

MANUAL

• LCD Monitor	• SWF AB Version	• SWF C Version
• SWF E Version	• SWF F Version	• SWF CB Version
• SWF EB Version	• SWF FB Version	• SWF UB Version



MME-061011 SUNSTAR PRECISION CO., LTD.

- 1. THIS IS AN INSTRUCTION FOR SAFE USE OF SMF. AUTOMATIC EMBROIDERY MACHINES. READ THOROUGHLY BEFORE USE.
- 2. CONTENTS IN THIS INSTRUCTION MAY CHANGE, WITHOUT PRIOR NOTICE, FOR IMPROVEMENT OF MACHINE QUALITY AND THUS MAY NOT CORRESPOND TO THE MACHINE YOU PURCHASED. CONTACT YOUR SALES AGENT FOR INQUIRIES.
- 3. THIS IS DESIGNED AND MANUFACTURED AS AN INDUSTRIAL MACHINE. IT SHOULD NOT BE USED FOR OTHER THAN INDUSTRIAL PURPOSE.



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1 EACH NAME AND FUNCTION OF OPERATION BOX

[Front Part]



- ① LCD Monitor
- The color LCD monitor indicates all information necessary for operating process. ② Function Menu Key
- It is used to select functions shown on the screen.
- ③ Starting Button
- (4) Stop Button
- (5) Digit Keys

They are used to input digits when setting parameter.

[Caution]

Contents change of Needle Bar Selection Table by "CL" Key. When you want to change the contents of needle bar selection table by differently setting up the needle bar during operation, select "F6 Color" from Main menu and input the number of needle bar you want to work with. After that, by pressing "*", you can easily change to the needle bar you want.



- 6 Embroidery Frame Movement Key. It is used to move the embroidery frame up, down, right and left.
- ⑦ Speed Adjusting Key of Embroidery Frame It is used to change the speed of embroidery frame movement to low, middl or high during moving the embroidery frame.
- (8) Speed Change Key of Main Shaft It is used to change the main shaft speed during operation. For speeding up, press "UP" key on the left side, and for reducing the speed, press "DOWN" on the right.

[Sides]



- (1) Acryl cover: This cover is used to protect the FDD device.
- ② Diskette withdrawal button: This is used to take out the inserted floppy diskette.
- ③ Diskette withdrawal button: This is used to take out the inserted floppy diskette.
- ④ Operation lamp: This light goes on and off when the FDD device is in operation.
- (5) Floppy Diskette Opening Handle



[Bottom]



① Com 2 : Serial Port-2

- 2 Parallel Port
- 3 key Board Connector
- ④ VGA Connector
- 5 Com 1 : Serial Port-1



2 BASIC OPERATION ORDER FOR EMBROIDERY



3 DESCRIPTION ON EACH FUNCTION

3-1) About Installing Machine Operating System Program

System installation program is used when machine operating program is erased by embroidery machine controller malfunction or when upgrade needed to more recent version of machine operating program. The program is displayed on screen in the following cases:

* No machine operating program in memory.

* When F1 + F2 + F7 function menu keys are pressed simultaneously in initial screen.

The first screen displayed when the main power switched on is as below.



After System Loading! Is displayed, there follows procedures as below.



3-1-1) When There Is No Machine Operating Program

The system installation program such as follows come up.

SWFD	ib system install	¥XX
P1	SYSTEM INSTALL	
81	SYSTEM BACKUP	
PS	MACHINE SET	
<u>1</u> 74 <u>1</u>	EXII	
SUNSTAI	R PRECISION Co.,	LTD

[Fig. 3-2]

1 As shown above, there are three types of menu in system installation program.

F1	SYSTEM IN	STALL :	Use this menu when you want to install machine operation program for
			controller using machine operating program diskette provided by SWF.
F2	SYSTEM BA	ACKUP :	Use this menu when you want to copy existing machine operating program to diskette.
F3	MACHINE S	ET :	It is used when machine information is set up.
F4	EXIT	:	Use this menu when you are finished with installation program.

2 Insert machine operating program diskettes from SWF into drive.

Г

Press function menu key F1 System Install and then proceed installation as shown [Fig. 3-3].

S W F EMB SYSTEM INSTALL V XX System Install	
SUNSTAR PRECISION Co., LTD	
	[Fig. 3-3]

④ Press F4 Exit to finish installation. Machine operating program will come up.



3-1-2) Upgrade Machine Operating Program

① Press F1 + F2 + F7 simultaneously before 'System Loading!' message display is completely on. See [Fig. 3-4]



- (2) Follow the same procedure, '3-1-1 When There Is No Machine Operating Program' steps, (2),
 (3) and (4).
- 3-1-3) Copy Machine Operating Program into Floppy Disks for Backup SWF is providing 2 diskettes with machine operating program when delivering the machine. If any of diskettes are lost or damaged, you should save machine operating program into new diskette.
 - ① Press menu function keys **F1** + **F2** + **F7** simultaneously as shown [Fig. 3-4].
 - ② Insert blank SWF formatted diskette into floppy drive. (Please refer page 3-38 for SWF formatting.)
 - ③ Press function menu key F2 System Backup [Fig. 3-2] comes up and copy starts. [Fig. 3-5]



④ Press F4 Exit when copy is complete. Machine operating program comes up.

3-1-4) When you are willing to change the machine settings

The below screen will be displayed under the following conditions.

1. When you have turned the Power OFF \Rightarrow ON after exchanging the system newly.

2. When you have selected F3 MACHINE SET on [Fig.3-2].

1) SWF AB Version

1 Head selection

		== HEAD	SELECT	=	
	12 HEAD				
	15 HEAD			Ŧ	日日本
	18 HEAD		11-12-5		
	20 HEAD				
	22 HEAD			t	
	24 HEAD				
	27 HEAD				
	28 HEAD				
	30 HEAD				
	40 HEAD				1000
				in the second se	
←	↑ ↓	-		 Select	

2 Number of collars selection

		NEEDLE	SELECT	=	44.
THF:		11 11			
	3 COLOR				
	6 COLOR				
	9 COLOR				T
	12 COLOR				
	15 COLOR				
	4 COLOR				
	ALL AND ALL				
THE .					
	and the second second				
+	↑ ↓	-		Select	PREVIOUS



③ Trimming method selection



④ Y frame size selection

	== Y FRAMI	E SIZE SETT	ING ==		
	PHP FIP			THE I	
	$450\mathrm{mm}$				
	$550\mathrm{mm}$				15 73
	$650\mathrm{mm}$				
	$750\mathrm{mm}$				
	$1000\mathrm{mm}$				
	1200mm				
	$850\mathrm{mm}$				
	· · · · · · · · · · · · · · · · · · ·				
+		→		Select	PREVIOUS

(5) X frame size selection



6 Selecting a work

	=== X SPACE EXTENSION(X) ==	
	NO	
	YES	
THIT		Th at
TH PI		
+	▲ ↓ → Select	PREVIOUS



O Wheel selection

		WHEEL T	'YPE SELE	CT ====	=	
			4121			
	18 HOLE	RATCHE	T			
	50 HOLE	RATCHE	T			
-						
+	↑ ↓	-			Select	PREVIOUS

2) SWF C(B) Version

 Machine type selection Select the machine type accurately.

	=== MACHINE TYPE SELECT ===	
	T-Series U-Series W-Series	
ł	↑ ↓ →	

2 Head selection

		HEAD SELEC	JL AAAAAA	=	
	HEAD				
2	HEAD				
4	HEAD				
6	HEAD				
8	HEAD				
		Sector Sector		Charles I	
← ↑	ŧ	-		Select	PREVIOUS

③ Number of collars selection

	===== NEEDLE SELECT =====	
TH H	[] [] [] [] [] [] [] [] [] [] []	
	3 COLOR	
	6 COLOR	
	9 COLOR	
	12 COLOR	
	15 COLOR	
TT	4 COLOR	
THE		
THE		TH H
-	$\uparrow \qquad \downarrow \qquad \rightarrow \qquad \qquad$	PREVIOUS



- (4) Thread sensor mode selection
 - C Version

Make a distinction between the wheel type and the spring type when setting the mode.

		SENSOR	TYPE SE	LECT ===		
					+++	
	SPRIN	G				
	WHEEI	L				
T						
+	1	+ -	*	SETTING	Select	PREVIOUS

(5) Wheel sensor mode selection Selecting details when the wheel type has been chosen

==== WHEEL TYPE SELECT ====	
	TE P
18 HOLE RATCHET	
50 HOLE RATCHET	
INDIANIALI WIIDIGL	
	PREILIOUS

• Cb Version



⁶ Y frame size selection

	== Y FRAME SIZE SETT	NG ==	in to the state of the other states and the state of the state of the state of the states of the sta
H R	$450\mathrm{mm}$		BA
	$550\mathrm{mm}$		
	650mm		
	$750\mathrm{mm}$		
	1000mm		had
	1200mm		
	850mm		
	360mm		
	▲ ↓ →	Select	PREVIOUS



O X frame size selection

	== X FRAME SIZE SETTING ==	
	A 200mm, T 150mm	
	B 240mm	中书
	D 300mm	
	E 330mm	
	F 345mm	
	H 400mm	
TH H	1 430mm J 450mm	青月
	K 500mm	
	Q 1000mm	中可
↓	A ↓ → Select	PREVIOUS

3) SWF E(B) Version

1) Head selection

12 HEAD	
15 HEAD	
18 HEAD	
20 HEAD	
22 HEAD	
24 HEAD	
27 HEAD	
28 HEAD	
30 HEAD	
40 HEAD	
TH Series	
← A L → Select	

② Number of colors selection



③ Trimming method selection

	====== TRIM SYSTEM =======	
1		
	SOLENOID	
	MOTOR	
THE P		
+	♦ ↓ → Select	PREVIOUS



④ Y frame size selection

== Y FRAME SIZE SETTING ==	
450mm	
$550\mathrm{mm}$	
$650\mathrm{mm}$	
750mm	
1000mm	
1200mm	
850mm	
360mm	
↑ ↓ → Select	PREVIOUS

(5) X frame size selection

	== X FRAME_SIZE SETTING ==	
	A 200mm, T 150mm	.# 4 .
	B 240mm	
	C 275mm	
	D 300mm	
	E 330mm	
	F 345mm	
	H 400mm	
	1 450mm	
	K 500mm	
	0 1000mm	
+	▲ ↓ → Select	PREVIOUS

6 Selecting a work

		X SPACE I	XTENSION	 (X) ==		
			qpp p	11-1	내는	
	NO					
	YES					
TH T						t
+	1	+ →			Select	PREVIOUS

O Wheel selection

• E Version





• Eb Version



4) SWF F(B) Version

1 Head selection

	====== HEAD SELECT =======	
	12 HEAD	
	15 HEAD	
	18 HEAD	
	20 HEAD	
	22 HEAD	
	24 HEAD	TT
	27 HEAD	
	28 HEAD	
	30 HEAD	
	40 HEAD	
TH	TH Series	
	↑ ↓ → Select	

② Number of colors selection

===== NEEDLE SELECT =	
3 COLOR	
6 COLOR	445 711
9 COLOR	
12 COLOR	
15 COLOR	
4 COLOR	
	1 中 相。
	. # 出.
	Select PREVIOUS

③ Wheel selection

• F Version





• Fb Version

==== WHEEL TYPE SELECT ====	•	
18 HOLE RATCHET		
50 HOLE RATCHET		PROVIDE COMPANY OF STREET
	-	
単則		
THE F		
	Select	PREVIOUS

5) SWF VB Version

1 Head selection

	HEAD SELECT	
	12 HEAD	
	15 HEAD	
	18 HEAD	
	20 HEAD	
	22 HEAD	
	24 HEAD	
	27 HEAD	
	28 HEAD	
	30 HEAD	
	40 HEAD	
-	★ ↓ → Select	

② Number of colors selection



③ Trimming method selection

	====== TRIM SYSTEM =======	
	SOLENOID	
	MOTOR	
		THE H
THE		
.a a		
+	↑ ↓ → Select	PREVIOUS



④ Y frame size selection



(5) X frame size selection



6 Selecting a work



O Wheel selection





Туре	Name of Type	Description
Bridge Type Arm + Flat Table	SWF/W1201	Single Head Automatic Embroidery Machine with Wide Space
	SWF/ -WE1204	4 Head Flat Embroidery Machine
	SWF/ -WE1206	6 Head Flat Embroidery Machine
SWF/ - Wseries		
Arm Type Arm + Cylinder Bed	SWF/□-T1201 SWF/□-T1501	Single Head Tubular Embroidery Machine
Bridge Type Arm + Cylinder Bed	SWF/UK1202 SWF/UK1501	2 Head Tubular Embroidery Machine
	SWF/UK1204 SWF/UK1504	4 Head Tubular Embroidery Machiine
	SWF/UK1206 SWF/UK1506	6 Head Tubular Embroidery Machine
	SWF/UH1206 SWF/UH1506	6-Head Compact Tubular Embroidery Machine
	SWF/UH1208 SWF/UH1508	8 Head Tubular Embroidery Machine
SWF/ - U series	SWF/ UI1212	12 Head Tubular Embroidery Machine

* The Models of Machine by Each Series (SWF C Version)

3-2) Details on LCD monitor display contents

A screen, which is seen in [Fig. 3-7], is an initial screen of program for operating machine. The screen can be divided into three, like (1) Screen for embroidery (2) Screen for working information, and (3) Screen for menu.



Initial display of SWF machine operating program [Fig. 3-7]

① Embroidery Area

This shows the retrieved embroidery design. If no embroidery design is retrieved, only SWF logo and control version information will be displayed.

(2) Process Information Area Process Information Area shows all information about the currently retrieved design.





9.	MIRROR	Mirror function setup value
10.	X_SCALE	X scale setup value
11.	Y_SCALE	Y scale setup value
12.	EMB RPM	Embroidery speed setup value
13.	Needle A B	A. Present needle bar B. Next needle bar
14.	Total St	Total number of working stitch
15.	Total Wk	It indicates the total number of working plate, and increases after each work.
16.	ORIGIN FIXPOS	[ORIGIN] shows if return-to-origin is set when completing design. When the ground color of letters is red, the machine turns "ON", and if there is no color, it turns "OFF". [FIXPOS] shows the stop position of main shaft. The back ground color of it changes to red when the shaft stops on 100 degree angle.
17.	L.N.H EMB_TIME	[Warning] Needle shaft switching should be done at 100 degree angle. [L.N.H] shows the speed of frame movement when manual positioning. The default is N(normal). Press speed adjustment button in the middle of frame positioning keys to change speed. Current setup value displays. L: Low speed N: Normal Speed H: High Speed [EMB_TIME] shows embroidery proceeding time
18.	Current No. of Stitches Total No. of Stitches	Current No. of Stitches shows the number of stitches completed during embroidering. Total No. Of Stitches shows the total number of stitches of retrieved design. The completion rate shows as % at the right.
19.	0 0 0 0	Shows the speed of embroidering

Always the data of stitch, color, jump are exact, because the data are calculated in a moment.

3) Menu of Function

It is a related menu to embroidery work with 8 divisions. If you press buttons located under the each menu, sub menu, which is related to the selected menu along with operation, come to fulfil.

An error or related operation appears on this screen. The Menu of Function is divided into two sections according to the operation of machine, such as "Menu when you quit operating in the middle of embroidery working" and "Functional Menu before operating embroidery".

3-3) Structure of Function Menu

3-3-1) Structure of Function menu during Embroidering Process Pause





3-3-2) Function Menu Structure before Starting Embroidery

- SWF C,E Version
- SWF F Version FLOPPY ★ INPUT -OUTPUT FLOPPY ★ INPUT FLOPPY OUTPUT GNT2910 FLOPPY TAPE GNT4604 GNT2910 TAPE DESIGN COPY GNT4604 DELETE DESIGN COPY -FORMAT DELETE NETWORK -INPUT FORMAT OUTPUT NETWORK -INPUT -SIERRA OUTPUT -FDD FMT --2DD SIERRA 2HD ★ EMB-CALL FDD FMT -2DD SETTING ★ BASIC 2HD ★ EMB-CALL SET I -F-SET SETTING -★ BASIC SET II SET I SET III -CUTTING -F-SET SET II NEEDLE T -SELECT CUTTING SET III CONVERT NEEDLE SELECT PALETTE CONVERT -START POSITION FRAME PALETTE -OFFSET POSITION FRAME -SUB-WORK -POSITION GAUGE EXCLUDE LENGTH -SUB-WORK -POSITION FASTVIEW GAUGE TRACE -EXCLUDE LENGTH GENERAL REPEAT -FASTVIEW -SPECIAL LOAD -TRACE AFC VALVEL1 GENERAL REPEAT SPECIAL VALVEL2 LOAD VALVEL3 COLOR TRIM VALVEL4 MACHINE SERVICE ALL ON ALL OFF INFO JUMP N UP TEST TRIM WIPER PICKFR MACHINE SERVICE TRIM -INFO UPPERSEN JUMP TEST WIPER -UNDERSEN **F-ORIGIN** -PICKER ERROR TRIM F-ORIGIN UPPERSEN -LOOKING FOR JUMP ERROR ★ EMB-EDIT--STITCH -UNDERSEN -LOOKING FOR C/C LOOKING FOR JUMP ★ EMB-EDIT--STITCH -DELETE LOOKING FOR C/C INSERT -DELETE -SCREEN SCREEN ENLARGEMENT INSERT TO THE ORIGINAL STATE SCREEN ENLARGEMENT SCREEN TO THE ORIGINAL STATE DIVIDE DIVIDE FILTER -FILTER

[Warning] You can not use main function menus with "★" when setting up continuous process.

3-4) Explanation and operation method on the function menu during suspension of working



<Reference >

If you want to RUN the machine with idling stitch by using "Menu when you quit operating in the middle of embroidery working " without stitching at the initial stage, push the bar switch to the left to go to " Suspension menu during operating in the middle of embroidery working ".

3-4-1) COLOR

Use color change function when you want to change needle bar. Press F1COLOR key to bring up menu as shown [Fig. 3-9]



[Fig. 3-9]



For example, if you want to change current needle bar #1 to needle bar #5, Press F55 Color will change automatically. Also, if the wanted needle bar is bigger than 6, Press F7 NEXT to change menu to [Fig. 3-10]. Press function key on wanted needle bar to change color automatically. If you do not want to change, press F8 PREVIOUS.



The needle bar comes to be changed directly if you press No. key on the key-pad that is placed on the right side of Operation Box as seen in the [Fig. 3-11] (Suspension screen by the bar switch during operating).



[Caution]

If the number of needle bar is "12", a key corresponds with a needle bar as 1:1. (1) Needle bar from 1 to 9 : Each needle bar corresponds with the relevant Num Key. (2) $10 \rightarrow +10' + 0', 11 \rightarrow +10' + 1', 12 \rightarrow +10' + 2'$, press the key at the same time.

3-4-2) TRIM

Manual cutting is used when an operator want to cut without using automatic cutting by the design codes. If you press F2 TRIM, the message, "Start Switch \rightarrow RUN" appears on the function menu as seen in the [Fig. 3-12]. In this case, if you push the start switch, the thread trimmer will be run automatically.

If you do not want the thread cut, press F8 PREVIOUS.



3-4-3) FLOAT idling stitch

Float is a function to change the position of design without rotation of main shaft. If you press "F3FLOAT" as seen in the [Fig 3-8], a screen of [Fig. 3-13] is shown on the screen.



[Fig. 3-13]



1	Float by	Keys									
	The such	menu	as	following	is	available	when	float	function	is	selected.

F1	+ 100	: For the process of 100 stitches without embroidery working.
F2	+1,000	: For the process of 1,000 stitches without embroidery working.
F3	+ 10,000	: For the process of 10,000 stitches without embroidery working.
F4	+ COLOR	: For the process to next color code without embroidery working.
F5	- 100	: For the backward process of 100 stitches without embroidery working.
F6	-1,000	: For the backward process of 1,000 stitches without embroidery working.
F7	-COLOR	: For the backward process to the previous color code without embroidery working.
F8	PREVIOUS	: It can be used for the finish of Float Function and red on screen is disappeared.

2 Start and Stop switches

When the function of processing without sewing is selected, it is available to progress and reverse with a unit of the set number of stitches $(1 \sim 10 \text{ stitches})$ by using Start or Stop switches.

3-4-4) FRAME

1 DATA-ORG

SWF embroidery machine can remember the original position of embroidery design when it suspends during working (Stop by Stop switch or by sense of thread cut). So if an operator wants to restart working after suspension, press F4 DATA-ORG to back to the original position of suspension automatically.



[Fig. 3-14] Example of restoration of embroidery frame

- A) Embroider design start Position
- B) Embroider design stop Position
- C) The Frame has moved by using frame move key.
- D) The Frame route when the data-org key is pressed.

(2) ORIGIN

Use Embroidery Initialization function to move the frame to the initial position of process.



[Fig. 3-15] An example of initializing embroidery

- A) Embroidery design start position.
- B) Embroidery design stop position.
- C) Frame route when the origin key is selected.

(3) POWER-RE

Power-re is a function to make the embroidery machine move to the initial place of working.



- A) Embroidery design start position.
- B) Embroidery design stop position.
- C) Frame Route when the power-re function is selected.

[Fig. 3-16] Example of restoration of power supply

A function of automatic movement of the frame can be available by the 3 menus such as DATA-ORG, ORIGIN, POWER-RE, and if you press Stop switch during the transferring, the frame comes to stop. After that, you can move the frame wherever you want by using the key in the box. If you press the Start switch again, the frame moves to the position that it wants to go initially.




- A) A starting point for movement of automatic embroidery frame
- B) Position in emergency stop by pressing Stop switch.
- C) A transfer position of the frame by the key for the frame transfer
- D) Initial position moved by pressing Start switch.
- E) A transfer route when you transfer an embroidery frame automatically, without a emergency suspension.

3-4-5) OFFSET

Use the Off-Set function to move frame to predefined position. Please refer page 3-69 for setting up predefined off-set position.



An Example of Palanquin Off-Set[Fig. 3-18]

- A) Embroider design Start Position.
- B) Embroider design Stop Position.
- C) Frame Route when the offset function is selected.

3-4-6) SETTING

Use this function to change setup value during the machine was paused. Please refer page 3-44 fordetails.



3-4-7) S-CODE

If you press F7 S-CODE on a screen as seen in the [Fig. 3-20], you can get the screen as belows.



[Fig. 3-20]



If you want to carry out embroidery work with a low speed for a certain part of designs, press F2LOW CODE after pressing F7 S-CODE on the suspension by the stop switch. From this moment, the machine starts to operate embroidery with the Low Speed setting under the setting II.

* If you want to release low speed setting, press F3 RESET

3-4-8) EMB END

Use this function to terminate process as you want instead of completion by normal design end code. "Do you want to cancel data set?" message as shown in [Fig. 3-21]appears when you press F8 EMB END Press F7 Yes to end the process. If not, Press F8 No



[Fig. 3-21]

3-5) Details and How to Operate Function Menus before Starting Embroidery

3-5-1) INPUT

INPUT-OUTPUT mode can be used when you want to input and output some designs using outer devices, or to copy and delete a design in the memory. You can use floppy disks for input and output, or punching tape for input, and communication with other computer.



[Fig. 3-22] Screen that a design is called

Let's take a look at menus.

F1	INPUT
F2	EMB-CALL
F3	SETTING
F4	SUB-WORK
F5	REPEAT
F6	COLOR
F7	TRIM
F8	To next menu. Press F8 to bring up:
F1	MACHINE
F2	EDIT shows up. We will call menus as "Main Function Menus" from now on.



F1 F2 F3 F4 F5 F6 F7 F8	ЕГЛЬБАА	ПІТРІІТ	TAPE	DESIGN	NETLIORK	FDD FMT	98/7/16 No. STITCH X Imm1 COLOR JUMP ANGLE MIRROR X_SCALE EMB RPM NEEDLE EMB RPM NEEDLE TOTAL ST TOTAL ST TOTAL ST TOTAL HK ORIGIN L. N. H. 0 14672	PM 3:28 5 14672 150.0 67.4 7 113 0 0 0 0 0 100[½] 100[½] 100[½] 100[½] 100[½] 100[½] 100[½] 100[½] 0 0 0 0 0 0 0 0 0 0 0 0 0
F1 F2 F3 F4 F5 F6 F7 F8								
	F1	F2	F3	F4	F5	F6	F7	F8

[Fig. 3-23] shows screen when main function menu F1 INPUT is selected.

Let's take a look at menus on this screen. They consists of:

F1	FLOPPY
F2	OUTPUT
F3	TAPE
F4	DESIGN
F5	NETWORK
F6	FDD FMT
F8	PREVIOUS
	We will call these menus as " Sub-Menu " from now on.

FLOPPY

It carries out input and delete of design.

[Ex.] Copy the design of '24' of SWF format from the floppy diskette to in the room # 60.

- ① Please be sure to insert floppy diskette into floppy drive before you select **F1** FLOPPY on [Fig. 3-23]. Select **F1** FLOPPY
- 2) The designs in a floppy diskette as seen in the [Fig. 3-24] appears on the screen.



Let's take a look at screen contents.

No. : It is a number of design according to the numerical order stored in a floppy diskette.
Name : Name of design stored in a floppy diskette
Information : It indicates generating dates of designs and number of stitches which are stored in a floppy diskette.
Code : It shows a format of embroidery design.

Now, let's examine function menu keys.

F1 Cursor key ↑	: Moves cursor to wanted design.
F2 Cursor key \downarrow	
F3 Page UP	Since only 20 designs can be displayed in each page, you should change page to see remaining design if you have more designs. Change to previous page.
F4 Page DN	: Change to next page.
F5 FORMAT	: Deletes all designs saved in the diskette.
F6 DELETE	: Deletes currently selected design.
F7 COPY	: Saves currently selected design into memory.
F8 PREVIOUS	: Returns to previous step.



Using a key for moving cursor, move the cursor to "24", a name of design.

③ When the cursor is on the wanted design as shown [Fig. 3-25], press F7 COPY.



(4) [Fig. 3-26] shows empty room in the memory. Use cursor keys to locate the cursor to room #60.



[Fig. 3-26]

(5) When the cursor is at room #60 as [Fig. 3-27], Press F7 Select



[Fig. 3-27]

(6) [Fig. 3-28] shows design save process from floppy diskette.

									4			\mathbb{H}	97/2/21	AM 3:28
	<u>ң </u>	Æ			田	H		田	<u> </u>		Ξ	⊞	No.	60
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			Sel		Mema	ry l	Posit					P1	X [mm]	150.70
				_						_			Y [mm]	170.60
	Ava	il S	tito	h 11	3382						H		Color	10
	7	10	30	41	44	48	49	50	51	52			Jump	157
日田田	53	54	55	56	57	58	59	60	61	62		HT I	ANGLE	0
	63	64	65	66	67	68	69	70	71	72			MIRROR	Off
	73	74	75	76	77	78	79	80	82	83			X_SCALE	100[%]
_#23	84	85	86	87	88	89	90	91	92	93	E	⊞	Y_SCALE	100[%]
- 445 2	94	95	96	97	98	99	100				1	┲┲┹──	EMB RPM	750
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embroide	ery d	ata	read	ling	•									
	1													
F1		F2		FB	;		F4		F5		1	F6	F7	F8

[Fig. 3-28]



- * Automatic insertion of ZSK diskette needle bar
 - The needle bar information can be selected when the C-ZSK diskette design is being copied.
 - Manual selection \rightarrow Stores previous needle bar information
 - Automatic selection \rightarrow Stores the information of the needle bar in use now



⑦ If you select EMBROIDERY CALLING in the menu as seen in the [Fig. 3-29], you can see that the design is saved in the room # 60. (Refer p.3-41 for Embroidery calling.)



[Fig. 3-29]

OUTPUT

Use Embroidery output when you save design from memory into floppy diskette.

Ex.) Copy the design of stored in room # 2 of design memory to a floppy diskette with SWF format

- ① Select F1 INPUT from main function menus.
- 2 From [Fig. 3-30] screen, Press F2 OUTPUT to continue embroidery output.



③ Press FIFLOPPY to output an embroidery design on the screen as seen in the [Fig. 3-31] after inserting floppy diskette in a floppy disk drive.







④ Use cursor keys to move cursor to room #2 as shown [Fig. 3-32].

(5) When you press F7 SELECT after placing cursor in the room # 2, you will be asked about the stored formation. In this case, if you select "SWF", you will see the process of copy as seen in the [Fig. 3-33].



[Fig. 3-33]

(6) The output of embroidery is finished in this method.



[Fig. 3-34]



Tape

Use binary or ternary punch tape to input design.

(1) Installation

① Needed: tape reader, punched design, signal cable for tape reader. See [Fig. 3-35]



- ① Tape reader power plug connector
- ③ Tape reader signal lamp [GNT2910]
- (5) Tape reader power switch
- O Tape reader base

- 2 Signal cable for tape
- ④ Power
- 6 Reader sensor cover
- (8) Tape mount
- 2) Place tape reader base on a table near the SWF operation panel.

③ Open Reader input sensor cover and mount tape as shown [Fig. 3-36]



Reader input sensor[Fig. 3-36]

- ④ Close reader input sensor cover.
- (5) Connect 9-pin signal cable into the connector at the back or tape reader as shown [Fig. 3-37]



Back of tape reader[Fig. 3-37]

- 6 Connect the other end 9-pin cable connector to main control box.
- (Please refer page 1-2 for connector on main control box.)
- O Connect tape reader power plug to main control box.
- (8) Turn tape reader main switch ON.
- 9 Check the green light is on at the tape reader power lamp.



(2) How to Input

In the main menu, select F1 INPUT and F3 Tape in the auxiliary menu, then
 F1 GNT2910, the following two screens comes to appear as the case may be.



[Fig. 3-38] When tape reader is connected properly.



[Fig. 3-39] When tape reader is not connected properly.

[Note] The tape reader is not connected properly when:

- 1) Tape reader power is OFF
- 2) Cable is not connected
- 3) Cable is not SWF provided
- If properly connected, you need to select memory room to save design as shown in [Fig. 3-38]. Use F1, F2, F3, F4 cursor keys to move cursor to the room you want. Press F7 Select You will see screen as [Fig. 3-40].



③ Press F1 READING reading to start tape reader to read punched design tape.
 Press F8 PREVIOUS to stop eading.



(4) [Fig. 3-41] shows when the reading is complete. Since it asks you if you want to save the design, press F7 YES



DESIGN

In the sub-menu of design menu, functions to copy the design of memory to another menu and to delete it, as well as to delete all designs of memory are existed.

Ex.) You can copy design in memory room #2 into memory room #70.

- ① Select F1 INPUT from main function menu.
- 2 Press F4 DESIGN to copy a design from screen shown [Fig. 3-42].



(3) As seen in the [Fig. 3-43], sub-menus of F1 COPY F2 DELETE F3 FORMAT exist. Press F1 COPY

					98/7/16 No. STITCH X EnnJ Y EnnJ COLOR JUMP ANGLE MIRROR X_SCALE MIRROR MIRROR X_SCALE MIRROR	PM 4:02 5 12962 189.7 66.9 4 161 00 0 ff 100[%] 100[%] 100[%] 100[%] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CUPY DELETE	FUKMAT					PREVIOUS
F1 F2	F3	F4	F5	F6	F7	F8

[Fig. 3-43]





(4) Press F7 SELECT after placing cursor in the memory room 2 to copy design in the No. 2 as seen in the [Fig. 3-44].

(5) You can select destination room in [Fig. 3-44] screen. Move the cursor to room #70 to copy design in that room, and select F7 Select



(6) You will see that the design of memory room # 2 as seen in the [Fig. 3-46] is copied to the memory room # 70 by using the EMBROIDERY CALLING from the main menu.



Ex.) Erase design in design memory room #70 from design memory.

- ① Select **F1** INPUT main function menu.
- 2 Press F4 DESIGN to erase a design in [Fig. 3-47] screen.

F1 F2 F3 F4 F5 F6 F7 F8	FLOPPY OUTPUT	TAPE	DESIGN	NETWORK	FDD FMT	98/7/16 No. STITCH X [mn] COLOR JUMP ANGLE MIRROR X_SCALE Y_SCALE EMB RPM NEEDLE TOTAL ST TOTAL HK OBIGIN 0. 14672	PM 3:28 5 14672 150.0 67.4 7 1113 0 0ff 100[×] 100[×] 100[×] 100[×] 100[×] 100[×] 100[×] PSEVIOUS
	F1 F2	F3	F4	F5	F6	F7	F8

[Fig. 3-47]



(3) As seen in the [Fig. 3-48], sub menus such as F1 COPY, F2 DELETE and F3 FORMAT exist. Press F2 DELETE



④ Press F7 SELECT to delete the design of in the room # 70 as seen in the [Fig. 3-49], using cursor after moving it to room # 70.

Avail St	Avail Stitch : 180,917,630										
31	32	33	34	35	36	No.	70				
		1.56	30000			STITCH	13338				
GING		1.18	1			X [mm]					
• <u> Jeilike</u> i	<u> </u>	63			8	Y LMMJ					
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ALCON.	<u>.</u>	7		Maria	J. Contraction	MIBBOB	ULL C				
		<u> </u>		Sr.		X SCALE	100[2]				
45	46	47	48	50	51	Y_SCALE	100[%]				
						EMB RPM	750				
AND E	572	A DEC	distant in	(D	Ser and	NEEDLE					
AIR	STARTER	AL.		Ser .		TOTAL ST	0				
52	53	54	60	70		TOTAL WK	0				
Gener Bin		Ŵ	2002			ORIGIN L.N.H.	FIX POS EMB TIME 0 [7]				
							88				
+	1	+	->	PageUP	PageDN	Select	PREVIOUS				
F1	F2	F3	F4	F5	F6	F7	F8				
						[F	ig. 3-49				

(5) As seen in the [Fig. 3-50], the message "Do you want to delete design?" appears on the screen. If you want to delete it, select F7 YES but if you don't want, choose F8 NO



Ex.) Delete the plural designs in the memory by the selection of user.

① If you follow the below procedure, you can see the screen of [Fig. 3-51]. Main menu → F1 INPUT → F4 DESIGN → F2 DELETE

Avail S	titch :	180,9	30,969)		98/5/19	AM11:45
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7	8	9	10	11	12	JUMP	
					IN CON	ANGLE	0
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	All and a	ų serietai s	<u>v</u>		Cardina .	X_SCALE	100[%]
13	14	15	16	17	18	Y_SCALE	100[%]
0000	a.	11/11	6 mil	192		EMB RPM	750
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-	`	<u></u>	- 19 <u>- 1</u> 9	and a		TOTAL ST	U
19	20	21	22	23	24	TOTHE WK	0
5	a-static	d la		a 2	THE OWNER AND INCOME.	ORIGIN	FIX POS
8		1		карноо		L.N.H.	EMB TIME
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20	20	61	20	67	30	1412	V 1/1
-	49.88	and State in	12				
4.3442 35	1 49	25 9 14	5-21	ASP.	4.45	i te i te t	
	27.75				dillip		
+	1	ŧ	+		PageDN	Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8

[Fig. 3-51]



② If you press F7 SELECT after moving the cursor to the design you want to delete with "F1 ~ F4", you will see the change of rim color to be red as seen in the [Fig. 3-52].



3 At this moment, if you press F6 SELECT you will see that the rim of design is red with arrow keys.



[Fig. 3-53]

(4) After moving to a design you want to delete, if you press "F7 SELECT, the rim of selected design will be changed to be red same as the existing design.



(5) Same as a method above, if you select "F7 DELETE" from the screen of [Fig. 3-54] after designating plural designs, you will be asked if you want to delete the designs.



6 If you press "F7 YES" in that case, the designs you want to delete will be deleted.



Ex.) Delete all designs in memory.

① Select F1 INPUT on the main menu.

2) On the screen of [Fig. 3-56], press F4 DESIGN to delete design.



(3) As seen in the [Fig. 3-57], sub-menus of F1COPY F2 DELETE F3 FORMAT exist. Press F3 FORMAT



3-55

(4) As seen in the [Fig. 3-58], there is a message "Do you want to format design memory?" on the screen. If you want to delete, press F7 YES but if don't, press F8 NO



FDD FMT

It carries out formating a floppy diskette, which is inserted in a floppy disk drive, to '2DD' or '2HD'.

 If you press "main menu → "F1 INPUT" → "F4 FDD FMT", sub menu appears as seen in the [Fig. 3-59].



[Fig. 3-59]





(2) If you select a formation you want, a question appears on the screen as seen in the [Fig. 3-60].

③ If you select F7 YES in the screen of [Fig. 3-61], format procedure appears on the screen.



[Caution]

If you remove a diskette by force from the disk drive during formatting, data on the diskette can be deleted or damaged.

3-5-2) EMB-CALL: You can use this function to retrieve a design saved in memory

Embroidery designs saved in each memory room will show up on the screen when you select F2 EMB-CALL from initial screen. Also, information about the design that the cursor is pointing is displayed on the process information area. (Maximum number of memory room is 100.)

Ex.) Retrieve the design in room #40.Number of Design Stitches: 21,946 stitchesNumber of Design Colors: 10 Colors

① [Fig. 3-62] indicates that any design is not available or there is no called design in the memory. If there is a design called in previous time, the design is printed out, as seen in the [Fig. 3-63].





[Fig. 3-63]



Press F2 EMB-CALL to bring up designs in each room as shown in [Fig.3-64]. You can retrieve a design simply move the cursor to the design you want by using F1, F2, F3, F4 and F7 Select. Since the design that we want to retrieve is in room #40 and we can only display 30 designs in one screen, you need to use F6 Page DN key to scroll to next screen.



③ [Fig. 3-65] shows the second page. Now move the cursor to room #40 by using F1, F2, F3, F4 cursor keys. You can see the information in the process information area that indicates the design is the one we want. Now, Select the design. Press F7 Select.

Avail S	titch :	180,9	30,969	9		98/5/19	PM 3:23
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		: Q(P*	The second			COLOR	_
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6 Jack	2		patters .	SP-A	A COLOR	ANGLE	0
	. 😽 -	1	1X	0752	200	MIRROR	Off
Car	<u> </u>			01	The set of the set of	X_SCALE	100[%]
45	46	47	48	50	51	Y_SCALE	100[%]
NIKE-					COTONES.	EMB RPM	750
C.			-	803	W PA	NEEDLE	
AIR	STANTER	-		U	237	TOTAL ST	<u> </u>
52	53	54	60			TUTAL WK	U
Ganst Ser.		V	2002			ORIGIN L.N.H.	FIX POS EMB TIME
						15524	0 [7]
						۲C	
+	1	¥	-			Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8

[Fig. 3-65]

- 98/7/16 PM 4:38 No. Stitch 2 21946 150.7 170.6 X [mm] Y [mm] 10 157 COLOR JUMP ANGLE 0 0ff 100[%] 100[%] MIRROR X_SCALE Y_SCALE EMB RPM 750 NEEDLE TOTAL ST 0 TOTAL WK 0 ORIGIN FIX POS 0 21946 0 [%] П 0 INPUT EMB-CALL SETTING SUB-WORK REPEAT COLOR TRIM NEX1 F7 F1 F2 F3 F4 F5 F6 F8 [Fig. 3-66]
- ④ You can see the design is retrieved in [Fig. 3-66] screen.



Design Confirm Function in case of Design Selection

Avail Sti	tch :	25,459,	,040			00/10/ 5	PM 9:39
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						STITCH	61451
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HIMM					allowing willing	¥ Emm3	-
		-0-				COLOR	-
7	8	9	12	13	14	JUMP	-
5000 m	143	34.4		15 A	75	ANGLE	0
6.1.3			SWF		S I	MIRROR	Off
"Weidfilter.SP"		407488				X_SCALE	100[%]
15	16	17	18	19	20	Y_SCALE	100[%]
	- Cha-	64	and a	3191		EMB RPM	760
00000		A		22	SWF	NEEDLE	
Photo Contraction of	and the second s		ALAN.	1		TOTAL ST	0
21	22	23	24	25	26	TOTAL WK	0
	÷		×	SMF	主要な	ORIGIN L. N. H.	FIX POS EMB TIME
27	28	29	30	31	32	61451	0 [%]
汉	*		ê	1	ê		88
+	1	¥	→		VIEW	Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8

If you press F2 Embroidery Call to call the design, the following screen shall appea

At this time, as the screen shall indication 30 designs, the indicated embroidery data image can be difficult to confirm the shape case by case. In order to supplement this, locate the cursor to the design before selecting it and press F6 View key. At this time, you can confirm the design as follows.

Avail St	itch :	25,175	,050			00/10/ 5	PM 9:44
					6	No.	9
						STITCH	30923
CRO I						X Emm]	175.0
			C			¥ Emm]	251.6
		AVA.				COLOR	9
7						JUMP	343
and the state of the		3		. sh		ANGLE	0
		L. Y		-		MIRROR	Off
*CARLOF			\\$ \$177	CAN SA		X_SCALE	100[%]
15				EJ/A	1	Y_SCALE	100[%]
						EMB RPM	760
616363 (2) 27:43 (3) (3)			DAP	2 million and		NEEDLE	
Personalities		- Fr	A LA	K //		TOTAL ST	0
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		/	1215	$\langle \cdot \rangle$	10		
-015			Marsa			ORIGIN	FIX POS
Annual Distance		- * F		A×-		L. N. H.	EMB TIME
27						0	A [7]
						30923	v 1/13
1	N. South a	HAR N	6		<u>a</u>		
	100		7		¥	isil-s:	
					-		لصالصا
						Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8

If you want embroidery work, press **F7** Selection key and if you want to select the other design, press **F8** Previous Stage key.

Number Input Function in case of Design Selection

If you press F2 Embroidery Call on the initial menu, the following screen shall appear.

Avail St	Avail Stitch: $25,459,040$						PM 9:39
1	2	3	4	5	6	No.	1
						STITCH	61451
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H KH		12		100	allowing to light	¥ Emm]	-
						COLOR	-
7	8	9	12	13	14	JUMP	-
A State State	142			and the	75	ANGLE	0
			SWF		X I	MIRROR	Off
*Carcar	-	4/18				X_SCALE	100[%]
15	16	17	18	19	20	Y_SCALE	100[%]
		1		1.42	SMF	EMB RPM	760
C C C C C						NEEDLE	
PERMIT						TOTAL ST	0
21	22	23	24	25	26	TOTAL WK	0
	*	褻	×.	SWF		ORIGIN L. N. H.	FIX POS EMB TIME
27	28	29	30	31	32	61451	0 [%]
汉				1	ê		88
+	Ť	¥	→		VIEW	Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8

At this time, input the design number that you already knew through number key. Next is the state that pressed number key [F4] to call the design no. 45.

Avail Sti	Avail Stitch : 25,109,514						PM 9:45
1	2	3	4	5	6	No.	1
	CELI		í.		STITCH	61451	
630	SEL	4CI:4	F	Ch ASEDW	X [mm]	-	
THE REAL	(55797	/ 9%		all corrections	Y Emm]	-	
	_					COLOR	-
· · ·	8	9	14	13	14	JUMP	-
State of the	143	24.4		No.	75	ANGLE	0
123			SWF	02.2	X	MIRROR	Off
"North Theory"		4074		Contraction of the local division of the loc		X_SCALE	100[%]
15	16	17	18	19	20	Y_SCALE	100[%]
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21	22	23	24	25	26	TOTAL MK	0
	101	and You					
INC.			~~	SWF	. Alt Mar	ORIGIN	FIX POS
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27	28	29	30	34	32	0	0.[7]
						61451	V [/1]
14			â				
		NTX.	<u>.</u>		<u> </u>		
			*			· 1 · 1	
						Select	PRELIDUS
						Joineet	1112+1003
F1	F2	F3	F4	F5	F6	F7	F8
	14	13	- 11	15	10		10



At this time, cursor movement key $F1 \sim F4$ shall disappear and F7 Selection and F8 Previous Stage shall appear. To input 45, press number key F5. If you want to select a design, press F7 Selection and if you want to cancel, press F8 Previous Stage. Also if you want to move the cursor to the selected location or the page without selecting the design by number key, press F6 Cursor Movement.

Avail Sti	Avail Stitch : 25,109,514						PM 9:45
1	2	3	a	5	6	No.	1
	GELI			_		STITCH	61451
610	SELL	CT:4	- D	Concernance of the second	X Emm]	-	
					BECHTYP HORAS	¥ Emm3	-
	China and China		- 200	127323334		COLOR	-
7	8	9	12	13	14	JUMP	-
All and the second	142	- Mar		-	-	ANGLE	Θ
		1.19	SWF		T	MIRROR	Off
Necal Necal	- 34	4				X_SCALE	100[%]
15	16	17	18	19	20	Y_SCALE	100[%]
	<u> 22</u>	4	*	The second		EMB RPM	760
61616202					SMF	NEEDLE	
KARADAKA						TOTAL ST	0
21	22	23	24	25	26	TOTAL WK	0
(12)		3 Sugar	5	ONE	alts' Mar	ORIGIN	FIX POS
Annual Conner	67	25	\leq		mistratic.	L. N. H.	EMB TIME
07	20	20	20	24	22	Θ	0 [v]
21	28	23			52	61451	0 [7]
2453	THE	100		*			
			9	A			HEHEH
			*		v	<u> </u>	
						Select	PRELITOUS
						361661	111201002
F1	F2	F3	F4	F5	F6	F7	F8
						· · ·	

As shown on the left screen, cursor shall move to number 45. If there is no design on 45, it shall move to the nearest room from 45.

Avail Stitch : 25,459,040					00/10/ 5	PM 9:39	
22	24	25	26	27	20	No.	45
55						STITCH	28216
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105	200-		00000	Ŧ	2-2-2-2	¥ Emm3	-
						COLOR	-
39	40	41	42	43	44	JUMP	-
				1.24		ANGLE	0
IASI-NILF	SPORT	S-C-A/T-TILE			-158.000	MIRROR	Off
						X_SCALE	100[%]
45	46	47	48	49	50	Y_SCALE	100[%]
		(DA CO)	(A) T			EMB RPM	760
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						TOTAL ST	0
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			2011				
Ŧ	100	Ŧ	1				
+	1	¥	->		VIEW	Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8



3-5-3) SETTING

[Fig. 3-67] shows the screen when you press **F3** SETTING from main function menu.



The menu consists of followings.

F1 BASIC	: It can be used for setting up for parameters such as basic standard, enlargement,
	contraction and angle.
F2 SET I	: Use this when you want to setup parameters related to embroidery.
F3 SET II	: Use this when you want to setup parameters related to embroidery.
F4 SET III	: Use this when you want to setup parameters related to embroidery.
F5 NEEDLE	: Use this when you select or change the needle shaft.
F6 FRAME	: Use this when you setup design start position and design end position.
F7 Additional	device : This is used when a spankle (R, L) or a coding device is installed.



BASIC

Basic	ŧĻ, j∉ ŧ	┟╷┟╡╅┥	98/7/16 No.	PM 4:49		
			STITCH	21946		
1 X scale		100 [%]	X [mm]	150.7		
2 Y scale		100 [2]	Y [mm]	170.6		
		0 [angle]	COLOR	10		
- 5 Hily Ie		U Langies	JUMP	157		
4 Mirror		NO	ANGLE	0		
5 X satin		0 [INC]	MIRROR	Off		
6 Y satin		0 [INC]	X_SCALE	100[2]		
7 Start Stitch		0[st]	EMB RPM	750		
8 Jump Convert		3[st]	NEEDLE			
9 Offset Function		NO	TOTAL ST	0		
5 OITSET TUNE CION			TOTAL WK	0		
Range: 50 ~ 200 [%]			ODICIN	FTV DOS		
	та та та та та					
	ᆋᆝᆄᆂ	ᆡᇉᆋᆋᆝ				
	╘╫┱┈╍╉┹╴┝╴	₿╕₽₽₽┙ ╚₽₽╕				
		ᡛ᠆ᡃᡏ᠋᠋ᠴ				
	TI 141	1 14 #1				
				PREUTOUS		
T +				1 112 1000		
F1 F2 F3	F4	F5 F6	F7	F8		
The screen whe	n vou selec	t ″ BASIC ″	[Fig	3-68]		

[Fig. 3-68] indicates a screen when you select F1BASIC on the [Fig. 3-67].

(1) X-Scale : Setup value to enlarge or reduce design on X axis.



The default is 100% and setup range is from 50% to 200%.

(2) Y-Scale : Setup value to enlarge or reduce design on Y axis.



[Fig 3-70]

The default is 100% and setup range is from 50% to 200%.



The default is 100% and setup range is from 50% to 200%.

(3) Rotate : setup value of rotation angle to turn the design.



The default is 0 degree and setup range is from 0 degree to 359 degrees. You can setup by 1 degree.

(4) Mirror : setup value to mirror the design along the X axis



The default is "NO" and you can input 1 to set the value to "YES" for mirroring the image.

(5)X satin

What is a setting of width of X satin ?



This function is to decide the width of satin stitch to the X-shaft direction, and increases the relative size to the basic value by 0.1[mm] each time.


- (6) "Y Satin" : It can be used for setting Y satin width.
- (7) Start Stitch : It is a setup for the design position to start working. You can adjust the number of stitches by deleting the number of stitches.



(8) Jump Convert : During carrying out continued jump, if you continue jump more than setting value, the machine trims first then moves the embroidery machine. For example, if you set up 5, when it meets continued jump code, the machine carries out jump without trimming until 4 stitch. But when the machine meets continuous jump more than 5 stitches, it performs trimming first and operates for embroidery after moving 5 stitches. The basic value is to be set as 3 stitches, but you can set it up from 0 to 10 stitches each.



[Caution]

If the machine is set for "0(stitch)", it moves without trimming for continuous jump without regard to the number of jump stitch.

(9) Offset function ; It is a parameter to decide if the machine uses Offset or not.



- * Setting point for Offset
 - 1. Set "YES" in the setting of embroidery frame coordinates.
 - 2. Set the Start of Embroidery and Offset Position in the stage of F3 Setting → F6 FRAME

After finishing setting the above three items, offset of embroidery frame can be carried out.

* When you called new embroidery design, Basic setting is reset automatically



SET I

[Fig. 3-78] shows the screen when you select F2 SET I from [Fig. 3-67] screen.

Setting I		98/7/16 PM 7:07 No. 2 STUTCH 21946
1 Total stitch		X [mm] 150.7
2 Total work	0	Y [mm] 170.6
3 Auto Origin Return	VFS	COLOR 10
4 Jum ohango Data	10.0 [mm]	JUMP 157
4 Jump change Data	10.0 [mm]	MIBBOB Off
5 Allhead sewing start point after F.B	3 [st]	X_SCALE 100[%]
6 Auto Back Stitch	3 [st]	Y_SCALE 100[%]
7 Auto Start After Triming	YES	EMB RPM 750
8 Auto Start After Frame Back	YES	NEEDLE
9 Ontimize method		TOTAL ST 0
		TOTAL WK 0
10 Frame Forward/Back Moving Unit	1 IstJ	OPIGIN ELV POS
11 Auto Backtack	NO	L. N. H. EMB TIME
Range: Reset(0)		0 0 [7]
	H H H	21946 V L/.J
िमिमी मिमी मिमी मिमी	打甲門	
DEFAULT		PREVIOUS
T V Constant		1.1271000
F1 F2 F3 F4	F5 F6	F7 F8
SET I scree	[Fig. 3-78]	

Present sub-menu has cursor of F1, F2 and F3 DEFAULT.

* Method of setting for each parameter......

After placement of cursor on the parameter number you want to set up, input data in the RANGE : using number keys.

* Method of saving of set value....

For the automatic saving of set value, press F8 PREVIOUS after setting.

- (1) Total stitch : This function can be used when you initialize the setting value for the number of stitch for whole working, same as a setting 'Total Stitch' on the main menu. Stitch increases one by one. (It accepts only 0 on the Num. key.)
- (2) Total work : It indicates the total number of plates (a number of finished work on the design) that has finished so far, increasing one by one, same as an indication of "Total work" on the main menu. (It accepts only 0 on the Num. key.)
- (3) Auto origin return : It carries out a function for the embroidery machine to be returned to a starting point after finishing work on a specific design. The basic value is 'YES', but if you don't want the machine to be returned to the starting point, input '0' to set 'NO'.
- (4) Jump change data : It is a value of stitch width to change a general code to jump code. The basic value is 8.0[mm] and you can set it by the unit of 0.1[mm] each from 5.0 ~ 12.7[mm]. That is, if an interval between the two stitches is longer than the basic value when the embroidery machine moves, the type of stitch is changed to jump stitches.

- (5) All head sewing start point after $\mathbf{F} \cdot \mathbf{B}$: When you work with lots of needles, if a needle is broken, the machine comes to suspend after sensing it. To correct the part that is not stitched, carry out back stitching and operate only the broken needle for double stitch. In this case, you can set the relative position that the needle starts to move, on the suspended position, within the scope of $1 \sim 20$ [stitches]. The basic value is 3[stitches].
- (6) Auto Back Stitch : Set the numbers of back-up stitches when the thread cut is sensed. The default is 2 stitch and you can set from 0 to 5 stitches by 1 stitch.
- (7) Auto start after trimming : It is a value to set if a machine starts automatically or not after trimming by either jump code or trimming or suspending code. The basic value is "YES", if you don't want to set an automatic starting input '0' to set 'NO'.
- (8) Auto start after frame back : It is a value to set if the machine starts automatically or not when it reaches "Previous needle position after back stitching" after back stitching from the suspending position. The basic value is "YES", if you don't want an automatic starting input '0' to set 'NO'.
- (9) Optimize method : It is for setting an interval between gauge and the rim of design. The gauge means a part consisted of running stitch where is apart from the rim of design. The basic value is 1[mm], and available scope is 5~30[mm].
- (10) Frame forward/back moving unit : It is to set the number of stitch that transfers back and forth by the operation of the switch. The basic value is 1[stitch], and it can be set up from 1[stitch] to 10[stitches] each.
- (11) Auto back-tack : It is to set about Back-Tack for the tightening of stitches when you start operating. The basic value is "NO".
- (12) In the case of small-head optional embroidery machine, a lock stitch function is added as follows:

Se	tting I		03/9/ 8	PM 4:52
-			No. STITCH	1039
1	Total stitch	0	X [mm]	50.9
2	Total work	0	Y [mm]	15.4
2	Auto Omigin Potumn	UEG	COLOR	6
3	Huto origin keturn	631	JUMP	15
4	Jump change Data	8.0 [mm]	ANGLE	0
5	Allhead sewing start point after F.B	3 [st]	MIRROR	Uff
6	Auto Back Stitch	2 [st]	X_SCALE	100[2]
7	Auto Start After Triming	YES	EMB RPM	750
8	Auto Start After Frame Back	YES	NEEDLE	
9	Optimize method	10 [mm]	TOTAL ST	0
10	Frame Forward/Back Moving Unit	1 [st]		
11	Auto Backtack	END BACK		FIX POS
12	Trim System Setting	OLD	0	0 [1]
13	Lock Stitch(END BACKTACK)	1	1039	0.171
Ran	ge: 1~5			\Box
17				$\Box \Box$
4	DEFAULT			PREVIOUS



Integration Setting Menu Addition in case of Design Calling

If you select the design to work through memory or floppy, you should practice setting such as X & Y extension, reduction, angle and needle bar conversion, etc. If you call the design through the above embroidery call process or if you call the design through floppy diskette(See page 3-18 on manual.), the following screen shall automatically appear.



Location of cursor shall be X extension and reduction. The available setting menu is as follows.

F1 F2 Menu Cursor Movement Key

F5 Previous Stage: The key being used to return to embroidery design selection screen
F6 View: You can confirm the setting on the screen for the changed set value
F7 Need Bar: The key for needle bar setting in the left ax

The next screen is the one that confirm by selecting $\boxed{16}$ View after changing X extension to 200% and angle into 45°.





To change the set value of needle bar, input F7 Needle Bar key. At this time, the cursor shall be moved to Needle Bar Selection as follows.



Input the desired needle bar order in turn. At this time, the cursor after inputting a needle bar shall automatically move to next needle bar number



If you want embroidery work after completing all the setting, input F5 Next Menu and if you want to select the design again, press F8 Previous Stage on the Basic Setting Menu.

OFFSET Needle Bar Designation : 0 key No. 10 Needle Bar Designation : -key No. 11 Needle Bar Designation : +key No. 12 Needle Bar Designation : CL key



■ SET II

[Fig. 3-79] shows the screen when you select **F3** SET **I** from [Fig. 3-65] screen.

Se	tting II			02/7/ 4	PM 2:40
	فاقتنا وتنتز الأرب والمتعادين			NO.	3014
1	Maximum Speed	1000	[rpm]	X [mm]	39.7
2	Minimum Speed	300	[rpm]	Y [mm]	54.9
3	Embroidery Speed	750	[rpm]	COLOR	2
4	Inching Speed	180	[rpm]	JUMP	120
5	Jump Speed	750	[rpm]	MIRROR	Off
6	Slow Speed	650	[rpm]	X_SCALE	100[%]
7	Inching Stitch	2	[st]	Y_SCALE	100[%]
8	After triming, Inching Stitch	3	[st]	EMB RPM	750
9	Upper thread cutting sensor	1	[st]	TOTAL ST	0
10	Under thread cutting sensor	0	[st]	TOTAL WK	0
11	Auto triming	YES	-	ORIGIN	FIX POS
12	Auto color change	YES		L. N. H.	EMB TIME
13	Thread Length trimmed	Medi	um	3014	0 [%]
14	START / END FILTER	0.0	[mm]	Contraction of the	
Ran	ge: Minimum ~ 1200 [rpm]				
		<u> </u>			
1	DEFAULT				PREVIOUS
F1	F2 F3 F4	F5	F6	F7	F8
	SET II Sc	[Fig	. 3-79]		

 Maximum Speed : Set maximum embroidering speed value of the machine. Setting value is set up with a unit of 1[rpm] from the lowest speed to max speed.

Version	M/C Type	Working Fabrics	TUBULAR	CAP	BORDER
		SWF/ W1201	-	-	1000
		SWF/ - WE1204	-	-	1000
	w series	SWF/ - WE1206	-	-	1000
		SWF/ - WF912	-	-	850
		SWF/ - T1201, T1501	1200	1200	1200
C. Varaian	T series	SWF/ - TH1215	850	750	-
C version		SWF/ - UK1202, UK1502	1000	1000	900
		SWF/ - UK1204, UK1504	1000	1000	900
		SWF/ - UK1206, UK1506	1000	1000	850
	U series	SWF/ - UH1206C, UH1506C	1000	750	1000
		SWF/ - UH1515	850	750	850
		SWF/ - UI1212	850	750	850
E Version		SWF/H - WD920-55	-	-	1000
F Version		SWF/ - WS(X)328-68AFC	-	-	850

(2) Minimum Speed : Set minimum embroidering speed value of the machine.

The default is 300[rpm] and you can set from 300[rpm] to maximum speed by 1[rpm].

- (3) Embroidery Speed : The basic value of Embroidery Speed is 750[rpm], and it should be set by the 1[rpm] unit within its scope of minimum and maximum speed which was set by SET II.
- (4) Inching Stitch : Set the number of stitching when starting embroidering. It is available to set up with a unit of 1[rpm] from 50[rpm] to 150[rpm]

M/C Type	Working Fabrics	Inching Speed Basic Value
	SWF/ W1201	100
w series	SWF/ WE1204	100
	SWF/ WE1206, WF912	100
	SWF/ - T1201, T1501	180
I Selles	SWF/ TH1515	100
	SWF/ UK1202, UK1502	100
	SWF/ - UK1204, UK1504	100
	SWF/ - UK1206, UK1506	100
U series	SWF/ - UH1206C, UH1506C	100
	SWF/ - UH1215	100
	SWF/ UI1212	100
	SWF/H WD920-55	100
	SWF/ - WS(X)328-68AFC	100

(5) Jump Speed : It is a value to designate a limit speed of jump stitch that makes the embroidery frame transfer without stitching. Basic value is 750[rpm], and it is set by the 1[rpm] unit from the minimum speed to maximum speed.

[Caution]

If you raise a jump speed up to more than 750[rpm], the needle can be not only broken but also caused troubles in the mechanism of needle bar.

- (6) Slow Speed : If you select F7 S-CODE, the screen shows F1 HIGHCODE, F2 LOWCODE and F3 RESET. For a part of embroidery working in low speed, you can choose F2 LOWCODE. The value can be set up by the 1[rpm] unit each from the low speed to high speed.
- (7) Inching stitch : When embroidery machine starts to work, the machine comes to drive slowly with the speed of inching. At this time, a basic value of stitches is 3[stitches]. The value can be set from 0[stitch] to 10[stitches] by the unit of one each.
- (8) After trimming inching stitch : When the machine meet a color change signal during embroidering or a course of embroidery on a specific design is finished, you can set for slow drive for finishing. The basic value is 3[stitches], and you can set it by the unit of 1 stitch each.
- (9) Upper thread cutting sensor : Setting value of number of stitches operated by upper Thread Cut Sensor



(10) Under thread cutting sensor : Setting value of number of stitches operated by Under Thread Cut Sensor.

Туре	Contents	Basic Default of Under Thread		
	SWF/	0		
w series	SWF/ -WE1204	0		
	SWF/	0		
T series	SWF/ -T1201 · T1501	4		
	SWF/UK1202 · UK1502	0		
	SWF/	0		
U series	SWF/	0		
	SWF/UI1212	0		

** In the case of AB, CB, EB, and VB Versions, when the wheel type has been set to 50 holes, the lower thread sensor can be set to one of [Low], [Medium], or [High] by using the number keys 0, 1, and 2. The default value will be set to Low(0). Even though it is set to Low, the sensor is more sensitive than the previous 18 holes.

Setting II			03/9/ 8 No.	PM 5:03
1 Maximum Speed	1000	[rpm]	STITCH X [mm]	3025 67.8
2 Minimum Speed	300	[rpm]	Y [mm]	76.6
3 Embroidery Speed	750	[rpm]	COLOR	2
4 Inching Speed	100	[rpm]	JUMP	18
5 Jump Speed	900	[rpm]	MIRBOR	0 Off
6 Slow Speed	650	[rpm]	X_SCALE	100[%]
7 Inching Stitch	2	[st]	Y_SCALE	100[%]
8 After triming, Inching Stitch	3	[st]	EMB RPM	750
9 Unner thread cutting sensor	3	[st]	TOTAL ST	0
10 Under thread cutting sensor	LOW	1301	TOTAL WK	0
11 Auto triming	YES		ORIGIN	FIX POS
12 Auto color change	YES		L. N. H.	EMB TIME
13 Thread Length trimmed	Medi	um	3025	0 [%]
14 START / END FILTER	0.0	[mm]		<u>enten</u> t
Range: Low(0), Medium(1), High(2)			ЮÖ	σb
↑ ↓ DEFAULT				PREVIOUS

- (11) Auto trimming : This is a value to set automatic trimming. Basic value is "YES", but you can set 'NO' if you don't want the automatic trimming.
- (12) Auto color change : Set automatic color change function. The default is "YES" and you can input "NO" to set to OFF.
- (13) Thread length trimmed : It is a setting value for the length of the remained thread after trimming automatically. If you want 'short thread', input '0', but 'long thread', input '2'.
- (14) Auto filtering function at start/end : It is a function to prevent from thread cutting by filtering the stitches of less than 0.5mm automatically at start and end to make embroidery. The basic value is 0.0[mm], and it is available to set up the setting value from 0.0[mm] to 0.5[mm] by a unit of 0.1[mm].

■ SET III

[Fig. 3-80] Shows the screen when you select F4 SET II from [Fig. 3-65] screen.

Setting III	1	02/7/ 6 PM 1:35 No. 1
1 Year Month Day		STITCH 3014
2 Hour:Minute		X [mm] 39.7
3 Frame Setting	FLAT	COLOR 2
A Software Limit Setting	NO	JUMP 120
F Deven On Auto Oninin		ANGLE 0
5 Power Un Auto Urigin	nu	MIRROR Off
6 Bottom Dead Point Stop	NO	X_SCALE 100[%]
7 All Head Sewing After Stitch Back	Each	FMB_BPM 750
8 BORING NEEDLE	0	NEEDLE
9 Speed Switching Data	4.5mm	TOTAL ST 0
10 Frame Speed Setting	LOWSPEED	TOTAL WK 0
11 Thread Break Moving	0	ORIGIN FIX POS
12 Jump Convert(Length)	0	L. N. H. EMB TIME
13 NEEDLE MOVE FUNTION(OFFSET)	YES	
14 FRAME MOVE METHOD(TRIMMING)	X	Test for the liter
Range: Ex) 19961 51 15 => 960515		
↑ ↓ DEFAULT CUTTING F-3	SET	PREVIOUS
F1 F2 F3 F4	F5 F6	F7 F8
SET III Scre	en	[Fig. 3-80]

- (1) Year, Month, Day : Set system year, month and date for example, input 990201 to set the system date to Feb. 1, 1999.
- (2) Hour : Minute : Set system hour and minute. For example, input 1745 to set the system time to 5:45PM. 17 means 5 o'clock in the afternoon and 45 means 45 minutes. Input 0545 to set the time to 5:45 AM.
- (3) Frame Setting : It is to set up the kind of embroidery frame you want to work with. The basic default is "FLAT(0)". and input "1" for setup of CAP.
- (4) Software Limit Setting : It is to set a function to set up the virtual Embroidery frame you want to work with. The basic default is "No".
- (5) Power On Auto Origin : It is to set function to find out Origin automatically when power is ON.The basic default is "0(No)", and if you want to use the function, input "1".
- (6) Bottom Dead Point Stop : Set needle shaft stop position to lower thread point when embroidery process completes. The default is "NO" and you can input 1 to set needle shaft lower stop when complete to "YES".

(7) All Head Sewing After Stitch Back : Set whether to move only head with cut thread or whole heads when embroidery process starts after frame returns from machine stop point. The default is "EACH" and you can input 0 to set "ALL" to move whole needle shaft heads.

[[] Warning] You must not change needle shaft manually when machine stops at lower thread position.



- (8) Boring Needle : It is to set a function to use boring operation as well as needle bar for it. The basic default is "0", and it sets up relevant needle bar. At this time, trimming devices of needle bar and thread sensing function is Off.
- (9) Speed Change Data : It is to generally slow down the speed of embroidery when normal operation is not available by the heavy sewing materials. The basic default is "High Speed (1)", but if you input "Low Speed(0)", The operation speed come to slow down each 30~50 rpm.
- (10) Frame Speed Setting : It is to adjust the speed during transferring the embroidery frame. It sets up the speed of frame transfer such as automatic origin return and offset movement. The basic default is "low speed (0), and input "1" for high speed.
- (11) Transfer of the embroidery frame when thread trimming: It is a setting value for the length that the embroidery frame is transferred to the rear of machine automatically in order to make convenient to insert the upper thread in needle when the machine is stopped by detecting a thread cutting. The basic value is 0cm, and it is available to set up the setting value from 0cm to 30cm by a unit of 1cm. This function is available only in the SWF/ -W1201.
- (12)Function of thread trimming by each JUMP detection: It is a setting value for the maximum jump stitch length that makes possible do the next work again after transferring to the setting value by a jump stitch and executing a thread trimming. The basic value is 0mm, and it is available to set up the setting value from 0mm to 50mm by a unit of 1mm.
- (13)Function of the needle bar transfer when moving to OFFSET : It is a function to swing laterally to raise the needle bar when moving to the offset position. The basic value is Yes(1) and it is to set up No(0) if not used.
- (14) Function to set up a moving direction of the embroidery frame when thread trimming: It is a function to swing the embroidery frame laterally a little to separate thread from working fabrics after thread trimming. The basic value is X(1) axis, and it shall be set up Y(2) when selecting the Y axis direction. And it shall be set up No(0) if not used.

Cutting Function

Definition of cutting function

The cutting function expresses Cutting Needle. The cutting needle is a tool to cut raw fabrics to a desired shape using the cutting needle which is specially manufactured. In general, the raw fabrics is cut by tools with 4 shapes $[-, |, \backslash, /]$ which are mounted instead of needle. In order to use this function, it is required to turn OFF automatically the thread detection function and the thread trimming function of the correspondent needle bar. Therefore, the thread detection function and the thread trimming function of the correspondent needle bar can be turned off by making the cutting function turned ON and OF in each needle bar. This function is mounted in Tubular machine type, FLAT machine type with less than 6 heads, SWF E Version, and SWF F Version.

• How to set up

Se	tting III		02/7/ 6 PM12:25
-		<u>nd</u>	STITCH 3014
1	Year,Month,Day		X [mm] 39.7
2	Hour:Minute		Y [mm] 54.9
3	Frame Setting	FLAT	COLOR 2
4	Software Limit Setting	NO	JUMP 120
5	Power On Auto Origin	NO	MIRROR Off
6	Bottom Dead Point Stop	NO	X_SCALE 100[%]
7	All Head Sewing After Stitch Back	Each	Y_SCALE 100[%]
8	BORING NEEDLE	0	NEEDLE
9	Speed Switching Data	HIGHSPEED	TOTAL ST 0
10	Frame Speed Setting	LOWSPEED	TOTAL WK 0
11	Thread Break Moving	0	ORIGIN FIX POS
12	Jump Convert(Length)	0	L. N. H. EMB TIME
13	NEEDLE MOVE FUNTION(OFFSET)	YES	<u> </u>
14	FRAME MOVE METHOD(TRIMMING)	x	Party and the state of the stat
Ran	ge: Ex) 1996 5 15 => 960515		
1	DEFAULT CUTTING	PREVIOUS	

① Display when it is set up by Setting III.

The following display will be appeared when F4 CUTTING is selected.

CUTTING	NEEDI	IF S	FT						4							02/7/ 6	PM 1:12
	TILLU			_				H	Ľ	Э				⊞-		No.	1
्रेमर जम्	tµ		цЦ.	-tı	45	-14	+		ta .	74		111		ليد		STITCH	3014
NEEDLE	1 2	2 3	4	5	6	7	8	9	10	11	12	13	14	15		X [mm]	39.7
																Y [mm]	54.9
SETTING	N	1 1	N	N	Ν	N	Ν	N	N	N	N					COLOR	2
Pango: .	1 ->	UFC	0	-	NO	1					•		TT	_		JUMP	120
hange	1 -/	ILO	, 0	-/	110					-			- 11			ANGLE	0
													ш		Ш	MIRHUR	100[11
	4								¢.						Ш	X_SCALE	100[2]
_### `##	#H								Ľ.							T_SCHLE	250
794 AP	- 44	1.	P	-				ч	h					d۲			0.1
		111			4	۳I			Τ.				illi		Ш		0
															Ш	TOTAL WK	0
_#* #A	-	88			ш	100			E.					а.		. or	
tur aut			F	-	1.1	10000			1.5			10 (100) 10 10 10				ORIGIN	FIX POS
14 #1	H				ŧ.	=			ŧ.					21	Ш	L. N. H.	EMB TIME
															Ш	0	0 [7]
	-								Æ.					1	Ш	3014	V 1/1
				-		then a s		1	E.,							FERRER	
"#+#"		1.4							1				1				
																<u>I Silsi</u>	
	2			_													PREVIOUS
		100	St. I		1	34.1		11							-20		

② The numerical key 1 signifies YES and the numerical key 0 signifies NO. Select YES or NO by pressing in order, and press F8 previous stage if you want to finish.



■ F-SET function

- \cdot Definition of the F-SET function
 - It is a function to change conditions of the frame transfer.
- Explanation for the detailed setting items in the F-SET function



① Display when it is set up by Setting III. It makes us known that F5 F-SET is added.

XY Frame	e parameter			▁_▟ᡛ▏ᡛ╉▙▁	No₹	1
		0		240 [STITCH	3014
1 Frame	e Start Angle	for LAJ Are	a	240 Lang J	@K@Emm]	39.7
2 Frame	e Start Angle	for [B] Are	a	240 [ang]	图Y强Emm]	54.9
Range:	230 ~ 270				COLOR	2
					JUMP	120
₩₩	₩.Ħ	₩₩	────────	▝ૠੂ∰	ANGLE	0
					MIBBOB	Off
				H_	X_SCALE	100[%]
		_#2 34	_#₽ \$₽	FEE] '994	Y_SCALE	100[%]
╶┶┱╗╵┲┲┵	──┶┱┱╢┍┲┲┹╴	╶┶┱╗╵┲┲╛╴	╶┶┱╗╵┲┲┙	──┶┰╗╵┲┲┛─	EMB	750
	F# #1	FFF P1		FFF 77	NEEDLE	
					TOTALSST	0
					TOTAL	0
						U
₽₽₽	1甲町	1甲 町	┣Ħ	₽₽₽	LE NE HE	EMB%TIME
					0 3014	0 [%]
帯		帯퀴			88	88
1	↓ DEF	AULT				PREVIOUS

- ② Display when it is pressed by F5F-SET. It makes us known that there are total 2 kinds of Parameters.
- ③ Explanation for the Parameters

No.	Parameter	Explanation	Setting range
1	Start angle of the embroidery frame transfer in the A section	Setting up a start angle of the embroidery frame when transferring in the A region	230° ~270°
2	Start angle of the embroidery frame transfer in the B section	Setting up a start angle of the embroidery frame when transferring in the B region	230° ~270°
	A restion: 0.1mm D	mastion: 0.1mm 10.7mm	

[Note] A section: 0.1mm \sim 2.0mm, B section: 2.1mm \sim 12.7mm

Polyester yarn mode selection

If the frame feed angles of Section A and Section B are bigger than 260°, the polyester yarn mode is selected, and looping can be prevented during embroidery.

Needle

[Fig. 3-81] shows the screen when you select F5 NEEDLE from [Fig. 3-65] screen.



▶ It is necessary to look into 'Head' of the SWF Multi-Head Embroidery Machine for an understanding above contents as follows.



Head of SWF Multi-Head Embroidery machine

[Fig. 3-82]

As seen in the [Fig. 3-82], each needle bar of the SWF Multi-Head Embroidery Machine has its own number. In addition to that, each number faces with 'Standard needle bar' as 1:1 in the menu of 'Change of number of needle bar' as seen in the [Fig. 3-83].



Sub menu of needle bar consists of as follows.

F1 SELECT : It carries out a function for changing order of needle bar when an embroidery machine meets a signal of 'Color Change' during operation.
 F2 CONVERT : It carries out a function to change at random the contents that table of standard needle bar faces a real needle bar as 1:1.
 F3 PALETTE : It changes the screen color of each needle bar.

(1) Select

(1-1) Example of Needle Selection

Ex.) Retrieve the design from room #40 and set color select order to 7-3-5-1-6-4-2-1

- ① Select F5NEEDLE which is one of sub-menus of F3 SETTING after calling design as seen in the [Fig. 3-65].
- ② Press F1 Select from needle shaft sub-menu to input the order of color select. You can see the "Needle Select" block of three blocks changes to blue as shown in [Fig. 3-83].



[Fig. 3-83]

③ Since the current cursor is on select order number 1, press "7" of the number keys to input 7 as shown in [Fig. 3-84]



[Fig. 3-84]





④ As seen in the [Fig. 3-85], the cursor is located at 2 automatically.

[Fig. 3-85]

⑤ Press "3" of the number keys to input 3 as shown in [Fig. 3-86]



[Fig. 3-86]

(6) Repeat the above procedures to set the order of needle shaft to 7-3-5-1-6-4-2-1 as shown in [Fig. 3-87]



⑦ When you finish needle shaft select order, check if the inputs right and press F8 PREVIOUS to exit from needle shaft select mode as shown in [Fig. 3-88]







#1. Change of contents to select a needle bar that you have set in advance during operation.

If you want a color change by the selection of a different needle bar during operation, select **F3**SETTING \rightarrow **F5**NEEDLE to change to a needle bar you want to use, or input the number of needle bar you want to use and press "CL", after selecting F6 COLOR

ex) The method to change a setup when a table for needle bar is set as '1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5', to ' $6 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5$ '.



In the state of initial menu as seen in the [Fig. 3-90], if you press 'F6 COLOR', a menu for needle bar selection comes out in a numerical order. Among this, if you select "F6 6", you will see that the needle bar exchanged to 6. After finishing a transfer of needle bar, if you press 'CL', the existing value '1' of needle bar will be changed to '6' on the screen of [Fig. 3-90].



[Fig. 89] is shown on the screen after pressing "CL". The order of needle bar is changed to $6 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5$

#2. Automatic saving of needle bar used in the sampling work

SWF Multi-Head Embroidery Machine is set to suspend after trimming when it reaches a point to change color during operation, if you only select a needle bar on the table for the selection of needle bar automatically. You can use this method easily when you intend to change to the original color again after using other colors.

ex) When you try to change color (change of needle bar) in the order of $3 \rightarrow 4 \rightarrow 2 \rightarrow 1 \rightarrow 5$ for a sampling work using 5 colors. It is a case that only a No. 3 needle bar is set whereas other needle bars are set as '0' when starting above sampling work.

Step 1 : Start work after setting a work position.

- Step 2 : When the machine reaches a point of color change, the machine comes to stop after trimming.
- Step 3 : Press "CL" after changing to No.4 needle bar manually.
- Step 4 : When a machine is placed on the needle bar (color) you want to use, restart work with a start switch.
- Step 5 : When the machine reaches a point of color change, it comes to suspend after trimming. In this case, press "CL" after changing to No.2 needle bar.
- Step 6 : Repeat the above steps to the end.



(1-2) **F3**INSERT example

You can use INSERT function to insert a needle shaft number into already selected needle shaft numbers.

Ex.) Lets insert needle shaft #7 between #1 and #6 of 7-3-5-1-6-4-2-1 order.

① Press F1 Select to enter into needle select mode in [Fig. 3-88].

2 Use cursor keys Fland F2 to move the cursor to select order 5 as shown in [Fig. 3-91].



③ Press **F**3INSERT once. The numbers after 5 shifts to the right and 1 appears in the blank automatically as shown [Fig. 3-92].

	98/7/16 PM 7:24
	STITCH 21946
Needle Select	× [mm] 150.7
	Y [mm] 170.6
heedle Step Hu 5	COLOR 10
	JUMP 157
7 3 5 1 1 6 4 2 1 0 0 0 0 0 0 0 0	ANGLE 0
	MIRROR Off
Needla Convert	X_SCALE 100[%]
	Y_SCALE 100[%]
Needle Bay No. 1 2 3 4 5 6 7 8 9	EMB RPM 750
Convert Needle No 1 2 3 4 5 6 7 8 9	
	ORIGIN FIX POS
neeale color	L. N. H. EMB TIME
1 2 3 4 5 6 7 8 9	ALLES
	L.
	ULTER S-
← → INSERT DELETE RESET	PREVIOUS
F1 F2 F3 F4 F5 F6	F7 F8

④ Since we want to insert needle shaft #7 between 1 and 6, press 7 in the place of 5 and press F3 PREVIOUS to exist from needle shaft select mode as shown in [Fig. 3-93].



(1-3) **F4** DELETE example

You can use DELETE function to delete one or more select numbers in the already selected needle elect numbers.

Ex.) Delete 5 between 3 and 1 from 7-3-5-1-7-6-4-2-1 to change 7-3-1-7-6-4-2-1.

- ① Press F1Select to enter needle select mode in [Fig. 3-91]
- 2 Use cursor keys **F1** and **F2** to move the cursor to select order number 3 as shown in [Fig. 3-94].



[Fig. 3-94]





3 When you press **F4DELETE** key once, the number after select order number 4 shifts to the left as shown in [Fig. 3-95].

(4) You can see the change simply by using delete function. Press F8 PREVIOUS to exit from needle select mode as shown in [Fig. 3-96].



(1-4) **F5** RESET example

ex) Deleting all contents about the needle bar selection table

- ① Press **F1**SELECT to enter needle shaft select mode in [Fig. 3-96]
- ② You can use the delete function, explained in previous section, to do this example, but to delete all needle shaft selection, press F5 RESET from menus in [Fig. 3-92]. You can see all needle except select order number 1 are deleted as shown in [Fig. 3-97].



[Fig. 3-97]



Additional Function for Needle Bar Setting

• Offset Needle Bar Setting Function

That adds 0 in front of the desired needle bar in case of needle bar selection.

That is, for example, when you perform continuous work in the order of 1-2-3-4, if you want to Offset at the no. 3 needle bar, you should input 1-2-0-3-4 when you input the needle bar order. Input of 0 is the number key 0Key.

- (2) Needle Bar Change Example
 - Ex.) Change needle bar so that the machine recognize the needle bar #1 to #8 and vice versa.
 - ① Press BSETTING from main function menu and press BNEEDLE. You will see a screen like [Fig. 3-98]



2 Press F2 CONVERT to change the needle shafts. The middle block, "Needle Convert" will change to blue as shown in [Fig. 3-99]







③ The cursor is on default needle bar 1 so that you can change. Press 8 of number keys, then a screen like [Fig. 3-100] will come up.

(4) Use cursor keys F1 and F2 to move the cursor on default needle bar 8 to change as shown in [Fig. 3-101].



(5) Input 1 from number keys and press F8 PREVIOUS to exit from needle bar select mode as shown in [Fig. 3-102].



[Fig. 3-102]



(3) PALETTE

This function codes each selected needle bar with different colors so that you can see the needle bar (color) change on design easily.

① Press **F3**PALETTE at needle bar that is a sub-menu of main function menu. The lower most block, "NEEDLE COLOR" changes to blue as shown in [Fig. 3-103].



- (2) The box over color code shows the needle bar number and the one beneath the box shows the colors available.
- In the upper box, move the cursor on the needles shaft you want to change color, and press
 Select The cursor will move to lower box.
- (4) Move the cursor to wanted color and press **F7**Select You can see the colors assigned to each needle bar on the screen.

FRAME

[Fig. 3-104] appears if you select **F3** FRAME, in the auxiliary menu after pressing **F6** SETTING in the main menu.



There are setup items of embroidery frame coordinates.

- Design Start Point : It is a function to designate a starting position of embroidery frame for called desing. After setting the starting position once, the embroidery frame moves automatically to the initial position after starting operation wherever it is.
- ② Offset Middle Point : When the embroidery frame.
- ③ Design Offset Point : It is a function to designate the frame position for called design finish or offset. This function is available for applique or frame exchange.

Caution !

- 1. If you don't set up "Yes" in Embroidery Frame Coordinates (Offset) in SET III, the function is not available during embroidery operation although you setup th Embroidery Frame Coordinates.
- 2. When the Embroidery Frame Origin is set up at wrong position it is difficult to detect the coordinates.



Ex.) Set up as follows.
Design Start Point - X : 500. Y : 300
Offset Middle Position - : X : 1000. Y : 1000
Design Offset Point - X : 1500. Y : 1700



1) If you press **F7**SELECT, after placing X to 500, Y to 300 with using Embroidery Frame Transferring Key in the [Fig. 3-105], the screen of [Fig. 3-106] comes to appear.

				F	1
Frame Offset				99/9/20	PM 9:12
			p##2 _\$#\$q	No.	2
्रमा सम मह त	╓┙┈┕┱╗╵╓┯┙╴		₩6 a₽,	STITCH	21064
	Design Start Po	oint		X [mm]	103.1
				Y [mm]	107.1
X Position	:	500		COLOR	13
Y Position		300	-		000
1 1031010	•	500		HNGLE	330
				Y SCOLE	100[2]
)ffset Middle Po	oint		Y SCALE	100[2]
				EMB BPM	790
X Position	:	Θ		NEEDLE	
U Proition		0		TOTAL ST	0
I FUSICION	•	0		TOTAL WK	0
	Design Offset Pr	int	l	ORIGIN	FIX POS
	Jesign offset it	11110		L. N. H.	EMB TIME
X Position	:	Θ		0	0 [2]
				21064	V 1/13
Y Position	:	Θ			
				لصالص	
				Select	PREVIOUS
F1 F2	F3 F4	F5	F6	F7	F8
الـــــــــــالــــــــالــــــــالــــــ				[Fig.	3-106

② If you press F2SELECT, after placing X to 1000, Y to 1000 to set up Offset Middle Point in the [Fig. 3-106], the screen [Fig. 3-107], comes to appear.



(3) If you press **F7** SELECT, after placing X to 1500, Y to 1700 to set up design offset point in the [Fig. 3-107], the screen [Fig. 3-108]comes to appear.



* It is available to cancel the setup by pressing [F8]PREVIOUS during the setup.



3-5-4) SUB-WORK



[Fig. 3-109] shows the screen when F4 SUB-WORK is selected from main function menu.

Let's take a look at the displayed menu.

F1 POSITION	: Easily check the retrieved design contacts to the X and Y limit position even when your not actually processing embroidery.
F2 GAUGE	: Generates the gauge of embroidery outline according to the "Optimize method" setup value from SET II.
F3 EXCLUDE	Embroiders only the outline of the retrieved embroidery design.
F4 LENGTH	: Measures the length of the retrieved embroidery design.
F5 FASTVIEW	: It is a virtual operation of design through screen like a real designing work
F6 TRACE	to see design direction and stages of color changes. : It checks if a selected design deviates from X and Y embroidery limit or not, during embroidering when a machine starts to work from the present position of embroidery frame.

Position

- 99/8/25 PM 2:38 No. 15203 STITCH X [mm] 136.9 Y [mm] 179.2 COLOB 9 JUMP 149 ANGLE 0 MIRROR **Off** X SCALE 100[2] [mm] Y SCALE 100[%] EMB BPM 750 568 NEEDLE TOTAL ST A TOTAL WK 0 RIGIN FIX I L. N. H. 0 [%] 15203 698 [mm] F-ORIGIN F_LIMIT PREVIOUS F6 F7 F1 F2 FЗ F4 F5 F8 [Fig. 3-110]
- ① [Fig. 3-109] screen shows up when you press F1 POSITION from screen [Fig. 3-110].

- ② The box in [Fig. 3-109] shows the possible area of taboret movement and the rough measure of the design. The "+" in the box shows the embroidery start position as well as the taboret position where current needle bar start embroidering.
- ③ Use taboret move key to move the embroidery to wanted taboret position. However, if any red part is on the box, the X and Y limit error can occur during process. Therefore, you need to move the taboret to cover all area to blue.

[Warning]

If you move taboret when main power is OFF, the taboret original point can be mis-aligned. If the taboret is mis-aligned, correct process point can not be assigned using process position set. In above screen, automatic detection of origin of origin is possible by inputting F5F-ORIGIN



Setting the embroidery frame limit

If you press **F6**F-LIMIT in the [Fig. 3-111], below screen comes to appear.



The above screen exhibits P1X and P1Y, at this time, if you choose the rim of frame or two point of diagonal line that you want to set by pressing Embroidery Frame Transferring Key, virtual embroidery frame limit is set up. To make errors in real operation, set up "Yes" in "Software Limit Setting" in SET Ⅲ.

GAUGE

① Press F2 GAUGE on the screen [Fig. 3-109]. You will see the screen like [Fig. 3-112]



② Start Switch → Run message appears on the function menu area on [Fig. 3-112].
 Press F8 PREVIOUS to cancel.

[Ref.] You can set up an interval between a called design and gauge line, using "Optimize Method" of SET I.


EXCLUDE



① Press **F3** EXCLUDE at the screen [Fig. 3-109]. You will see the screen like [Fig. 3-113].

② Start Switch → Run message appears on the function menu are on [Fig. 3-113]. Therefore, if you press the start switch the machine actually embroider the outline according to the displayed design. Press F3PREVIOUS to cancel.

[Ref.] F7 TRACE has a function for gauge and outline. It you press F7 TRACE in the [Fig. 3-120] and [Fig. 3-121], the embroidery frame moves fast in the outline so that the real range of work can be easil understood.

LENGTH



 Press F4 LENGTH on the screen [Fig. 3-109]. You will see the screen like [Fig. 3-114].

- 2 Use cursor keys F1, F2, F3 and F4 to move the cursor at the anchor point to measure the length.
- ③ Press F7 Select when the cursor is on the anchor point.
- (4) Use cursor keys F1, F2, F3 and F4 to move the cursor. The distance from the anchor point is displayed on the left box. Press F8 PREVIOUS to cancel.



FASTVIEW

① If you press F5FASTVIEW on the screen of [Fig. 3-109], you can get screen like.



It is a function to see the whole process to form a design while outputting it on a screen as seen in the [Fig. 3-115].

② "F1 FAST VIEW"	: It is a function to output a design fast on the screen.
③ "F2 SLOW VIEW"	: It is a function to output a design slowly on the screen.
④ " F3 PAUSE"	: It is a function to suspend a output of design during outputting.
5 " F 4 INIT"	: It is a function to reoutput a selected design.

TRACE

① You can check if a size of selected design deviates from X and Y embroidery limit or not during embroidering, when a machine starts to work from the present position of embroidery frame.



(2) The arrow marks on above Fig. mean a transferring route of an embroidery frame. It checks if the maximum and minimum X and Y scope of a design deviate from the embroidery frame.

If the machine touches the embroidery limit, a transferring of embroidery frame comes to suspend and you can see a message of "Embroidery Frame Limit Error" on the screen.



3-5-5) REPEAT

[Fig. 3-117] shows the screen when **F5**REPEAT is selected from main function menu.



Let's take a look at the menu on the screen

F1 GENERAL	: You can do continuous process horizontally as well as vertically to 99 times for
\frown	one retrieved design.
F2 SPECIAL	: You can retrieve several design from memory and do continuous process up to
	63 processes. You can edit angle change, X-axis mirror, enlarge and reduce
	freely and do these continuously.
F3 LOAD	: You can use this function to retrieve continuous process saved in memory.

GENERAL

Press F1 GENERAL on the [Fig. 3-117] screen. You will see a screen like [Fig. 3-118].

	meral Repeat X Repeat Y Repeat X Design Inter Y Design Inter X / Y Design I Design Interw Mirror Conver	rual rual Priority al Mode t		France Not	1 0 [mm] 0 [mm] Priority 2 Stop Hirror	98/7/16 No. STITCH X EnnJ V EnnJ COLOR JUMP ANGLE MIRROR X_SCALE EMB RPM NEEDLE TOTAL ST TOTAL ST TOTAL ST TOTAL ST TOTAL ST TOTAL ST TOTAL ST TOTAL ST TOTAL N. H. 0 21946 Select	PH 6:29 2 21946 150.7 170.6 100 157 0 0 0 0 0 0 0 100 [%] 100 [%] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1						Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8
						Li ig.	5 110

We will discuss about the parameters setup in normal continuous process.

- X Repeat Use number key to input the number of repeat to X direction. The range is from 1 to 99.

- Y Repeat Use number key to input the number of repeat to Y direction. The range is from 1 to 99.

- X Design Interval

Set the distance between design start points by X direction gap. The sign of move decides the repeat direction.

-+: Repeat to the right

--: Repeat to the left



[Fig. 3-119]



-Y Design Interval Set the distance between design start points by Y direction gap. The sign of move decides the repeat direction.



- X/Y Design priority

Set priority between X direction and Y direction.



 \langle When you select X direction at first \rangle



 \langle When you select Y direction at first \rangle

[Fig. 3-121]

- Moving method of design

There are suspension and jump codes in the moving method of design

—Using STOP code: You make the machine suspend after moving to the next position of design.

-----Using JUMP code: You make the machine start working automatically after moving to the next position of design.

[Ex] Call a design No.2 and following.	carry out an embroidering work without cease as
Number of X repeat Number of Y repeat Interval of X design Interval of Y design Priority of X/Y design Moving method of design Selection of reverse effect * It is saved as date.	: 5 : 5 : 40 mm : -40 mm : X priority : Jump code t : Normal

If you press F5REPEAT on the main menu after calling the design of OWLTH, and press
 F1 GENERAL, you can get the screen like [Fig.3-122].





- ② The red area in the [Fig 3-122] means that the relevant menus are selected. Using numerical and function keys (For 1~4 : numerical key , 5~7 : function key) input the setting value like [ex].
- ③ When you press **F7** SELECT after inputting the setting value like [ex], the screen will be displayed as following.



(4) At this moment, if you select **F7YES** you will see the process to apply the setting value on the screen, with a following question if you want to save.



(5) If you want to save the above, press F7YES Then you can get the screen as seen in the [Fig. 3-125].

General Repeat		98/7/16 No.	PM 7:56 2
		STITCH	13338
1 X Repeat 5		X [mm]	84.3
2 Y Repeat 5		Y [mm]	110.6
2 X Design Internal 40	[mm]	COLOR	6
5 x besign incerval 40		JUMP	8
4 Y Design Interval 40	[mm]	ANGLE	0
5 X / Y Design Priority X Prior	rity	MIRROR	1100
6 Design Interval Mode Frame Ju	mp	X_SCALE	100[2]
7 Mirror Convert NoMirro	on	FMB BPM	250
		NEEDLE	
		TOTAL ST	0
		TOTAL WK	0
#2 \$\$#2 \$\$_#2 \$\$_#2			
	╷╦┲┙╴	ORIGIN	FIX POS
[[[[[[[[[[[[[[[[[[[P1	L. N. H.	EMB TIME
		0	0 [2]
	HH.	13338	
म मम मम मम	#1		
Save Method ?		DATA	DESIGN
	F(F7	FO
11 12 13 14 15	ro		01

[Fig. 3-125]



There are two methods, "data" and "design" in the saving method as seen in the [Fig. 3-125].

DATA : It is a method to call a design after saving it in a continuous work menu.
 DESIGN : It is a method to save it in memory after collecting the continuously generating designs in one.

6 [Fig. 3-126] indicates a screen to select F7 DATA for saving the selected design.



If you select a method to save, the machine will be changed to the mode of continuous work. You can confirm the saved designs if you select F5 REPEAT from the main menu \rightarrow F3 LOAD.



[Fig. 3-127]

[Reference] When you set **F8** DESIGN as a saving method, a screen is shown as [Fig. 3-128].



If you select a room in which you want to save, a screen changes to continuous mode as seen in the [Fig. 3-125].

You can confirm that the continuous designs are saved in the room by selecting "Main menu \rightarrow F2 EMB-CALL.



SPECIAL

SPECIAL means a kind of design blending function. You can create new design using designs in the memory up to 63 times.

- (1) SPECIAL process example
 - Let's use the following design 1 and 2 to make new design as shown in [Fig. 3-131]





Design 1 in room #18 [Fig. 3-129]

Design 2 in room #29 [Fig. 3-130]



The design procedure is $1 \rightarrow 2 \rightarrow 3 \rightarrow 4$. You need to prepare the following table to design like [Fig. 3-139].

No.	Design	X [mm]	Y [mm]	Angle	X Scale	Y Scale	Mirror Effect	
1	18	0	0 mm	0	100%	100%	No	
2	29	70 mm	100 mm	0	100%	100%	No	
3	29	250 mm	0 mm	0	100%	100%	Yes	
4	18	70 mm	-100 mm	0	100%	100%	Yes	

[Table	3-1	
--------	-----	--

[Table 3-1] can be made by calculating the distance from design start point to the next design.

① Press F5 REPEAT from main function menu and select F2 SPECIAL You will see screen like [Fig. 3-132].



(2) There shows a table similar to [Table 3-1] in [Fig. 3-132]. The cursor is on No.1 design field currently. Input 18 as shown in [Fig. 3-133].

Special	l Repeat					₫┺╍	
No. I	Design	X [mm]	Y [mm]	Angle	X Scale Y	Scale Mir	ror
1 1	18						
2							
3							
4							
6							
7							
8							34
9							
10							
12							
13							
14							
15							
17							ㅋ
18							
19							7
20							
21 Bange	L' Dee	ion No					
Kange	. Des	ign nu.					
+	↑	↓	→			Select	PREUIOUS
F1	F2	F3	F4	F5	F6	F7	F8

[Fig. 3-133]



(3) User cursor keys F1, F2, F3 and F4 to move the cursor to No. 2 design field. The default values for X [mm], Y [mm], Angle etc. will be set as shown in [Fig. 3-134].

[Warning]

You can not move to next field if the input design is not in the memory. Therefore, it may be convenient to make a table like [Table 3-1] of page 3-90 in advance before input.



[Fig. 3-134]

- Special Repeat Design X [mm] Y [mm] X Scale Y Scale Mirro Angle 18 0 0 0 100 100 N 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 29 Range : Design No. INSERT Select PREUIOUS 4 F1 F2 FЗ F4 F5 F6 F7 F8 [Fig. 3-135]
- ④ The cursor is now on No. 2 field. Input 29 as shown in [Fig. 3-135]

(5) Follow above explained procedure to input 18 in No. 4 field. You can see a screen like [Fig. 3-136] at this time.

S	pec i	al Repea	t						
	No.	Design	X [mm]	Y [mm]	Angle	X Scale	Y Scale	Mir	ror
	1	18	0	0	0	100	100	NO	
	2	29	70	0	0	100	100	NO	
	3	29	0	0	0	100	100	NO	
	4	18	0	0	0	100	100	N 0	
	5								
	6								
	r o								
-	9								
	10								
H	11								
	12								
	13								
	14								
	15								
-t	17								
	18								
	19								
	20								
	21								
	Ran	ge: X	interval [m	m]					1
					LUCERT				
-	-	↑	↓ ↓	→	INSERT	DELETE	Selec	ct	PREUIOUS
F1		F2	F3	F4	F5	F6	F	7	F8
								·	





6 Use cursor keys F1, F2, F3 and F4 to move the cursor to X Gap field of No. 2. You can see a screen like [Fig. 3-137] at this time.

⑦ Input 70 as in [Table 3-1]. You can see a screen like [Fig. 3-138].



(8) Follow the above explained procedure to input all values of [Table 3-1] (However, use number key on operation panel to input "-" value.) [Fig. 3-139] shows the screen with all values.

	Spec i	al Repea	t				<u>1</u>		
ΨĦ	No.	Design	X [mm]	Y [mm]	Angle	X Scale	Y Scale	Mirror	F
	1	18	Ø	Ø	A	100	100	NO	
	2	29	70	100	0	100	100	NO	
- F	3	29	250	0	0	100	100	YES	H
	4	18	70	-100	0	100	100	YES	
- 43	5								F
	6								
	7								
- F	8								-
	9								щ_
	10								H-
	12								
	13								
- F	14								
	15								
	16								H-
	17								
	18								
	19								H
	20								
14	21								#* -
	Ran	ge: Y	es(1), No(0)						
					INCEDT	DELETE	Selec		2110
-	-	Ē	•		mount	DELETE	- 36160	I MEOI	003
F	L	F2	F3	F4	F5	F6	F7	' F8	;
								[Fig. 3-	139

(9) If all values are correctly input, Press F7 Select You will be prompted if you want to save the new design after generating new design. [Fig. 3-140] shows the screen after all values of special continuous are set correctly.



[Fig. 3-140]

3-120



(2) **F5** INSERT and **F6** DELETE

 INSERT : You can use insert function to insert new design between designs. [Fig. 3-141] shows the screen when you press F5 INSERT after moving cursor to No. 3 from the screen as [Fig. 3-139].



② DELETE: You can use delete function to delete a design data. [Fig. 3-142] shows the screen when you press F6 DELETE after moving cursor to No. 3 from the screen as [Fig. 3-139].

Spec i	al Repeat						
No.	Design	X [mm]	Y [mm]	Angle	X Scale	Y Scale	Mirror
1	18	0	0	0	100	100	NO
2	29	70	100	0	100	100	NO
3	18	700	-100	0	100	100	YES
4							
							-
7							
8							3
9							
10							
11							-
13							
14							H .
15							
16							##**
17							
18							
20							
21							
Ran	ge: De	esign No.					1
+	↑	↓	→	INSERT	DELETE	Selec	t PREUIOUS
F1	F2	F3	F4	F5	F6	F7	F8
F1	rΖ	r3	r4	r5	гь	F7	F8

[Fig. 3-142]

LOAD

1) Press F5 REPEAT from main function menu and F3 LOAD. You will see a screen like [Fig. 3-143].



② The screen structure of retrieve is similar to that of continuous process save screen. Use cursor keys F1, F2, F3 and F4 to move the cursor to design room you want to retrieve. Simply press F7 Select to retrieve continuous process.

3-5-6) COLOR

Please refer section 3-4-1 for F6 COLOR of main function menu.

3-5-7) TRIM

Please refer section 3-4-2 for F7 TRIM of main function menu.



3-5-8) MACHINE

You can see screens of section 3-5-8 for MACHINE menu and section 3-5-9 for EMB-EDIT menu by selecting F8 NEXT [Fig. 3-144] shows the screen when F8 NEXT is selected.



When you press F1 MACHINE in [Fig. 3-144], a screen like [Fig. 3-145] appears.



[Fig. 3-145]



Let's take a look at the sub-menu for machine maintenance.

FI SERVICE : It is a preliminary item.
F2 INFO : You can see a list about SWF machine information.
F3 TEST : You can use this function to check various solenoids, thread sensor, etc.
F4 F-ORIGIN : You can detect the original point of taboret.
FS ERROR : You can check the last 10 errors saved in the memory.



INFO

Press F8 NEXT of main function menu -> F1MACHINE of main function menu -> F2 INFO sub-menu. You will see a screen like [Fig. 3-156].



TEST

Press F3 NEXT of main function menu -> F1 MACHINE -> F3 TEST of MACHINE sub-menu. You will see a screen like [Fig. 3-147].



Let's take a look at sub-menu of operation test.

F1 JUMP	: Tests jump solenoid operation
F2 WIPER	: Tests wiper solenoid operation.
F3 PICKER	: Tests picker solenoid operation.
F4 TRIM	: Tests thread cut solenoid operation.
F5 UPPERSEN	${\sf I}$: It can be used for checking of upper thread sensor.
F6 UNDERSEN	${\sf I}$: It can be used for checking of lower thread sensor.



(1) JUMP

Press F1JUMP in [Fig. 3-147]. You will see a screen like [Fig. 3-148]



If you push the START switch then, jump solenoids attached to each heads operate about 0.5 second. Press F8 PREVIOUS if you wan to stop.

(2) WIPER

Press F2 WIPER in [Fig. 3-147]. You will see a screen like [Fig. 3-149].



If you push the START switch then, the wiper solenoid of head whose head switch is ON operate about 0.5 second. Press **F8** PREVIOUS if you want to stop.

(3) PICKER

Press F3 PICKER in [Fig. 3-147]. You will see a screen like [Fig. 3-150].



If you push the START switch then, the picker solenoids attached near to the hook operate about 0.5 second. Press F8 PREVIOUS if you want to stop.

(4) TRIM

Press F4TRIM in [Fig. 3-147]. You will see a screen like [Fig. 3-151].



If you push the START switch then, thread cut solenoids attached to the thread cut cam operate about 0.5 second. Press F8PREVIOUS if you want to stop.



(5) UPPERSEN



If you push the START switch then, the thread cut sensor on thread tension adjust panel whose head switch is ON operate and the head lamp attached to the thread sensor spring and thread sensor panel start to blink. If it is not connected, the lamp will not blank. Press **F8** PREVIOUS if you want to stop.

(6) UNDERSEN

If you press **F6** UNDERSEN you can get screen like [Fig. 3-153].



If you push the START switch then, the thread cut sensor on thread tension adjust panel whose head switch is ON operate and the head lamp attached to the thread sensor spring and thread sensor panel start to blink. If it is not connected, the lamp will not blink. Press **F8** PREVIOUS if you want to stop.

■ F-ORIGIN

Press F4 F-ORIGIN in [Fig. 3-145]. You will see a screen like [Fig. 3-154]. The frame will back to original point at this time. That is, when you see frame from the front, the frame moves to front and left most position to find original point and then moves to opposite direction to find X and Y limit. After it completes to find every points, frame moves back to start point.



During operating as above, if you press **F8** PREVIOUS an embroidery frame comes to suspend and back to the previous stage.

[Warning]

Since the frame moves around on the entire table, be sure there is nothing on the table to drop. Therefore, like the message on the screen, you can press the start switch to run. Once it stops, you can press the stop switch to start again.



ERROR

Press F5 ERROR in [Fig. 3-145]. You will see a screen like [Fig. 3-155].



SWF system can save errors that occur during operation up to 10. You can check error contents by using error check function. Press **F8** PREVIOUS to stop.

3-5-9) EMB-EDIT

After choosing F8 NEXT key, on the main manu and F2 EMB-EDIT you can see the screen as seen in the [Fig. 3-156].



Sub menus of EMB-EDIT

F1 STITCH : Seeing data of Number of Stitch of called design, you can change codes or No. of stitches.
F2 Screen : You can check punching status by extending and reducing the graphic design of the called design on the screen.
F3 DIVIDE : This is the function when you want to store the desired part of the selected design into two separate designs.
F4 FILTER : It converts stitches that are deviated from the limit of recognition to the stitches that the machine can recognize.



STITCH

Stite	Edit	╡┪╴┟╡╡	ı ⊫≞	98/5/20	AM 9:56
			┝┷╁╼╾╂┷╧╢╒╧┷╂╤	STITCH	1714
stitch No.	X Data	Y Data	Function	X [mm]	33.3
1	-14	12	GENERAL	V fund	25.5
2	15	-2	GENERAL	001.00	
3	-13	-5	GENERAL	COLOR	
4	1	14	GENERAL	JUMP	25
5	U	18	GENERAL	ANGLE	Θ
6	1	16	GENERAL	MIRROR	Off
	-1	31	GENERAL	X_SCALE	100[%]
8	1	31	GENERAL	Y SCALE	100[2]
9	-1	31	GENERAL	EMD DOM	750
10	1	31	GENERAL		130
11	-1	31	GENERAL	NEEDLE	
12	1	21	GENERAL	TOTAL ST	0
13	-29	51	GENERAL	TOTAL WK	0
15	-20	o o	CENEDAL		
15	-29	0	CENERAL	ORIGIN	FIX POS
10	-29	0	CENERAL	L.N.H.	EMB TIME
18	-30	õ	CENERAL	0	A []
19	-29	ñ	GENERAL	1714	0 [7]
20	-29	ň	GENERAL		
21	-30	õ	GENERAL		1-1-1
HIQL :	127 ~ 127	-	Canadina		
임위· -	-121 121				
JUMP COI	LOR DELETE	INSERT	PageDN	NEXT	PREUIOUS
F1	F2 F3	F4	F5 F6	F7	F8
				[Fig	g. 3-157

If you press F1 STITCH on the [Fig. 3-156], you can see [Fig. 3-157].

Auxiliarly menu of STITCH

F1 JUMP : Only Jump codes of the data on Number of Stitch from called design are shown in the screen
F2 COLOR : Only Color and stop codes of the data on Number of Stitch from called design are shown
in the screen.
F3 DELETE : The key is used when you want to delete one Number of Stitch from the data of called design.
F4 INSERT : The key is used when you want to insert one Number of Stitch from the data of called design.

- Ex.) After calling No.40 Design, then edit as following.
 - 1. Delete data of Number of Stitch 1000.
 - 2. Change Number of Stitch 1500 of Function Code to Color Change Code
 - 3. In the middle of Number of Stitch 10000 and 10001, insert
 - X: 2mm, Y:-5mm and make Jump Code.
- (1) To look for Number of Stitch 1000 from the [Fig. 3-157], press F6 PageDN until [Fig. 3-158] is appeared on the screen.

	97/2/18	AM 4:24						
STITC		┞╵ ╘ ╪╡┑╴╶ _┢ ╪	╆╵ ╘ ╪╬┑╴╶╏	╈╫╻	No.	2		
					Stitch	21945		
stitch No.	X Data	Y Data	Func	ction	X Emm 1	150 70		
988	-14	33	GENI	ERAL	V from 1	130.10		
989	18	-30	GENI	ERAL	T LMMJ	170.60		
990	-15	33	GENI	ERAL	Color	10		
991	19	-30	GENI	ERAL	Jump	157		
992	-15	33	GENI	ERAL	ANGLE	0		
993	19	-30	GENI	ERAL	MIRROR	Off		
994	-15	32	GENI	ERAL	X SCALE	100[2]		
995	19	-29	GENI	ERAL	V SCOLE	100[:/]		
996	-15	32	GENI	ERAL		1001/1		
997	19	-29	-29 GENERAL			750		
998	-16	3Z GENI		ERAL	Needle			
999	20	-29	GENI		Total St	0		
1000	-16	31	GENI		Total Wk	0		
1001	-15	-29	GENI	ERHL				
1002	-15	_29	CENI	EDAI	ORIGIN	FIX POS		
1003	-16	21	CENI	PDAT	L. N. H.	EMB TIME		
1004	20	-28	GENI	FRAL	9			
1005	-16	31	GENI	ERAL	21945	0 [%]		
1000	20	-28	GENI	EBAL	21713			
1008	-16	31	GENI	ERAL				
Bange: -	-127 ~ 127							
JUMP COI	OR DELETE	INSERT	PageUP	PageDN	NEXT	PREVIOUS		
F1	F2 F3	F4	F5	F6	F7	F8		

(2) The cursor points out Number of Stitch 988 as seen in the [Fig. 3-158]. Press F7 NEXT



Stitc	h Edit				9772718	AM 4:25			
					No.	2			
stitch No.	X Data	Y Dat	a Fur	nction	Stitch	21945			
988	-14	33	CEN	FRAI	X [mm]	150.70			
989	18	-30	GEN	ERAL	Y [mm]	170.60			
990	-15	33	GEN	EBAL	Color	10			
991	19	-30	GEN	EBAL	Jump	157			
992	-15	33	GEN	IERAL	ANGLE	Ø			
993	19	-30	GEN	IERAL	MIBBOB	110			
994	-15	32	GEN	IERAL	V SOOLE	110			
995	19	-29	GEN	IERAL	A_SCHLE	1001%1			
996	-15	32	GEN	IERAL	Y_SCALE	100[%]			
997	19	-29	GEN	IERAL	EMB RPM	750			
998	-16	32	GEN	IERAL	Needle				
999	20	-29	GEN	IERAL	Total St	0			
1000	1000 -16		GEN	IERAL	Total Wk	0			
1001	19	-29	GEN	IERAL					
1002	-15	32	GEN	IERAL	OBIGIN	ETX POS			
1003	19	-29	GEN	IERAL		EMB TIME			
1004	-16	31	GEN	ERAL	<u> </u>				
1005	1005 20		1005 20		20 -28	GEP	IERAL	0	0 [2]
1006	-16	31		IERAL	21945	0 1/11			
1007	20	-28	-28 GENERAL			i de la com			
1008	-16	31	GEF	IERHL					
Range :	-127 127				<u> '' ''</u>				
			PageUP	PageDN	PREUIOUS	PREUIOUS			
	T								
F1	F2 F	73 F4	F5	F6	F7	F8			

(3) As seen in the [Fig. 3-159], Function Menu F1, F2, F3 and F4 are changed to cursor. Move cursor to the Number of Stitch 1000.

[Fig. 3-159]

(4) Now delete data of Number of Stitch 1000. For that, press F7 PREVIOUS [Fig. 3-160].

	97 /2 /19	AM 4:2E			
Stitch	Edit			No	9
<u> </u>				INU.	24045
stitch No.	X Data	Y Data	Function	stiten	21945
988	-14	33	GENERAL	X LMM J	150.70
989	18	-30	GENERAL	Y [mm]	170.60
990	-15	33	GENERAL	Color	10
991	19	-30	GENERAL	Jump	157
992	-15	33	GENERAL	ANGLE	0
993	19	-30	GENERAL	MIRBOR	Off
994	-15	32	GENERAL	X SCALE	1001-21
995	19	-29	GENERAL	N_SOOLE	40051
996	-15	32	GENERAL	Y_SCHLE	100121
997	19	-29	GENERAL	EMB RPM	750
998	-16	32	GENERAL	Needle	
999	20	-29	GENERAL	Total St	0
1000	-16	31	GENERAL	Total Wk	0
1001	19	-29	GENERAL		
1002	-15	32	GENERAL	ORIGIN	FIX POS
1003	19	-29	GENERAL	L. N. H.	EMB TIME
1004	-16	31	GENERHL		
1005	-16	20 -28		24045	0 [%]
1000	-10	_29	CENEDAL	21945	
1001	-16	31	CENERAL	l chai	
1000			CLINDING		
Range: -	-127 127				<u> </u>
-	↑ ↓	Pa Pa	geUP PageDN	PREVIOUS	PREVIOUS
F1	F2 F3	F4	F5 F6	F7	F8
			I		

[Fig. 3-160]

(5) As seen in the [Fig. 3-160], F3 DELETE is appeared on the main manu.Press F3 DELETE. Then as seen the [Fig. 3-161], data on 1000 stitches are disappeared, and below data are move up.

S4 : 4 - 1	FALA		- + + +	97/2/18	AM 4:25
		<u>t til det t</u>	<u>॑</u>	No.	2
atitah Na	Y Data	V Data	Function	Stitch	21945
STICA NO.	n Data	I Data	FUNCTION	X [mm]	150.70
988	-14	33	GENERAL	Y [mm]	170.60
989	18	-30	GENERAL	Color	10
990	-15	-30	GENERAL	Jump	157
992	_15	-30	CENERAL		121
993	19	-30	CENERAL	HNGLE	Ø
994	-15	32	CENERAL	MIRROR	Off
995	19	-29	GENERAL	X_SCALE	100[%]
996	-15	32	GENERAL	Y_SCALE	100[%]
997	19	-29	GENERAL	EMB RPM	750
998	-16	32	GENERAL	Needle	
999	20	-29	GENERAL	EBOME-X	100
1000	19	-29	GENERAL	FRAME V	100
1001	1001 -15 32	32	GENERAL	FRHME-Y	100
1002	19	-29	GENERAL		
1003	-16	-16 31 20 -28	GENERAL	ORIGIN	FIX POS
1004	20		GENERAL		
1005	-16	31	GENERAL	0	0 [9]
1006	20	-28	GENERAL	21945	0 [7]
1007	-16	31	GENERAL		
1008	20	-28	GENERAL		
Range: -	-127 ~ 127				L_I L_I
JUMP COI	OR DELETE	INSERT Pag	geUP PageDN	NEXT	PREUIOUS
F1	F2 F2	F4	F5 F6	F7	FS
	12 13	F1	13 10		ro
				[E G	< 0 1C1
					3. 3-101

(6) As seen in the [Fig. 3-162], with the same method move cursor to Number of Stitch 1500.

	Stitck	Edit		\downarrow		97/2/18	AM 4:27
		2410	1 56	1 <u>44</u>	de ut	No.	2
	-4:4-1 N-	U D-4-		Eur		Stitch	21945
	Stitch Mo.	Χ ματα	Y Data	Fui	nction	X [mm]	150.70
	1492	-29	23	GEN	NERAL	Y [mm]	170.60
	1493	27	-27	GEN	NERAL	Color	10
	1494	-28	22	GER	MERAL		452
	1495	20	-27	GER	TERAL	Jump	157
	1496	-29	-26	GER	TERHL	ANGLE	0
	1497	_29	-26	GEI	TERHL	MIRROR	Off
	1490	-25	-26	GEI	NEDAL	X_SCALE	100[%]
	1500	-29	20	GEI	NERAL	Y_SCALE	100[%]
	1501	28	29 –25 CENERAL		NERAL	EMB RPM	750
	1502	-29	21	GEN	NERAL	Needle	
	1503	27	-25	GEN	NERAL	Total St	
	1504	-29	20	20 GENERAL		Total St	-
	1505	28	-25 G		IERAL	Total Wk	0
	1506	-29	20	GEN	NERAL		
	1507	27	-24	GEN	NERAL	ORIGIN	FIX POS
	1508	1508 -29	19	19 GENERAL	NERAL	L. N. H.	EMB TIME
	1509	28	-23	GEN	NERAL	0	0.191
	1510	-29	18	GEN	NERAL	21945	0 171
	1511	28	-23	GEN	NERAL		
	1512	-30	19	GEN	NERAL		لكالكا
	Range: -	-127 ~ 127					للكالكا
			- <u></u>				
	+	↑ ↓	\rightarrow	PageUP	PageDN	PREULOUS	PREVIOUS
Г	F1	F2 F3	F4	F5	F6	F7	F8

[Fig. 3-162]



Stitch	Edit			97/2/18 AM 4:27
		<u>' <u>'</u> </u>	╧╧╕┈┍╧╧┙╵╘╧╧╕┈	No. 2
stitch No.	X Data	Y Data	Function	Stitch 21945
4402	20	22	OTNEDAL	X [mm] 150.70
1492	-29	23	GENERAL	Y [mm] 170.60
1493	_20	-27	CENEDAL	Color 10
1495	20	-27	CENERAL	Jump 157
1496	-29	27	GENERAL	
1497	28	-26	GENERAL	
1498	-29	21	GENERAL	MIRROR OFF
1499	27	-26	GENERAL	X_SCALE 100[%]
1500	-29	21	GENERAL	Y_SCALE 100[%]
1501	28	-25	GENERAL	EMB RPM 750
1502	-29	21	GENERAL	Needle
1503	27	-25	GENERAL	Total St 0
1504	-29	20 GENERAL		Total Wk 0
1505	28	-25	GENERAL	
1506	-29	20	GENERAL	
1507	27	-24	GENERAL	URIGIN FIX POS
1508	-29	19	GENERAL	L. N. H. END TIME
1509	28	-23	GENERAL	<u> </u>
1510	-29	18	GENERAL	21945 0 17.3
1511	28	-23	GENERAL	
1512	-30	19	GENERAL	
Range: G	eneral(0),color	(1), jump(2), end	1(3)	
		Pac	rel IP ParceDN	PREILIOUS PREILIOUS
+	T +		ragebii	THEOTOGO THEOTOGS
F1	F2 F3	F4	F5 F6	F7 F8
				[Fig. 3-163]

(7) For the correction of Function Code of 1500 stitches, using F1, F2, F3 and F4 move the cursor to Function Code of 1500 as seen in the [Fig. 3-163].

(8) At this time, you can see description as following on the screen.

)	
---	--

That is, if you press 0, you can proceed to General code. if you press 1, you can proceed to Color code. if you press 2, you can proceed to Jump code. if you press 3, you can proceed to End code.

We should get into Jump code, so that input 2 on the Num key. At this time the screen is as follows.

	Stitch	Edit				97/2/18	AM 4:27
						Stitch	21045
	stitch No.	X Data	Y Data	Fun	ction	- Streen	21345
	1492	-29	23	GEN	ERAL	X LMMJ	150.70
	1493	27	-27	GEN	ERAL	Y [mm]	170.60
	1494	-28	22	GEN	IERAL	Color	10
	1495	27	-27	GEN	IERAL	Jump	157
	1496	-29	22	GEN	IERAL	ANGLE	0
	1497	28	-26	GEN	IERAL	MIRROR	Off
	1498	-29	21	GEN	IERAL	X SCOLE	1001:/1
	1499	27	-26	GEN	IERAL	N_SOMEE	1001 1
	1500	-29	21	JUM	IP	Y_SCALE	1001%1
	1501	28	-25	GEN	IERAL	EMB RPM	750
	1502	-29	21	GEN	IERAL	Needle	
	1503	27	-25	GEN	IERAL	Total St	0
	1504	-29	20	GEN	IERAL	Total Wk	0
	1505	28	-25	GEN	IERAL		
	1506	-29	20	GEN	IERAL	OBIGIN	FIX POS
	1507	27	-24	GEN	IERAL		EMB TIME
	1508	-29	19	GEN	IERAL	<u> </u>	
	1509	28	-23	GEN	IERAL		0 [2]
	1510	-29	18	GEN	IERAL	21945	0 1/13
	1511	28	-23	GEN	ERAL		
	1512	-30	19	GEN	ENHL		
	Range: G	General(0),color	(1),jump(2),	end(3)			
	-	▲ ⊥		PageUP	PageDN	PREVIOUS	PREUIOUS
	•						
Ľ	F1	F2 F3	F4	F5	F6	F7	F8

[Fig. 3-164]

(9) Place cursor 10000 as seen in the [Fig. 3-165].

Γ								П	97/2/10	OM 4:20
	Stit	ch Edit		▋╋┫Ĺ╴╶┟╉	ŦŦ	Ш.	田田	H	No.	9
									NU.	24045
	stitch No	. X	Data	Y Data		Fun	ction		stricen	21945
	9997		23	-6		GEN	ERAL		X LMMJ	150.70
	9998		23	-6		GEN	ERAL		Y [mm]	170.60
	9999		3	-13		GEN	ERAL		Color	10
F	10000		23	13		GEN	ERAL	Ш.	Jump	157
	10001	-	24	-19		GEN	ERAL		ANGLE	0
	10002		23	12		GEN	ERAL		MIRROR	Off
	10003		-24	-17		GEN	ERAL	H I	X SCALE	1001-21
	10004		22	11		GEN	ERAL	H.	N_SOALE	4001.01
L	10005		23	-17		GEN	ERAL		Y_SCHLE	1001%1
F	10006		22 10 GENER		ERAL	Ш.	EMB RPM	750		
	10007	-	23	-15 9		GENERAL GENERAL		Ш.	Needle	
	10008		22						Total St	0
	10009		-24	-15	GENERAL			Total Wk	0	
	10010		23	9		GEN	ERAL	U.		
F	10011	10011 -24 -14			GENERAL		11	ORIGIN	FIX POS	
	10012		22	8		GEN	ERAL	ll i	L.N.H.	EMB TIME
	10013		23	-13		GEN	ERAL			
	10014		22	8		GEN	GENERAL		0	0 [2]
	10015		23	-13		GEN	ERHL		21945	
E	10016 22 10017 -23		22	-12		CEN	EDAL			ren ren
			12		GLI	ENHL				
	Range: -127 ~ 127		127							·
Ē					Pag	ellP	PageDN		PREILIOUS	PRELITOUS
	+	T	*	-	Iag	COL	rugebh		1101003	111201003
r	F1	F2	F3	F4		FS	F6		F7	F8
		14	- 13		-	15	10			10

[Fig. 3-165]


(10)Press F7 NEXT to get F4 INSERT on the Function Menu. Now press F4 INSERT. Then the data of preceding stitch no. 10000 is moved to the stitch no. 10001 as seen in the [Fig. 3-166]. We can see that data of 10000 stitch are made of basic value.
(X: 0mm, Y: 0mm, Function Code: General Code)

	Stitch	Edit				97/2/18	AM 4:28
						INO.	2
	stitch No.	X Data	Y Data	Fun	ction	stiten	21945
	9997	23	-6	GEN	ERAL	X LMM J	150.70
	9998	23	-6	GEN	ERAL	Y [mm]	170.60
	9999	3	-13	GEN	ERAL	Color	10
	10000	0	0	GEN	ERAL	Jump	157
	10001	23	13	GEN	ERAL	ANGLE	0
	10002	-24	-19	GEN	ERAL	MIRBOR	Off
	10003	23	12	GEN	ERAL	X SCOLE	1001:/1
	10004	-24	-17	GEN	ERAL	N_SCALE	1001
	10005	22	11	GEN	ERAL	Y_SCHLE	100[%]
	10006	-23	-17	GEN	ERAL	EMB RPM	750
	10007	22	10	GEN	ERAL	Needle	
	10008	-23	-15	GEN	ERAL	Total St	0
	10009	22	9	GEN	ERAL	Total Wk	0
	10010	-24	-15	GEN	ERAL		
E	10011	-24	-14	GEN	ERHL	ORIGIN	FIX POS
	10012	-24	-14	GEN	FDAT	L.N.H.	EMB TIME
	10013	_22	_12	CEN	FDAI	9	
	10011	23	8	GEN	ERAL	21945	0 [7]
	10010	-23	-13	GEN	EBAL	21713	
	10017	22	7	GEN	ERAL		1-11-11
	Range: -	-127 ~ 127		1			
느							
]	UMP COL	OR DELETE	INSERT	PageUP	PageDN	NEXT	PREUIOUS
Ľ	F1	F2 F3	F4	F5	F6	F7	F8
						[Fig	g. 3-166

(11)As seen in the [Fig. 3-166], present cursor is located in X Data. For making 2mm of X Data, input 20 from Num. key. At this time, the screen is looked like the [Fig. 3-167].

ſ								07 /2 /10	AM 4:20
	Stit	ch Edit		HELL LEF	ŦŦ	Ш.,	▦▦	No	
			_					NO.	2 24045
	stitch No). X	Data	Y Data		Fun	ction	stiten	21945
	9997	,	23	-6		GEN	ERAL	X Lmm J	150.70
	9998	3	23	-6		GEN	ERAL	Y [mm]	170.60
	9999)	3	-13		GEN	ERAL	Color	10
	10000	20		0		GEN	ERAL	Jump	157
	10001	L	23	13		GEN	ERAL	ANGLE	0
	10002	2 -	24	-19		GEN	ERAL	MIRBOR	Off
	10003	3	23	12		GEN	ERAL	X SCOLE	1001.41
	10004	1 -	24	-17		GEN	ERAL	V SCOLE	1001.1
	10005	5	22	11		GEN	ERAL	T_SCHEE	1001.31
	10006	• -	23	-17		GEN	ERAL	EMB RPM	750
	10007	2	22	10		GEN	ERAL	Needle	
	10008	3 -	23	-15		GEN	ERAL	Total St	0
	10009		22	9		GEN	ERAL	Total Wk	0
	10010	<u>'</u> -	24	-15		GEN	ERAL		
F	10011		23	-14		GEN	ERHL	ORIGIN	FIX POS
	10012		24	-14		CEN	FDAT	L.N.H.	EMB TIME
	10013	í _	22	-13		CEN	FRAI	A	
	10015		22	8		GEN	EBAL	21945	0 [%]
	10010	[_	23	-13		GEN	EBAL		
	10017	,	22	7		GEN	ERAL		
	Pango '	-127 ~	127						
	nunge.								أنكنانصنا
J	UMP C	COLOR	DELETE	INSERT	Pag	eUP	PageDN	NEXT	PREVIOUS
Г	F1	F2	F3	F4		F5	F6	F7	F8

[Fig. 3-167]

[Caution] The X, Y data on the design used [Number of Stitch-Edit] and [Screen Edit] means real size of embroidery X 10. For input of data, multiply 10 times from the real size of embroidery.

No. 22 stitch No. X Data Y Data Function 9997 23 -6 GENERAL 9998 23 -6 GENERAL 9998 23 -6 GENERAL 100000 20 -50 JUMP 100001 23 13 GENERAL 10002 -24 -19 GENERAL 10003 23 12 GENERAL 10006 -23 -17 GENERAL 10006 -23 -17 GENERAL 10006 -23 -17 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -15 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -15 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7		l titok	F4:+	i and in		\bot \bot		$ \downarrow \downarrow \downarrow $		97/2/18	AM 4:28
Stitch No. X Data Figure 100 - Color 100 Stitch No. X Data Figure 100 - Color 100 Stitch No. X Data Figure 100 - Color 100 Stitch No. X Data Figure 100 - Color 100 Stitch 21948 Stitch 21948<	<u> </u>		Luit		[┍] ╹╘╪╪┑╴╻╞╛			#* *#.		No.	2
Stitch No. X Data Y Data Function 9997 23 -6 GENERAL 9998 23 -6 GENERAL 9999 3 -13 GENERAL 10000 20 -50 JUMP 10001 23 13 GENERAL 10002 -24 -19 GENERAL 10003 23 12 GENERAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 18 GENERAL 10008 -23 -15 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10017										Stitch	21945
9997 23 -6 GENERAL 9998 23 -6 GENERAL 9999 3 -13 GENERAL 10000 20 -56 JUHP 10001 23 13 GENERAL 10002 -24 -19 GENERAL 10003 23 12 GENERAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -15 GENERAL 10008 -23 -15 GENERAL 10010 -24 -15 GENERAL 10010 -24 -15 GENERAL 10012 -24 -14 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10015 22 8 GENERAL 10017 22 7 GENERAL 10017 22<	stitch	No.	X D	lata	Y Data		Fun	ction	ш	X [mm]	150.70
9998 23 -6 GENERAL 9999 3 -13 GENERAL 10000 20 -50 JUMP 10001 23 13 GENERAL 10002 -24 -19 GENERAL 10003 23 12 GENERAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -17 GENERAL 10009 22 9 GENERAL 10009 22 9 GENERAL 10011 23 9 GENERAL 10012 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -15 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23		997	2	3	-6		GEN	ERAL	ш	Y [mm]	170.60
3999 3 -13 GENERAL 100000 20 -50 JUMP 100001 23 13 GENERAL 100002 -24 -19 GENERAL 100003 23 12 GENERAL 100004 -24 -17 GENERAL 100005 22 11 GENERAL 100006 -23 -17 GENERAL 100007 22 10 GENERAL 100008 -23 -15 GENERAL 100010 -24 -15 GENERAL 100010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23 -13 GENERAL 10016 -23 -13 GENERAL 10016 -23 7 GENERAL 10016 <th></th> <th>998</th> <th>2</th> <th>3</th> <th>-6</th> <th></th> <th>GEN</th> <th>ERAL</th> <th>ш</th> <th>Color</th> <th>10.00</th>		998	2	3	-6		GEN	ERAL	ш	Color	10.00
100001 20 -30 0000 10000 100001 23 13 GENERAL 00000 0000 100002 -24 -19 GENERAL 00000 0000 100004 -24 -17 GENERAL V.SCALE 100002 100005 22 11 GENERAL V.SCALE 100012 100007 22 10 GENERAL 00000 100012 100009 22 9 GENERAL EMB RPH 754 100010 -24 -15 GENERAL 10011 10012 00000 100000 100000 100000 100000 100000 1000000 1000000 1000000 1000000 1000000 1100010000 100010000 10000000 10000000 100000000 100000000 100000000 100000000000 100000000000000 1000000000000000000000 1000000000000000000000000000000000000		999		3	-13		GEN	ERAL		Jump	10
10001 2.3 1.3 GENERAL 10002 -24 -19 GENERAL 10003 23 12 GENERAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -15 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10012 -24 -14 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10017 22 7 GENERAL 10017 <	10	000	2	.0	-30		OEN	F			157
10002 -24 -13 GENERAL 10003 23 12 GENERAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -17 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10017 22 <th>10</th> <th>001</th> <th>2</th> <th>.5</th> <th>-10</th> <th></th> <th>GEN</th> <th>EBAL</th> <th>ш</th> <th>ANGLE</th> <th>0</th>	10	001	2	.5	-10		GEN	EBAL	ш	ANGLE	0
10003 2.3 12 OBTEMAL 10004 -24 -17 GENERAL 10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -15 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23 -13 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10016 -23 -13 GENERAL 10016 -23 7 GENERAL 10016 -22 7 GENERAL 10017 <	10	002	-2		-13		CEN	FDAI	ш	MIRROR	Off
10005 22 11 GENERAL 10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -17 GENERAL 10009 22 10 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10017 22 7 GENERAL 10017 22 7 GENERAL 10017 9	10	003		.5	-17		CEN	FDAI	ш	X_SCALE	100[%]
10006 -23 -17 GENERAL 10007 22 10 GENERAL 10008 -23 -17 GENERAL 10009 22 10 GENERAL 10009 -23 -15 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10018 PREUIOUS PREUIOUS PREUIOUS PREUIOUS	16	001	2	.7	11		CEN	FRAI	ш	Y_SCALE	100[%]
10007 22 10 GENERAL 10008 -23 -15 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10017 22 7 GENERAL 10018 PEUIOUS PREUIOU PREUIOUS PREUIOU PREUIOU	16	005	-7	2	-17		GEN	ERAL		EMB RPM	750
19908 -23 -15 GENERAL 10009 22 9 GENERAL 10010 -24 -15 GENERAL 10011 23 9 GENERAL 10012 -24 -15 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10018 PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUI	16	000	2	22	10		GEN	ERAL	ш	Needle	
19909 22 9 GENERAL 10910 -24 -15 GENERAL 10911 23 9 GENERAL 10912 -24 -14 GENERAL 10913 22 8 GENERAL 10915 22 8 GENERAL 10916 -23 -13 GENERAL 10917 22 7 GENERAL 10917 27 7 GENERAL 10917 28 7 GENERAL 10917 27 7 GENERAL 10917 27 7 GENERAL 10917 27 7 GENERAL 10917 27 7 GENERAL 10017 7 7	16	008	-2	3	-15		GEN	ERAL	ш	T-t-1 Ct	
10810 -24 -15 GENERAL 10811 23 9 GENERAL 10812 -24 -14 GENERAL 10813 22 8 GENERAL 10814 -23 -13 GENERAL 10815 22 8 GENERAL 10816 -23 -13 GENERAL 10817 22 7 GENERAL 10818 PageUP PageDN PREUIOUS F1 F2 F3 F4 F5 F6 F7 F8	16	009	2	2	9		GEN	ERAL	ш	Total St	0
10011 23 9 GENERAL 10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 100101 PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUIOUS F1 F2 F3 F4 F5 F6 F7 F8	10	010	-2	4	-15		GEN	ERAL	ш	Total Wk	0
10012 -24 -14 GENERAL 10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10018 -23 -13 GENERAL 10017 22 7 GENERAL 10017 22 7 GENERAL 10017 22 7 GENERAL 10017 25 7 GENERAL 10017 5 7 GENERAL 10017 7 GENERAL 9 10017 7 GENERAL 9 10017 7 GENERAL 9 10017 7 GENERAL 9 10017 7 F3 PA	16	011	2	3	9		GEN	ERAL			
10013 22 8 GENERAL 10014 -23 -13 GENERAL 10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL 10010 PREUIOUS PREUIOUS PREUIOUS PREUIOUS PREUIOUS F1 F2 F3 F4 F5 F6 F7 F8	16	012	-2	4	-14		GEN	ERAL		ORIGIN	FIX POS
10014 -23 -13 GENERAL 0	16	013	2	2	8		GEN	ERAL	ш	L. N. H.	EMB TIME
10015 22 8 GENERAL 10016 -23 -13 GENERAL 10017 22 7 GENERAL Range: General(0), color(1), jump(2), end(3) GENERAL	16	014	-2	3	-13		GEN	ERAL	ш	0	0 [11]
10016 -23 -13 GENERAL 10017 22 7 GENERAL Range: General(0),color(1),jump(2),end(3) Image: PageUP PageUP F1 F2 F3 F4 F5 F6 F7 F8	16	015	2	2	8		GEN	ERAL	ш	21945	0 [7]
10017 22 7 GENERAL Range: General(0),color(1),jump(2),end(3) Image: Description ← ↑ → PageUP PageDN F1 F2 F3 F4 F5 F6 F7 F8	16	016	-2	3	-13		GEN	ERAL	- 11		
Range: General(0), color(1), jump(2), end(3) ← ↑ → PageUP PageDN PREVIOUS PREVIOUS F1 F2 F3 F4 F5 F6 F7 F8	16	017	2	2	7		GEN	ERAL	11		
← ↑ ↓ → PageUP PageDN PREUIOUS PREUIOU F1 F2 F3 F4 F5 F6 F7 F8	Range	: G	enera l (0),color	(1),jump(2)),end	(3)				
← ↑ → PageUP PageDN PREUTOUS PREUTOUS F1 F2 F3 F4 F5 F6 F7 F8		_									
F1 F2 F3 F4 F5 F6 F7 F8	+		1	+	-	Pag	eUP	PageDN		PREUTOUS	PREUIOUS
	F1		F2	F3	F4		F5	F6		F7	F8

(12)Following the method explained above, you can correct easily Y Data and Function Code. The [Fig. 3-168] shows the corrected state of Y Data and Function Code.

[Fig. 3-168]



(13)To know position of Jump Code or Color Code, have the screen of F1JUMP or F2COLOR then press related key to get only Jump Code or C/C code. To back to the previous menu, press
F8 PREVIOUS Then you can see the message, Do you want to save edit design ?

	Stitch	Edit	tti lat	ы		97/2/18	AM 4:29
			<u>' Litta di Li</u>	<u> 5339</u>	╧╧╧	No.	2
	atitah Na	V Data	V Data	Fun	otion	Stitch	21945
	STITCH NO.	A Data	I Data	Fun	Ction	X [mm]	150.70
	9997	23	-6	GEN	ERAL	Y Emm J	179.69
	9998	23	-6	GEN	IERAL	Color	10
	9999	3	-13	GEN	ERAL		452
	10000	20	-50	JUI	F	dmb	157
	10001	23	13	GEN	ERHL	ANGLE	0
	10002	-24	-15	GEN	EDAL	MIRROR	Off
	10003	23	12	GEN	ERHL	X_SCALE	100[%]
	10004	-24	-17	GEN	ERHL	Y_SCALE	100[2]
	10005	_22	_17	GEN	EDAL	EMB BPM	250
	10000	-23	-17	CEN	EDAL	Needle	130
	10007	_22	_10	CEN	EDAL	Needle	
	10000	-23	-15	CEN	EDAL	Total S	t O
	10005	-74	-15	CEN	FRAT	Total W	< 0
	10010	22	15	CEN	FDAT		
	10011	-74	-14	GEN	FRAL	ORIGIN	FIX POS
	10012	27	8	GEN	FRAL	L. N. H	. EMB TIME
	10013	-73	-13	GEN	FRAT	A A A A A A A A A A A A A A A A A A A	0.1.1
	10011	23	8	CEN	FRAL	21945	- 01%]
	10015	-23	-13	GEN	ERAL		
	10010	23	7	GEN	ERAL		10-010-01
	Denne 1 C		(4) :				
	Range. G	eneral(0),color	·(I),Jump(Z),e	ena (3)			
							NO
	Do you want to save edit design?						
Г	F1	F2 F3	F4	F5	F6	F7	F8
	··-						10
						F	

[Fig. 3-169]

(14)To save, press F7 YES or if you don't want to save F8 NO

SCREEN

Press F2 SCREEN in the [Fig. 3-156]. Then you can get the [Fig. 3-170].



[Fig. 3-170]

(1) ZOOM

Ex.) Call 40 design, expand "S" on the upper side.

(1) When you press F5 ZOOM menu is changed as the [Fig. 3-171]. Using F1, F2, F3 and F4 move the cursor to left-up side of "S".



2 Pressing F7 Select and using cursor of F1, F2, F3 and F4, move the cursor to right-down side of "S" as seen in the [Fig. 3-172]. The yellow BOX surrounds "S".



[Fig. 3-172]





(3) If you press F7 Select "S" enlarged as seen in the [Fig. 3-173].
 For moredetailed expansion, press F5 again. If you go back to previous condition,
 F6 ZOOM-ALL



DIVIDE

This function can be used when you want to save a special part of selected design as separate two designs.

① For example, if you want to separate a rim and central mark from the screen of [Fig. 3-174]



② If you select F2 EMB-EDIT from the main menu→F4 DIVIDE you will see the screen like [Fig. 3-175].



[Fig. 3-175]





③ After separating a rim and mark from the total embroidery, (example, 1119[st]) you will see the separated designs as follows.

④ If you press "F7 YES" from the above screen of [Fig. 3-176], a menu to decide rooms for saving "design 1" and "design 2" separately will be shown on the screen as seen in the [Fig. 3-177].



[Fig. 3-177]

(5) If you set a room to save "design 1" from the screen of [Fig. 3-177], consequently a screen to set a room to save "design 2" comes out as seen in the [Fig. 3-178].



(6) If you select "F2 EMB-CALL" from the main menu, you will see that the two designs are saved separately in the room 91 and 92 as seen in the [Fig. 3-179].

Avail Sti	tch :	180,5	89,508	5		98/5/20	PM12:13
31	32	33	34	35	36	No.	31
CHICA		1	2		5	X [mm]	10024
记用电	<u> </u>	As				Y [mm]	
37	38	39	40	41	42	COLOR	
3 m k	.in	å	dillin.	an	A	ANGLE	0
500 B	<u>.</u>	7		OFF 25	AND -	MIRROR	0ff
- COL-	<u> </u>			S.	APP PR	X_SCALE	100[%]
45	46	47	48	50	51	Y_SCALE	100[%]
NIKE	5	A	- And a state of the		SAMPARTS-	EMB RPM	750
ATR	STAMTER		A REAL PROPERTY.	20	C/	TOTAL ST	0
52	53	54	60	90	91	TOTAL WK	0
Gaas/		X)	2002	POLO SPORT		ORIGIN L.N.H.	FIX POS EMB TIME
92	100					15524	U [%]
	翻					88	88
+	1	ŧ	-	PageUP	PageDN	Select	PREVIOUS
F1	F2	F3	F4	F5	F6	F7	F8
						[Fi	g. 3-179



■ FILTER

Thread is easily cut when X and Y axis are too short $(0.1 \sim 0.3 \text{ mm})$ during operating for the selected design. In this case, if you select F2 EDIT \rightarrow F5 FILTER from the main menu, the machine combines the stitches of short length into the stitches of next step to prevent from cutting.

① For instance, if there are total 10 stitches as seen in the [Fig. 3-180], select "F2EMB-EDIT" → "F1 STITCH" from the main menu first.

Stitc	h Edit			98/7/16 No.	PM 8:57
stitch No.	X Data	Y Data	Function	STITCH	10
1	1	2	GENEBAL	X [mm]	2.2
2	2	1	GENERAL	Y [mm]	0.5
3	3	1	GENERAL	COLOR	1
4	2	1	GENERAL	JUMP	1
5	4	0	GENERAL	ANGLE	0
5	5	0	GENERAL	MIRROR	Off
, s	2	0	GENERAL	X_SCALE	100[%]
9	2	õ	JUMP	Y_SCALE	100[%]
10	0	0	END	EMB RPM	750
11				NEEDLE	
12				TOTAL ST	0
13				TOTAL WK	0
15					, <u> </u>
16				ORIGIN	FIX POS
17				L. N. H.	EMB TIME
18				0	A [7]
19				10	V 1/11
20				1000	
- ZI	127 ~ 127				
Kange:	-127 127				نكانكا
JUMP CO	LOR DELETE	INSERT	PageDN	NEXT	PREVIOUS
F1	F2 F3	F4	F5 F6	F7	F8
					100

[Fig. 3-180]

② The stitches having shorter than 0.3[mm] can be extended more than 0.4[mm] thread by combining with the stitches of next step. For this, call the relevant design first, then select "F2 EDIT"→ "F5 FILTER" from the main menu like the [Fig. 3-181].



[Fig. 3-181] shows the number of stitches which are shorter than standard.

(3) If you select "F5 0.4" at the moment, you will be asked about the room for saving as seen in the [Fig. 3-182].



[Fig. 3-182]



④ If you press "F2 EMB-CALL" from the main menu, then select F2 EMB-EDIT → F1STITCH you will see that the whole stitches are made with the longer thread than standard value.

Stitcl Stitcl stitch No. 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 13 11 12 13 11 4 15 16 17 18 19 20 20 21	h Edit X Data 6 5 3 2 0	Y Data 4 1 0 0 0 0	Fund GEMI GEMI GEMI GEMI GEMI JJ EI	tion ERAL ERAL ERAL ERAL JMP ID	98/7/16 No. STITCH X Imm3 Y Imm3 COLOR JUMP ANGLE MIRROB X.SCALE Y_SCALE V_SCALE EMB RPM NEEDLE TOTAL ST TOTAL HK ORIGIN L. N. H. 0 10	PH 9:04 2 10 2.2 0.5 1 1 1 0 0 ff 100[×] 100[×] 100[×] 750 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Range:	-127 ~ 127					
JUMP CO	LOR DELETE	INSERT		PageDN	NEXT	PREVIOUS
F1	F2 F3	F4	F5	F6	F7	F8
					[Fi	g. 3-183]

[Caution] Both jump code and finishing code are excluded from the optimization.

4 CONTENTS OF ERROR INDICATION AND TROUBLESHOOTING

4-1) Main Motor

No.	Error Message	Description	Recommended Action
100	Main shaft is not at the fix position	Stop-Angle of shaft deviates from 100 degree	F7 Press the automatic return key.
101	Main motor driver irregular signal detected	Main shaft motor driver error	Turn main switch off and on repeatedly.
102	Over load error	Thread is entangled in hook. Needle bar reciprocator is not working properly Thread is entangled when cutting.	Check all hooks of all heads and turn main switch off and on repeatedly.
103	Trimming system return error	Not return of cutting sensor when cutting	Check cutting system for normal working
104	Error on starting position	It happens when the starting button is pressed down in POWER ON.	Check the connector condition of starting button.
105	Error on Stop Switch	It happens when the Stop button is pressed down in POWER ON.	Check the connector condition of stop button.

4-2) X, Y Shaft Step Motor

No.	Error Message	Description	Recommended Action
200	(+X) Frame limit signal, detected	Carriage system of embroidery frame reach to +X limit.	Move the embroidery frame to the -X direction.
201	(-X) Frame limit signal, detected	Carriage system of embroidery frame reach to -X limit.	Move the embroidery frame to the +X direction.
202	(+Y) Frame limit signal, detected	Carriage system of embroidery frame reach to +Y limit.	Move the embroidery frame to the -Y direction.
203	(-Y) Frame limit signal, detected	Carriage system of embroidery frame reach to -Y limit.	Move the embroidery frame to the +Y direction.
204	X-axis Driver irregular signal, detected	Problem happened on X-axis driver	Turn main switch off and then on.
205	Y-axis Driver irregular signal, detected	Problem happened on Y-axis driver	Turn main switch off and then on.
206	Wiper Return Error	It happens when wiper solenoid is not returned	Check the wiper mechanism.
207	Trim Return Error	It Happens when trim motor is not returned	Check the trim mechanism.

4-3) Color Change

No.	Error Message	Description	Recommended Action
300	Needle position signal does not vary	Needle bar has wrong position	Rotate color change cam manually to the right position with confirming load



4-4) Encoder

No.	Error Message	Description	Recommended Action
400	Eneoder A signal does not vary	Abnormal signal is generated by encoder A phase of the main shaft	Check the connection of encoder cable and turn main switch off and on.
401	Eneoder Z signal does not vary	Abnormal signal is generated by encoder Z phase of the main shaft	Check the connection of encoder cable and turn main switch off and on.

4-5) Floppy Disk and Communication

No.	Error Message	Description	Recommended Action
600	Floppy drive is not ready	No disk exists in floppy disk drive	Insert disk into the floppy disk drive
601	Diskette sector not found	Disk is not formated or improperly formated.	Disk is to be formated or replaced with other.
602	Diskette drive A file not found	Unavailable design data in disk	Replace with other one.
603	Write protect error	Disk is in the write protect mode.	Remove the write protect tab from the disk.
604	Error this diskette	When the disk is damaged	Disk is to be formatted or replaced with other.
605	Diskette space is insufficient	Memory space is not enough in the disk.	Replace the disk.
606	Drive open error	Removal of the disk from floppy disk drive during the operating.	Insert the disk into the drive and restart operating.
607	Floppy reading error	Damaged sector was found in the disk	Disk is to be re-formatted or replaced with other.
608	Floppy writing error	Damaged sector was found in the disk	Disk is to be re-formated or replaced with other.
610	Floppy driver error	Error occurred by uncertain cause.	Disk is to be re-formated or replaced with other.

4-6) Memory

No.	Error Message	Description	Recommended Action
700	Memory file not found	No data are stored in memory	Input the data file into memory by floppy disk or tape
701	System memory is insufficient	Memory vacancy is not enough to copy the data into memory.	Enough memory will be provided by removing unnecessary data files.
702	Memory room is insufficient	100 of memory buffers are occupied by design files.	Enough memory will be provided by removing unnecessary data
703	Memory system error	Error generated during the operation of copying and deleting.	Reset and process again. Turn the main switch off and then on.
704	Weakness of battery in memory	When power is off, battery to keep data in memory is worn away	Exchange the batteries after consulting with your local A/S center.

4-7) Tape reader

No.	Error Message	Description	Recommended Action
630	Read data error	Data error is occurred during data reading by tape reader.	Re-input the data through the tape reader.
640	Can't find out equipment for network.	Devices for network are not linked up with.	Check the connection of devices for network.

4-8) Continuous Work

No.	Error Message	Description	Recommended Action
501	Error on setup for Continuous work (X number * Y number <100)	It happens when the setup is over the limit for continuous work.	Reset the X and Y not to be over 100.