USER'S MANUAL

COMPACT MACHINE ''NEO''

TEJT-C

FOREWORD

This user's manual is a guide book for using TAJIMA embroidery machine TEJT-C "NEO" correctly. It describes about operation of the machine and items to notice for use. Please read this manual thoroughly, understand the contents, and then use the machine.

This manual is composed of the following contents.

[IMPORTANT SAFETY INSTRUCTIONS]

[IMPORTANT WARNING ITEMS FOR SAFE OPERATION]

[CONSTRUCTION OF THE MACHINE]

[BASIC OPERATION]

[SETTING•OPERATION]

[OUTLINE OF FUNCTION]

[ELECTRICAL COMPONENT]

[TROUBLESHOOTING AND MAINTENANCE]

Regarding optional devices, please refer to the user's manual of the device you have chosen.

This manual may contain discrepancies in detailed information when compared with the actual machine due to continued research and improvements. If any question about the machine or contents of this manual arises, please consult your TAJIMA distributor.

Please keep this manual near the machine for immediate reference. When this manual is not used, keep it carefully.

Tokai Industrial Sewing Machine Co., Ltd.

IMPORTANT SAFETY INSTRUCTIONS

Operation of this machine requires correct operation and appropriate maintenance to ensure safety.

Please read the IMPORTANT SAFETY INSTRUCTIONS in this manual carefully and do not attempt operation or maintenance of the machine before you thoroughly understand the items written under IMPORTANT SAFETY INSTRUCTIONS.

Items that require your special attention on operation and maintenance of the machine are specified below with the warning symbol and signal word. These items must be strictly observed to ensure safety during operation and maintenance. Signal word definition is given below.

⚠ DANGER

Indicates that there is a lot of danger or death or serious injuries [*1] if the instruction is not observed.

⚠ WARNING

Indicates that there is a likelihood of death or serious injuries [*1] if the instruction is not observed.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury [*2] or property damage.

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*1:A condition caused by electric shock, injury, fracture of a bone, etc., that leads to aftereffects, or an injury that necessitates hospitalization or visits to a hospital over a long period.
*2: An injury that does not necessitate hospitalization or visit to a hospital over a long period.

🚫 : Prohibited items

⚠ Items that may cause electric shock if not observed

🛈 : Items that must be followed carefully to ensure safe operation

⏚ : Instructive items regarding connection of grounding wire

⚠ : Items that must be observed to perform works comfortably

📖 : Items that explain the contents of sentences in detail and items that complement the contents.

CONTENTS

8. FRAME SETTING

9. Manual operation

10. OUTLINE OF FUNCTIONS

11. ELECTRO-COMPONENT PARTS

12. TROUBLESHOOTING AND MAINTENANCE

Electro-relative drawing

1.IMPORTANT WARNING ITEMS FOR SAFE OPERATION

FD11

Carrying

⚠ WARNING

🚫 **Carrying of this machine should be performed by two or more persons.**
Dropping could cause injury or breakdown.

🚫 **When carrying the machine, hold the correct spots.**
Dropping could cause injury or breakdown.

⚠ CAUTION

🚫 **Do not transport, store, and operate the machine in an area of which altitude exceeds 1,000m.**

Installation

⚠ CAUTION

🚫 **Do not use the machine in ambient temperature of 45°C or more, or 5°C or less at running, at a place with much humidity, and outside.**
It could cause breakdown.

🚫 **Do not use the machine at a place where strong electric field or magnetic field is generated by such as high output high-frequency generator, high-frequency welder, etc.**
It could cause injury or breakdown due to malfunction.

❗ **Place the machine on a firm stand horizontally.**
Dropping could cause injury or breakdown.

❗ **Install the machine so that the embroidery frame or the drive section of the machine does not hit things or wall near the machine.**
It could cause injury or damage of the machine.

Wiring
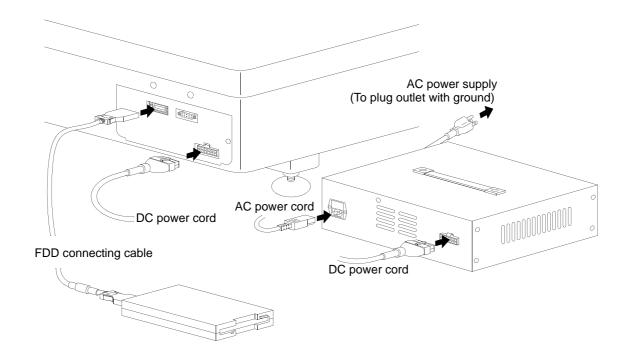
Insulation resistance: 10M ohms or more (500 V megger)

⚠ **CAUTION**

⏚ **Connect grounding wire of power cord to the ground (class D or more, grounding resistance 100 ohms or less).**
If using the machine without grounding, there could be a danger of electric shock due to leak current.

AC power supply
(To plug outlet with ground)

DC power cord

AC power cord

FDD connecting cable

DC power cord

Instructions for use

⚠ WARNING

🚫 **Do not have your hands or face access to moving unit during running of the machine. Especially, the vicinity of needle is dangerous.**
It could cause injury.

⚠ **Do not damage, modify or heat the power or other wiring cords. Do not exert undue force to them, either.**
Cord will be damaged causing fire or electric shock.

⚠ **Insert power cord securely.**
If electric poles of power plug touch metal, etc., it could cause fire or electric shock.

⚠ **Keep away electric section from water and chemicals.**
Circuit will have short-circuit causing fire or electric shock.
If entered, turn off the power switch and contact the distributor after turning off the primary power supply.
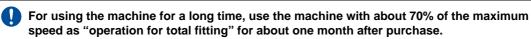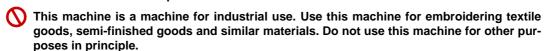
⚠ **When pulling out power cord, hold the plug to pull out the cord.**
Pulling out cord will cause cord and plug to be damaged causing fire or electric shock.

⚠ CAUTION

❗ **For using the machine for a long time, use the machine with about 70% of the maximum speed as "operation for total fitting" for about one month after purchase.**
By performing operation for total fitting, life of the machine will become longer, which will be useful to avoid unexpected troubles.

🚫 **This machine is a machine for industrial use. Use this machine for embroidering textile goods, semi-finished goods and similar materials. Do not use this machine for other purposes in principle.**
It could cause breakdown.

❗ **Only the persons who are sufficiently trained for the operation must operate the machine.**
Wrong operation could cause injury.

❗ **Read this user's manual thoroughly, understand the contents of operation securely, and then operate the machine.**
Wrong operation could cause injury.
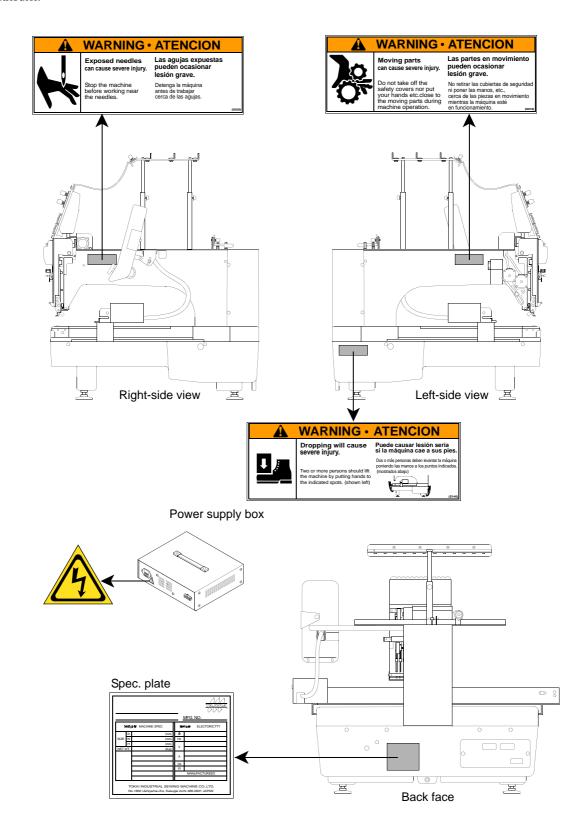
❗ **Operate the machine with proper clothing and appearance.**
Operating the machine with improper clothing and appearance could cause injury.

🚫 **Do not ride on the machine.**
It could cause injury.

🚫 **Do not use the machine with take-up lever guard or cover of movable unit detached.**
It could cause injury.

FD11

WARNING LABELS

The machine has warning labels that bear instructions for safe operation. Machine operators must follow the instructions shown on the warning labels.
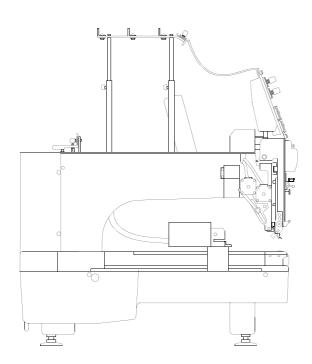
Do not detach this label or make it illegible by painting, etc. If a warning label is missed or damaged, please contact the distributor.


⚠ **WARNING · ATENCION**	
Exposed needles can cause severe injury.	**Las agujas expuestas pueden ocasionar lesión grave.**
Stop the machine before working near the needles.	Detenga la máquina antes de trabajar cerca de las agujas.

⚠ **WARNING · ATENCION**	
Moving parts can cause severe injury.	**Las partes en movimiento pueden ocasionar lesión grave.**
Do not take off the safety covers nor put your hands etc.close to the moving parts during machine operation.	No retirar las cubiertas de seguridad ni poner las manos, etc., cerca de las piezas en movimiento mientras la máquina esté en funcionamiento.

Right-side view

Left-side view

⚠ **WARNING · ATENCION**	
Dropping will cause severe injury.	**Puede causar lesión seria si la máquina cae a sus pies.**
Two or more persons should lift the machine by putting hands to the indicated spots. (shown left)	Dos o más personas deben levantar la máquina poniendo las manos a los puntos indicados. (mostrados abajo)

Power supply box

Spec. plate

Back face

2. MACHINE CONSTRUCTION

Name of each part
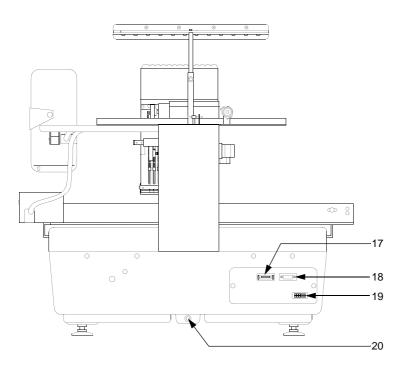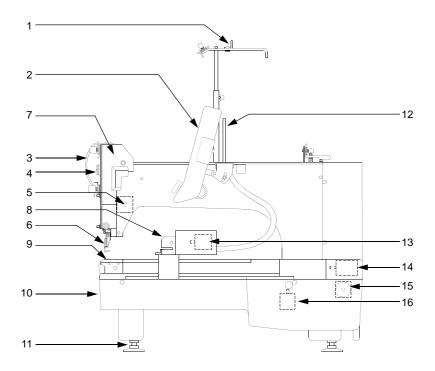
1. Main body of embroidery machine (multi needle machine)

1. Thread guide system
2. Tension base
3. Operation panel box
4. Color change motor
5. Thread holding motor
6. Jump motor
7. Needle bar case
8. Z-spec. frame
9. Needle plate
10. Stand
11. Leveling adjuster
12. Thread stand stud
13. X-axis motor
14. Main shaft motor
15. Y-axis motor
16. ATH Motor
17. FDD connector
18. Serial connector
19. Power supply connector
20. Oil draining hole
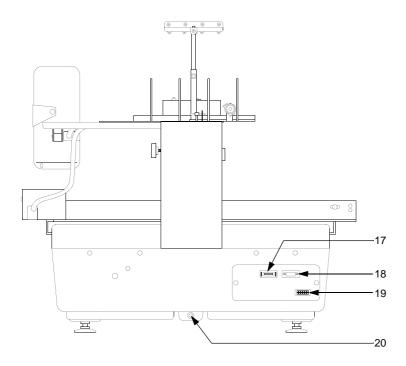
IA09

2. Main body of embroidery machine (1-needle machine)
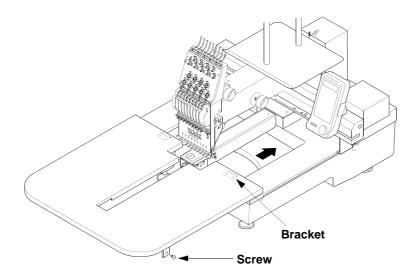
1. Thread guide system
2. Operation panel box
3. Take-up lever guard
4. Rotary-type tension disk
5. Thread holding motor
6. Thread wipe pin
7. Needle bar case
8. Z-spec. frame
9. Needle plate
10. Stand
11. Leveling adjuster
12. Thread stand stud
13. X-axis motor
14. Main shaft motor
15. Y-axis motor
16. ATH Motor
17. FDD connector
18. Serial connector
19. Power supply connector
20. Oil draining hole
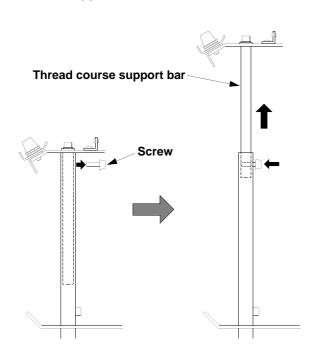
3. Table

📖 To attach the table, insert brackets to the attaching openings so that they are fitted to the openings, and then tighten the screws.
When detaching the table, do not lose the screws.
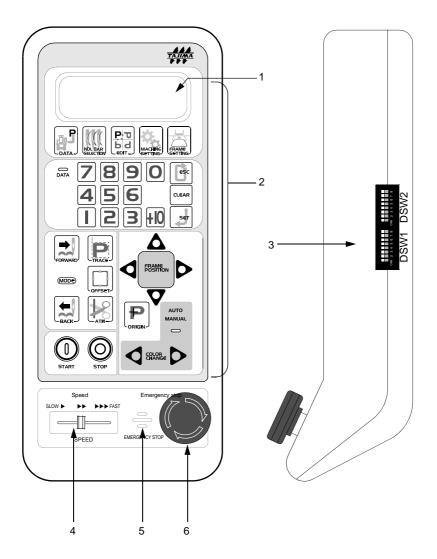
Bracket

Screw

4. Thread course support bar

📖 Remove the screw to move up the thread course support bar to the position where a screw hole exists, and then tighten the screw.

Thread course support bar

Screw

5. Operation panel box

1. LCD display area

2. Operation panel

3. DIP switch

4. Speed controller

5. Buzzer

6. Emergency stop switch

⚠ **Do not push the operation panel with a sharp-pointed object. It could cause breakdown.**

6. DIP switch

DSW2

No.	Contents	OFF	ON
8	—	*—	—
7	—	*—	—
6	—	*—	—
5	—	*—	—
4	Satin conversion	* Adjusts stitch length of 1.5 mm and more	Corrects stitch length of 0.6 mm and more
3	Satin correction	* Corrects X and Y at the same time	Corrects X and Y individually
2	Origin of installation	* From floppy disk drive	From personal computer
1	Operation mode 2	* Usual operation mode	Installation mode Turn ON DSW1-1
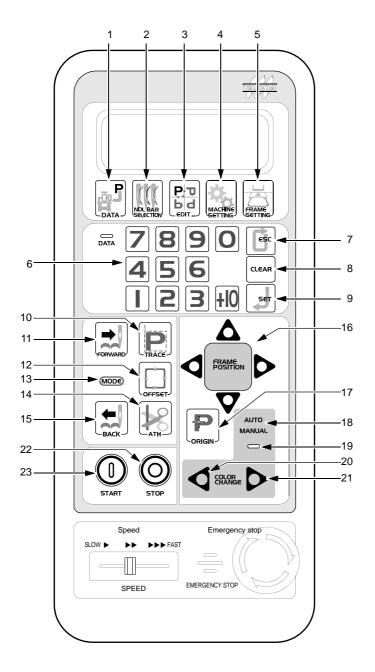
DSW1

No.	Contents	OFF	ON
8	Main shaft acceleration	* Standard	Acceleration: High speed
7	—	*—	—
6	—	*—	—
5	—	*—	—
4	Moving direction of the frame travel key	* Based on frame	Based on design
3	The number of times of buzzer	* 10 times	Once
2	LCD character display	* English	Japanese
1	Operation mode 1	* Usual operation mode	Test mode

📖 After changing DIP switch, turn on the power switch again.

📖 *: Setting at shipment
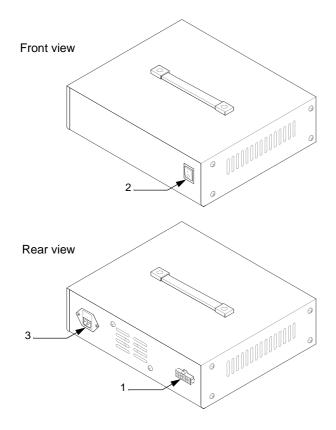
7. Operation panel

1. Data set menu key

2. Color change set key

3. Design edit key

4. Machine setting key

5. Frame set key

6. Numerical keys
   ⊞ : Use this key for needle bar of number 10 and more

7. Escape (ESC) key

8. Clear key

9. Set (SET) key

10. Trace key

11. Frame forward key

12. Offset key

13. Frame back/forward (feed unit) switching key

14. Thread trimming (ATH) key

15. Frame back key

16. Frame travel key

17. Origin return key

18. Color change (automatic/manual) switching key

19. Manual operation lamp
    Lights when manual color change is performed

20. Needle bar case left slide key

21. Needle bar case right slide key

22. Stop switch

23. Start switch

FD11

2-7

8. Power supply box

Front view

2

Rear view

3

1

1. DC power supply connector

2. Power switch

3. AC power supply connector

9. Floppy disk drive

3

1

2

1. Disk ejection button

2. Operation indicator lamp

3. FDD connector

Main specifications

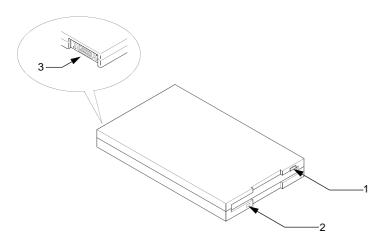| ⚠ **CAUTION** |
|---|
| 🛈 **When using the machine deviating from contents of specifications of power supply and power consumption, trouble may occur.** |

Specification	Contents of specifications
r.p.m.	120 - 1,200 rpm
Embroidery space	360 × 500 mm
Input data	Up to 280,000 stitches, 99 designs
Weight	80 kgs
Outside dimension	W 665 × L 805 × H 796 mm
Electric current•capacity•Hz	1.2A (200V) 225VA 50/60 Hz
Power supply•power consumption	Single-phase AC: 100- 120V, 200 - 240V Max. 220 W

📖 **The maximum number of revolutions is limited depending on frame setting or stitch length.**

Insulation resistance: 10M ohms and more (500V megger)
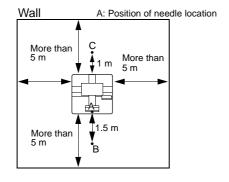
⚠ **WARNING**
⏚ **Connect grounding wire of power cord to the ground (class D or more, grounding resistance 100 ohms or less).** **If using the machine without grounding, there could be a danger of electric shock due to leak current.**

Ambient noise level

The ambient noise level of the machine is less than 85 dB. Measuring conditions are as follows.
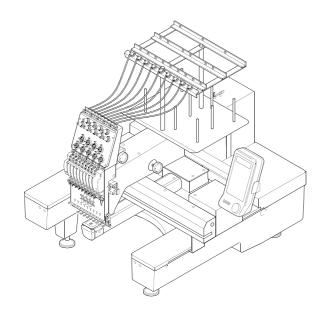
◆**Measuring ambience (refer to the illustration shown left)**
◆**Measuring position**
 Measured at B and C of which height is 1.6 m from the floor, and higher value is adopted.
◆**Operating condition of the machine**
 Cloth is stretched to the border frame, and satin stitch sewing of 4 mm stitch length is executed.
◆**R. P. M.**
 The maximum number of revolutions of the machine
◆**Measuring tool**
 Conformity to IEC61672-1: 2002 Class 1

3. OPERATION BASICS

MACHINE START AND STOP

1. Power switch

The power switch is located on the power supply box.

OFF

ON
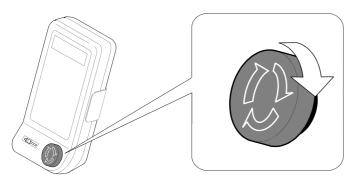
📖 When turning ON the power again, turn "OFF" the power switch and wait for two or three seconds. Then, turn it "ON".

2. Emergency stop switch

To stop the machine in an emergency, press the emergency stop switch. Pressing the emergency stop switch will cause the main shaft to stop immediately.

To release the stop lock, turn the switch to the direction indicated by the arrow.
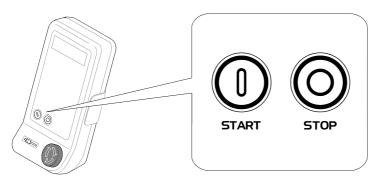
📖 When releasing the emergency stop, do not move the frame.

3. Start switch and stop switch

The start switch starts the machine and the stop switch stops the machine.

When starting the machine with the start switch kept to be pushed, the machine will start with inching. When the start switch is released, the speed will become normal speed.
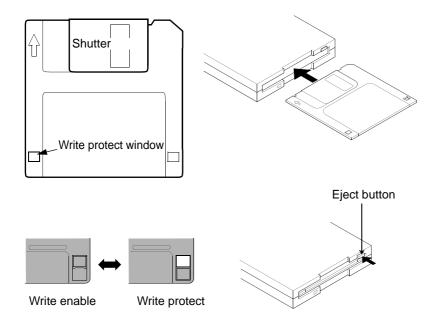
Pressing the stop switch will cause the needle bar to stop at the fixed position.

START   STOP

PRECAUTIONS FOR HANDLING FLOPPY DISK DRIVE (OPTION)

> ## ⚠ CAUTION
>
> 🚫 **Do not put the floppy disk near magnets or a TV set.**
>
> 🚫 **Do not expose the floppy disk to excessive heat, humidity, or direct sunlight.**
>
> 🚫 **Do not place objects on the floppy disk.**
>
> 🚫 **Do not stack floppy disks to store.**
>
> ❗ **Floppy disks do not last eternally. Data must be copied to backup floppy disks for storage.**
>
> 🚫 **Do not use damaged or deformed floppy disk, otherwise the floppy disk drive could be damaged.**
>
> ❗ **Clean the floppy disk drive once a month using a cleaning disk. If the head is foul, trouble to reading/writing data could occur.**
>
> 🚫 **Do not open the shutter. The disk may be soiled.**
>
> ❗ **To prevent the stored data from being erased, slide the tab of the write protect switch to open the write protect window of a floppy disk (write protect state).**
>
> ❗ **Insert a floppy disk slowly and carefully into the floppy disk drive. If a floppy disk is inserted impetuously, pressing the eject button may fail to eject the floppy disk and could cause the machine to be damaged.**
>
> 🚫 **Do not try to remove the floppy disk during data reading/writing. The data in the floppy disk could be destroyed.**

📖 Do not use unformatted floppy disks.

Shutter

Write protect window

Write enable   Write protect

Eject button
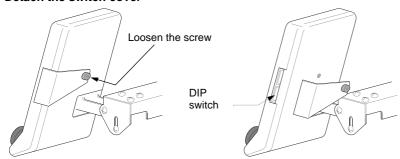
PROGRAM INSTALLATION

When installing from personal computer
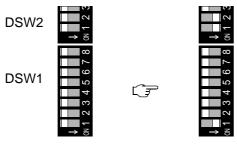
> ⚠️ **CAUTION**
>
> ❗ **When installing the panel program, design data and machine setting will be cleared.**

📖 Program installation includes main program, XY program, and panel program. It is possible to install these programs through a personal computer or the floppy disk drive (FDD). The program installation is required when setting up the machine or upgrading the version. Perform the program installation after turning "OFF" the power switch.

1. **Detach the switch cover**

Loosen the screw

DIP switch
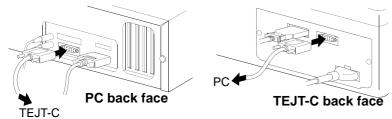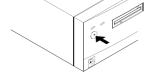
2. **Turn ON the DSW2-1, 2-2, and DSW1-1**

DSW2

DSW1

☞
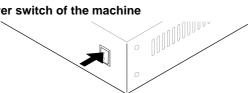
3. **Connect the machine and personal computer with serial connector**

PC back face

TEJT-C

PC

TEJT-C back face

4. **Turn ON the power of the personal computer**

5. **Turn on the power switch of the machine**

📖 After turning ON the power switch, the screen will become as shown below.

```
****** INSTALL *****

        FROM PC
```

6. **Set the floppy disk for installation to the personal computer**

7. Execute "Tejt_inst.exe"

8. Select the file to install

```
┌─────────────────────────────────────────────────┐
│ ▦ TEJT_INST                                  ✕  │
│                                                 │
│           ┌──────── INSTALL SETTING ────────┐    │
│           │   Install File Name (✳✳✳.bin)    │    │
│           │ ☑ Panel  [Open]  A:\ panel11t.bin │   │
│           │                                  │    │
│           │ ☑ Main   [Open]  A:\ main_110.bin │   │
│           │                                  │    │
│           │ ☑ Xy     [Open]  A:\ xy___100.bin│    │
│           └──────────────────────────────────┘   │
│                                                 │
│        [  INSTALL  ]          [  CLOSE  ]        │
└─────────────────────────────────────────────────┘
```
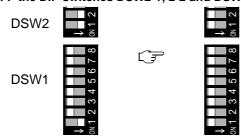
9. Press [INSTALL] **key**

10. Press [START] **key to start the installation**

11. Installing

```
****** INSTALL *****
              PANEL
     INSTALLING
 [>>>              ]
```

12. Installation is completed

```
****** INSTALL *****

  INSTALL FINISH
       [POWER OFF]
```

☞
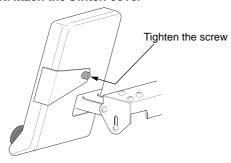
13. Turn OFF the DIP switches DSW2-1, 2-2 and DSW1-1

DSW2

DSW1

☞

14. Attach the switch cover

Tighten the screw

📖 "Tejt_inst.exe" is included in the floppy disk.

📖 Press "Open" to select the file to install.

📖 The program file is also included in the floppy disk.

📖 Panel: Program related to panel
Main: Program related to CPU
Xy: Program related to drive system

📖 Pressing the install key will display the screen for confirmation.
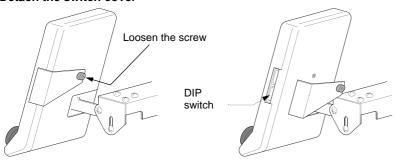
📖 When the installation is completed, turn "OFF" the power switch.

📖 Machine setting has returned to the initial setting. Change the machine setting according to need.

📖 If design data has been cleared, input it again.
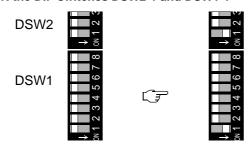
When installing from floppy disk drive

1. **Detach the switch cover**

Loosen the screw

DIP switch
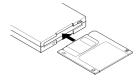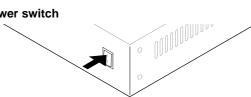
2. **Turn ON the DIP switches DSW2-1 and DSW1-1**

DSW2

DSW1

☞

3. **Set the program disk**

📖 When inserting the program disk after turning ON the power switch, the screen will become as shown below. Press the [SET] key to continue operation from 5.

```
****** INSTALL *****

SET KEY →FILE SEARCH
```

4. **Turn ON the power switch**

5. **Selection of program**

```
****** INSTALL *****
1.MAIN      →   -
2.XY        →   -
3.PANEL     →   -
```

☞ △/▽

📖 Main: Program related to CPU
XY: Program related to drive system
PANEL: Program related to panel

6. **Select "INSTALL"**
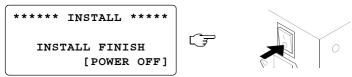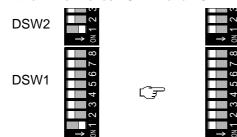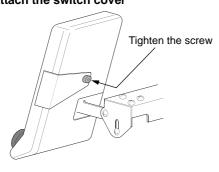
```
****** INSTALL *****
1.MAIN      →   -
2.XY        →   -
3.PANEL     →   -
```
☞ ◁/▷

7. **Start installation**

```
****** INSTALL *****
1.MAIN      →   -
2.XY        →   -
3.PANEL     →INSTALL
```
☞ [SET]
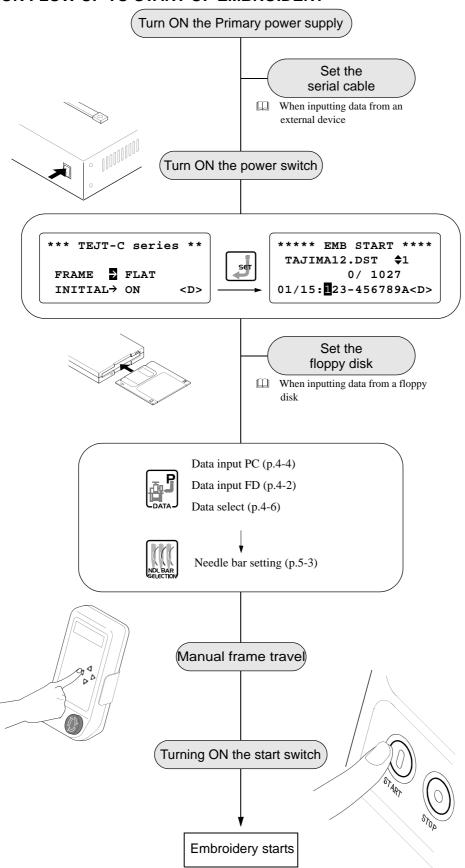
📖 When installing plural programs, it is possible to select plural installation items by performing operations 5 and 6.

```
****** INSTALL *****
1.MAIN      →INSTALL
2.XY        →   -
3.PANEL     →INSTALL
```

8. **Installation**

```
****** INSTALL *****
                 PANEL
      INSTALLING
 [>>>>           ]
```

9. **Installation is completed**

```
****** INSTALL *****

    INSTALL FINISH
         [POWER OFF]
```
☞

📖 When the installation is completed, turn "OFF" the power switch.

10. **Turn OFF the DIP switches DSW2-1 and DSW1-1**

DSW2

DSW1

☞

11. **Attach the switch cover**

Tighten the screw

📖 Machine setting has returned to the initial setting. Change the machine setting according to need.

📖 If design data has been cleared, input it again.

OPERATION FLOW UP TO START OF EMBROIDERY

Turn ON the Primary power supply

Set the
serial cable

📖 When inputting data from an
external device

Turn ON the power switch

```
*** TEJT-C series **

FRAME  ➡ FLAT
INITIAL➔ ON     <D>
```

SET

```
***** EMB START ****
TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123-456789A<D>
```

Set the
floppy disk

📖 When inputting data from a floppy
disk

Data input PC (p.4-4)

Data input FD (p.4-2)

Data select (p.4-6)

Needle bar setting (p.5-3)

Manual frame travel

Turning ON the start switch

Embroidery starts

EXPLANATION ON THE SCREEN

The descriptions below are explanation for LCD screen displayed at each situation.

When it is possible to change setting, the operation button on the panel is displayed.

● Main

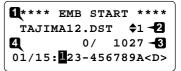|		

POWER ON	1: FRAME mode (FLAT/CAP/CYLNDR) ◀ ▶
	
	2: Origin return
	
	(ON: To perform/OFF: Not to perform) ◀ ▶
	
	3: Needle bar number that is currently selected
		```*** TEJT-C series **```
		
		```FRAME → FLAT-1 3```
		```INITIAL→ ON-2 <D>```

EMB. START	⊙ When automatic color change is performed: Change automatic to manual using AUTO↕MANUAL .
	
	1: Design name
	2: FB/FF feed unit (1, 10, 100, C, n-stitch)
	3: The current number of stitches/the number of total stitches
	4: The current step/the number of total steps: Needle bar number in color change order
		```1**** EMB START ****```
		```TAJIMA12.DST ⬍1 -2```
		```4 0/ 1027 -3```
		```01/15:123-456789A<D>```

	⊙ When manual color change is performed: Change manual to automatic using AUTO↕MANUAL .
	
	1: Needle bar number ◀ ▶ + SET
		```***** EMB START ****```
		```TAJIMA12.DST ⬍1```
		``` 0/ 1027```
		```01/15: NO.2* →[SET]```

EMBROIDERING	1: The current number of stitches/the number of total stitches ↔ the current number of stitches/maximum rpm
	
	📖 Set at "Screen" for machine setting.
		```*** EMBROIDERING ***```
		```TAJIMA12.DST ⬍1```
		```1► 66/ 900 rpm```
		```01/15:123-456789A<D>```

EMB. PAUSE	1: Stop by temporary stop
	
	📖 Insert "–: Temporary stop" at needle bar setting (The machine stops temporarily before performing automatic color change).
		```***** EMB PAUSE ****```
		```TAJIMA12.DST ⬍1```
		```1 59/ 1027```
		```01/15:123-456789A<D>```

	1: Needle bar number
	
	📖 When selecting "Manual" at color change setting, the machine stops at every color change.
		```***** EMB PAUSE ****```
		```TAJIMA12.DST ⬍1```
		``` 159/ 1027```
		```01/15: NO.4-1```

● DATA SET MENU: Press [⌐P DATA] in the state of "Embroidery start" of MAIN.

DATA INPUT

1: Data input switching (PC: Serial/FD: Floppy disk)

◀ ▶ + [SET]

```
***** DATA MENU ****
1.INPUT DATA  → PC-1
2.SELECT DATA
3.DELETE DATA
```

⊙ Serial input

a: Label name

b: Remaining memory capacity (stitches)
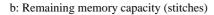
⊙ FD input

c: Design number→Design name ◀ ▶

d: The number of stitches of FD design

e: Remaining memory capacity (stitches)

```
*** INPUT THRU PC **

NAME  → DATA-01-a
MEMORY→ 56897  ST-b
```

```
**** SELECT DATA ***
c1/23 → BIRD.TBF
STITCH→  10713 ST-d
MEMORY→ 180876 ST-e
```

DESIGN SELECT

2: Memory design selection

[SET]

a: Memory number/total memory capacity → Design name

▲ ▽

b: The number of stitches of memory design

c: Remaining memory capacity (stitches)

⊙ Design information

After selecting design ◀ ▶

Design information 1: X size, position of right and left from the absolute coordinate

Design information 2: Y-size, position of back and forth from the absolute coordinate

Design information 3: The number of color changes (total steps), end position of XY

[ESC] To return to data selecting screen

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA-2
3.DELETE DATA
```

```
a** SELECT DATA **
01/12 → BIRD.TBF
STITCH→  10713 ST-b
MEMORY→ 180876 ST-c
```

```
*** INFORMATION 1 **
 X SIZE  →  72.7 mm
+X AREA  →  40.8 mm
-X AREA  →  31.9 mm
```

```
*** INFORMATION 3 **
COLOR   →    18
X END  →   -  0.6 mm
Y END  →   +  0.1 mm
```

DESIGN DELETE

3: Memory design deletion

[SET]

⊙ Design selection

a: Memory number/total memory capacity → Design name

◀ ▶ + [CLEAR]

b: The number of stitches of memory design

c: Remaining memory capacity (stitches)

⊙ Confirmation of deletion

a: Y (yes) [SET] N (No) [ESC]

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA-3
```

```
a** DELETE DESIGN **
01/03 → TAJIMA12.TBF
STITCH→   1027 ST-b
MEMORY→ 180876 ST-c
```

```
*** DELETE DESIGN **

   DELETE OK ?
 a-[Y=SET,N=ESC]
```

4: Input mode of memory design

[SET]

```
***** DATA MENU ****
2.SELECT DATA
3.DELETE DATA
4.MEMORY MODE◄4
```

INPUT MODE

a: Mode selection (Single/Multi) ◄ ▶

📖 Single: It is possible to perform embroidery without storing data in memory.

　　Multi: Input data to memory.

```
**** MEMORY MODE ***

 MEMORY → MULTI◄a
```

INITIAL MEMORY

5: Memory initialization

[SET]

```
***** DATA MENU ****
3.DELETE DATA
4.MEMORY MODE
5.INITIAL MEMORY◄5
```

a: Y (yes) [SET] N (no) [ESC]

```
** INITIAL MEMORY **

DELETE ALL DATA OK ?
    a►[Y=SET,N=ESC]
```

● Color change setting: Press [NDL BAR SELECTION] in the state of "Embroidery start" of MAIN.

NEEDLE SELECT

⊙ When automatic color change is performed

📖 Color change function is not available for use in 1-needle machine.

1: Color change mode (automatic/manual) [AUTO MANUAL]

```
*** COLOR CHANGE ***
MODE  → AUTO◄1
                  2
01/15:123456789ABCDE
```

📖 The lamp will turn on when manual is set.

2: The current step/the number of total stitches: Color change

order ◄ ▶ + ten keys (numerical keys)

📖 Insert "–: Temporary stop" using (STOP) .

a: In the state of temporary stop of needle bar

```
*** COLOR CHANGE ***
MODE  → AUTO
         STOP ◄a
04/15:123-456789ABCD
```

⊙ When manual color change is performed

1: Color change mode (automatic/manual) [AUTO MANUAL]

2: The current step/the number of total steps:

The current needle bar number ◄ COLOR CHANGE ▶ + [SET]

```
*** COLOR CHANGE ***
MODE  → MANUAL◄1
                  2
01/15:  No.7* →[SET]
```

● Data setting: Press [P�byd EDIT] in the state of "Embroidery start" of MAIN.

DATA SETTING

1: Rotation (90° unit) ◀ ▶

2: Mirror image reversion (OFF/X: Reversion based on X-axis/

Y: Reversion based on Y-axis) ◀ ▶

3: Repeat [SET]

⊙ Repeat setting

a: Repeat direction (Horizontal/Vertical) ◀ ▶

b: The number of times of repeat (01 to 99) ◀ ▶

c: Space (0 to 255 mm) ◀ ▶

```
**** DESIGN EDIT ***
1.ROTATE   →  0°  ◀1
2.REVERSE  →  OFF◀2
3.REPEAT   →  [SET]◀3
```

```
** REPEAT SETTING **
DIR   → HORIZONTAL ◀a
TIMES → 03 ◀b
SPACE → 120 mm ◀c
```

● Frame setting: Press [FRAME SETTING] in the state of "Embroidery start" of MAIN.

FRAME SETTING

1: Manual frame travel speed (1 to 3) ◀ ▶

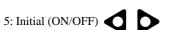2: Offset setting after completion of embroidery

(automatic/manual) ◀ ▶

3: Origin return after completion of embroidery

(automatic/manual) ◀ ▶

4: Frame mode (Flat/Cap/Cylinder/Border) ◀ ▶

5: Initial (ON/OFF) ◀ ▶

```
*** FRAME SETTING **
1.MANUAL SPD → 1 ◀1  2
2.OFFSET     → AUTO 3
3.ORIGIN RTN → AUTO
```

```
*** FRAME SETTING *4
4.FRAME MODE→ FLAT
5.INITIAL   → ON
```

● Machine setting: Press [MACHINE SETTING] in the state of "Embroidery start" of MAIN.

MACHINE SETTING

1: Display (Stitch/rpm) ◀ ▷

2: Thread breakage sensor (OFF/1 to 5) ◀ ▷

3: Preset halt [SET]

⊙ Preset setting

   a: The number of total stitches (999999 stitches: max.)

    [CLEAR] It can be cleared.

   b: The number of stitches for halt (0 to 999999 stitches)
    Ten keys (numerical keys)

4: Thread trimming length (1 to 17) ◀ ▷

5: Thread trimming timing (-10 to +10) ◀ ▷

6: Jump conversion (0 to 9 stitches) ◀ ▷

7: Auto jump (OFF/ 4.0 to 9.9 mm) ◀ ▷

8: Frame drive timing (AUTO/250°) ◀ ▷

9: The number of inchings at start (2 to 9 times) ◀ ▷

A: Tie stitching (So: "To perform" when starting embroidery/S-:

   "Not to perform" when starting embroidery) ◀ ▷

B: Satin stitch (–: Without correction, 1 to 5: 0.1 mm unit) ◀ ▷

C: Boring (OFF/1 /2) ◀ ▷

  📖 It is not available for use in 1-needle machine.

D: Cording (ON/OFF) ◀ ▷

  📖 It is not available for use in 1-needle machine.

E: Communication speed (9600/19200/38400) ◀ ▷

F: Network (1/2/OFF) ◀ ▷

```
** MACHINE SETTING *
1.SCREEN    → ST—1
2.THREAD SNS→ 2—2
3.PRESET HLT→ [SET?—3
```

```
**** PRESET HLT ****

COUNTER→   1278 ST—a
PRESET →  30000 ST—b
```

```
** MACHINE SETTING *
4.TRIM LENG → 1—4
5.TRIM TMNG → + 0—5
6.JUMP CONV → 3 ST—6
```

```
** MACHINE SETTING 7
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO—8
9.INCHING   → 2—9
```

```
** MACHINE SETTING A
A.TIE SET   → So Eo
B.SATIN ADJ → OFF—B
C.BORING    → OFF—C
```

```
** MACHINE SETTING D *
D.CORDING   → OFF  E
E.COM SPEED → 9600
F.NETWORK   → OFF—F
```

INSPECTIONS BEFORE STARTING OPERATION

Before embroidering, execute inspections of the following items.

<table>
<tr><td colspan="2">⚠ CAUTION</td></tr>
</table>

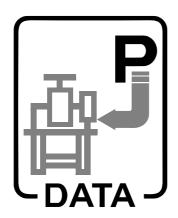| ⓘ	**When performing inspection before starting operation, be sure to turn OFF the power switch.** **If performing inspection with the power turned ON, it may cause injury.**

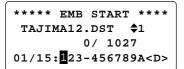| Inspecting item	State	Corrective measures
Covers	Come off	Attach
Thread	Come off	Set
	Broken	
Needle	Bent	Replace
	Broken	
Rail on rotary hook	Proper quantity of oil is not adhered	Supply oil
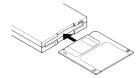
4. DATA SET MENU

Data input (floppy disk)

Input design data from floppy disk to the machine. Data of the input design will be set.
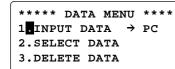
1. **Insert the floppy disk.**

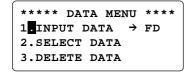📖 Data set is to make design data become possible to perform embroidery.

2. **Switch to "DATA MENU"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
        0/ 1027
01/15:123-456789A<D>
```
☞

3. **Select "FD"**

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```
☞ ◁/▷

📖 The black square that blinks on the screen is the item to be selected.

```
1.INPUT DATA  → PC
```
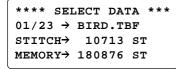
4. **Reading the floppy disk**

```
***** DATA MENU ****
1.INPUT DATA  → FD
2.SELECT DATA
3.DELETE DATA
```
☞ SET

📖 When the machine is reading design data in the floppy disk, the message shown below will be displayed.

```
FILE SEARCHING
```

5. **Selection of design data**

```
**** SELECT DATA ***
01/23 → BIRD.TBF
STITCH→  10713 ST
MEMORY→ 180876 ST
```
☞ △/▽

6. **Input**

```
*** SELECT DATA ***
09/23 → BELL.DST
STITCH→   2451 ST
MEMORY→ 180876 ST
```
☞ SET

📖 Regarding error code"2BA", refer to p.12-2.

📖 When inputting "*.TBF" data, data set will be performed after pressing [SET].

```
***** EMB START ****
 BELL.TBF       ⬍1
        0/  2451
01/04:A6B3      <D>
```
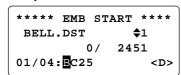
7. **Set needle bar steps**

```
*** COLOR CHANGE ***
MODE  → AUTO

01/04:
```
☞ 7 8 9 0 4 5 6 1 2 3 +10

📖 If no setting for "Color change" in the input design data, set needle numbers to needle bar steps. Regarding how to set needle bars, refer to p.5-3.

8. Set

```
*** COLOR CHANGE ***
MODE   → AUTO

01/04:BC25
```

👉 [SET]

9. Completion

```
***** EMB START ****
 BELL.DST      ⬍1
         0/  2451
01/04:BC25        <D>
```
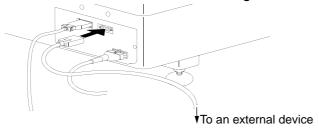
📖 The input data will be set.
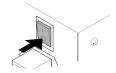
INPUT DATA (Serial connection 1)

The descriptions below are explanation for how to download design data from an external device that is connected serially to the machine. The input design data will be set.

1. **Connect an external device with the machine using the serial cable.**

To an external device

📖 When performing serial connection, turn "OFF" the power of the machine and the external device.

📖 When connecting the external device with the machine, use the dedicated cable (option).

2. **Turn "ON" the power of the machine**

📖 When the power of the machine is turned ON, also turn "ON" the power of the external device.

3. **Switch to "DATA MENU"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/  1027
01/99:123-56789AB<D>
```

4. **Select "PC"**

```
***** DATA MENU ****
1.INPUT DATA ⇒ FD
2.SELECT DATA
3.DELETE DATA
```

◁/▷

5. **Read data from the external device**

```
***** DATA MENU ****
1.INPUT DATA ⇒ PC
2.SELECT DATA
3.DELETE DATA
```
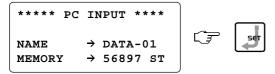
SET

📖 When pressing [SET], the design data transmitting from the external device will be displayed.

6. **Transmit design data from the external device**

7. **Set**

```
***** PC INPUT ****

NAME     → DATA-01
MEMORY   → 56897 ST
```

SET

📖 During data transferring, the lamp of DATA blinks.

HB03

8. **Completion of data set**

```
***** EMB START ****
 DATA-01        ⬍1
          0/ 56897
01/12:123456789AB<D>
```

📖 When reading "DST", the message will be displayed as shown below after inputting design data.

```
*** COLOR CHANGE ***
MODE  → AUTO

01/12:█
```

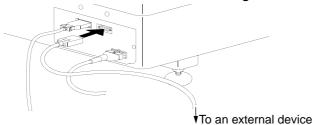When setting color change, refer to p.5-3.

INPUT DATA (Serial connection 2)

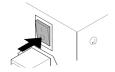The descriptions below are explanation for how to select and download the design data in an external device, which is connected serially, from the embroidery machine side. The input design data will be set.

1. **Connect an external device with the machine using the serial cable.**

↓To an external device

📖 When performing serial connection, turn "OFF" the power of the machine and the external device.

📖 When connecting the external device with the machine, use the dedicated cable (option).

2. **Turn "ON" the power of the machine**

📖 When the power of the machine is turned ON, also turn "ON" the power of the external device.

3. **Switch to "DATA MENU"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
           0/  1027
01/99:123-56789AB<D>
```

☞ [P / DATA]

4. **Select "PC"**

```
***** DATA MENU ****
1.INPUT DATA ⊋ FD
2.SELECT DATA
3.ÐELETE DATA
```

☞ ◁/▷

5. **Search for data of an external device**

```
***** DATA MENU ****
1.INPUT DATA ⊋ PC
2.SELECT DATA
3.ÐELETE DATA
```

☞ [SET]

📖 When pressing [SET], the design data transmitting from the external device will be displayed.

6. **Select design data of an external device**

```
*** SELECT DATA **
  1   → SOCKS.DST
STITCH→   3119 ST
MEMORY→ 257536 ST
```

☞ △/▽

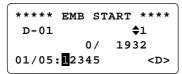📖 Regarding error code"2BA", refer to p.12-2.

7. **Set**

```
*** SELECT DATA **
   3  → D-01.DST
STITCH→  1932 ST
MEMORY→ 257536 ST
```

☞ △/▽

8. **Completion of data set**

```
***** EMB START ****
 D-01          ⬍1
          0/  1932
01/05:█2345      <D>
```

📖 During data transferring, the lamp of
DATA blinks.

📖 When reading "DST" data, the display
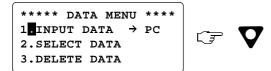below will appear after input of design
data.

```
*** COLOR CHANGE ***
MODE  → AUTO

01/05:█
```

To set color change, refer to p.5-3.

SELECT DATA

Set design data in the memory of the machine.
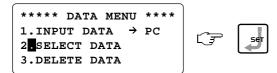
1. **Switch to "DATA MENU"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/  1027
01/15:123-456789A<D>
```
☞ 🅿 DATA

2. **Select "SELECT DATA"**

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```
☞ ▽

3. **Decision**

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```
☞ SET

4. **Selection of design data**

```
*** SELECT DATA **
01/12 → BIRD.TBF
STITCH→  10713 ST
MEMORY→ 180876 ST
```
☞ △/▽

5. **Data set**

```
*** SELECT DATA **
07/12 → FLOWER.TBF
STITCH→   3972 ST
MEMORY→ 180876 ST
```
☞ SET

6. **Completion**
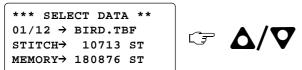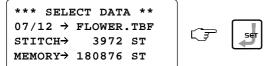
```
***** EMB START ****
 FLOWER.TBF    ♦1
          0/  3972
01/05:159AB     <D>
```
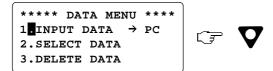
DELETE DATA
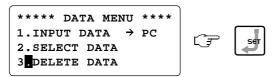
Select design data in the memory of the machine to delete.

1. Switch to "DATA MENU"

```
***** EMB START ****
 TAJIMA12.DST  ↕1
         0/  1027
01/15:123-456789A<D>
```

2. Select "DELETE DATA"

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```

3. Decision

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```

4. Selection of design data

```
*** DELETE DESIGN **
01/12 → TAJIMA12.DST
STITCH→   1027 ST
MEMORY→ 180876 ST
```

5. Deletion

```
*** DELETE DESIGN **
07/12 → FLOWER.TBF
STITCH→   3972 ST
MEMORY→ 180876 ST
```

6. Confirm

```
*** DELETE DESIGN **

    DELETE OK ?
      [Y=SET,N=ESC]
```

7. Completion
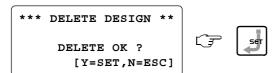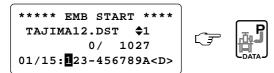
```
*** DELETE DESIGN **
07/11 → DOG.DST
STITCH→   5098 ST
MEMORY→ 184848 ST
```

📖 It is possible to perform deletion continuously after deleting data.

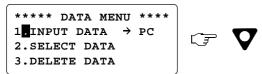📖 To return the screen to the "EMB START SCREEN", press "ESC" twice.

MEMORY MODE

This setting decides whether storing the design data in the memory or not when inputting it.
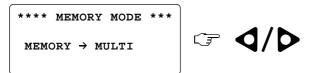
1. Switch to "DATA MENU"

```
***** EMB START ****
 TAJIMA12.DST  ♦1
           0/  1027
01/15:123-456789A<D>
```
☞ [P/DATA key]

2. Select "MEMORY MODE"

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```
☞ ▼

3. Decision

```
***** DATA MENU ****
2.SELECT DATA
3.DELETE DATA
4.MEMORY MODE
```
☞ [SET key]
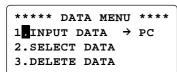
4. Selection of mode

```
**** MEMORY MODE ***

 MEMORY → MULTI
```
☞ ◁/▷

📖 MULTI: To store input design to the memory
SINGLE: To store one design data to the memory and overwrite by new design data

5. Set

```
**** MEMORY MODE ***

 MEMORY → MULTI
```
☞ ◁/▷

📖 When setting the memory mode, data setting will be canceled.

6. Completion

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```

📖 When "SINGLE" is set, input data from FD/PC.

📖 To return the screen to "EMB START SCREEN", press "ESC" twice.

INITIAL MEMORY

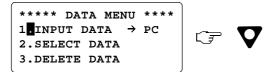This setting erases all design data stored in the memory of the machine.
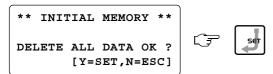
1. Switch to "DATA MENU"

```
***** EMB START ****
 TAJIMA12.DST  ◆1
          0/  1027
01/15:123-456789A<D>
```
☞ [P DATA]

2. Select "INITIAL MEMORY"

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```
☞ ▽

3. Initialize

```
***** DATA MENU ****
3.DELETE DATA
4.MEMORY MODE
5.INITIAL MEMORY
```
☞ [SET]

4. Confirm

```
** INITIAL MEMORY **

DELETE ALL DATA OK ?
      [Y=SET,N=ESC]
```
☞ [SET]
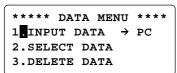
📖 During initializing memory, the message will be displayed as shown below.

```
*** INITIALIZING ***
```

5. Completion

```
***** DATA MENU ****
1.INPUT DATA  → PC
2.SELECT DATA
3.DELETE DATA
```

📖 Since all design data has been erased, input data here.
To return the screen to "EMB START SCREEN" without data input, press "ESC". When data setting is not performed, the screen shown below will be displayed.

```
***** EMB START *****
 .              ◆1
          0/      0
01/00:          (D)
```

5. COLOR CHANGE

NDL BAR
SELECTION

Mode switching

Set color change to automatic/manual.

1. Switch to "COLOR CHANGE"

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:123456789AB<D>
```

☞ NDL BAR SELECTION

2. Select mode

```
*** COLOR CHANGE ***
MODE  → AUTO

01/15:123456789ABCDE
```

☞ AUTO ↕ MANUAL

3. Setting

```
*** COLOR CHANGE ***
MODE  → MANUAL

01/15:  NO.D
```

☞ SET

4. Completion

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:  NO.D
```

Mode switching key

📖

AUTO ↕ MANUAL ⬌ AUTO ↕ MANUAL

Auto: Unlit   Manual: Lit

(Automatic color change)   (Manual color change)
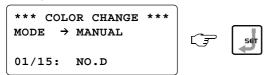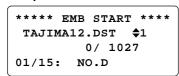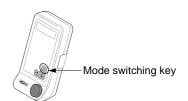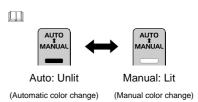
📖 When setting to "manual", the needle bar number currently used will be displayed as shown below.

```
01/15:  NO.D
```

📖 To change needle bar, refer to manual operation p.5-3.
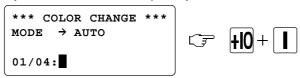
Needle bar setting (Input of step)

Set needle bar number to needle bar step.

1. Switch to "COLOR CHANGE"

```
***** EMB START *****
 BELL.TBF       ⬍1
          0/  2451
01/04:█          <D>
```

☞ NDL BAR SELECTION

2. Input needle bar number. (Example: Needle bar number 11)

```
*** COLOR CHANGE ***
MODE  → AUTO

01/04:█
```

☞ +10 + 1
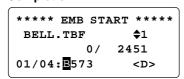
3. Input needle bar number to the next step

```
*** COLOR CHANGE ***
MODE  → AUTO

02/04:B█
```

☞ 7 8 9 0
4 5 6
1 2 3 +10

4. Set the needle bar setting

```
*** COLOR CHANGE ***
MODE  → AUTO

04/04:B57█
```

☞ SET

5. Completion

```
***** EMB START *****
 BELL.TBF       ⬍1
          0/  2451
01/04:█573     <D>
```

📖 To set other needle bars continuously, repeat operations 2 and 3, then press "SET".

Needle bar	1st nee-dle	•••	10th needle	11th needle
Opera-tion	1		+10+0	+10+1
Display	1	•••	A	B

📖 Set needle bar numbers to all steps.
📖 All needle bars are displayed as "1" in 1-needle machine.

📖 When the number of needle bar numbers to be set is fewer than the number of color change steps, the remaining steps will be automatically compensated.

[Example]
When the number of color change steps is 5 and up to two steps for needle bar numbers are set (Needle bar number: 2, 5)

Needle bar step	1	2	3	4	5
Needle bar No.	2	5	2	5	2

▒ : Compensated needle bar No.

Needle bar setting (Change of step)

Change needle bar number of needle bar step.

1. **Switch to "COLOR CHANGE"**
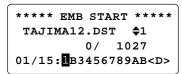
```
***** EMB START *****
 TAJIMA12.DST  ⬍1
          0/  1027
01/15:123456789AB<D>
```

☞ NDL BAR SELECTION

2. **Select the needle bar step**

```
*** COLOR CHANGE ***
MODE  → AUTO

01/15:123456789ABCDE
```

☞ ◁/▷

3. **Input needle bar number. (Example: Needle bar number 11)**

```
*** COLOR CHANGE ***
MODE  → AUTO

02/15:123456789ABCDE
```

☞ +I0 + I

📖 To set other needle bars continuously, repeat operations 2 and 3, then press "SET".

Needle bar	1st needle	•••	10th needle	11th needle
Operation	I		+I0+O	+I0+I
Display	1	•••	A	B

4. **Setting**

```
*** COLOR CHANGE ***
MODE  → AUTO

03/15:1B3456789ABCDE
```

☞ SET

5. **Completion**

```
***** EMB START *****
 TAJIMA12.DST  ⬍1
          0/  1027
01/15:1B3456789AB<D>
```

Setting for temporary stop

This setting will cause embroidery to stop temporarily when color change is performed.

1. **Switch to "COLOR CHANGE"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:123456789AB<D>
```
☞ NDL BAR SELECTION

2. **Select the needle bar step**

```
*** COLOR CHANGE ***
MODE  → AUTO

01/15:123456789ABCDE
```
☞ ◁/▷
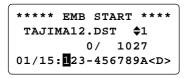
3. **Select needle bar (Example: Stop before needle bar step 4)**

```
*** COLOR CHANGE ***
MODE  → AUTO

04/15:123456789ABCDE
```
☞ STOP

📖 To set other needle bar steps continuously, repeat operations 2 and 3 and then press "SET".

4. **Setting**

```
*** COLOR CHANGE ***
MODE  → AUTO
        STOP
04/15:123-456789ABCD
```
☞ SET

📖 When setting temporary stop, "-" will be inserted just before the set step.

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/  1027
01/15:123-456789A<D>
```

📖 When performing embroidery with automatic setting for frame setting "Offset", the machine will stop temporarily after frame movement to the offset position before its performing color change.

6. DESIGN EDIT

Rotate

This setting rotates design of which data has been set.
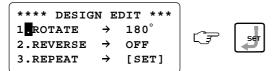
1. Switch to "DESIGN EDIT"

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
☞ [P d / b d EDIT]

📖 For details, refer to p.10-2.

2. Select angle

```
**** DESIGN EDIT ***
1.ROTATE   →  0°
2.REVERSE  →  OFF
3.REPEAT   →  [SET]
```
☞ ◁/▷
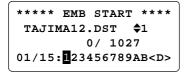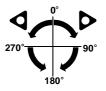
📖 Rotation is performed in increments of 90°.

```
          0°
    270°      90°
         180°
```

3. Set

```
**** DESIGN EDIT ***
1.ROTATE   →  180°
2.REVERSE  →  OFF
3.REPEAT   →  [SET]
```
☞ [SET]

📖 To perform design edit continuously, perform "MIRROR, REPEAT" operation without pressing "SET".

4. Completion

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
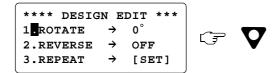
Mirror

This setting reverses the design of which data has been set as a mirror image.

1. **Switch to "DESIGN EDIT"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ P д / b d
EDIT

📖 For details, refer to p.10-2.

2. **Select reverse**

```
**** DESIGN EDIT ***
1.ROTATE   →  0°
2.REVERSE  →  OFF
3.REPEAT   →  [SET]
```

☞ ▽
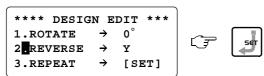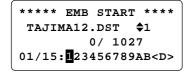
3. **Select reversing direction**
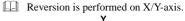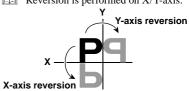
```
**** DESIGN EDIT ***
1.ROTATE   →  0°
2.REVERSE  →  OFF
3.REPEAT   →  [SET]
```

☞ ◁/▷

📖 Reversion is performed on X/Y-axis.

Y
Y-axis reversion
X
X-axis reversion

4. **Set**

```
**** DESIGN EDIT ***
1.ROTATE   →  0°
2.REVERSE  →  Y
3.REPEAT   →  [SET]
```

☞ SET

📖 To perform design edit continuously, perform "ROTATE, REPEAT" operation without pressing "SET".

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
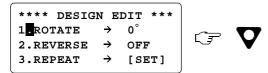
Repeat

This setting arranges design of which data has been set repeatedly.
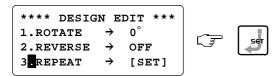
1. **Switch to "DESIGN EDIT"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

📖 For details, refer to p.10-3.

2. **Select repeat**

```
**** DESIGN EDIT ***
1.ROTATE    →   0°
2.REVERSE   →   OFF
3.REPEAT    →  [SET]
```

3. **Decision**

```
**** DESIGN EDIT ***
1.ROTATE    →   0°
2.REVERSE   →   OFF
3.REPEAT    →  [SET]
```

4. **Setting for direction**

```
** REPEAT SETTING **
DIR    ➡ HORIZONTAL
TIMES  → 01
SPACE  →    0 mm
```

📖 Direction: Horizontal/Vertical
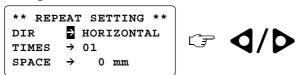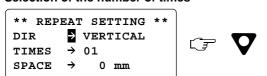
5. **Selection of the number of times**

```
** REPEAT SETTING **
DIR    ➡ VERTICAL
TIMES  → 01
SPACE  →    0 mm
```

6. **Setting for the number of times**

```
** REPEAT SETTING **
DIR    → VERTICAL
TIMES  ➡ 01
SPACE  →    0 mm
```

📖 The number of times: 01 to 99

7. **Selection of space**

```
** REPEAT SETTING **
DIR    → VERTICAL
TIMES  ➡ 04
SPACE  →    0 mm
```

8. **Setting for space**

```
** REPEAT SETTING **
DIR    → VERTICAL
TIMES  → 04
SPACE  →   0 mm
```
☞ ◁/▷
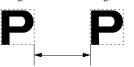
📖 Space: 0 to 255 mm

📖 Space means an interval between a design and the next design.

9. **Decision**

```
** REPEAT SETTING **
DIR    → VERTICAL
TIMES  → 04
SPACE  →  88 mm
```
☞ [SET]

10. **Set**

```
**** DESIGN EDIT ***
1.ROTATE   →  0°
2.REVERSE  → OFF
3.REPEAT   → [SET]
```
☞ [SET]

📖 To perform design edit continuously, perform "ROTATE, MIRROR" operation without pressing "SET".

11. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ↕1
        0/ 1027
01/15:123456789AB<D>
```

7. MACHINE SETTING

MACHINE SETTING
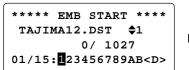
SCREEN
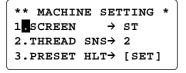
This setting displays the number of stitches/rpm [*1] during embroidery.

1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
☞ [MACHINE SETTING]
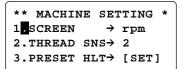
2. **Select display mode**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ ◁/▷

📖 SCREEN:ST/rpm
The number of total stitches of design of which data has been set

| 6/ 1027 |

The number of revolutions (rpm) during running of the machine

| 6/ 240 rpm |

3. **Set**

```
** MACHINE SETTING *
1.SCREEN    → rpm
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ [SET]

4. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

*1: Even if rpm is set, the number of stitches of design of which data has been set is displayed while the machine is stopping.
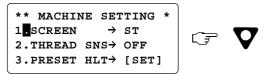
THREAD BREAKAGE SENSOR

This is the setting for thread breakage detection.

1. Switch to "MACHINE SETTING"
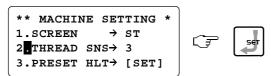
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:❶23456789AB<D>
```

2. Select thread breakage sensor

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ OFF
3.PRESET HLT→ [SET]
```

3. Select setting value

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ OFF
3.PRESET HLT→ [SET]
```

📖 Setting value: OFF, 1, 2, 3, 4, 5
•OFF: Not to detect thread breakage
•1 to 5: To detect thread breakage by set number of stitches

※ The smaller the value, the higher the sensibility

4. Set

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 3
3.PRESET HLT→ [SET]
```

5. Completion

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:❶23456789AB<D>
```
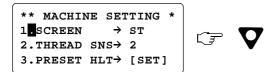
PRESET HALT (SETTING)

This setting makes the machine halt automatically when the number of stitches reaches the set value.
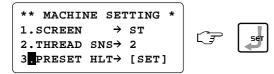
1. **Switch to "MACHINE SETTING"**
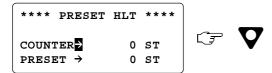
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ MACHINE SETTING

2. **Select preset halt**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ ▼

3. **Decision**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ SET

4. **Select setting**

```
**** PRESET HLT ****

COUNTER→     0 ST
PRESET  →    0 ST
```

☞ ▼

5. **Input setting value**

```
**** PRESET HLT ****

COUNTER→     0 ST
PRESET  →    0 ST
```

☞ 7 8 9 0
4 5 6
1 2 3
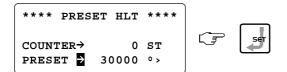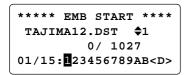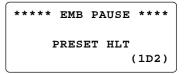
📖 To correct the setting value, press CLEAR "CLEAR" to input value again.

6. **Set**

```
**** PRESET HLT ****

COUNTER→      0 ST
PRESET  →  30000 °>
```

☞ SET

📖 When the machine is topped by preset halt, the warning buzzer will sound and the message as shown below will be displayed.

```
***** EMB PAUSE ****

    PRESET HLT
          (1D2)
```

Press the stop switch to release the preset halt, and perform necessary works.

7. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
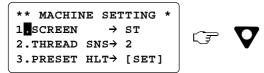
PRESET HALT (COUNTER)

This setting clears the accumulated number of stitches [*1] of embroideries that have been done.

1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```
☞ 🔧 MACHINE SETTING

2. **Select preset halt**

```
** MACHINE SETTING *
1.SCREEN     → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ ▽

3. **Decision**

```
** MACHINE SETTING *
1.SCREEN     → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ SET

4. **Clear**

```
**** PRESET HLT ****

COUNTER→   1278 ST
PRESET  →  30000 ST
```
☞ CLEAR
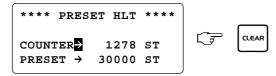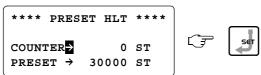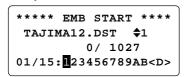
📖 To clear the setting value for preset, select "PRESET" and press CLEAR "CLEAR" with the same manner as the previous page.

5. **Set**

```
**** PRESET HLT ****

COUNTER→      0 ST
PRESET  →  30000 ST
```
☞ SET

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```
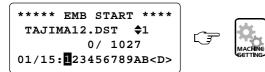
*1: The counter is effective when preset halt is set.
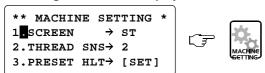
TRIM LENGTH

Set the length of remaining thread when thread trimming is performed.

1. **Switch to "MACHINE SETTING"**
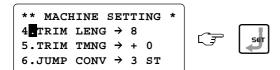
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
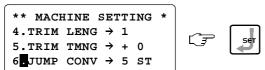
2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

3. **Selection of the setting value**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```

◁/▷

☐ Setting value: 1 to 17

Short   Long
1 ←——— ——→ 17

4. **Set**

```
** MACHINE SETTING *
4.TRIM LENG → 8
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
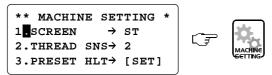
TRIM TIMING

Set timing to start thread trimming.

1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```
☞ [MACHINE SETTING]

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ [MACHINE SETTING]
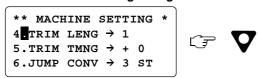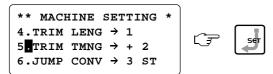
3. **Select thread trimming timing**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```
☞ ▽

4. **Selection of the setting value**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```
☞ ◁/▷

📖 Setting value: -10•••-1, 0, +1•••+10

Early   Late
-10 ◄———— 0 ————► +10
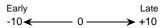
Perform adjustment according to
thread trimming condition and thread
to use.

5. **Set**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 2
6.JUMP CONV → 3 ST
```
☞ [SET]

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```
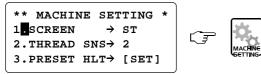
JUMP CONVERSION

This setting converts consecutive jump stitches into frame stepping [*1].
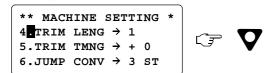
1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
☞ [MACHINE SETTING]

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ [MACHINE SETTING]

3. **Select jump conversion**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```
☞ ▽

4. **Selection of the setting value**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
```
☞ ◁/▷
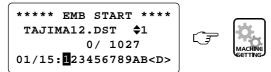
Setting value: 0,1,2, ••• 8, 9
0: Not to convert

5. **Set**

```
** MACHINE SETTING *
4.TRIM LENG → 1
5.TRIM TMNG → + 0
6.JUMP CONV → 5 ST
```
☞ [SET]

When the number of times of jump codes reaches the set value, the jump codes will be converted to frame stepping.

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

*1: Frame stepping: Rotation of the main shaft is stopped, and only the embroidery frame moves.

FD11

AUTOMATIC JUMP

This setting converts longer stitches than the setting value to automatic jump.
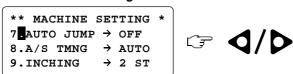
1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

3. **Selection of the setting value**

```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```

◁/▷
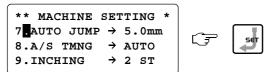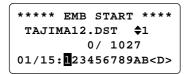
📖 Setting value: OFF, 4.0, ••• 9.9 (mm)
OFF: Not to convert

📖 Keeping ◁/▷ pressed changes value quickly.

4. **Set**

```
** MACHINE SETTING *
7.AUTO JUMP → 5.0mm
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```
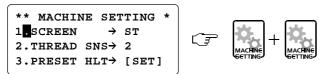
A/S TIMING

This setting sets timing [*1] to start the embroidery frame drive.
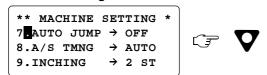
1. **Switch to "MACHINE SETTING"**
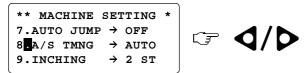
```
***** EMB START ****
 TAJIMA12.DST  ♦1
           0/ 1027
01/15:123456789AB<D>
```
☞ [MACHINE SETTING]

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN     → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ [MACHINE SETTING] + [MACHINE SETTING]

3. **Select A/S timing**

```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```
☞ ▽

4. **Selection of the setting value**
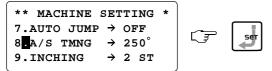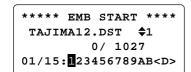
```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```
☞ ◁/▷

📖 Setting value: Auto, 250°
AUTO: Automatic adjustment
250° : Frame drive with the same tim-
ing

📖 When setting to 250° , good
thread tightening will be obtained
in general, but the machine will be
burdened.

5. **Set**

```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → 250°
9.INCHING   → 2 ST
```
☞ [SET]

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
           0/ 1027
01/15:123456789AB<D>
```

*1: Adjust frame drive start timing according to stitch length and/or rpm.

THE NUMBER OF INCHING TIMES
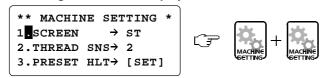
Set the number of inching times after thread trimming.

1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:123456789AB<D>
```

☞ MACHINE SETTING
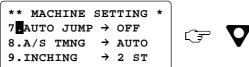
▱ When starting the machine manually after stopping the machine manually, the machine will not perform inching.

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ MACHINE SETTING + MACHINE SETTING
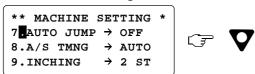
3. **Select the number of inching times**
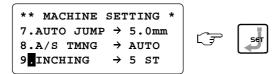
```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```

☞ ▽

4. **Selection of the setting value**

```
** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG  → AUTO
9.INCHING   → 2 ST
```

☞ ▽

▱ Setting value: 2, 3, ••• 8, 9

5. **Set**

```
** MACHINE SETTING *
7.AUTO JUMP → 5.0mm
8.A/S TMNG  → AUTO
9.INCHING   → 5 ST
```

☞ SET

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:123456789AB<D>
```
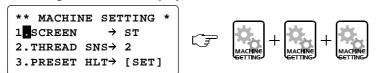
TIE SET (TIE STITCHING)

This is the setting for tie stitching when starting and/or ending embroidery.
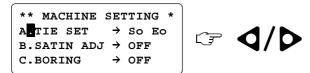
1. **Switch to "MACHINE SETTING"**
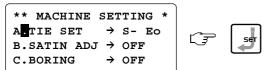
```
***** EMB START ****
 TAJIMA12.DST  ≑1
          0/ 1027
01/15:123456789AB<D>
```

☞ [MACHINE SETTING]

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING]

3. **Selection of the setting value**

```
** MACHINE SETTING *
A.TIE SET   → So Eo
B.SATIN ADJ → OFF
C.BORING    → OFF
```

☞ ◁/▷

◻ ◁ :So /S-

▷ :Eo /E-
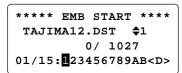
So: Tie stitching is applied to start of embroidery
Eo: Tie stitching is applied to end of embroidery
S-, E-: No tie stitching is applied

◻ When tie stitching is applied, the machine will reciprocate for one stitch.

4. **Set**

```
** MACHINE SETTING *
A.TIE SET   → S- Eo
B.SATIN ADJ → OFF
C.BORING    → OFF
```

☞ [SET]

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ≑1
          0/ 1027
01/15:123456789AB<D>
```
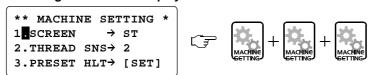
SATIN ADJUSTMENT

This setting corrects satin stitch length.

1. Switch to "MACHINE SETTING"

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

2. Switching of item to be displayed

```
** MACHINE SETTING *
1.SCREEN     → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
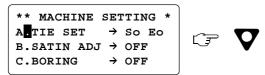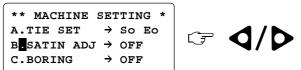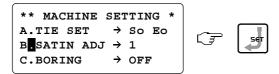
3. Selection of satin correction

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → OFF
C.BORING     → OFF
```

4. Selection of the setting value

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → OFF
C.BORING     → OFF
```
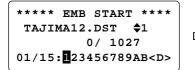
Setting value: OFF, 1, 2, 3, 4, 5
OFF: No satin adjustment
1 to 5: 0.1 to 0.5 mm

The adjusting value will be added to both sides of a stitch.

5. Set

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → 1
C.BORING     → OFF
```

6. Completion

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

GC03

BORING

This is the setting for boring device.
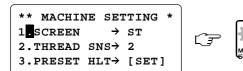
1. **Switch to "MACHINE SETTING"**
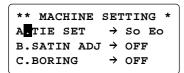
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ [MACHINE SETTING]

📖 Not available to use in 1-needle machine.

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN     → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING]

3. **Selection of the setting value**

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → OFF
C.BORING    → OFF
```

☞ ▽

4. **Selection of the setting value**

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → OFF
C.BORING    → OFF
```

☞ ◁/▷
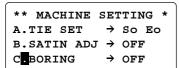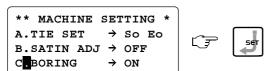
📖 OFF: Not equipped
   1: Equipped, without offset
   2: Equipped, 12 mm offset

5. **Set**

```
** MACHINE SETTING *
A.TIE SET    → So Eo
B.SATIN ADJ → OFF
C.BORING    → ON
```

☞ [SET]

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

CORDING
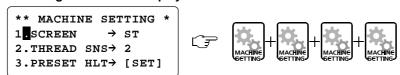
This is the setting for cording.

1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```
☞ [MACHINE SETTING]

📖 Not available to use in 1-needle machine.

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```
☞ [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING]

3. **Selection of the setting value**

```
** MACHINE SETTING *
D.CORDING   → OFF
E.COM SPEED → 9600
F.NETWORK   → OFF
```
☞ ◁/▷
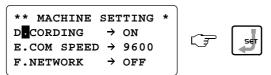
📖 OFF: Not equipped
ON: Equipped

4. **Set**

```
** MACHINE SETTING *
D.CORDING   → ON
E.COM SPEED → 9600
F.NETWORK   → OFF
```
☞ [SET]

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```
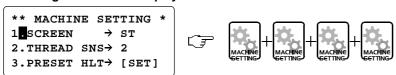
COM SPEED

This is the setting for transmitting speed (bps) by serial connection.
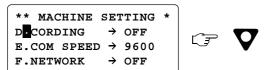
1. **Switch to "MACHINE SETTING"**
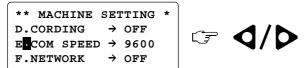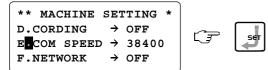
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ [MACHINE SETTING]

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN      → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

☞ [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING] + [MACHINE SETTING]

3. **Selection of the setting value**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED  → 9600
F.NETWORK    → OFF
```

☞ ▽

4. **Selection of the setting value**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED  → 9600
F.NETWORK    → OFF
```

☞ ◁/▷

📖 Setting value: 9600, 19200, 38400
Set the value according to the communication speed of the transmitting device.

5. **Set**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED  → 38400
F.NETWORK    → OFF
```

☞ [SET]

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

NETWORK

This is the setting for network connection.
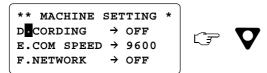
1. **Switch to "MACHINE SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```

2. **Switching of item to be displayed**

```
** MACHINE SETTING *
1.SCREEN    → ST
2.THREAD SNS→ 2
3.PRESET HLT→ [SET]
```

3. **Selection of the setting value**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED → 9600
F.NETWORK    → OFF
```
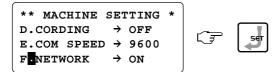
4. **Selection of connection**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED → 9600
F.NETWORK    → OFF
```
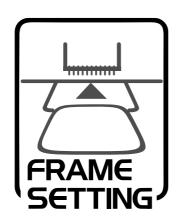
OFF: Not to connect
   1: Data transfer from PC
   2: Reading data from DG/ML

5. **Set**

```
** MACHINE SETTING *
D.CORDING    → OFF
E.COM SPEED → 9600
F.NETWORK    → ON
```

6. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```

8. FRAME SETTING

FRAME
SETTING

MANUAL SPEED
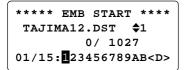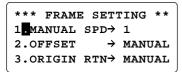
This setting sets speed when frame travel is performed manually.

1. **Switch to "FRAME SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ [FRAME SETTING]

2. **Select setting value**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

☞ ◁ / ▷
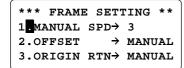
📖 Setting value: 1, 2, 3

1	2	3
Low speed	Middle speed	High speed

3. **Set**

```
*** FRAME SETTING **
1.MANUAL SPD→ 3
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

☞ [SET]

4. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

OFFSET
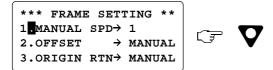
This setting makes the frame move to offset position automatically/manually.

1. **Switch to "FRAME SETTING"**
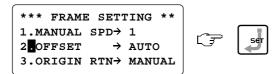
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

2. **Select offset**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

3. **Select setting value**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

📖 Setting value: AUTO/MANUAL

Auto	The frame will move automatically to offset position at temporary stop or end of embroidery
Manual	The frame will not move automatically

4. **Set**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → AUTO
3.ORIGIN RTN→ MANUAL
```

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

ORIGIN RETURN
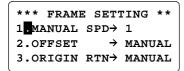
This setting makes the frame move to the design start position manually/automatically.

1. **Switch to "FRAME SETTING"**
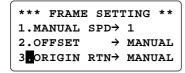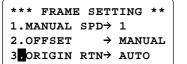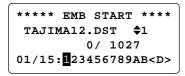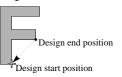
```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

☞ [FRAME SETTING]

Origin return

Design end position

Design start position

2. **Select origin return**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

☞ ▽

3. **Select setting value**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

☞ ◁/▷

Setting value: AUTO/MANUAL

Auto	The frame will move to the design start position when embroidery is finished
Manual	It is possible to stop or perform frame back at end position of embroidery

4. **Set**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ AUTO
```

☞ [SET]

5. **Completion**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

In case of manual setting
When performing next embroidery after finish of embroidery, perform origin return (p.9-3) manually.
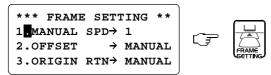
FRAME MODE

Set the embroidery frame to flat frame/cap frame/cylindrical frame.

1. Switch to "FRAME SETTING"

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
☞ 🔲 FRAME SETTING

2. Switching of item to be displayed

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```
☞ 🔲 FRAME SETTING
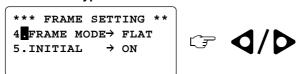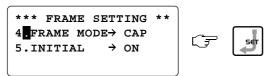
3. Select frame type
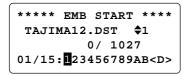
```
*** FRAME SETTING **
4.FRAME MODE→ FLAT
5.INITIAL   → ON
```
☞ ◁/▷

📖 Setting value: FLAT, CAP, CYLNDR, BORDER

4. Set

```
*** FRAME SETTING **
4.FRAME MODE→ CAP
5.INITIAL   → ON
```
☞ SET

5. INITIAL

```
*** TEJT-C SERIES **

FRAME   → CAP
INITIAL→ ON     <D>
```
☞ SET

📖 When setting the frame mode, the screen will return to the initial screen. When changing frame type, the position of the origin will change. Press "SET" to perform "INITIAL" operation.

6. Completion

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

📖 Range in which it is possible to perform embroidery is limited by frame type.

Frame type	X-axis	Y-axis
Normal/tubular goods frame	±250 mm	±180 mm
Cap frame	±180 mm	+43 mm -35 mm
Cylindrical frame	±65 mm	±90 mm
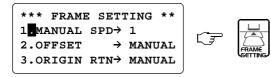
INITIAL

This setting performs origin search at turning on the power to return the frame to the position where the power was shut off.
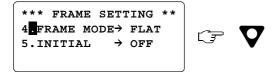
1. **Switch to "FRAME SETTING"**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```

  ☞ [FRAME SETTING]

📖 "Initial" operation searches the center of the embroidery frame.
Origin of frame differs depending on frame type.

2. **Switching of item to be displayed**

```
*** FRAME SETTING **
1.MANUAL SPD→ 1
2.OFFSET    → MANUAL
3.ORIGIN RTN→ MANUAL
```

  ☞ [FRAME SETTING]

3. **Select initial**

```
*** FRAME SETTING **
4.FRAME MODE→ FLAT
5.INITIAL   → OFF
```

  ☞ ▽

4. **Selection of the setting value**

```
*** FRAME SETTING **
4.FRAME MODE→ FLAT
5.INITIAL   → ON
```

  ☞ [SET]
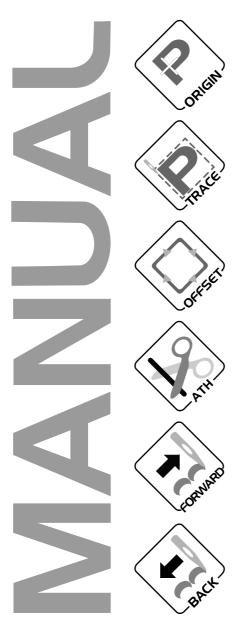
📖 Setting value: ON/OFF
ON: To search the origin when the power switch is turned "ON"
OFF: Not to search origin

5. **Set**

```
*** FRAME SETTING **
4.FRAME MODE→ FLAT
5.INITIAL   → ON
```

  ☞ [SET]

6. **Completion**

```
*** TEJT-C SERIES **

FRAME  ⬍ FLAT
INITIAL→ ON     <D>
```

  ☞ [SET]

📖 When changing "INITIAL" to set to "ON", the screen will return to the initial screen.
Pressing "SET" will perform origin search to cause the screen to become "EMB START" screen.

📖 "INITIAL" operation is required in the following cases:
  1. Frame type has been changed
  2. When the power was shut off in process of embroidery
  3. When installing each software from floppy disk
  4. When installing PANEL software from PC

9. MANUAL OPERATION

FD11

MANUAL COLOR CHANGE

Slide the needle bar case to perform color change.
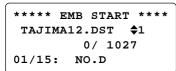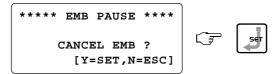
> ### ⚠ CAUTION
>
> 🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**
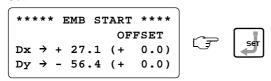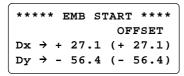
1. Switch to manual color change

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:■23456789AB<D>
```
☞   AUTO ⬍ MANUAL ▬

📖 When switching from automatic to manual, the lamp will light.

AUTO ⬍ MANUAL ▬ ➡ AUTO ⬍ MANUAL ▭

2. Select needle bar

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:  NO.D
```
☞   ◀ COLOR CHANGE ▶

📖 It is not available for use in 1-needle machine.

3. Set

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:  NO.5* →[SET]
```
☞   SET

📖 Pressing the "SET" key will cause the needle bar case to slide.

4. Completion

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:  NO.5
```
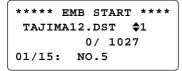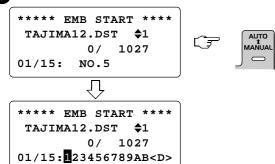
↺ Manual➡Return to automatic

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/  1027
01/15:  NO.5
```
☞   AUTO ⬍ MANUAL ▭

📖 When switching from manual to automatic, the lamp will be unlit.

AUTO ⬍ MANUAL ▭ ➡ AUTO ⬍ MANUAL ▬

⬇

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/  1027
01/15:■23456789AB<D>
```

GC06

MANUAL ORIGIN RETURN

Return the embroidery frame to design start position.

⚠ **CAUTION**

🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

1. Select origin return

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍1
        63/ 1027
01/15:123456789AB<D>
```

☞ P ORIGIN

2. Confirm

```
***** EMB PAUSE ****

    CANCEL EMB ?
     [Y=SET,N=ESC]
```

☞ SET

📖 When performing origin return in process of embroidery, it will become impossible to continue embroidery.

📖 When pressing "SET", the frame will move to the position of the origin.

3. Completion

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```

TRACE

Move the embroidery frame along with embroidery space (the maximum size of X and Y directions) of design data.

> # ⚠ CAUTION
>
> 🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

1. **Select trace**

```
***** EMB START ****
 TAJIMA12.DST  ♦1
         0/ 1027
01/15:123456789AB<D>
```

☞ 〔P TRACE〕

In process of tracing

```
******* TRACE ******
 TAJIMA12.DST  ♦1
X SIZE→  54.0 mm
Y SIZE→  10.7 mm
```

📖 For details of trace, refer to p.10-7.

📖 It is not possible to perform tracing in process of embroidery.

📖 Pressing the trace key will cause trace start position to become design start position.

📖 Embroidery size of design will be displayed during tracing.

OFFSET (SETTING FOR POSITION)

Set offset position.
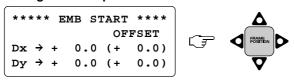
> ⚠ **CAUTION**
>
> 🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

1. Select offset

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:▮23456789AB<D>
```

☞ [OFFSET]

📖 When changing frame type, the offset position will return to (0, 0).

2. Setting for offset position
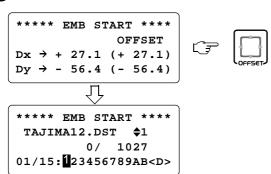
```
***** EMB START ****
            OFFSET
Dx → +  0.0 (+  0.0)
Dy → +  0.0 (+  0.0)
```

☞ [FRAME POSITION]
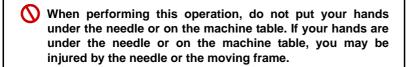
📖 Use the frame travel key to set the offset position. Frame travel position is displayed with coordinate values.

3. Set

```
***** EMB START ****
            OFFSET
Dx → + 27.1 (+  0.0)
Dy → - 56.4 (+  0.0)
```

☞ [SET]

📖 When pressing "SET", the set position will be registered to the machine, and this position will be applied to all design data.

4. Completion

```
***** EMB START ****
            OFFSET
Dx → + 27.1 (+ 27.1)
Dy → - 56.4 (- 56.4)
```

📖 When setting offset of frame setting to auto, the frame will move to the offset position when the machine stops temporarily or after completion of embroidery. At this moment, the screen shown left will be displayed. The screen shows that the machine stops at the offset position.

↺ **Return to the original position**

```
***** EMB START ****
            OFFSET
Dx → + 27.1 (+ 27.1)
Dy → - 56.4 (- 56.4)
```

☞ [OFFSET]

⬇

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/  1027
01/15:▮23456789AB<D>
```

📖 When pressing the offset key, the frame will return to the previous position before frame travel.

OFFSET (CHANGE OF POSITION)

Change offset position.

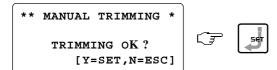⚠️ **CAUTION**

🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

---

1. Select offset

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
        0/ 1027
01/15:▉23456789AB<D>
```

☞ 🔲 OFFSET

📖 When changing frame type, the offset position will return to (0, 0).
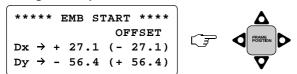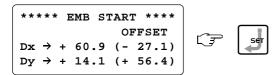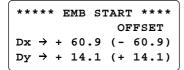
2. Change offset position

```
***** EMB START ****
            OFFSET
Dx → + 27.1 (- 27.1)
Dy → - 56.4 (+ 56.4)
```

☞ [FRAME POSITION arrows]

📖 Move the frame to the registered off-set position. Set a new position using the frame travel key.

3. Set

```
***** EMB START ****
            OFFSET
Dx → + 60.9 (- 27.1)
Dy → + 14.1 (+ 56.4)
```

☞ SET

📖 When pressing "SET", the moved position will be registered to the machine.

4. Completion

```
***** EMB START ****
            OFFSET
Dx → + 60.9 (- 60.9)
Dy → + 14.1 (+ 14.1)
```

↩ **Return to the original position**

```
***** EMB START ****
            OFFSET
Dx → + 60.9 (- 60.9)
Dy → + 14.1 (+ 14.1)
```

☞ 🔲 OFFSET

⬇

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
        0/ 1027
01/15:▉23456789AB<D>
```

📖 When pressing the offset key, the frame will return to the previous position before frame travel.
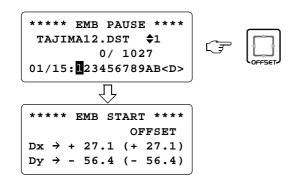
OFFSET (FRAME TRAVEL)

This operation moves the frame to offset position/the current position.
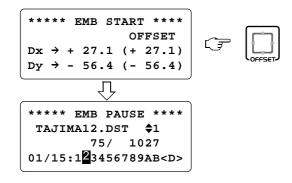

⚠️ **CAUTION**

🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

---

1. **Move to the offset position**

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍1
         0/ 1027
01/15:123456789AB<D>
```

👉 [OFFSET]

⬇

```
***** EMB START ****
             OFFSET
Dx → + 27.1 (+ 27.1)
Dy → - 56.4 (- 56.4)
```

📖 When pressing the offset key, the frame will move to the registered offset position.

↩ **Return to the original position**

```
***** EMB START ****
             OFFSET
Dx → + 27.1 (+ 27.1)
Dy → - 56.4 (- 56.4)
```

👉 [OFFSET]

⬇

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍1
        75/  1027
01/15:123456789AB<D>
```

📖 When pressing the offset key, the frame will return to the previous position before frame travel. Pressing the start switch will make the frame return to the original position and will start embroidery.
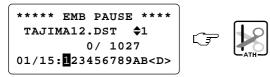
MANUAL THREAD TRIMMING

Perform thread trimming.

⚠ **CAUTION**

🚫 When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.

---

1. **Select ATH (thread trimming)**

```
***** EMB PAUSE ****
 TAJIMA12.DST  ‡1
          0/ 1027
01/15:123456789AB<D>
```

👉 [ATH icon]

2. **Confirm**

```
** MANUAL TRIMMING *

    TRIMMING OK ?
      [Y=SET,N=ESC]
```

👉 [SET key]
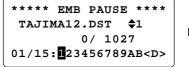
📖 When selecting ATH, the main shaft will rotate. When tie stitching (p.7-12) is set, the machine will embroider for one stitch to perform thread trimming.

9-8

GC03

FRAME BACK/FORWARD (FEED UNIT)

This operation performs frame back/forward by set feed unit.
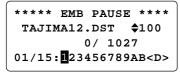
⚠ **CAUTION**

🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

---

1. Select mode (color change unit)

```
***** EMB PAUSE ****
 TAJIMA12.DST  ♦1
          0/ 1027
01/15:123456789AB<D>
```
☞ (MODE)

2. Frame forward by color change unit

```
***** EMB PAUSE ****
 TAJIMA12.DST  ♦100
          0/ 1027
01/15:123456789AB<D>
```
☞ ➡ FORWARD

3. Completion

```
***** EMB PAUSE ****
 TAJIMA12.DST  ♦1
        100/ 1027
01/15:123456789AB<D>
```
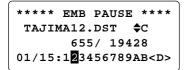
📖 Setting value:1, 10, 100, C, n-stitch
   1: 1 stitch unit
   10: 10 stitch unit
   100: 100 stitch unit
   C: Color change unit
   n: Stitch position input by numerical key

📖 When keeping on pressing "FORWARD/BACK" for one or more seconds, frame traveling will be performed to color change even if the key is released.

📖 When pressing "FORWARD", frame travel will be performed to the stitch position of color change. Every pressing the key will perform frame forward to the next color change position.

FRAME BACK/FORWARD (N-STITCH FEED)

This operation performs frame back/forward to input stitch position.
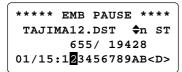
> ⚠️ **CAUTION**
>
> 🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

1. Select mode (n stitch)

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍C
        655/ 19428
01/15:123456789AB<D>
```
☞ MODE

📖 Setting value:1, 10, 100, C, n-stitch
1: 1 stitch unit
10: 10 stitch unit
100: 100 stitch unit
C: Color change unit
n: Stitch position input by numerical key

2. Input the number of stitches

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍n ST
        655/ 19428
01/15:123456789AB<D>
```
☞ 7 8 9 0
4 5 6
1 2 3

📖 When the input number of stitches is larger than the current number of stitches, frame forward will be performed. When it is smaller than the current number of stitches, frame back will be performed.

3. Move the frame to stitch position

```
*** FORWARD/BACK ***
 TAJIMA12.DST  ⬍n ST
   *  3856/ 19428
01/15:123456789AB<D>
```
☞ SET

📖 When pressing "SET", frame forward (frame travel) will be performed to the input stitch position.

4. Completion

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍n ST
       3856/ 19428
01/15:123456789AB<D>
```

FRAME FORWARD

Perform frame forward.

⚠️ **CAUTION**

🚫 **When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.**

---

1. **Select forward**

```
***** EMB START ****
 TAJIMA12.DST  ⬍1
          0/ 1027
01/15:123456789AB<D>
```

☞ [FORWARD]

📖 When 1 stitch unit is set, pressing "FORWARD" once will perform frame forward for one stitch.

2. **Keep on pressing the forward key**

```
****** FORWARD *****
 TAJIMA12.DST  ⬍1
          2/ 1027
01/15:123456789AB<D>
```

☞ [FORWARD]

📖 When keeping on pressing "FORWARD" for one or more seconds, frame travel will be performed to color change even if the key is released.
To stop the machine, press the stop switch.

3. **Stop at color change position**

```
***** EMB PAUSE ****
 TAJIMA12.DST  ⬍1
        655/ 1027
01/15:123456789AB<D>
```

FRAME BACK

Perform frame back.
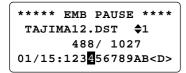
```
                ⚠ CAUTION

   🚫  When performing this operation, do not put your hands
       under the needle or on the machine table. If your hands are
       under the needle or on the machine table, you may be
       injured by the needle or the moving frame.
```

1. **Select back**

```
***** EMB PAUSE ****
 TAJIMA12.DST  ♦1
        655/ 1027
01/15:12345 6789AB<D>
```

☞ [← BACK]

📖 When 1 stitch unit is set, pressing "BACK" once will perform frame forward for one stitch.

2. **Keep on pressing the back key**

```
******  BACK  ******
 TAJIMA12.DST  ♦1
        653/ 1027
01/15:12345 6789AB<D>
```

☞ [← BACK]

📖 When keeping on pressing "BACK" for one or more seconds, frame travel will be performed to color change even if MANUAL key is released. To stop the machine, press the stop switch.

3. **Stop at color change position**

```
***** EMB PAUSE ****
 TAJIMA12.DST  ♦1
        488/ 1027
01/15:1234 456789AB<D>
```

📖 Frame back will be performed to color change position.

10. OUTLINE OF FUNCTIONS

FD11
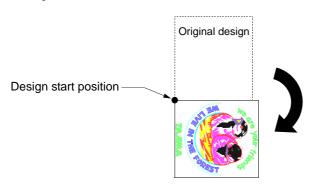
ROTATE
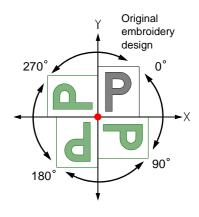
This function rotates design of which data has been set.

The design is rotated centering the design start position.

📖 Rotation unit: 90˚

<Example: 90˚rotation>

Original design

Design start position

Y

Original embroidery design

270˚

0˚

180˚

90˚

X
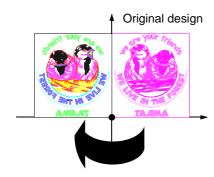
MIRROR

This function reverses design of which data has been set.
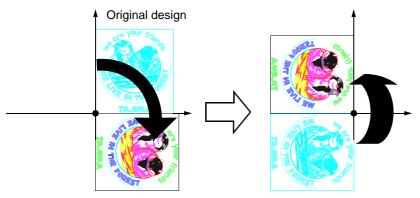
The design is reversed on X/Y-axis based on the design start position as the base line.
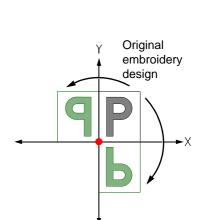
📖 Reversing axis: X (Symmetric with respect to the X-axis)/Y (Symmetric with respect to the Y-axis)

<Example: Y-axis reversion>;

Original design

Y

Original embroidery design

X

<Example:90˚-rotation and X-axis reversion>

Original design
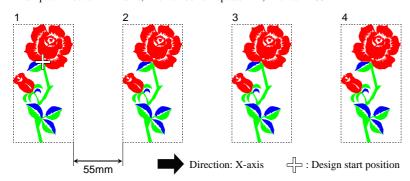
📖 When both rotation and REVERSE are set, the order of priority becomes rotation → reverse (reversion).
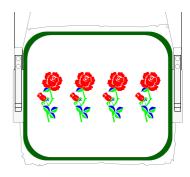
REPEAT

This function performs embroidery repeatedly using design of which data has been set.

Set embroidery direction, the number of times of repeat, and design interval.

📖 It is possible to rotate and/or reverse (mirror) the design repeatedly arranged.
The order of priority: Repeat → rotation → reverse

<Example: Direction → X-axis, The number of repeats → 4, Interval → 55 mm>

55mm

➡ Direction: X-axis   ✛ : Design start position
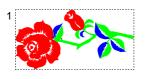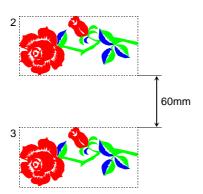
📖 When performing "Trace" after setting "Repeat", it will be possible to confirm the whole embroidery space. Adjust start position, the number of repeats, interval, etc. so that the embroidery space does not exceed the frame.

<Example: Direction → X-axis, The number of repeats → 3, Interval → 60 mm, Rotation → 90°, Reverse → Y>
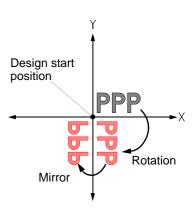
Direction: X-axis (Even if setting is made to X-axis, embroidery is performed along Y-axis because the design is rotated by 90°.)

60mm

📖 If reverse is applied on X-axis in the repeat setting above, the order of embroidery will become in reverse.

Design start position

PPP

Rotation

Mirror

OFFSET

This function makes the frame move to the position set by offset, and return the frame to the original position after working.
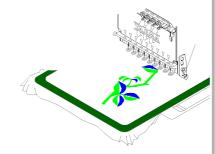
Offset includes manual/automatic setting (frame setting).

1. Manual offset

Pressing "OFFSET" at machine stop will cause the frame to move to the offset position. Pressing the "OFFSET" once more will cause the frame to return to the original position.

<Example: Placing applique>

(1) Stop the machine

Offset position

Stop position

(2) Move the frame to the offset position

(3) Place applique
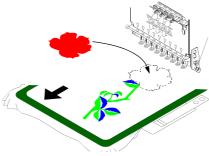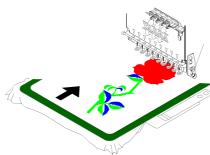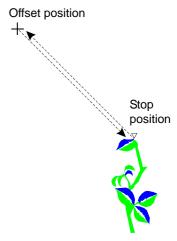
(4) Press the offset button to return the frame to the original position (When pressing the start button, the frame will return to the original position to restart the embroidery).

📖 When placing applique, etc., it is convenient if temporary stop (p.5-5) is set at color change.
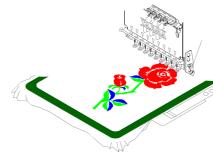
2. Automatic offset
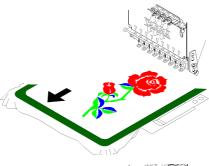
This setting makes the frame move to the offset position automatically when embroidery is finished if offset position is set and offset of frame setting is set to auto.

<Example: Exchange of frame>

(1) Embroidery is finished

Offset position

End position of embroidery

Design start position
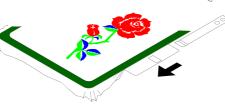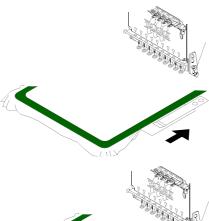
(2) Move the frame to the offset position
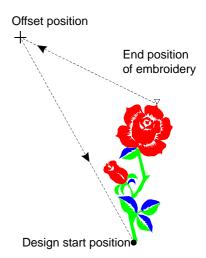
(3) Change the frame

(4) New frame (Re-stretching of cloth)

(5) When pressing the start button, the frame will move to the design start position and embroidery will start.

📖 When embroidering the same design, to perform embroidery from the same start position, set frame setting "START POINT (Origin Return)" (p.8-4) to auto.
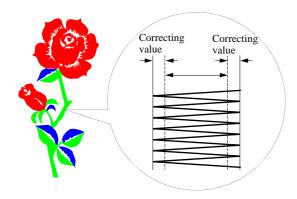
SATIN ADJUSTMENT

This function expands satin stitch length.

To expand satin stitch length, set satin adjustment of machine setting.

Setting value: OFF, 1～5

📖 Although 1.5 mm and longer stitches are adjusted by setting value of satin adjust, regarding
less than 1.5 mm long stitches the adjusting value will become small.
When switching the DIP switch (2DSWS: p.2-6) on the operation panel, it is possible to
apply satin adjust to 0.6 mm and longer stitches.
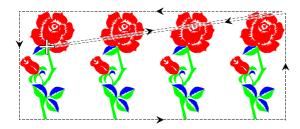
TRACE
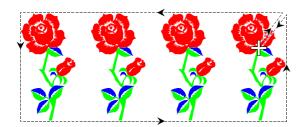
This function makes the frame move along the square embroidery space of design of which data has been set.

When tracing the set design, the frame will move from the design start position to four corners (right, rear, left, and front) of the embroidery space and then return to the design start position.
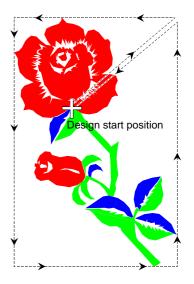
When repeat is set, the machine will trace the whole embroidery space.

Design start position

If mirror: Y is set to the repeat shown above, the machine will perform trace as shown below.
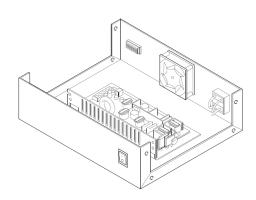
📖 Pressing the trace key will cause trace start position to become design start position.

11. ELECTRO-COMPONENT PARTS

⚠️ **CAUTION**
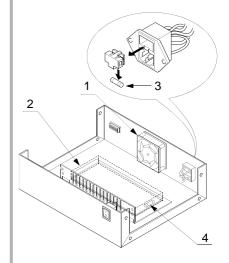
🚫 **Do not block wind flow of the cooling fan.**
   Inside of the box will overheat to lead to breakdown.
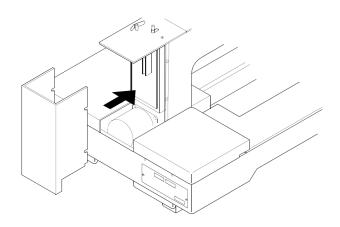
POWER SUPPLY BOX
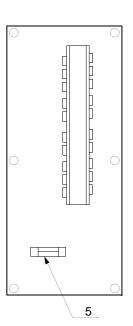
1:Cooling fan

2: DC power supply

3:Glass tube fuse (250V / 6.3A) For power supply

4: Glass tube fuse (250V / 8A) For power supply

POWER CARD

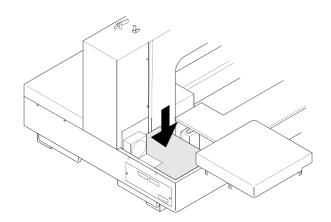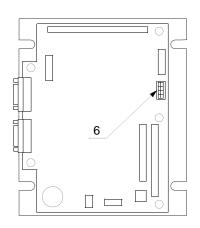5: Glass tube fuse (125V / 20A)
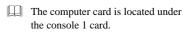
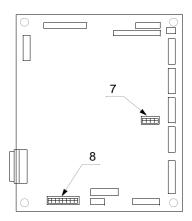   For DC power supply 24 V

CONSOLE 1 CARD

6: DIP switch

COMPUTER CARD

7: DIP switch

8: DIP switch

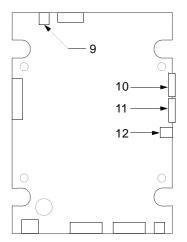📖 The computer card is located under the console 1 card.

CONSOLE 2 CARD

9: DIP switch
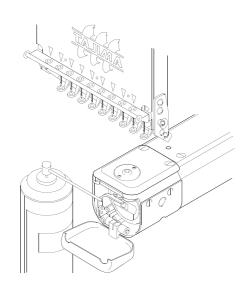
10: DIP switch

11: DIP switch

12: DIP switch

The console 2 card is located in the operation panel.

12. TROUBLESHOOTING AND MAINTENANCE

WHEN THE MACHINE IS STOPPED DURING OPERATION

There are two main machine stop factors: one is stop by occurrence of error and another is stop by normal stop factor. When the machine operation is interrupted with code number displayed on the screen, carry out the troubleshooting referring to the code chart below.

```
****EMB PAUSE****

  THREAD BREAK
           (291)
```

Example of stop by occurrence of error

1. Stop by occurrence of error

📖 When releasing the error display
    (1) Confirm the contents of error.
    (2) Take proper action. If a code number of 300 series is displayed, contact the distributor.
    (3) Press the stop button to release the error.

Code number	Stop Factor	Corrective Action
211	The main shaft has stopped deviating from the fixed position	Adjust the stop position of the main shaft (p.12-3) so that it is located at the fixed position.
225	Stitching outside the embroidery space.	Move the frame manually so that the design fits in the embroidery area.
281	The target needle position is not detected even after 15 seconds after start of color change.	• Adjust needle position (p.12-3). • Check or replace the potentiometer (needle position sensor). • Correct mis-input of needle position.
291	The machine detected thread breakage.	Check upper thread/under thread.

2BA	Input of design data exceeding memory capacity.	• Press the ESC key to stop data input.
		  📖Input the design data again after deleting unnecessary design data.
		• Press the SET key to perform data set without data input to make embroidery possible.
		  📖When the power is shut off on the way of embroidery, data will be lost.

2CF	Stop by emergency stop switch	Release the lock of the emergency stop switch.
2FC	Abnormal temperature in the machine	Check if the room temperature is too high. Check the cooling fan.
316	A main shaft motor error signal is detected.	Replace the power card, main shaft motor.
322	An X-axis motor error signal is detected.	Replace the power card, X-axis motor.
323	A Y-axis motor error signal is detected.	Replace the power card, Y-axis motor.
3A6	Incorrect ATH movable knife retractable position	Check the position of ATH movable knife.
3B5	Communication error in the controller	Turn on the power again.
3B6	Communication error with the external device	Check the connecting cable, external device.
3D5	RAM memory error	• Install the operation program again. • Replace the Console 1 card.
B01	Floppy disk format has an error.	• Format the floppy disk. • Replace with a new formatted floppy disk.
B04	No floppy disk has been inserted.	Insert a floppy disk.
BC1	No design is registered on the floppy disk.	Insert the floppy disk in which design data is registered.
BC3	Disk driver has abnormality.	Replace the disk driver.
	Sector of floppy disk has broken.	• Format floppy disk. • Replace with a new formatted floppy disk.
	It is not possible to read floppy disk.	
C01	The FDD does not work.	Check if the floppy disk is inserted to the fixed position. Check the FDD connector. If there is no problem with the connection, replace the FDD unit.

2. Maintenance stop

Maintenance stop is stop for maintenance. It is not caused by occurrence of error.

□ The message is displayed when embroidery starts (pressing the start button).

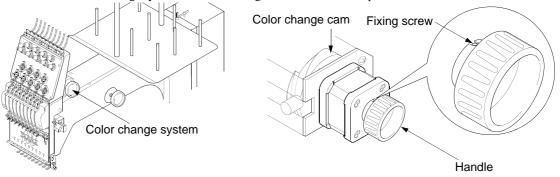|	

When the message shown right is displayed on the screen, supply oil to the specified spots (p.12-7). After the lubrication, press the stop button to release the maintenance mode to continue working.	`**MAINT.REQUIRD**`
	`One drop of oil`
	
	`→ As per Inst. Manual`

When the message shown right is displayed on the screen, grease the specified spots (p.12-8). After the greasing, press the stop button to release the maintenance mode to continue working.	`!CAUTION:Grease Cams`
	`Take-up, Presser`
	
	`→ As per Inst. Manual`

3. Adjustment of needle position

When the change cam deviates from the fixed position, the machine will not work. Adjust needle position with the following operations.

(1) Rotate the handle of color change system so that the fixing screw comes to the top.
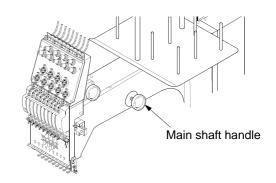

Color change cam   Fixing screw

Color change system

Handle

□ When the fixing screw of the handle is positioned at the top, odd-numbered needle bars are selected.

4. Adjustment of stop position of main shaft

```
***** EMB START *****
 TAJIMA12.DST  ♦1
        0/ 1027 ■■
01/15:▮23456789AB<D>
```

When the main shaft stops deviating from the fixed position, black squares as shown in the left illustration will blink. Perform manual color change (p.9-2) to rotate the main shaft to return stop position to the fixed position. After stop position returns to the fixed position, perform manual color change once again to return to the original needle bar.

□ When rotating the main shaft handle to the position where black squares disappear, the position is the stop position of the main shaft. Rotate the main shaft handle while pushing it.

Main shaft handle

WHEN TROUBLE OCCURS

<div align="center">

⚠ **CAUTION**

</div>

ℹ **Adjustment includes some complicated works. Consult your local distributor before working.**

Examples for causes and adjustments when trouble(s) occur are described below.

	Cause	Adjust
Machine cannot start	Loose or broken belts	Adjust the belt tension or replace the belt.
	Needle position signal, NOT detected.	Adjust needle position (p.12-3) so that normal needle position signal is displayed at the column of needle position display of the operation panel.
	Poor connection of connector	Securely connect the connectors.
Stop position error	Loose or soiled belt	Adjust the belt tension or clean the belt.
	Galling of driving parts	Adjust or replace the needle bar drive system and/or rotary hook.
Incorrect color changing	Stop position is incorrect.	Adjust the position.
	Position of take-up lever is wrong.	Adjust the position of the take-up lever at the stop position so that its position is the same as others.
	Needle position NOT detected.	Adjust needle position so that normal needle position signal is displayed at the column of needle position display of the operation panel (p.12-3).
Jump error	Incorrect positioning of parts related to needle bar drive system	Adjust the attaching position of the needle bar reciprocator set with the upper dead point stopper.
Design displaced	Incorrect positioning of frame drive belt	Adjust the belt tension.
	Malfunctioning of frame drive system	Replace/adjust the parts.
	Overall frame weight is excessive.	Lower the r.p.m. of the main shaft.
	Drive unit (X, Y-axes) defective	Replace the drive unit.
		Replace the X-axis/Y-axis drivers.
Thread breakage	Wrong needle-rotary hook timing or improper gap	Adjust the timing or gap.
	Wrong needle bar lower dead point	Readjust the lower dead point.
	Scratches on thread passing area	Remove the scratches.
	Incorrect upper/lower thread tension	Adjust the tension.
	Repeated stitching at the same point	Correct the data.
	Incorrect take-up lever timing	Readjust the take-up lever driving cam timing.
ATH	Thread is not trimmed.	Adjust the ATH knife position.

DAILY MAINTENANCE

1. WARNINGS AND CAUTIONS

⚠️ **WARNING**

To prevent accidents resulting in injury or death and physical damage, the following must be observed when performing daily maintenance (cleaning, lubrication, greasing, and/or inspection).
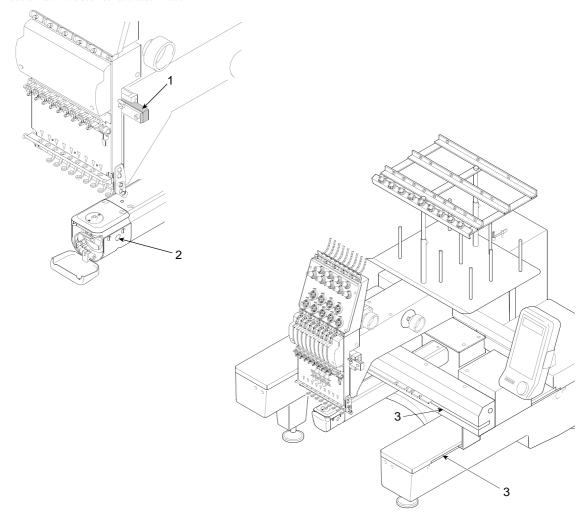
❗The maintenance operations must be performed by properly trained personnel.

❗When restarting the machine after maintenance operation, attach all covers etc. which were removed for maintenance operation.

⚠️ **CAUTION**

❗Perform daily maintenance in the specified schedule.
If the daily maintenance is not observed, the machine may fail to operate correctly. Since the loss incurred by ignoring the daily maintenance instructions can be judged "not covered by guarantee".

❗If the machine is not used for a long period, turn the power switch ON in regular intervals.
Although each card of the machine has a backup battery, data may be lost for about one month because voltage of the battery will come down gradually due to discharge when the power switch is turned off.

❗Assure enough illumination.
Assure 300 lux or more for working areas including underneath part of the machine table when changing under threads or performing daily maintenance.
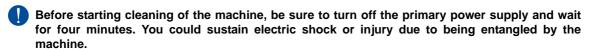
2. Cleaning

⚠️ **WARNING**

🛈 Before starting cleaning of the machine, be sure to turn off the primary power supply and wait for four minutes. You could sustain electric shock or injury due to being entangled by the machine.

🛈 The maintenance operations must be performed by properly trained personnel.

🛈 When restarting the machine after maintenance operation, attach all covers etc. which were removed for maintenance operation.

Cleaning area	Cleaning cycle
(1)Case linear section	Once/week
(2) ATH section	Everyday
(3) X/Y-axis drive system	Once/2 weeks

📖 1-needle machine does not have case linear.

3. Lubrication

> ⚠ **WARNING**
>
> ❗ During machine lubrication, turn OFF the power switch. You could sustain severe injuries due to being entangled by moving machine units.
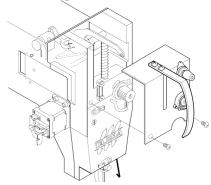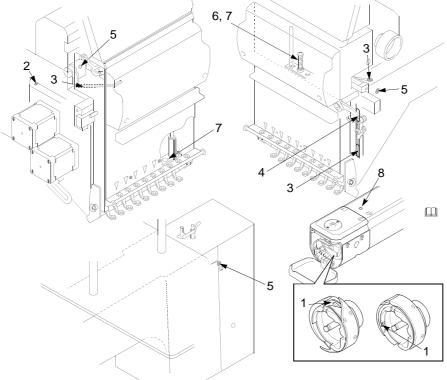
> ⚠ **CAUTION**
>
> ❗ Keep the lubrication cycles as shown below. Deviated lubrication cycles may cause thread breakage.
>
> ❗ When supplying lubricating oil, use only Tajima's genuine SF oil or equivalent (#150 spindle oil: ISO viscosity grade = VG18).
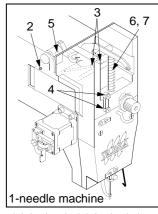
Lubrication Points	Lubrication Cycle
(1) Rail on rotary hook	Every 3 to 4 hours of operation
(2) Drive shaft of presser foot reciprocator (3) Needle bar drive shaft	Once/day
(4) Presser foot drive shaft (5) Inside the arm (6) Needle bar (7) Felt packing (needle bar)	Once/week
(8) Inside the cylinder bed	Once/3 months

📖 When supplying oil to 1-needle machine, remove the top cover of the needle bar case.

📖 As the guidance persuading the operator to perform lubrication to the rail section of rotary hook, the machine has a function to display maintenance information (p.12-3) on the operation panel.When the maintenance information is displayed, turn OFF the power switch and supply oil to the rail section of rotary hook.For other lubrication cycles, refer to the chart shown above.

1-needle machine

📖 When lubricating the lubrication hole (red mark) of the rotary hook, attach the accessory lubricating nozzle to the tip of the oiler. Cut the tip of the nozzle according to necessary length.

Lubricating nozzle

4. Greasing

> ⚠️ **WARNING**
>
> ❗During machine greasing, turn OFF the power switch. You could sustain severe injuries due to being entangled by moving machine units.
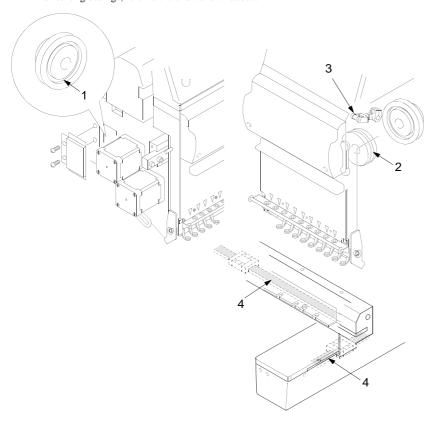
> ⚠️ **CAUTION**
>
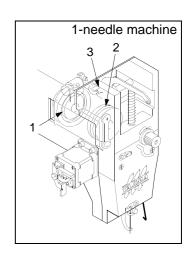> ❗Please contact the distributor for further information about greasing.
>
> ❗When greasing, use only high quality mineral oil based lithium grease or equivalent.

Greasing Points	Greasing Cycle
(1) Presser foot cam (2) Take-up lever drive cam (3) Roller of take-up lever	Once/3 months
(4) X/Y-axis drive system	Once/6 months

📖 As the guidance persuading the operator to perform greasing, the machine has a function to display maintenance information (p.12-3) on the operation panel.

When the maintenance information is displayed, turn OFF the power switch and perform greasing to the specified spots.

For other greasings, refer to the chart shown above.

5. Inspections

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⚠ **WARNING**

🛈 During machine inspection, turn OFF the primary power supply. (Before disconnecting the primary power supply, turn OFF the power switch.) You could sustain severe injuries due to being entangled by moving machine units.

</div>

Inspection Point	Contents	Cycle
(1) Each belt of main shaft drive system	Tension and wear of belt, Existence of crack	
(2) Each belt of X/Y-axis drive system	Tension and wear of belt, Existence of crack	Once/3 months
(3) Rotating and sliding sections	Degree of wear	

6. Repair

<div style="border: 2px solid;">

⚠ **WARNING**

To prevent accidents resulting in injury or death and physical damage, the following must be observed when performing the repairs of the machine.
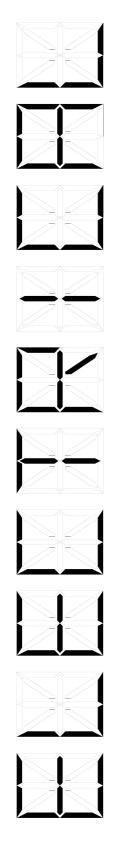
🛈 Before starting repair of the machine, be sure to disconnect the primary power supply to the machine and wait for 4 minutes. (Before disconnecting the primary power supply, turn OFF the power switch.) It takes 4 minutes until the machine becomes completely discharged.

🛈 If the machine needs repairs, the repairs must be done only by the service personnel assigned and trained by Tajima or qualified technician. (Consult the distributor.) Do not change the specification nor modify the parts of the machine. Such modification could risk the operational safety.

🛈 When restarting the machine after repairs, attach all covers, etc., which were removed for the repair operation.
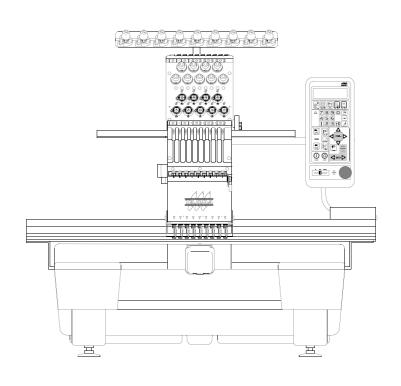
</div>

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⚠ **CAUTION**

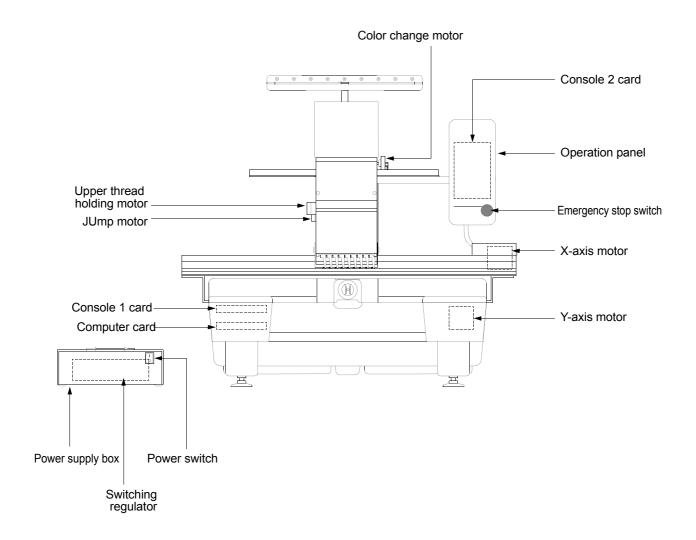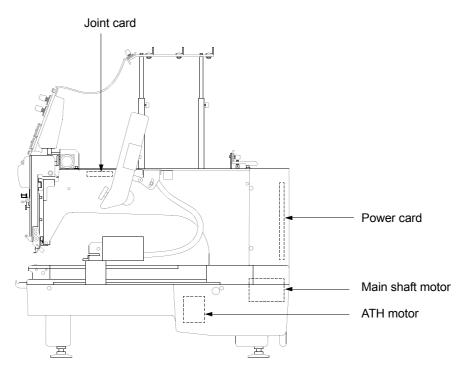🛈 For the machine repairs, use TAJIMA genuine parts for replacement.
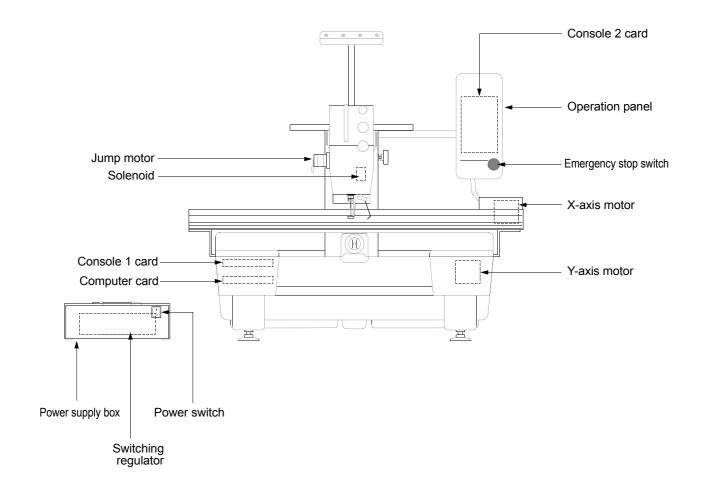
</div>

ELECTRO-RELATIVE DRAWING

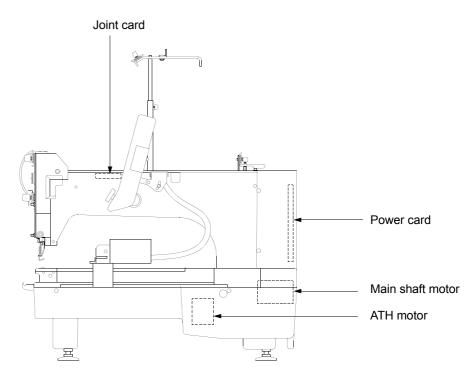## 1. Layout of electrical parts

Color change motor

Console 2 card

Operation panel

Upper thread holding motor

JUmp motor

Emergency stop switch

X-axis motor

Console 1 card

Computer card

Y-axis motor

Power supply box

Power switch

Switching regulator

Joint card

Power card

Main shaft motor

ATH motor
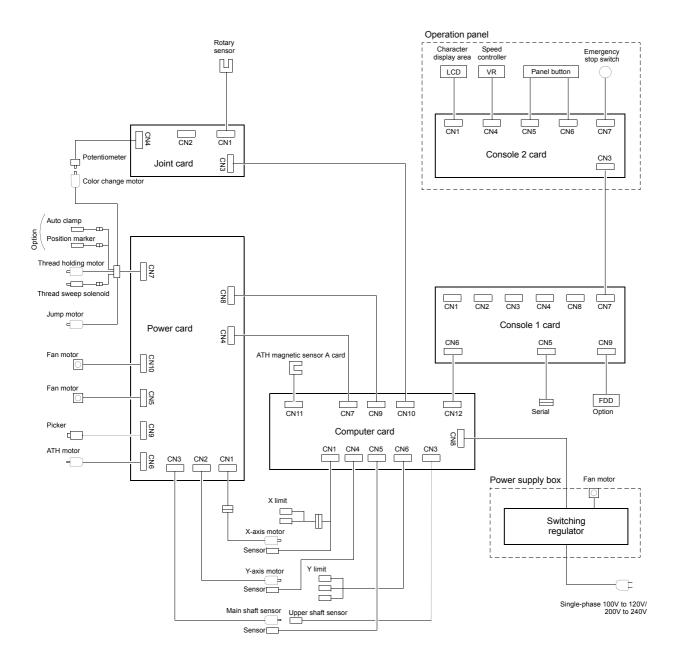
2. Layout of electrical parts (1-needle machine)

Console 2 card

Operation panel

Emergency stop switch

Jump motor

Solenoid

X-axis motor

Console 1 card

Computer card

Y-axis motor

Power supply box

Power switch

Switching
regulator

Joint card

Power card

Main shaft motor

ATH motor

IA09

3. Electric system diagram

📖 1-needle machine uses thread sweep solenoid instead of thread holding solenoid and it does not have color change motor and potentiometer.