M. TYPE
para.dst	1	NORMAL REPEAT (ON/OFF)	OFF	FLAT
STITCH	2	USER INPUT REPEAT (ON/OFF)	OFF	SCALE X
898	3	REPEAT X COUNT (1 ~ 10)	1	100
COLOR	4	REPEAT Y COUNT (1 ~ 10)	2	SCALE Y
5	5	INTERVAL-X [1/10mm]	1.10	100
JUMP	6	INTERVAL-Y [1/10mm]	1.10	MIRROR
2	7	PRIORITY (X/Y)	X	OFF
SIZE X				ANGLE
180				0
SIZE Y				MAX RPM
169				1000
NEEDLE				ORIGIN
0 5 5				YES
FIX POS				N. COUNT
0				0
0(Z)				REPEAT
0				X : 1
				Y : 2
				PRI : X
				L M H

KEY IN USING NUMERIC KEY (0:OFF/1:ON)

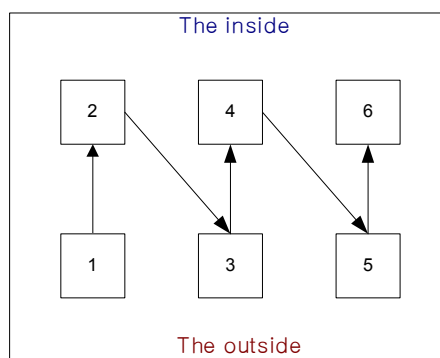
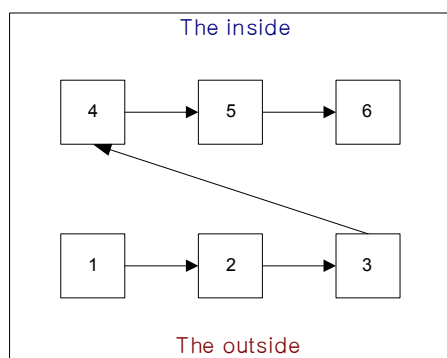
- ① **NORMAL REPEAT** : It indicates the value of setting about if doing repetition work. Default value is "OFF" and it can be possible to set up "ON" by pushing .
- ② **USER INPUT REPEAT** :It indicates the value of setting about if doing a user's input consecutive work. Default value is 'OFF' and it can be possible to set up 'ON' by pushing .
- ③ **REPEAT X COUNT** : It inputs the repetition amount to the X-direction using the number key. The range of setting depends on the size of the X-direction of a design. For example, in the case that the width of a design is 849 like the picture above, it can be possible to 52 times.
- ④ **REPEAT Y COUNT** : It inputs the repetition amount to the Y-direction using the number key. The range of setting depends on the size of the Y-direction of a design. For example, in the case that the height of a design is 994 like the picture above, it can be possible to 36 times.
- ⑤ **INTERVAL-X** : It sets up the distance between designs by an interval of X-direction. The unit is 0.1mm.



- ⑥ **INTERVAL-Y** : It sets up the distance between designs by an interval of Y-direction. The unit is 0.1mm.



⑦ **PRIORITY(X/Y)** : It indicates the priority of X-direction and Y-direction.

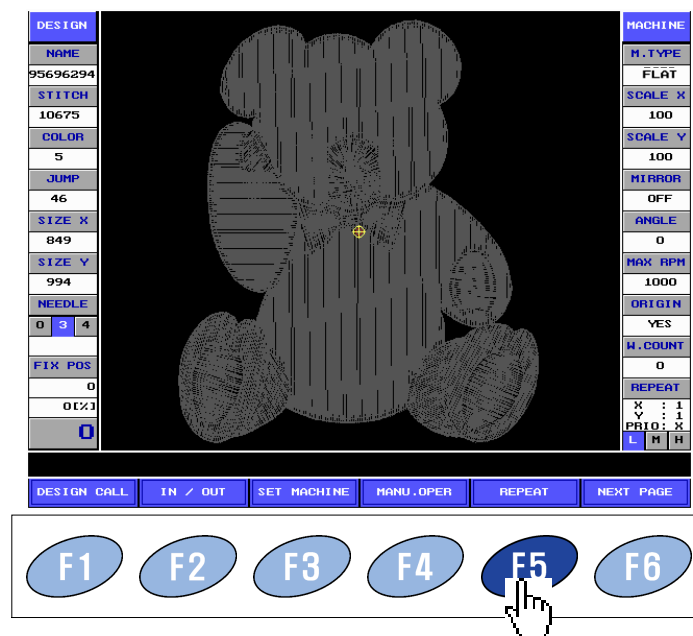


<When selecting the priority of X-direction >

<When selecting the priority of Y-direction >

## 1 Single design repeat

- ◆ Let us see about the method that does several embroideries with one design depending on the value of setting.
- ◆ The procedure is as follows. Please try with careful reference.



Select [REPEAT] after calling a design. (On the initial screen of the embroidery this menu exists but this case it is assigned to the design being worked previously.)





DESIGN	LIST OF REPEAT SETTING			MACHINE
NAME	NO.	ITEM	SET	M. TYPE
95696294	1	REPEAT? (ON/OFF)	OFF	FLAT
STITCH	2	REPEAT X COUNT (1 ~ 52)	1	SCALE X
10675	3	REPEAT Y COUNT (1 ~ 36)	1	100
COLOR	4	INTERVAL-X [1/10mm]	1.10	SCALE Y
5	5	INTERVAL-Y [1/10mm]	1.10	100
JUMP	6	PRIORITY (X/Y)	X	MIRROR
46	7	REPEAT MODE(Normal/Special/Variable)	Normal	OFF
SIZE X				ANGLE
849				0
SIZE Y				MAX RPM
994				1000
NEEDLE				ORIGIN
0 6 3				YES
FIX POS				M. COUNT
0				0
0(%)				REPEAT
0				X : 1
				Y : 1
				PRIO: X
				L M H

KEY IN USING NUMERIC KEY (0:OFF/1:ON)



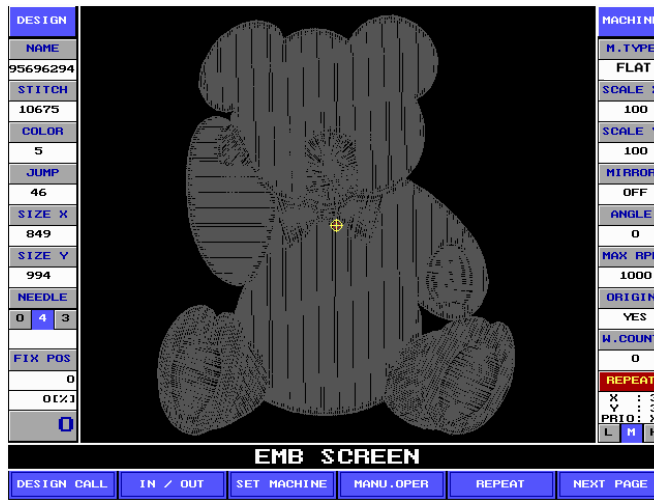
- ◆ If the screen of setting repetition work is called, input the value of setting in turn.
- ◆ For example, the procedure that is set up, 3 times to the X-direction, 3 times to the Y-direction, the distance is assigned 11mm to both of X, Y and the priority of X, is as follows.
- ◆ After first placing the cursor on the item of the number 1 and push the **POWER 1** key to set up into 'ON', push **F5** [SET].
- ◆ After removing the cursor to the below item of the number 2 using the **F2** [↓] key, push **FATH 3** key and push the **F5** [SET] key.
- ◆ Such a method set up the items to number 7 as you want like the picture below.

DESIGN	LIST OF REPEAT SETTING			MACHINE
NAME	NO.	ITEM	SET	M. TYPE
95696294	1	REPEAT? (ON/OFF)	ON	FLAT
STITCH	2	REPEAT X COUNT (1 ~ 4)	3	SCALE X
10675	3	REPEAT Y COUNT (1 ~ 3)	3	100
COLOR	4	INTERVAL-X [1/10mm]	1.10	SCALE Y
5	5	INTERVAL-Y [1/10mm]	1.10	100
JUMP	6	PRIORITY (X/Y)	X	MIRROR
46	7	REPEAT MODE(Normal/Special/Variable)	Normal	OFF
SIZE X				ANGLE
849				0
SIZE Y				MAX RPM
994				1000
NEEDLE				ORIGIN
0 4 3				YES
FIX POS				M. COUNT
0				0
0(%)				REPEAT
0				X : 1
				Y : 1
				PRIO: X
				L M H

KEY IN USING NUMERIC KEY (0:Normal/1:Special/2:Variable)



If setting is finished, push **F6** [PREVIOUS] to exit.

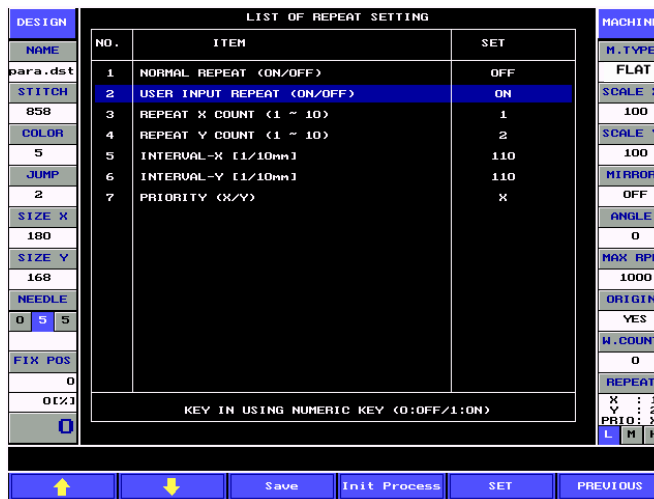


On the right bottom of the screen, information of repetition work turns red and the value of setting can be seen.



<Completion of setting repetition work>

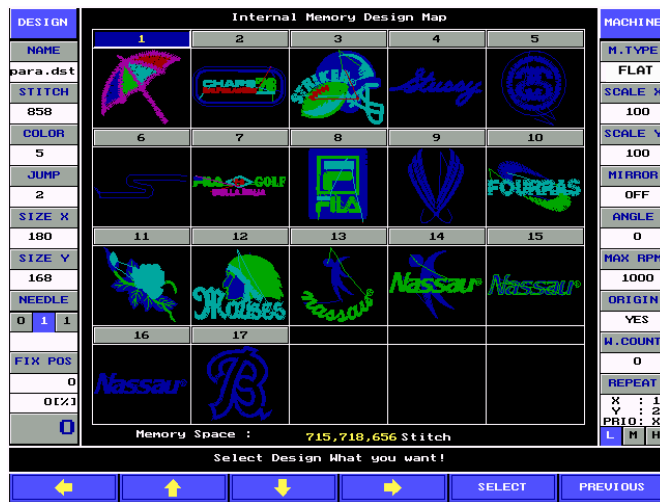
## 2 Multiple design repeat



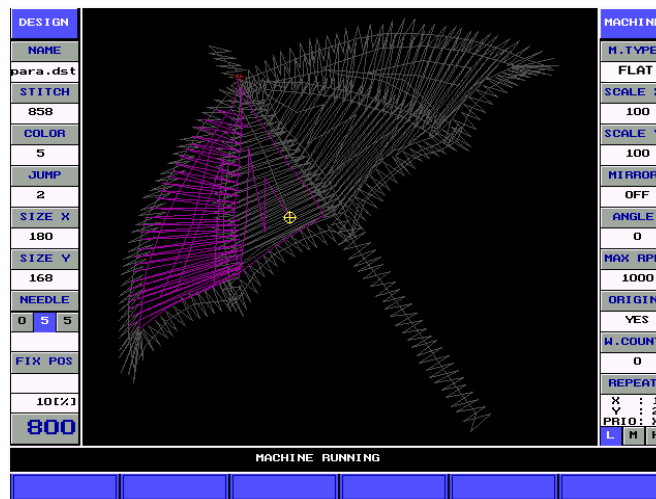
If making 'ON' of user's input consecutive operation, the menu above show up.

At this time, store the coming procedure selecting **F4** Init process.

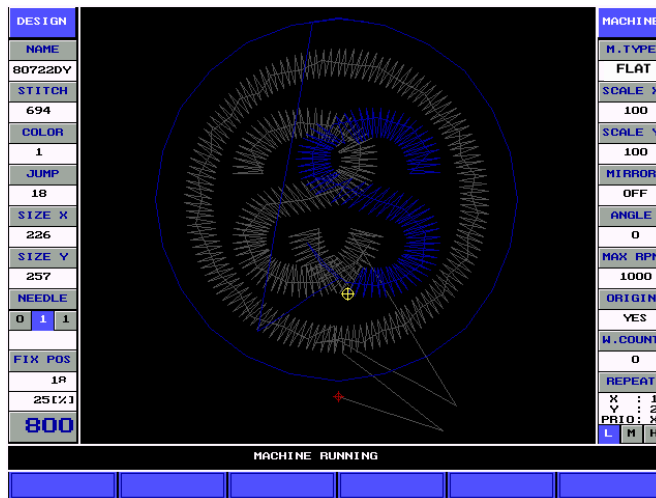
◆ Refer to the following procedures.



※ For example, let us combine the No.1 design and No.5 design.



※ Call a first design and start embroidery work at the position you want.



Call a second design and move the frame and start embroidery work at the position you want. You can repeat this operation by calling other design continuously or using the frame.

If you want to store up the procedures till now, push the **F5** REPEAT again and move the consecutive operation setting up screen.



Select the **F3** save on the screen above and store up the procedures till now.



If you want to store up the stored procedures as a design file, push the **F5** SET and conduct only this operation, come out selecting **F6** PREVIOUS.  
In case of storing up the design pushing **F5** SET.



the screen of selecting a memory room shows up. If you set up the room for inputting this design and then select **F5** SET,



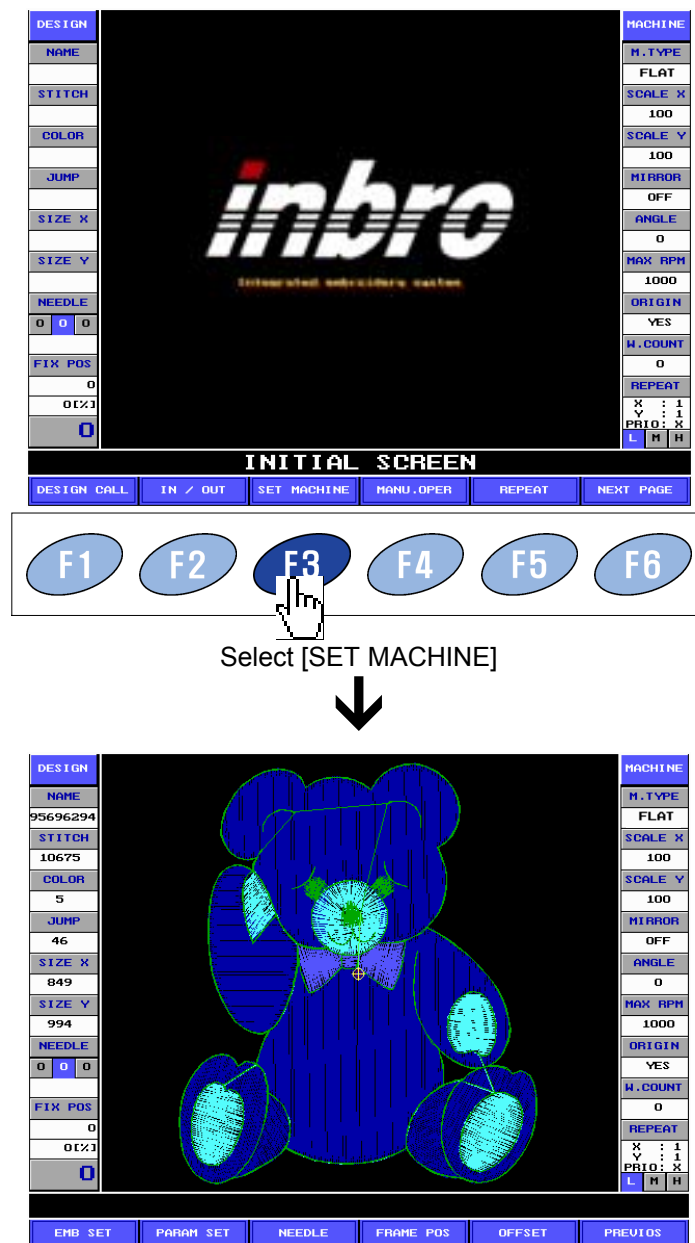
You can use a new name. After setting up the new name, come out pushing the [SET] key.

Then, you can repeat the procedures till now after drawing the new design on the screen. Like general consecutive operation, make the NORMAL REPEAT function become ON repeat the new design.



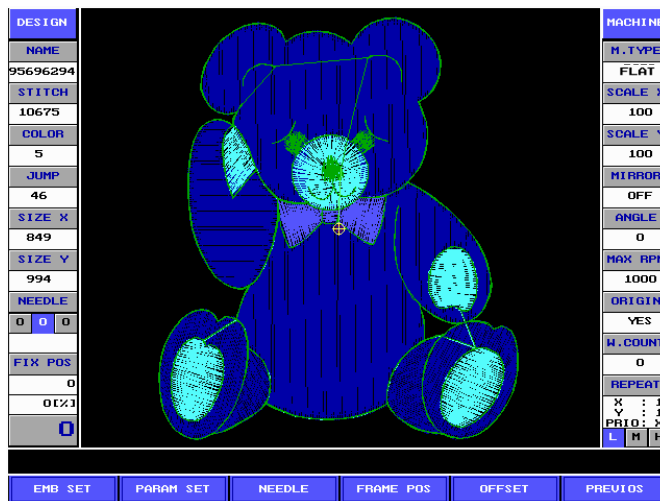
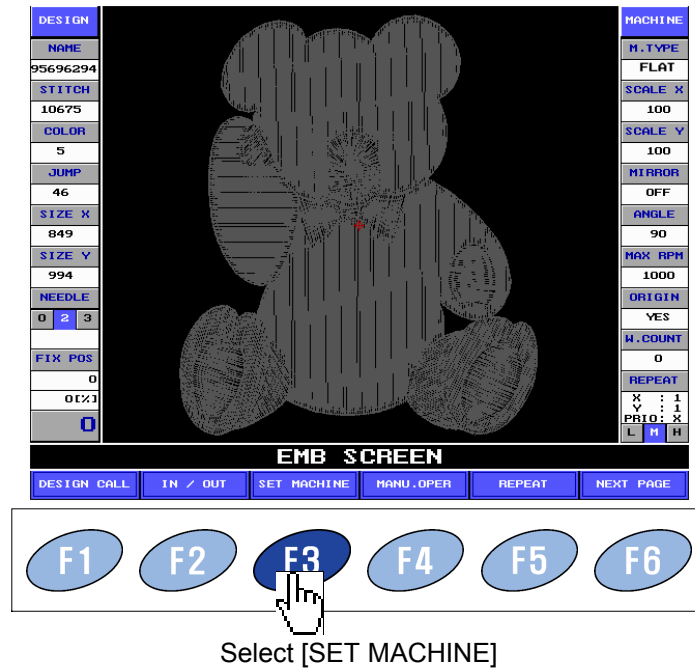
### III. Parameters change

- ◆ It sets up reduction, magnification, rotation and so on or several operating conditions can be changed. Change of several operating conditions can be set up on all screens, on the initial screen of the embroidery or on the screen after calling a design or on the screen of a stop during the embroidery.
  - ◆ On all three screens let us see the procedure calling the screen of setting up parameters. Let us follow the next procedure.
- ① <Calling the screen of setting up parameters on the initial screen of the embroidery>



If [SET MACHINE] is selected before calling a design, parameters of the design, which is being worked previously, is going to be set up.

- ② < Calling the screen of setting up parameters on the initial screen after calling a design >



- ③ < Calling the screen of setting up parameters on a stop screen during the embroidery >



DESIGN		MACHINE	
NAME	95696294	M. TYPE	FLAT
STITCH	10675	SCALE X	100
COLOR	5	SCALE Y	100
JUMP	46	MIRROR	OFF
SIZE X	849	ANGLE	0
SIZE Y	994	MAX RPM	1000
NEEDLE	0 4 4	ORIGIN	YES
FIX POS	25	H. COUNT	0
0%]	0	REPEAT	X : 1 Y : 1 PRIO : X
		L	M H

\*STOP\* SWITCH STOP

CHG NEEDLE    MANU. TRIM    FLOAT    OFFSET    END of WORK    **NEXT PAGE**

F1    F2    F3    F4    F5    **F6**

Select [NEXT PAGE]



DESIGN		MACHINE	
NAME	95696294	M. TYPE	FLAT
STITCH	10675	SCALE X	100
COLOR	5	SCALE Y	100
JUMP	46	MIRROR	OFF
SIZE X	849	ANGLE	0
SIZE Y	994	MAX RPM	1000
NEEDLE	0 4 4	ORIGIN	YES
FIX POS	25	H. COUNT	0
0%]	0	REPEAT	X : 1 Y : 1 PRIO : X
		L	M H

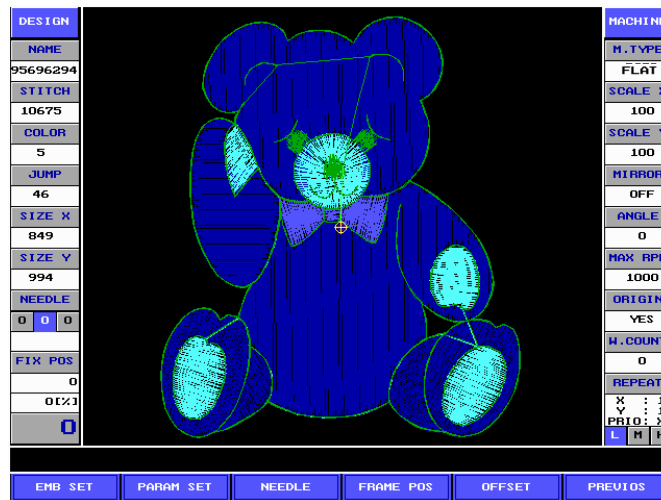
\*STOP\* SWITCH STOP

SET MACHINE    PREVIOUS

F1    F2    **F3**    F4    F5    F6

Select [SET MACHINE]





- ◆ Because we did see methods that call [SET MACHINE] menu on all three screens, now let us see about the submenu.

- F1** EMB SET : It is used when setting parameters such as magnification, reduction and setting of the angle etc.
- F2** PARAM SET : It sets all sorts of parameters of the machine
- F3** NEEDLE : It sets up the order of change of a needle.
- F5** OFFSET : It sets up start point, offset position, offset stitch and so on.
- F6** PREVIOUS : It is used when moving to the previous stop.

## 1 Design parameters change

- ◆ If you want to change the operating conditions of a design, select **F3** [SET MACHINE] → **F1** [EMB SET] on the initial screen of the embroidery or on the screen after calling a design.
- ◆ Then the screen below shows up. Here set up all sorts of operating conditions about a design.

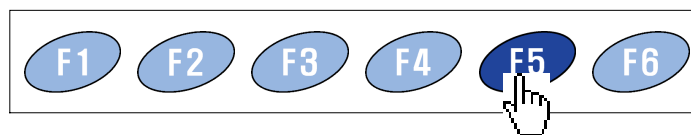
DESIGN		LIST OF EMBROIDERY CONDITION				MACHINE	
NAME	NO.	ITEM	RANGE	DEFAULT	SET	M. TYPE	
95696294	1	X-SCALE	50 ~ 200 [%]	100	100	FLAT	
STITCH	2	Y-SCALE	50 ~ 200 [%]	100	100	SCALE X	
10675	3	ANGLE	0 ~ 359 [DEG]	0	0	100	
COLOR	4	MIRROR	ON / OFF	OFF	OFF	SCALE Y	
5	5	X-SETTIN	0 ~ 5	0	0	100	
JUMP	6	Y-SETTIN	0 ~ 5	0	0	MIRROR	
46	7	OFFSET	ON / OFF	OFF	OFF	OFF	
SIZE X	8	TOTAL STITCH COUNT CLEAR	ON / OFF	OFF	OFF	ANGLE	
849	9	TOTAL WORK COUNT CLEAR	ON / OFF	OFF	OFF	0	
SIZE Y	10	FLOAT STITCH AT START	DESIGN STITCH	0	0	MAX RPM	
994						1000	
NEEDLE						ORIGIN	
0 0 0						YES	
FIX POS						H. COUNT	
0						0	
0[%]						REPEAT	
0						X : 1	
						Y : 1	
						PRI: X	
						L M H	

① How to set up

◆ Let us see how to set up. Using **F1**, **F2** turn the item to be set up reversibly.



Using the number key input the value you want. (Input **POWER 1** / **BACK-C 0** when selecting ON/OFF)



Select [SET]. Then the value of setting is stored automatically.

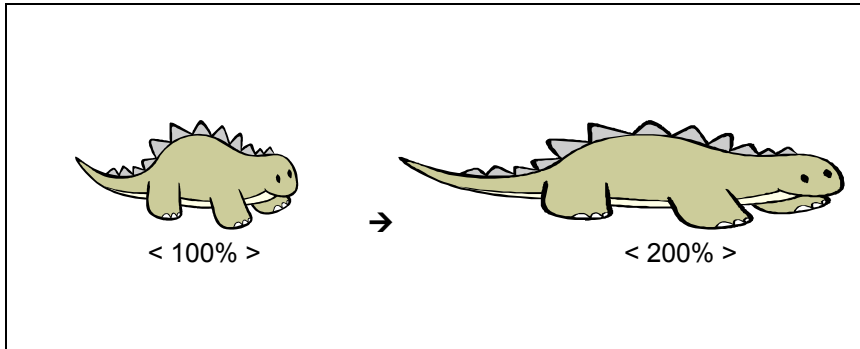


<Completion of changing the value of setting of a design>

② Contents of items of setting of a design

1. X-SCALE

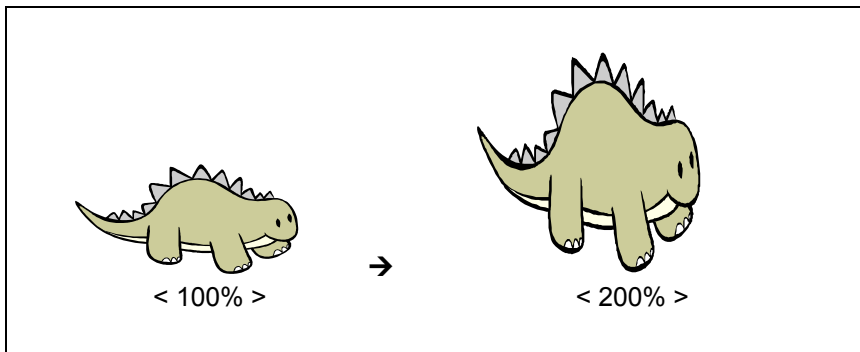
It sets up the scale of reduction or magnification of a design to the X-direction.



Default value is 100% and the range of setting is from 50% to 200%

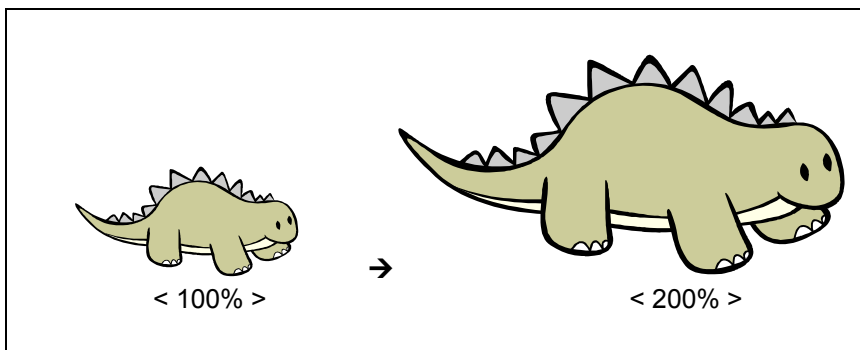
2. Y-SCALE

It sets up the scale of reduction or magnification of a design to the Y-direction.



Default value is 100% and the range of setting is from 50% to 200%

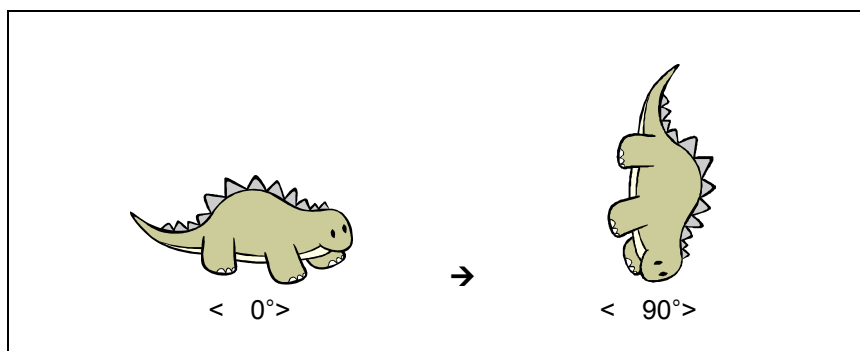
< When magnifying all of X, Y >



Default value is 100% and the range of setting is from 50% to 200%

### 3. ANGLE

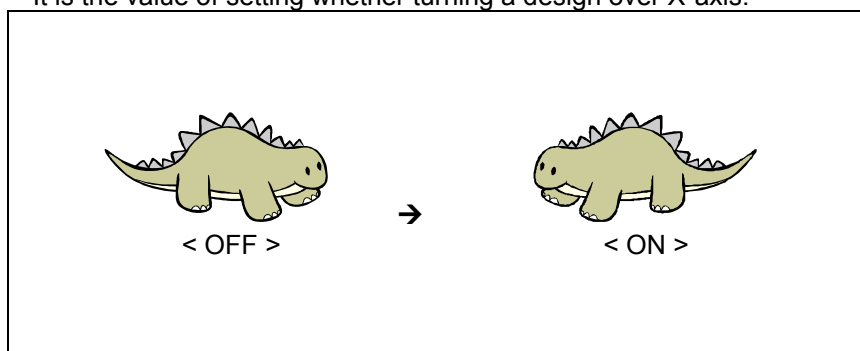
It sets up the angle of rotation when trying to rotate a design.




Default value is 0° and the range of setting is from 0° to 359° by the unit of 1°


### 4. MIRROR

It is the value of setting whether turning a design over X-axis.



Default value is "OFF" and in order to use the effect of MIRROR input  to set up to "ON".

### 7. OFFSET

It is the parameter of deciding whether using offset function or not when using the offset function that assigned automatically. Default value is "OFF" and "ON" can be selected by the  key.

### 8. TOTAL STITCH COUNT CLEAR

This function is used when initializing the function that indicates total stitch count up to now (after initializing) as being added by 1 each stitch and the value of setting. (It accepts the number key of only 0)

### 9. TOTAL WORK COUNT CLEAR

This function indicates total work count up to now (after initializing) as being added by 1 each work count (the number of finishing the work one time about arbitrary design). (It accepts the number key of only 0)

### 10. FLOAT STITCH AT START

It is the function that sets up the start position of the work to be done, that is, the function that omits stitch count you want during the embroidery and then can do the embroidery.

## 2 Machine parameters change

- ◆ If you want to change the operating conditions of a machine, select **F3** [SET MACHINE] → **F2** [PARAM SET] on the initial screen of the embroidery or on the screen after calling a design.
- ◆ The screen below, on which all kinds of operating conditions of a machine about a design are set up, shows up. The screen of setting the operating conditions of a machine shows up over total 3 pages.
- ◆ How to set up is same as the method of changing the operating conditions of a design, please refer to the method.

① The item of the first page

If you select **F3** [SET MACHINE] → **F2** [PARAM SET], the first page shows up immediately.

DESIGN	LIST OF MACHINE PARAMETER PAGE 1					MACHINE
NAME	NO.	ITEM	RANGE	DEFAULT	SET	M.TYPE
13258	1-1	SENSING UPPER THREAD BREAK	ON / OFF	ON	ON	FLAT
STITCH	1-2	SENSING UNDER THREAD BREAK	ON / OFF	OFF	OFF	SCALE X
51819	1-3	JUMP/TRIM CONVERSION COUNT	0 ~ 10	3	3	100
COLOR	1-4	JUMP CONVERSION	ON / OFF	OFF	OFF	SCALE Y
5	1-5	AUTO JUMP STITCH LENGTH	50 ~ 127	100	100	100
JUMP	1-6	F.B.ALL HEAD START POINT	0 ~ 5	3	0	MIRROR
136	1-7	AUTO BACK STITCH	0 ~ 5	0	3	OFF
SIZE X	1-8	AUTO START	ON / OFF	ON	ON	ANGLE
1862	1-9	INTERVAL BETWEEN OUTLINE	5 ~ 30	10	0	0
SIZE Y	1-10	UNIT OF BACK STITCH	1 ~ 10	1	1	MAX RPM
1555	1-11	AUTO BACKTACK	ON / OFF	ON	ON	850
NEEDLE	1-12	COUNT OF UPPER THREAD BREAK	1 ~ 10	1	1	ORIGIN
0 1 2	1-13	COUNT OF UNDER THREAD BREAK	1 ~ 20	5	5	YES
FIX POS						M.COUNT
0						0
0EX						REPEAT
0						X : 1
						Y : 1
						PRIO: X
						L R H

KEY IN USING NUMERIC KEY(0:OFF/1:ON)

↑ ↓ NEXT PAGE SET PREVIOUS

- 1-1. **SENSING UPPER THREAD BREAK**  
It is the value of setting whether the sensor sensing upper thread break works.  
Default value is "ON" and it can be possible to select "OFF" by the **BACK** **0** key.
- 1-2. **SENSING UNDER THREAD BREAK**  
It is the value of setting whether the sensor sensing under thread break works.  
Default value is "OFF" and it can be possible to select "ON" by the **POWER** **1** key.
- 1-3. **JUMP CONVERSION STITCH**  
It is the function that moves a frame after once making trim if doing a serious of jump more then the value of setting when executing a serious of jump function. For example, it is the function that does not make trim until 4 stitches and works

by jump stitch when a series of jump code is met if the value of setting is assigned 5, but that starts the embroidery after first of all making trim and moving by 5 stitches when a series of jump code more than 5 stitches is met. Default value is 3 stitch and it can be possible set up from 0~ 10 by the unit of 1 stitch.

1-4. **JUMP CONVERSION**

It is the value of setting the auto jump stitch length. Default value is 'OFF' and it can be possible set up 'ON' by pushing .

1-5. **AUTO JUMP STITCH LENGTH**

It is the value of setting the stitch length, which makes general code into jump code. Default value is 10[mm] and it can be possible set up from 50~ 127[mm] by the unit of 10[mm]. That is, this value is changed to jump stitch if the length between two stitches is longer than the value of setting as a frame moving from one stitch to another stitch


1-6. **F. B. ALL HEAD START POINT**

It is the function that can set up the relative position of total needles starting to move to a stop point within the range of 1~ 20 stitch when sewing can be executed to modify on the undesirable shape which can occur because of under thread being pulled if after the embroidery trying to get whole needles to work ahead of the position where a mistake occurs by operating just needles having something wrong after executing back-stitch in order to modify the part where the embroidery is not done when the machine halts due to detecting an abnormality of a certain needle (ex. thread break) lately during the progress of working with whole or several needles at the same time. Default value is 3.

1-7. **AUTO BACK STITCH**

It is the value of setting stitch count of the embroidery going backward after detecting the thread break. Default value is 3 stitch and it can be possible set up from 0~ 5 by the unit of 1 stitch.

1-8. **AUTO START**

It is the value of setting about whether the next part of the embroidery starts automatically after jump code and trim and executing trim by stop code. Default value is "ON" and input  to set up "OFF" if you do not want automatic start.

1-9. **INTERVAL BETWEEN OUTLINE**

It is called a gauge that does the embroidery with running switch at the position away regular interval from the outline of a design and as the value, which sets up the interval between the outline of a design, default value is 10[mm] and has the range of 5~ 30[mm].

1-10. **UNIT OF BACK STITCH**

This function sets up stitch count depending on one operation of a bar switch when getting a frame to go forward or backward by a bar switch. Default value is 1 stitch and it can be possible set up from 0 to 10 stitches by the unit of 1 stitch.

1-11. **AUTO BACK-TACK**

It is the value of setting about whether executing back-tack function for a stitch formation (protection of thread getting loose) on starting the embroidery. Default value is "OFF".

1-12. **COUNT OF UPPER THREAD BREAK**

The machine is going to stop for the first time when a sense detecting upper thread break as much as this value of setting. It prevents a sensor from useless detection by wrong operation. Default value is 1 stitch and it can be possible set up from 1 to 5 stitches.

1-13. **COUNT OF UNDER THREAD BREAK**

The machine is going to stop for the first time when a sense detecting under thread break as much as this value of setting. It prevents a sensor from useless detection by wrong operation. Default value is 1 stitch and it can be possible set up from 1 to 5 stitches.

② The item of the second page

If you select **F3** [SET MACHINE] → **F2** [PARAM SET] → **F4** [NEXT PAGE], the second page shows up.

DESIGN	LIST OF MACHINE PARAMETER PAGE 2				MACHINE
NAME	NO.	ITEM	RANGE	DEFAULT	SET
13258	2-1	MAX SPEED LIMIT	MIN ~ 850	850	850
STITCH	2-2	MIN SPEED LIMIT	300 ~ MAX	300	300
51819	2-3	EMB SPEED	MIN ~ MAX	850	850
COLOR	2-4	INCHING SPEED	50 ~ 150	80	80
5	2-5	ORIGIN RETURN	ON / OFF	ON	ON
JUMP	2-6	START INCHING COUNT	0 ~ 10	5	5
136	2-7	INCHING COUNT AFTER TRIM	2 ~ 10	3	0
SIZE X	2-8	AUTO TRIM	ON / OFF	ON	ON
1862	2-9	AUTO COLOR CHANGE	ON / OFF	ON	ON
SIZE Y	2-10	THREAD TRIMMING LENGTH	S / M / L	M	M
1555					
NEEDLE					
0					
FIX POS					
0					
0 [%]					
0					

2-1. **MAX SPEED LIMIT**

It is the value of setting the maximum speed limit of a machine. Default value depends on kinds of machine and selection of kinds of working material and the range of setting is as follows.

Working material	4 Heads
FLAT	850rpm
CAP	800rpm

2-2. **MIN SPEED LIMIT**

It is the value of setting minimum speed limit. Default value is 300[rpm] and the value of setting is set up from 300[rpm] to maximum speed by the unit of 10[rpm].

2-3. **EMB SPEED**


It is the value of setting embroidery speed during the embroidery. Default value is 850[rpm] and it is set up within the range between minimum speed and maximum speed by the unit of 1[rpm].



#### 2-4. INCHING SPEED

It is the value of setting low sewing speed on beginning the embroidery. Default value is that one head is 185[rpm] and four heads is 100[rpm]. It is set up from 50[rpm] to 200[rpm] by the unit of 10[rpm].

#### 2-5. ORIGIN RETURN

It indicates whether the function, which moves a frame to the original start point on embroidery halting, is set. Default value is "ON" and input  when "OFF"



It can be possible that a needle breaks or the mechanism of needle overworks if jump speed is raised up higher than 750[rpm].


#### 2-6. START INCHING COUNT

When the embroidery beginning, the machine works at inching speed slowly and at this time, as the value of setting stitch count for the operation of low speed, default value is 3 stitch and it can be set up from 0 stitch to 10 stitch by the unit of 1 stitch.


#### 2-7. INCHING COUNT AFTER TRIM

If the signal of color change is met or the embroidery about a design is completed during the work, the finish is going to be done and at this time, as the value of setting stitch count for the operation of low speed, default value is 3 stitch and it can be set up from 2 stitch to 10 stitch by the unit of 1 stitch.



#### 2-8. AUTO TRIM

The value of setting whether the function of automatic trim works. Default value is "ON" and when the function of automatic trim is set up "OFF", selecting can be possible by the  key.





#### 2-9. AUTO COLOR CHANGE

The value of setting whether the function of automatic color change executes. Default value is "ON" and when the function of automatic color change is set up "OFF", selecting can be possible by the  key.

#### 2-10. THREAD TRIMMING LENGTH

It is the value of setting the length of upper thread left on a needle when automatic trim was made. Default value is "M" (medium) and if getting the length short, input  to be set up "S" and if getting the length long, input  to be set up "L".

③ The item of the third page


If you select  [SET MACHINE] →  [PARAM SET] →  [NEXT PAGE] →  [NEXT PAGE], the third page shows up.

DESIGN	LIST OF MACHINE PARAMETER PAGE 3					MACHINE
NAME	NO.	ITEM	RANGE	DEFAULT	SET	M. TYPE
13258	3-1	FRAME START	230 ~ 250	240	240	FLAT
STITCH	3-2	EACH HEAD AT BACK ST. START	ON / OFF	ON	ON	SCALE X
51819	3-3	BOTTOM STOP AFTER EMB	ON / OFF	OFF	ON	100
COLOR	3-4	FRAME LIMIT	ON / OFF	ON	OFF	SCALE Y
5	3-5	MACHINE TYPE	FLAT /CAP	FLAT	FLAT	100
JUMP	3-6	AUTO LUBRICATION	ON / OFF	OFF	ON	MIRROR
136	3-7	FRAME SPEED	H / M / L	M	M	OFF
SIZE X	3-8	MOVING DIRECTION AFTER TRIM	X / Y	Y	Y	ANGLE
1862	3-9	X, Y Driver TYPE(NEW/OLD)	LOW /HIGH	LOW	LOW	0
SIZE Y						MAX RPM
1555						850
NEEDLE						ORIGIN
0 1 2						YES
FIX POS						M.COUNT
0						0
0[EX]						REPEAT
0						X : 1
						Y : 1
						PRIO: X
						L M H


### 3-1. FRAME START

It is the value of setting the rotation angle of main axis where a frame starts to operate. Default value is 240° and it is set up from 230° to 250° by the unit of 1°

### 3-2. EACH HEAD AT BACK STITCH START

It is the function that makes doing the embroidery detecting thread break when back stitch starts. Default value is "ON" and if it is not used, input  to be set up "OFF".

### 3-3. BOTTOM STOP AFTER EMB

It is the value of setting that makes needle to stop at bottom stop point. Default value is "OFF " and if you are doing bottom stop of needle, input  to be set up "ON ".




When a machine did bottom stop, never change a needle by hand


### 3-4. FRAME LIMIT

Because there is no mechanical limit switch, try to build limit of software. If you input two points on the frame, limit is built like below.




### 3-5. MACHINE TYPE

It is the item that sets up kinds of working material. Default is "FLAT(0)" and when CAP is set up, input .

### 3-6. AUTO LUBRICATION


It is the function that makes auto lubrication function ON/OFF. Default value is "OFF" and ON" can be selected by inputting .

### 3-7. FRAME SPEED

It is the item that selects the speed of a manual frame. The initial value of frame speed is decided by selecting one of three steps, which are low speed, medium speed and high speed. Default value is medium speed () and it can be possible to change to low speed or high speed by selecting , .

3-8. MOVING DIRECTION AFTER TRIM

It selects moving direction in order to draw a thread after trim. Default value is "Y"

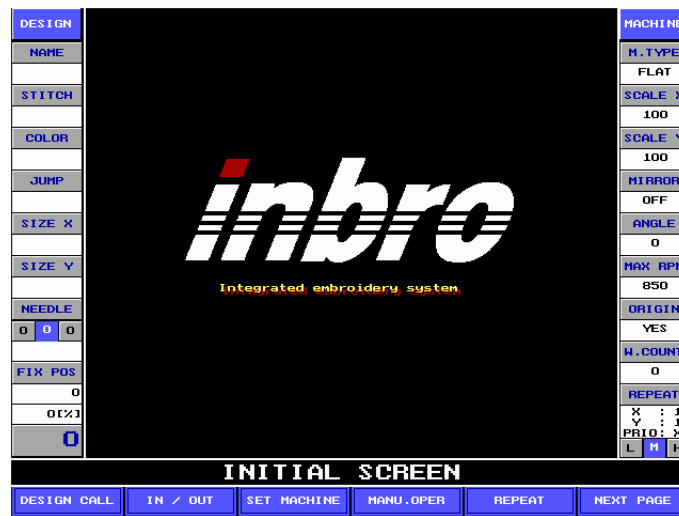
and it can be possible to select "X" by inputting  .

3-9. X, Y Driver TYPE(NEW/OLD)

## IV. Upgrading the embroidery operating program

- ◆ Let us introduce how to upgrade the program when operating program of the embroidery has something wrong and new version is released. Please follow the procedure below.

<Inputting whether setting up the origin on the screen where the origin of a frame is set up>



The initial screen of the embroidery shows up.



Insert diskette in which there is operating program of the embroidery provided by INBRO into floppy drive.





Push **MODE** → **DATA 9** → **BACK 0** key in turn.



Check out the message below shows up.

**INBRO Co.**  
**Main Software Version UP Routine.**



If the  key is pushed, main program starts to set up.  
(If you want to cancel, push the  key.)



If the setting is finished, short beep sound is heard continuously.



If beep sound is heard, turn power off and then turn on again.



<Completion of upgrading program>

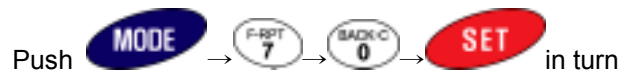
## V. Initializing the program

- ◆ If operating program of the embroidery was upgraded or installed due to abnormality, the procedure that initializes the program is required. Initializing is executed only one time right after upgrading program and how to initialize is as follows. Please follow the procedure below carefully.

< Inputting whether setting up the origin on the screen where the origin of a frame is set up >



The initial screen of the embroidery shows up








<Completion of initializing program of the embroidery>



## 6. The others

### 1. Error code

No.	Name of error	Contents of error	How to handle
01	Stop Position ERROR	Main axis does not stop at 100° when a stop.	Set up the angle of main axis to 100° and operate again by pushing 
02	X+ Frame Limit ERROR	The system of removing a frame reaches +X limit.	Move a frame to the +X direction.
03	X- Frame Limit ERROR	The system of removing a frame reaches -X limit.	Move a frame to the -X direction.
04	Y+ Frame Limit ERROR	The system of removing a frame reaches +Y limit.	Move a frame to the +Y direction.
05	Y- Frame Limit ERROR	The system of removing a frame reaches -Y limit.	Move a frame to the -Y direction.
06			
07	X-Driver Ready ERROR	Abnormality occurs at X-direction driver.	Turn the main switch off and then turn on.
08	Y-Driver Ready ERROR	Abnormality occurs at Y-direction driver.	Turn the main switch off and then turn on.
09	Half-C Position ERROR	When a needle does not reach at the correct position on changing needle	Check out the overload by turning needle by hand and place the needle to the correct position.
10	Encode A signal ERROR	When abnormality occurs on the encoder A signal of main axis	After checking out connecting state of encoder cable, turn main the switch off and then turn on.
11	Encode Z signal ERROR	When abnormality occurs on the encoder Z signal of main axis	After checking out connecting state of encoder cable, turn the main switch off and then turn on.
12	UP-THREAD Cut ERROR	When an upper thread breaks	Get an upper thread hung on again and keep working by pushing the  key.

14	UNDER THREAD ERROR	When an under thread breaks	Get an under thread hung on again and keep working by pushing the  key.
15	Timeover(Main) ERROR	When foreign matter is inserted in the main axis on stopping or it does not reach to the correct position because the load gets big.	Remove foreign matter by looking around main axis and after setting up the angle of main axis to 100° operate again by pushing  .
16	Timeover(Color) ERROR	When foreign matter is inserted in the needle motor on changing a needle or it does not reach to the correct position because the load gets big.	Remove foreign matter and after placing a needle to the correct position operate again by pushing  .



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