USER'S MANUAL COMPACT SEWING MACHINE "NEO"





Foreword

This user's manual is a guidebook for using TAJIMA embroidery machine TEJTII-C "NEO" correctly. It describes about operation of the machine and items to notice for use. Please read this manual and use the machine after understanding the contents.

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]

[Troubleshooting and maintenance]

[Electrical component]

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 product you have purchased 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

To use this machine safely, it is necessary to handle it correctly.

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.

MARNING

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



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

^{*2:} An injury that does not necessitate hospitalization or visit to a hospital over a long period.



Prohibited items



(1) Items that may cause electric shock if not observed

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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.

^{*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.



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1. Important warning items for safe operation

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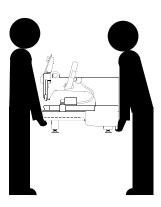


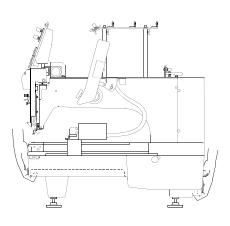


Carrying

A 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.





A CAUTION

ODO not transport, store, and operate the machine in the 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.
- O 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

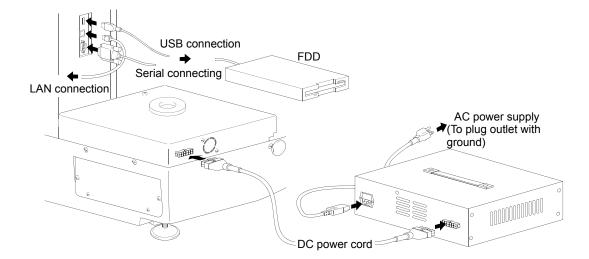
Insulation resistance: 10M ohms or more (500v megger)

A CAUTION



Connect grounding wire of power cord to the ground (class 3 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.





Instructions for use

WARNING

O 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



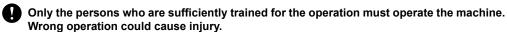
For using the machine for a long time, use the machine with about 70% of the maximum speed as "operation for total fitting" for about one month after purchase.

By performing operation for total fitting, life of the machine will become longer, which will be useful to avoid unexpected troubles.



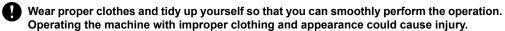
This machine is a machine for industrial use. Use this machine for embroidering textile goods, semi-finished goods and similar materials. Do not use this machine for other purposes in principle.

It could cause breakdown.



Read this user's manual thoroughly, understand the contents of operation securely, and then operate the machine.

Wrong operation could cause injury.



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

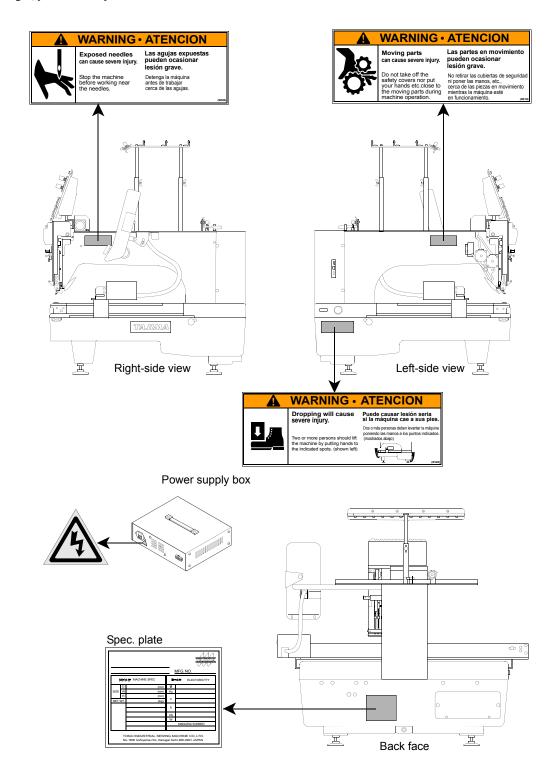
Do not use the machine with take-up lever guard or cover of movable unit detached. It could cause injury.



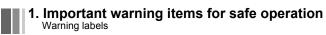
Warning labels

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 the label nor make the printing surface illegible by paint etc. In addition, if a waning label is missed or damaged, please consult your local distributor.



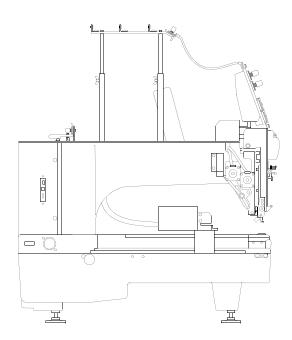
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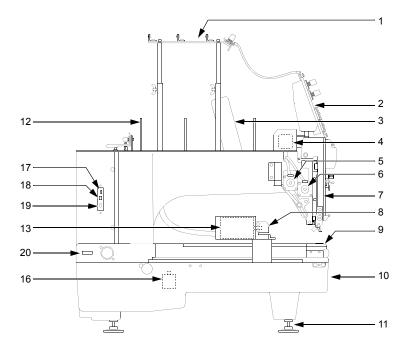
2. Machine construction

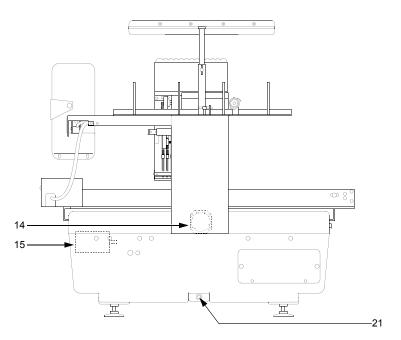
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Name of each part

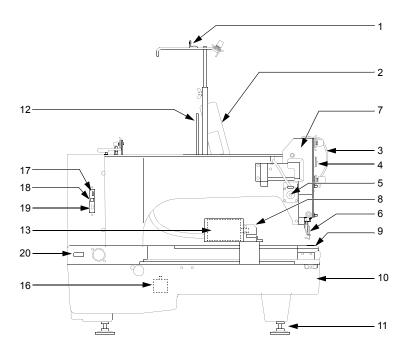
1. Main body of embroidery machine (multi needle machine)

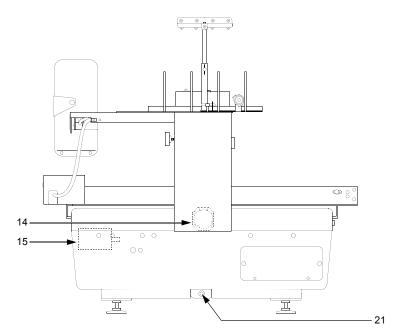




- 1. Thread guide system
- 2. Tension base
- 3. Operation panel box
- 4. Color change motor
- 5. Thread holding motor
- 6. Jump motor
- 7. Needle bar case
- 8. Z-spec. frame
- 9. Needle plate
- 10. Stand
- 11. Leveling adjuster
- 12. Thread stand stud
- 13. X-axis motor
- 14. Main shaft motor
- 15. Y-axis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

2. Main body of embroidery machine (single needle machine)

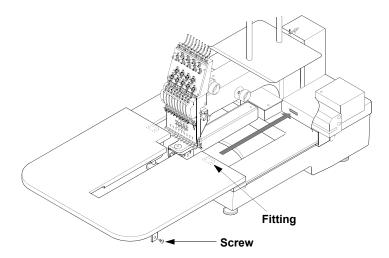




- 1. Thread guide system
- 2. Operation panel box
- 3. Take-up lever guard
- 4. Rotary-type tension disk
- 5. Thread holding motor
- 6. Thread wipe pin
- 7. Needle bar case
- 8. Z-spec. frame
- 9. Needle plate
- 10. Stand
- 11. Leveling adjuster
- 12. Thread stand stud
- 13. X-axis motor
- 14. Main shaft motor
- 15. Y-axis motor
- 16. ATH motor
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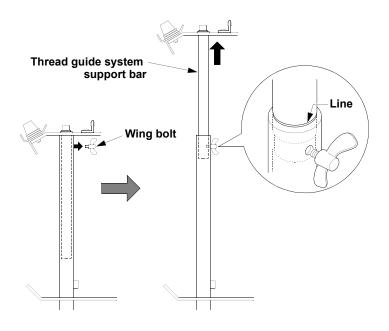


Table



To mount the table, insert the fitting to the installation opening so that it is aligned, and then tighten the screw. When detaching the table, do not lose the screw.

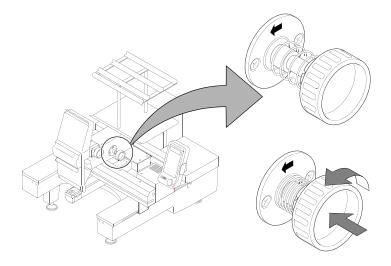
Thread guide system support bar



Remove the wind bolt and pull up the thread guide system support bar. Fix the wing bolt at the position where you can see the line.

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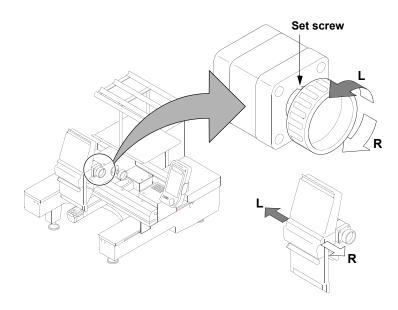
Main shaft handle



- Pushing the main shaft handle to turn to the direction indicated by the arrow will cause the main shaft to rotate.
- When the main shaft comes off from the fixed position, the machine will not work. Perform adjustment for main shaft stop position.

 => p.11-3

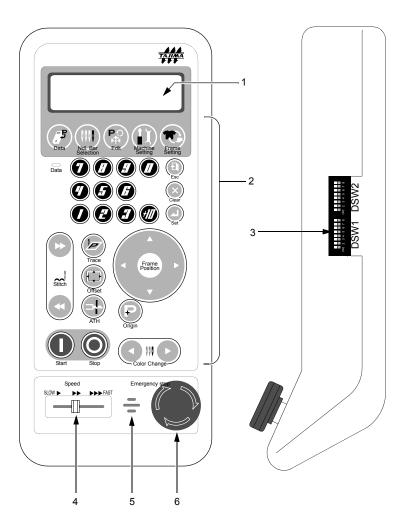
Color change handle



- Turning the color change handle to the directions indicated by the arrows (L/R) will cause the needle bar case to slide.
- When the needle bar case comes off from the fixed position, the machine will not work. Perform adjustment so that the set screw of the color change handle is positioned directly above or below.
- When the set screw is positioned directly above, odd-numbered needle bars will be set at the fixed position. When the set screw is positioned directly below, even-numbered needle bars will be set at the fixed position.

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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.

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DIP switch

DSW2

No.	Contents	OFF	ON
8	_	*	_
7	_	*	_
6	_	*	_
5	_	*	_
4	Satin conversion	* Corrects stitch length of 1.5 mm and more	Corrects stitch length of 0.6 mm and more
3	Satin adjustment	* 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 DSW1-1 ON

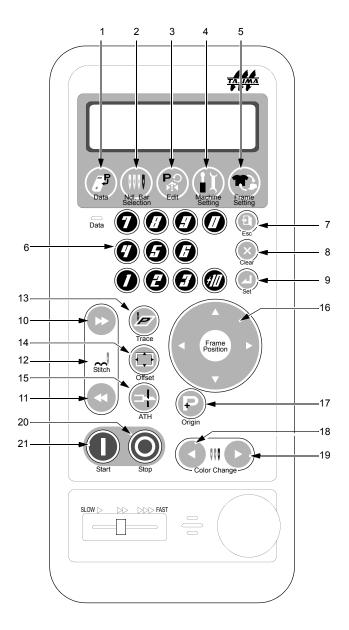
DSW1

No.	Contents	OFF	ON
8	Main shaft acceleration	* Standard	Acceleration: High speed
7	_	*	_
6	_	*	_
5	Beam sensor	* Non-correspondent	Correspondent
4	Frame moving direction by frame travel keys	* Based on frame	Based on design
3	The number of times of buzzer	* 10 times	Once
2	_	*	_
1	Operation mode 1	* Usual operation mode	Test mode

- After changing DIP switch, turn on the power switch again.
- *: Setting at shipment

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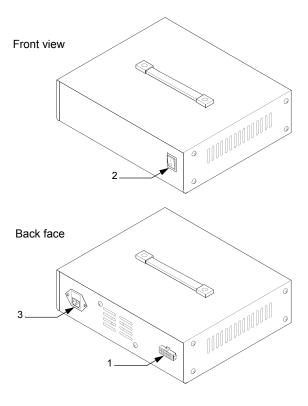
Operation panel



- 1. Data set menu key
- 2. Color change setting key
- 3. Design edit key
- 4. Machine setting key
- 5. Frame setting key
- 6. Numerical key
- 7. Escape key
- 8. Clear key9. Set key
- 10. Frame forward key
- 11. Frame back key
- Feed unit setting key of frame back/ forward
- 13. Trace key
- 14. Offset key
- 15. Thread trimming (ATH) key
- 16. Frame travel key Select key of setting item
- 17. Origin return key
- 18. Needle bar case left-slide key
- 19. Needle bar case right-slide key
- 20. Stop switch
- 21. Start switch

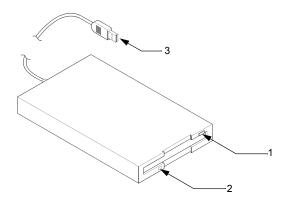
2-8

Power supply box



- 1. DC power supply connector
- 2. Power switch
- 3. AC power supply connector

Floppy disk drive



- 1. Disk ejection button
- 2. Operation indicator lamp
- 3. USB connector

Main specifications

CAUTION

When using the machine deviating from contents of specifications of power supply and power consumption, trouble may occur.

Spec. items	Contents of specifications
R. P. M.	120 - 1,200 rpm
Embroidery space	360 * 500 mm
Input data	600,000 st , up to 99 designs
Weight	80 kg
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

Insulation resistance: 10M ohms and larger (500V megger)

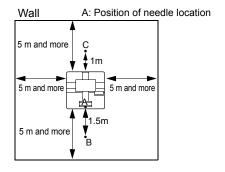
WARNING



Since there is a danger of electric shock due to leak current, be sure to ground the earth cable of the machine. In addition, degree of grounding should be type D or higher (grounding resistance 100 ohms or less).

Ambient noise level

The ambient noise level of the machine is less than 85 dB. Measuring conditions are as follows:



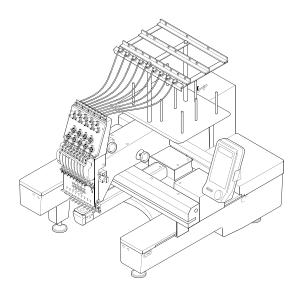
The maximum number of revolutions is limited depending on frame setting or stitch length.

- ◆Measuring environment (refer to the left illustration)
- ◆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 Fabric is stretched to a tubular goods frame and the machine is sewing satin stitches of 4 mm length
- ◆R. P. M. The maximum number of revolutions of the machine
- ◆Measuring tool Conformity to IEC61672-1: 2002 Class 1

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3. Basic operation

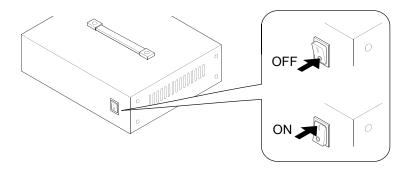
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Starting and stopping the machine

1. Power switch

The power switch is located on the power supply box.

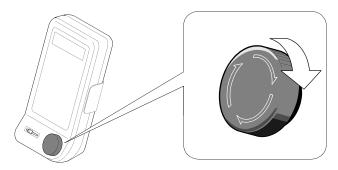


To turn ON the power again, turn "OFF" the power switch first, and after two to three seconds turn it "ON".

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.

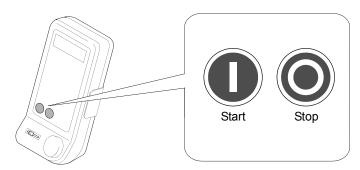


3. Start switch and stop switch

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.



When releasing the emergency stop, do not move the frame.

After releasing emergency stop, activate ATH to return the main shaft to the fixed position, and continue the working.

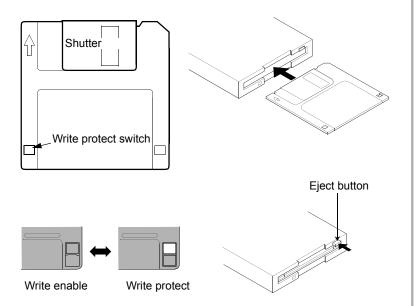
Manual Thread Trimming => p.9-7

3-2

Handling of floppy disk drive

A CAUTION

- O Do not put the floppy disk near magnets or a TV set.
- O not expose the floppy disk to excessive heat, humidity, or direct sunlight.
- O Do not place objects on the floppy disk.
- O Do not stack floppy disks to store.
- Floppy disks do not last eternally. Data must be copied to backup floppy disks for storage.
- O 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.
- O 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. This could cause the floppy disk to be damaged and, in addition, the floppy disk drive could be damaged.
- O 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.

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Program installation

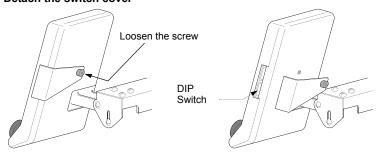
When installing from personal computer

A CAUTION

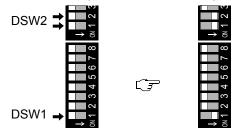
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When installing the panel program, design data and machine setting will be cleared.

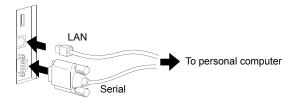
1. Detach the switch cover



2. Turn ON DIP switches (DSW2 1 and 2, DSW1 1).



3. Connect the machine with personal computer



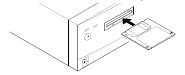
4. Turn ON the power of the personal computer.



5. Turn on the power switch of the machine.



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

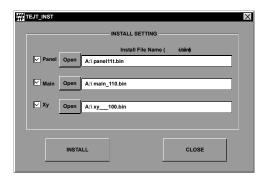


Program installation includes main program, XY program and panel program. They can be installed from personal computer or floppy disk. Perform this operation when setting up the machine or upgrading the software. Perform working from the state where the power switch is turned "OFF".

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

***** INSTALL ****
FROM PC

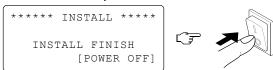
- 7. Execute "Tejt_inst.exe".
- 8. Select the file to install.



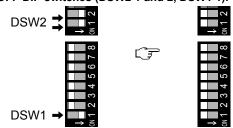
- 9. Press the INSTALL key.
- 10. Press the start leads to start installation.
- 11. Installing



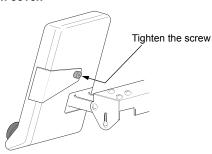
12.Installation is completed.



13.Turn OFF DIP switches (DSW2 1 and 2, DSW1 1).



14. Attach the switch cover.



- "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.

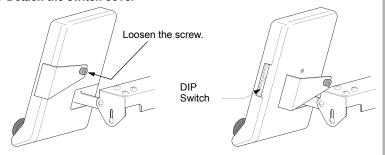
Installation from floppy disk drive



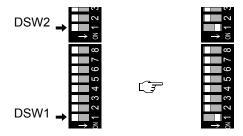


Installation from a floppy disk will clear the design data and machine setting.

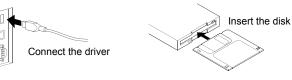
1. Detach the switch cover



2. Turn ON DIP switches (DSW2 1 and DSW1 1).



3. Set the program disk.



4. Turn ON the power switch.



5. Selection of program



When the program disk is inserted after turning ON the power switch, the screen as shown below will appear.Press the "SET" key and continue working from operation 5.

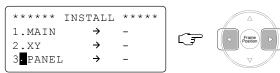
****** INSTALL *****

SET KEY →FILE SEARCH

- Main: Program related to CPU
 XY: Program related to drive system
 PANEL: Program related to panel
- Use the up and down keys to select item to install.

3-6

6. Select "INSTALL".



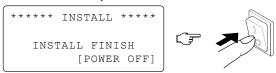
7. Start installation.



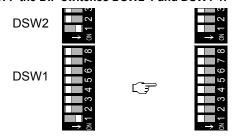
8. Installation



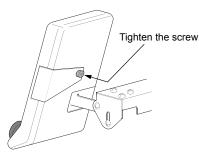
9. Installation is completed.



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



11.Attach the switch cover.



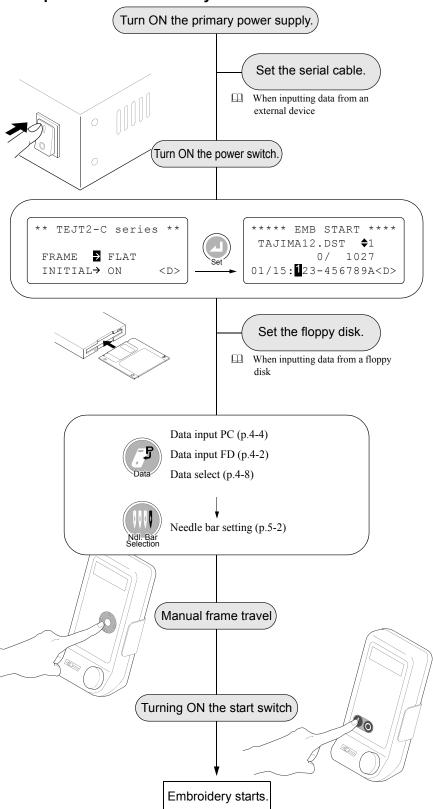
- Select "INSTALL" using right and left keys.
- When installing plural programs, it is possible to select plural installation items by performing operations 5 and

****	INSTALL ****
1.MAIN	→INSTALL
2.XY	→ -
3. PANEI	→INSTALL

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.

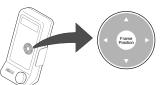
Operation flow up to start of embroidery



3-8

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.





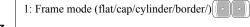


Select item to set Select setting value

Main screen

start of embroidery

At machine stop



 $\frac{8}{2}$ 2: Origin search (ON: to perform/OFF: not to perform) Power (

3: The needle bar No. the is currently selected

1: Design name

2: FB/FF feed unit (1, 10, 100, C, n-stitches) (Stitch)

3: Current stitch count/Total stitch count in design

4: Current step/Total step count in design: needle bar number of color change sequence

1: The current stitch count/Total stitch count <=> The current stitch count/Maximum number of revolutions (rpm) When embroidering

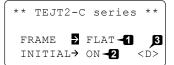
Set display switching in "SCREEN" of machine setting.

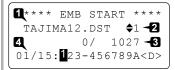
1: Stop by temporary stop

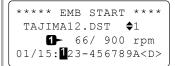
Insert "—: Temporary stop" at needle bar setting (The machine stops temporarily before performing automatic color change.)

Select item to set

Select setting value







```
EMB START
TAJIMA12.DST
              $1
            1027
        456789A<D>
```

Data set menu: Press



in the state of "EMB START" of MAIN screen.

1: Data input switch (PC:Personal computer/FD: Floppy)

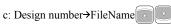


Input from personal computer

- a: Label name
- b: Memory capacity

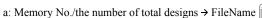
Data input

FD input



- d: The stitch count in design
- e: Memory capacity

2: Memory design selection





- b: The stitch count in design
- c: Memory capacity
- O Design Information

Design

After selecting a design



Design information 1: X size, right and left positions from the absolute coordinates

Design information 2: Y size, back and forth positions from the absolute coordinates

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

Return to data select screen

- 3: Memory design deletion
- Obesign selection
 - a: Memory number/total memory capacity → Design name



b: The stitch count of memory design

c: Memory capacity

Design

© Confirmation of deletion

a: Y (yes) N (no)

**** DATA MENU **** 1. INPUT DATA .SELECT DATA

INPUT THRU PC **

NAME → DATA-01-a MEMORY→ 56897 ST-b

* SELECT DATA $\overline{01}/23 \rightarrow BIRD.TBF$ STITCH→ 10713 ST**-**d MEMORY→ 180876 ST-e

**** DATA MENU **** .INPUT DATA 2. SELECT DATA -2 3.DELETE DATA

** SELECT DATA $/12 \rightarrow BIRD.TBF$ STITCH→ 10713 ST**≺**b MEMORY→ 180876 ST-C

*** INFORMATION 1 ** $X SIZE \rightarrow 72.7 mm$ +X AREA → 40.8 mm -X AREA → 31.9 mm

*** INFORMATION 1 ** 0.6mm 0.1mm

**** DATA MENU **** 1.INPUT DATA 2.SELECT DATA 3. DELETE DATA-3

DELETE DESIGN ** $01/12 \rightarrow TAJIMA12.DST$ STITCH→ 1027 ST **-b** MEMORY→ 180876 ST -C

DELETE DESIGN ** DELETE OK ? a [Y=SET, N=ESC]

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3-10

4: Input mode of memory design

Input mode

a: Mode selection (single/multi)



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

Multi: Input data to memory

5: Memory clear (2)

Memory clear

Delete all design data inputted to the machine

a: Y (yes) N (no)



Color change setting: Press (in the state of "EMB START" of MAIN screen.

a: Current step/the number of total steps: color change sequence



Veedle bar selection

It is possible to perform setting even in the middle of embroidery when the machine stops.

b: The state where needle bar stops temporarily.

Insert "—: Temporary stop" using . Pressing it once again will cancel the insertion.

Data setting:Press Press in the state of "EMB START" of MAIN screen.

1:Size X (80-120%, 1% increments)

2: Size Y (80-120%, 1% increments)

3: Rotation (90° unit)

4: Mirror reversion (OFF/X: reversion based on X-axis/Y: reversion based on Y-axis)

5: Repeat

Repeat setting

a: Repeat direction (Horizontal/Vertical)

b: The number of repeats of X and Y (1 to 99)

c: Design interval of X and Y (0 to 255mm)

**** DATA MENU **** .SELECT DATA .DELETE DATA MEMORY MODE 🗗

*** MEMORY MODE *** MEMORY → MULTI-a

**** DATA MENU **** 3.DELETE DATA 4.MEMORY MODE INITIAL MEMORY-5

INITIAL MEMORY ** DELETE ALL DATA OK ? a-[Y=SET, N=ESC]

COLOR CHANGE *** MODE → AUTO STOP -b 04/15:123-456789ABCD

DESIGN EDIT 1. SIZE X 100%-1 2.SIZE Y 100%-2 3.ROTATE 0 °**-3**

DESIGN EDIT 0 ° 3.ROTATE 4.REVERSE OFF REPEAT [SET]-5

** REPEAT SETTING ** PRIOR HORalontal X TIMES→ Œ TIMES->

REPEAT SETTING ** Υ TIMES→ SPACE→ Χ 0 mm, 0 mm SPACE→

Frame setting: Press



in the state of "EMB START" of MAIN screen.

1: Manual frame travel speed (1-3)



2: Offset travel (automatic/manual)



3: Origin return after completion of embroidery (automatic/manual)



Frame setting

Machine setting

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



5: Initialize (ON: to perform/OFF: not to perform)



6: Trace mode (Square/Contour)



Machine setting: Press



in the state of "EMB START" of MAIN screen.

1: Display (Stitches/Revolutions)

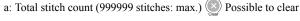


2: Thread breakage sensor (OFF/1-5)



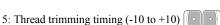


Preset setting



b: The number of stop stitches (0-999999st) numerical keys

4: Thread trim length (1 to 17)



6: Jump conversion (0 to 9 stitches)



7: Auto jump (OFF/4.0 to 9.9mm)



8: Frame drive timing (AUTO/250°)



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



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

FRAME SETTING ** 4 FRAME MODE→ FLAT -4 5.INITIALIZE→ ON --5 6.TRACE MODE→ CONTOUR6

** MACHINE SETTING * 1. SCREEN → ST-1 2.THREAD SNS→ 2-2 3.PRESET HLT→

PRESET HLT **** COUNTER-1278 ST **√a** PRESET → 30000 ST-b

MACHINE SETTING TRIM LENG →1 5.TRIM TMNG \rightarrow + 0-5 6.JUMP CONV → 3 ST -6

MACHINE SETTING * 7 AUTO JUMP → OF4 8.A/S TMNG 9.INCHING

JZ05 3-12

A: Tie stitching (So: "To perform" at the start/S-: "Not to perform" at

Eo: "To perform" at end of embroidery/E-: "Not to perform" at end of embroidery)

B: Satin stitch (-: Without correction, 1 to 5: in increments of 0.1 mm)

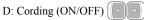


C: Boring (OFF/1/2)



Not available to use

in 1-needle machine.





Not available to use in 1-needle machine.

E: Sequin

Sequin Setting

a: Up/down of sequin device (U: up/D: down)



When the needle bar with sequin device is not selected, the machine will not

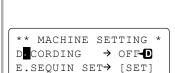
b: Feed amount of sequin (FF/4.0 to 9.9 mm)



c: Manual sequin chip feed

When the needle bar with sequin device is not selected, the machine will not

Not available to use in 1-needle machine.



MACHINE SETTING A

→ So Eo

→ OFF-B → OFF-C

A. TIE SET

C.BORING

B.SATIN ADJ



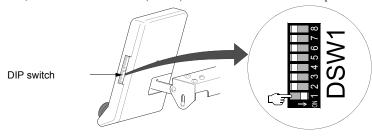


Test mode

Machine setting

LCD screen displayed at test mode is explained here.

Detach the cover that is located at the back of the operation panel while turning OFF the power, set No.1 of DIP switch 1 (DSW1) to "ON" and then turn ON the power.



TEJT2-C series TEST MODE <1>

Test mode

(1) Main

(2) XY

(3) Panel Test mode

(4) Embroidery information

TEST MODE MAIN Ver T.3 (1)(2) ΧY Ver T.3 (3) PANEL Ver T.1

** TEST MODE (2)XY Ver T.3 Ver T.1 (3) PANEL (4) EMB INFORMATION

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Main

Main

a:Angle of main shaft b:ATH setting c:Needle bar number being used and angle

***** MAIN ***** SHAFT → 107.5° o -a TRIM → o →b NEEDLE→ No.1 -C 203

Panel

- (1) Network setting
- (2) Maintenance information
- (3) Memory test
- Panel (4) Buzzer, LED test

 - (5) Key test
 - (6) Display language setting
 - © COM connection
 - a: Port (COM/LAN)
 - b: Data transfer speed (9600/19200/38400)
 - c: Network (off/1/2)
 - OFF: No connection
 - 1: Receiving data from PC
 - 2: Selecting data of PC to input
- Network setting LAN connection
 - a: Port (COM/LAN)
 - b: TCP/IP (Auto/Manual)
 - Auto does not have IP address setting.
 - c: IP address
 - IP address
 - d: IP number
 - e: Subnet mask
 - f: Gateway

Maintenance information

Maintenance

Memory clear status

Memory test

Clearing will result in English display.

***** PANEL *****

- (1) NETWORK SETTING
- (2) MAINTENANCE
- (3) MEMORY INITIAL

***** PANEL *****

- (4) BUZZER, LED TEST
- (5) KEY TEST
- (6) LANGUAGE →

** NETWORK SETTING * PORT → COM ¬a COM SPEED → 9600-b NETWORK → OFF-C

** NETWORK SETTING PORT TCP/IP → MANUÁL IP ADDRESS \rightarrow [SET]-c

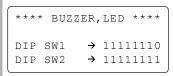
**** IP ADDRESS →192.168**.-d** 1. 77 ΙP MASK→ 0. 0. 0 **.-e** 0 0 **-f** 0 GATE→ 0. 0.

MAINTENANCE *** NNN NNN NNN

INITIALIZING *** 1600KB OK



	Setting status of DIP switch 1
ts.	Setting status of DIP switch 2
Ę	Screen and button lamp will blink, and buzzer will sound.
9	
Buzzer LED test	
Bn	
	"o" will be displayed/not displayed every time the button is pressed since the
*	function corresponds to each button of the operation panel.
Key test	
Æ	
	a: Switching of display language (Japanese/English)
<u>o</u>	
Language	
-anc	
_	
-	



**** KEY TEST **** 00000 00 0 00000 000 0 00 0 0 00 00000 00 0 00 00

***** LANGUAGE **** ENGLISH -a

Embroidery information

	a: The number of pieces	
tion	b: The stitch count	
Embroidery information	c: Error	
	1. Thread breakage	8. 232C communication
	2. Main shaft motor	9. 232C connection
ation	3. Y-axis motor	10. Internal communication
Error information	4. X-axis motor	11. Internal connection
or inf	5. Needle case position	12. Data
Erro	6. Thread trim	13. RAM
	7. Temperature	14. Limit

** EMB INFORMATION * $\begin{array}{cccc} \text{PIECE} & \rightarrow & & \text{a} & 0 \\ \text{STITCH} & \rightarrow & & \text{b} & 0 \end{array}$ ERROR →[SET] →C

***** ERRORS ***** [1] THREAD BK→ 0 [2] M MOTOR → 0 [3] Y MOTOR → 0

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Inspections before starting operation

Before embroidering, execute inspections of the following items.



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	Status	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

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4. DATA SET MENU

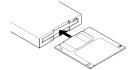
Data input (FD)	4-2
Data input (PC 1)	4-4
Data input (PC 2)	4-6
Select data	4-8
Delete data	4-9
Memory mode	4-10
Initial mamany	1 11



Data input (FD)

Input design data from a floppy disk to the machine. The data of input design will be set.

1. Insert the floppy disk.



2. Switch to "DATA MENU".



3. Select "FD".



4. Reading of floppy disk



5. Selection of design data



6. Input



7. Set needle bar steps.



Data set means to make design data possible to be embroidered.

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

1. INPUT DATA → PC

When the machine is reading design data of a floppy disk, the screen as shown in the illustration below will appear.

FILE SEARCHING

- When design data that exceeds memory capacity is input, error code "2BA" will be displayed.

 2BA=> p.11-2
- When inputting "*.TBF" data, data set will be performed after pressing [SET].

```
***** EMB START ****
BELL.TBF $1
0/ 2451
01/04:$\alpha$6B3 <D>
```

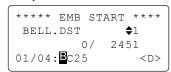
When there is no "color change" setting in the input design data, set needle bar number(s) to needle bar step(s).

Input of needle bar step=> p.5-2

8. Set



9. Completion

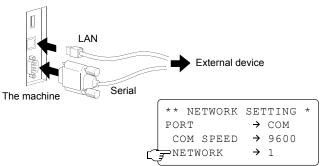


The input data will be set.

Data input (PC 1)

The following explains how to receive design data sending from an external device that is connected with network to the machine. The input data of design will be set.

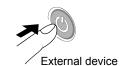
1. Connect an external device and the machine using the cable.



- When connecting the cable, turn OFF the power of the machine and external device.
- When performing connection with an external device, the exclusive cable is necessary.
- Set Panel>Network setting>Network of Test mode to "1".COM connection => p.3-14

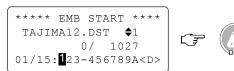
2. Turn on the power.





When turning ON the power of the machine, turn also on the power of the external device.

3. Switch to "DATA MENU".



4. Select "PC".



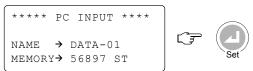
5. Receive data from the external device



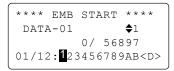
Press "SET" to make ready for receiving data.

6. Transmit design data from the external device.

7. Set



8. Completion of data set



"Data" lamp will blink during data transfer.



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

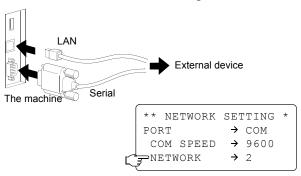


Refer to color change setting. Input of needle bar step=> p.5-2

Data input (PC 2)

The following explains how to input design data of an external device that is connected with network while selecting it from the machine. The input data of design will be set.

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



- When connecting the cable, turn OFF the power of the machine and external
- When performing connection with an external device, the exclusive cable is necessary.
- Set Panel>Network setting>Network of Test mode to "2".
 - OM connection => p.3-14

2. Turn on the power.





When turning ON the power of the machine, turn also on the power of the external device to start DG/ML.

3. Switch to "DATA MENU".

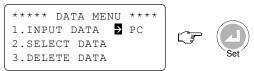




4. Select "PC".



5. Searching of external device data



Pressing "SET" will enable you to see design data registered in the external device DG/ML from the machine.

6. Select design data of the external device.



When design data that exceeds memory capacity is input, error code "2BA" will be displayed. 2BA => p.11-2

7. Set

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

8. Completion of data set



"Data" lamp will blink during data transfer.



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



Refer to color change setting. Input of needle bar step=> p.5-2

Select data

Set design data in the memory of the machine.

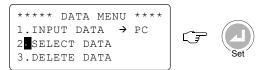
1. Switch to "DATA MENU".



2. Select "SELECT DATA".



3. Set



4. Selection of design data



5. Data 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

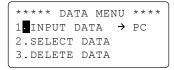
0/ 1027

01/15:123-456789A<D>



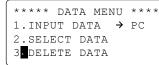
When it is not possible to input design data into the memory, delete unnecessary design data to assure memory capacity.

2. Select "DELETE DATA".





3. Set



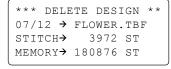


4. Selection of design data



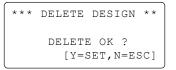


5. Deletion





6. Confirm







7. Completion

*** DELETE DESIGN **
07/11 DOG.DST
STITCH > 3972 ST
MEMORY > 180876 ST

- It is possible to perform deletion continuously after deleting data.
- To return to "EMB START SCREEN", press "ESC" twice.

Memory mode

This setting decides whether storing the design data into the memory or not when inputting design data.

1. Switch to "DATA MENU".



2. Select "MEMORY MODE".



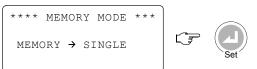
3. Set



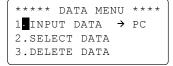
4. Selection of mode



5. Set



6. Completion



- MULTI: To store input design to the memory SINGLE: To store one design data to the memory and overwrite by new design data
- When setting the memory mode, data setting will be canceled.
- When you set "SINGLE", input data from FD/PC.
- To return to "EMB START SCREEN", press "ESC".

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Initial memory

This setting erases all design data stored in the memory of the machine.

1. Switch to "DATA MENU".



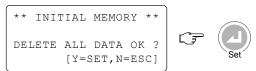
2. Select "INITIAL MEMORY".



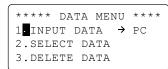
3. Clear



4. Confirm



5. Completion



during initializing memory, the message will be displayed as shown below.

*** INITIALIZING

Since all design data has been erased, input data here.

To return to "EMB START SCREEN" without data input, press "ESC".

When data set is not performed, the display as shown in the illustration below will appear.



5. COLOR CHANGE

Input of needle bar step	5-2
Needle bar setting (Change of step)	5-3
Setting for temporary stop	5-4



Input of needle bar step

Set needle bar number to needle bar step.

1. Switch to "COLOR CHANGE".





2. Input needle bar number. (Example: Needle bar No.11)





3. Input needle bar number to the next step.





4. Set the needle bar setting

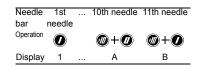




5. Completion



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



Set needle bar numbers to all steps.

All needle bar steps are displayed as

"1" in 1-needle machine.

If the number of needle bar number settings is less than the number of color change steps, the remaining steps will be automatically complemented.

Example: When up to two steps of needle bar numbers are set in case of five steps

Needle bar step	1	2	3	4	5	6	7
Needle bar	2	5	2	5	2	5	2
number							

: Complemented needle bar number

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>

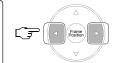




2. Select the needle bar step

*** COLOR CHANGE ***
MODE → AUTO

01/15:123456789ABCDE



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

*** COLOR CHANGE ***
MODE → AUTO

02/15:1**2**3456789ABCDE





4. Setting

*** COLOR CHANGE *** MODE → AUTO

03/15:1B3456789ABCDE





_

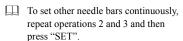
**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:1B3456789AB<D>

5. Completion

Step of the same color

*** COLOR CHANGE *** MODE → AUTO 03/15:12**2**456789AB<2>

*** COLOR CHANGE *** MODE → AUTO 03/15:12-**2**456789A<2>



Needle	1st	 10th needle	11th needle
bar	needle		
Operation	•	# + #	# + 7
Display	1	 Α	В

- When the next step is the same needle bar, the machine will stop and start automatically. At this moment, ATH will not work.
- If a temporary stop is inserted, the machine will not start automatically. Press the START button to start the machine.

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>



2. Select the needle bar step

*** COLOR CHANGE *** MODE → AUTO

01/15:**1**23456789ABCDE



3. Select needle bar. (Example: Stop before needle bar step 4)

*** COLOR CHANGE ***
MODE → AUTO

04/15:123456789ABCDE



4. Setting

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





5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15: 23-456789A<D>

- To set other needle bar steps continuously, repeat operations 2 and 3 and then press "SET".
- When setting temporary stop, "—" will be inserted just before the set step.
- 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.

5-4

6. DESIGN EDIT

Size	6-2
Rotate	6-3
Mirror	6-4
Repeat	6-5



Size

This setting enlarges/reduces design of which data is set.

1. Switch to "DESIGN EDIT".

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



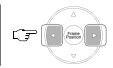
2. Change X size.

*** DESIGN EDIT ****

1. SIZE X → 100%

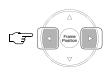
2. SIZE Y → 100%

3. ROTATE → 0°



When changing Y size





3. Set





4. Completion

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

- For details of size, refer to outline of functions.

 Size=> p.10-3
- Select scale ratio (80 to 120%). When X size is changed, Y size will be changed in the same value.
- Change of Y size changes Y size only.
- To perform design edit continuously, perform operations of "ROTATE, MIRROR, REPEAT" without pressing "SET".

6-2 JZ05

Rotate

This setting rotates design of which data is set.

1. Switch to "DESIGN EDIT".



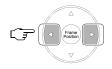
2. Select rotation.

*** DESIGN EDIT ****
1 SIZE X → 100%
2.SIZE Y → 100%
3.ROTATE → 0°



3. Select angle





4. Set







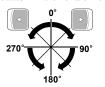
5. Completion

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

For details of rotation, refer to outline of functions.

Rotate=> p.10-2

It rotates in increments of 45°.



To perform design edit continuously, perform operations of "SIZE, MIRROR, REPEAT" without pressing "SET".

Mirror

This setting reverses design of which data is set like mirror image.

1. Switch to "DESIGN EDIT".

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





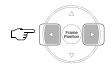
2. Select reverse.





3. Select reversing direction.





4. Set







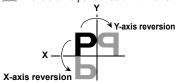
5. Completion

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

For details of mirror, refer to outline of functions.

Mirror=> p.10-2

Reversion is performed on X/Y-axis.



To perform design edit continuously, perform operations of "SIZE, ROTATE, REPEAT" without pressing "SET".

6-4

Repeat

This setting repeatedly arranges design of which data is set.

1. Switch to "DESIGN EDIT".

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





2. Select repeat

*** DESIGN EDIT ****
1 SIZE X → 100%
2.SIZE Y → 100%
3.ROTATE → 0°



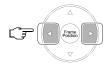
3. Set

*** DESIGN EDIT ****
3.ROTATE → 0°
4.REVERSE → OFF
5.REPEAT → [SET]



4. Setting for direction

** REPEAT SETTING ** PRIOR ₽ HORIZONTAL X TIMES→ 1



5. Selection of the number of times

** REPEAT SETTING **
PRIOR VERTICAL
X TIMES > 1
Y TIMES > 1



6. Setting for the number of repeats

** REPEAT SETTING **
PRIOR → VERTICAL
X TIMES 1
Y TIMES → 1











For details of repeat, refer to outline of functions.

Repeat=> p.10-3

Direction: Horizontal/Vertical



The number of times: 01 to 99

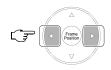
7. Selection of space

** REPEAT SETTING **
PRIOR → VERTICAL
X TIMES→ 3
Y TIMES→ 2



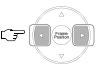
8. Setting for space

** REPEAT SETTING **
X TIMES→ 3
Y TIMES→ 2
X SPACE 0 mm





** REPEAT SETTING **
Y TIMES→ 2
X SPACE→ 60 mm
Y SPACE→ 0 mm



9. Set

** REPEAT SETTING ** Y TIMES→ 2 X SPACE→ 60 mm Y SPACE→ 15 mm



10.Set

*** DESIGN EDIT ****

1 ROTATE → 0°

2.REVERSE → OFF

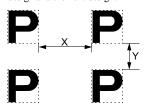
3.REPEAT → [SET]



11.Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:123456789AB</br>

- Space: 0 to 255 mm
- Space means an interval between a design and the next design.



To perform design edit continuously, perform operations of "SIZE, ROTATE, MIRROR" without pressing "SET".

6-6

7. MACHINE SETTING

Screen	7-2
Thread breakage sensor	7-3
Preset halt	7-4
Trim length	7-5
Trim timing	7-6
Jump conversion	7-7
Automatic jump	7-8
A/S timing	7-9
The number of inching times	7-10
Tie stitching	7-11
Satin adjustment	7-12
Boring	7-13
Cording	7-14
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Screen

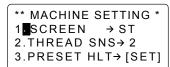
This setting displays the stitch count/revolutions during embroidering.

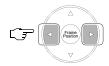
1. Switch to "MACHINE SETTING".

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

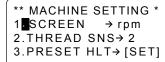


2. Select display mode





3. Set





4. Completion

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

Screen: ST/rpm

Total stitch count of design of which data is



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

7-2

Thread breakage sensor

This is the setting for thread breakage detection.

1. Switch to "MACHINE SETTING".

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



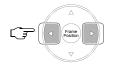
2. Select item to set.

** 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]



4. Set

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





5. Completion

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

- Setting value: Off, 1, 2, 3, 4, 5
 OFF: Not to detect thread breakage
 1 to 5: Detects thread breakage by the
 number of set stitches.
- ☆ The smaller the value, the higher the sensibility

7. MACHINE SETTING Preset halt

Preset halt

This setting makes the machine halt automatically when the stitch count reaches the set value.

1. Switch to "MACHINE SETTING".

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>



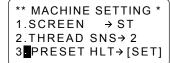


2. Select item to set.

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



3. Set





4. Resetting of counter





5. Select item to set





6. Input setting value





7. Set



To clear the setting value of preset halt, select "PRESET" in the same manner and press "CLEAR".

- To correct the value, press "CLEAR" to call "0".
- Setting to "0" will not cause the machine to perform preset halt.
- When the machine is topped by preset halt, the warning buzzer will sound and the message as shown below will be displayed.

PRESET HLT (1D2)

To cancel, press the stop switch.

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>

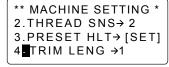


2. Switching of item to be displayed

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

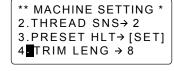


3. Selection of the setting value





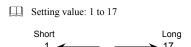
4. Set





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:**1**23456789AB<D>



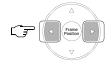
2. Switching of item to be displayed

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



3. Selection of the setting value

** MACHINE SETTING *
3.PRESET HLT→ [SET]
4.TRIM LENG →1
5 TRIM TMNG → + 0



4. Set

** MACHINE SETTING *
3.PRESET HLT→ [SET]
4.TRIM LENG →1
5 TRIM TMNG → + 2

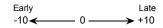




5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>

Setting value:-10...-1,0,+1...+10



Perform adjustment according to thread trimming condition and thread to use.

Jump conversion

This setting converts consecutive jump stitches to frame stepping.

1. Switch to "MACHINE SETTING".

**** EMB START **** TAJIMA12.DST **♦**1 0/ 1027 01/15:**1**23456789AB<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 \rightarrow 1 5.TRIM TMNG → + 0 6 JUMP CONV → 3 ST



4. Set

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





Setting value:0,1,2, ... 8,9 0: Not to convert

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

5. Completion

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

Automatic jump

This setting converts longer stitches than the setting value to automatic jump.

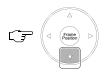
1. Switch to "MACHINE SETTING".

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



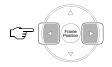
2. Switching of item to be displayed

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



3. Selection of the setting value

** MACHINE SETTING *
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
7 AUTO JUMP → OFF



4. Set

** MACHINE SETTING *
5.TRIM TMNG → + 0
6.JUMP CONV → 3 ST
7.AUTO JUMP → 5.0



5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>

- Setting value: Off,4.0, ... 9.9(mm)
 OFF: Not to convert
- Keeping on pressing either right or left key will change value quickly.

A/S timing

This setting sets timing when the embroidery frame starts to move.

1. Switch to "MACHINE SETTING"

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15: 23456789AB<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 *
6.JUMP CONV → 3 ST
7.AUTO JUMP → OFF
8.A/S TMNG → AUTO



4. Set

** MACHINE SETTING *
6.JUMP CONV → 3 ST
7.AUTO JUMP → OFF
8 A/S TMNG → OFF





5. Completion

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

- Setting value: Auto, 250°
 AUTO: Automatic adjustment
 250°: Frame drive with the same timing
- When setting to 250°, good thread tightening will be obtained in general, but the machine will be burdened.

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</br>



When starting the machine manually after stopping the machine manually, the machine will not perform inching.

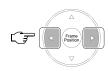
2. Switching of item to be displayed

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



3. Selection of the setting value

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



4. Set

** MACHINE SETTING *
7.AUTO JUMP → OFF
8.A/S TMNG → AUTO
9■INCHING → 5 ST





5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>

Setting value:2, 3, ... 8,9

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>





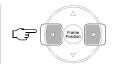
2. Switching of item to be displayed

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



3. Selection of the setting value

** MACHINE SETTING * 8.A/S TMNG → AUTO 9.INCHING → 2 ST A TIE SET → So Eo



4. Set

** MACHINE SETTING * 8.A/S TMNG → AUTO 9.INCHING → 2 ST A TIE SET → S- Eo





5. Completion

**** EMB START **** TAJIMA12.DST **♦**1 0/ 1027 01/15:**1**23456789AB<D> Tie stitching goes and returns in 0.8 mm.









So: To perform tie stitching at the start of sewing

Eo: Tie stitching is performed at the end of sewing.

S-, E-: Not to perform tie stitching

Satin adjustment

This setting corrects satin stitch length.

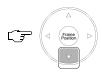
1. Switch to "MACHINE SETTING".

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



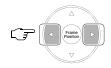
2. Switching of item to be displayed

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



3. Selection of the setting value

** MACHINE SETTING *
9.INCHING → 2 ST
A.TIE SET → So Eo
B SATIN ADJ → OFF



4. Set

** MACHINE SETTING *
9.INCHING → 2 ST
A.TIE SET → S0 E0
B.SATIN ADJ → 1



5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>

- 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.

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Boring

This is the setting for boring device.

1. Switch to "MACHINE SETTING".

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



Not available to use in 1-needle machine.

2. Switching of item to be displayed





3. Selection of the setting value

** MACHINE SETTING * A.TIE SET → So Eo B.SATIN ADJ → OFF CBORING → OFF



4. Set







5. Completion

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

- OFF: Not equipped
 - 1: Equipped, without offset
 - 2: Equipped, 12 mm offset

Cording

This is the setting for cording.

1. Switch to "MACHINE SETTING".

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:123456789AB</br>



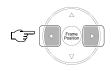
2. Switching of item to be displayed

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



3. Selection of the setting value

** MACHINE SETTING *
B.SATIN ADJ → OFF
C.BORING → OFF
D.CORDING → OFF



4. Set

** MACHINE SETTING *
B.SATIN ADJ → OFF
C.BORING → OFF
D.CORDING → ON



5. Completion

**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:**1**23456789AB<D>

Not available to use in 1-needle machine.

- OFF: Not equipped ON: Equipped
- It is not possible to perform setting when the last needle is not selected.

Sequin

This is a setting for sequin device.



- When performing this operation, do not have your hands or face access to the vicinity of sequin device. You could be injured by the moving device.
- 1. Switch to "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]



3. Set

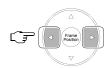






4. Up/down operation





5. Switching of item to set





6. Set feed amount of sequin.





- Move up/down the sequin device of selected needle bar by manual operation.
- U: To move up the device
- D: To move down the device

- The value added by 0.7 mm to the diameter of sequin chip to use is a rough standard for feed amount. In case of 3 mm sequin, set to 4.0 mm.
- Setting value: Off, 4.0 to 9.9 mm
- When sequin device is not used, set to "OFF".

7. MACHINE SETTING Sequin

7. Switching of item to set





8. Chip feed operation





9. End of working

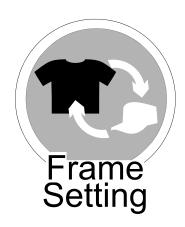




- Pressing it feeds one piece of sequin chip.
- To end the working, press the "ESC" button.

8. FRAME SETTING

Frame speed	8-2
Offset	8-3
Origin return	8-4
Frame mode	8-5
Initial (origin search)	8-6
Trace	8-7



Frame speed

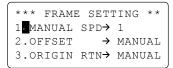
This setting sets speed when the frame moves.

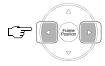
1. Switch to "FRAME SETTING".



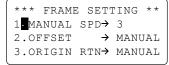


2. Select setting value.





3. Set







4. Completion

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

Corresponding movement
Manual frame travel, origin search,
origin return, trace, offset

Setting value: 1, 2, 3

1	2	3
Low speed	Middle speed	High speed

Offset

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

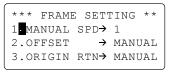
1. Switch to "FRAME SETTING".

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



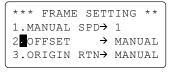
Set position of offset by manual offset operation. Offset (setting for position)=> p.9-4

2. Select offset.



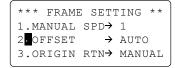


3. Select setting value.





4. Set







5. Completion

**** EMB START ****
TAJIMA12.DST 💠1
0/ 1027
01/15: 1 23456789AB <d></d>
l

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.

8. FRAME SETTING Origin return

Origin return

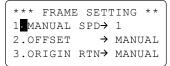
This setting makes the frame move to the design start position manually/automatically.

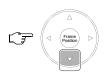
1. Switch to "FRAME SETTING".



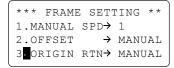


2. Select origin return.



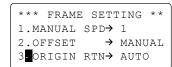


3. Select setting value..



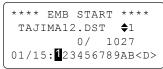


4. Set

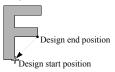




5. Completion



Origin return



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
	It is possible to stop or perform frame back at end
	position of embroidery

☐ In case of manual setting
When performing the next embroidery
after the end of the embroidery,
perform origin return manually.
Manual origin return=> p.9-2

Frame mode

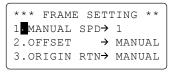
Set the embroidery frame to flat frame/cap frame/cylindrical frame/border frame.

1. Switch to "FRAME SETTING".

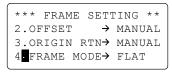
**** EMB START ****
TAJIMA12.DST \$1
0/ 1027
01/15:123456789AB<D>

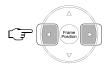


2. Switching of item to be displayed

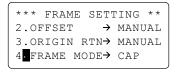


3. Select frame type.



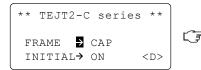


4. Set





5. Initial (origin search)





6. Completion

**** EMB START ****
TAJIMA12.DST 💠1
0/ 1027
01/15: 1 23456789AB <d></d>

Setting value

Flat	Tubular goods frame,
	auto clamp frame
Cap	Cap frame
Cylinder	Cylindrical frame
Border	Border frame

- When setting the frame mode, the screen will return to the initial screen. When the type of frame is changed, the position of origin will change. Press "SET" to cause the machine to perform origin search.
- Available range of embroidery will be limited depending on the type of frame.

Frame Type	X-axis	Y-axis
Tubular goods	+/-250 mm	+/-180 mm
frame		
A. Clamp-T	+/-20	+/-40-90mm
	to75mm	
A. Clamp-B	+/-140mm	+/-05mm
Cap frame	+/-180 mm	+43 mm
Сар пашс	17-100 11111	-35 mm
Cylindrical	+/-65 mm	+/-90 mm
frame		
Border	+/-250 mm	+/-180mm

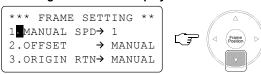
Initial (origin search)

This setting performs origin search at turning on the power to return the frame to the position where the power was shut off.

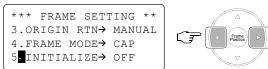
1. Switch to "FRAME SETTING".



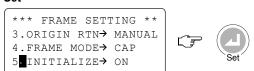
2. Switching of item to be displayed



3. Selection of the setting value



4. Set



5. Completion



"Initial" operation searches the center of the embroidery frame.

Origin of frame differs depending on frame type.

ON: To search the origin when the power switch is turned "ON"
OFF: Not to search origin

- When changing origin search to "ON", the screen will return to the start screen.

 Pressing "SET" will cause the machine to perform origin search and to call embroidery start screen.
- "INITIAL" operation is required in the following cases:
 - 1. Frame type has been changed
 - 2. When the power was shut off in the middle of embroidering
 - 3. When installing each software from floppy disk
 - 4. When installing PANEL software from PC

Trace

This setting sets frame travel mode when the machine performs tracing.

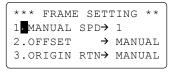
1. Switch to "FRAME SETTING".





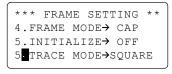
The frame moves along a square/condery. It is possible to check whether

2. Switching of item to be displayed



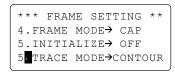


3. Selection of the setting value





4. Set







5. Completion

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

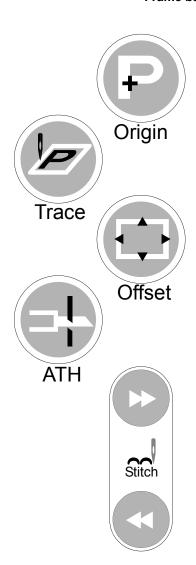
tour of the embroidery range of design before the machine performs embroifabric, frame and/or embroidery range are correct.





9. Manual operation

Manual origin return	9-2
Trace	9-3
Offset (setting for position)	9-4
Offset (change of position)	9-5
Offset (frame travel)	9-6
Manual Thread Trimming	9-7
Frame back/forward (feed unit)	9-8
Frame back/forward (feed by n-stitches)	9-9
Frame forward	9-10
Frama hack	0 11



Manual origin return

Return the embroidery frame to design start position.

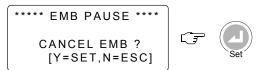


When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.

1. Select origin return



2. Confirm



3. Completion



- When performing origin return in process of embroidery, it will become impossible to continue embroidery.
- Pressing "SET" will cause the frame to move to the start position of design.

9-2 JZ05



Trace

Move the embroidery frame along the embroidery range of design data.



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







2. In process of tracing

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





- Regarding trace mode setting, refer to frame setting. Trace=> p.8-7
- It is not possible to perform tracing in process of embroidery.
- Pressing the trace key will cause the trace starting position to become a start position of design.
- Embroidery size of design will be displayed during tracing.

Offset (setting for position)

Set offset position.

A 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





2. Setting for offset position





3. Set





4. Completion

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.

When changing frame type, the offset

position will return to (0, 0).

Set an offset position using frame

frame will be displayed with

Pressing "SET" will cause the set

position to be registered to the

machine and to be used for all design

coordinates.

data.

travel key. Moving position of the

5. **U** Return to the original position







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

Pressing the offset key will cause the frame to return to the position before

travel.

9-4 JZ05

Offset (change of position)

Offset (change of position)

Change offset position.

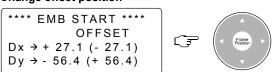


(V) When performing this operation, do not put your hands under the needle or on the machine table. If your hands are under the needle or on the machine table, you may be injured by the needle or the moving frame.

1. Select offset



2. Change offset position

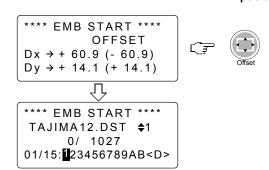


3. Set



4. Completion

5. the original is a second of the original is a second of the original is a second or position



- When changing frame type, the offset position will return to (0, 0).
- The frame will move to the registered offset position. Set a new position using frame travel key.
- Pressing "SET" will register the moved position.

Pressing the offset key will cause the frame to return to the position before travel

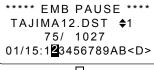
Offset (frame travel)

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

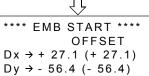
A CAUTION

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.

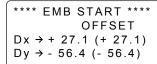
1. Move to the offset position







2. U Return to the original position







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

Pressing the offset key will cause the frame to move to the registered offset position.

Pressing the offset key will cause the frame to return to the position before travel. In addition, pressing the start switch will cause the machine to return to the original position and then to start embroidery.

Manual Thread Trimming

Perform thread trimming.



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 thread trimming (ATH).





2. Confirm





When selecting ATH, the main shaft will rotate. When tie stitching is set, the machine will embroider for one stitch to perform thread trimming. Tie stitching=> p.7-11

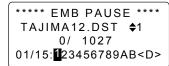
Frame back/forward (feed unit)

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



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)





2. Frame forward by color change unit

***** EMB PAUSE ****
TAJIMA12.DST **♦**C
0/ 1027
01/15:**1**23456789AB<D>





3. Completion

***** EMB PAUSE ****
TAJIMA12.DST \$C
75/ 1027
01/15:123456789AB<D>

Setting value:1,10,100,C,nNeedle
1: 1 stitch unit
10: 10 stitch unit
100: 100 stitch unit
C: Color change unit
n: Stitch position inputted by
numerical key
Pressing "FORWARD/BACK" for
one second or longer will cause the
frame to move until color change even

if it is released.

Pressing "FORWARD" will cause the frame to move to the stitch position of color change.

Every pressing will perform frame

Every pressing will perform frame forward to the next color change position.

9-8 JZ05

Frame back/forward (feed by n-stitches)

This operation performs frame back/forward by input stitch count.



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)





2. Input the stitch count

**** EMB PAUSE ****
TAJIMA12.DST ♦n ST
75/ 1027
01/15:1 2 3456789AB <d></d>



3. Move the frame to stitch position







4. Completion

***** EMB PAUSE ****
TAJIMA12.DST **♦**n ST
356/ 1027
01/15:12345 789AB<D>

- Setting value:1,10,100,C,nNeedle
 - 1: 1 stitch unit
 - 10: 10 stitch unit
 - 100: 100 stitch unit
 - C: Color change unit
 - n: Stitch position inputted by numerical key
- When the input stitch count is larger than the current stitch count, frame forward will be performed. When it is smaller than the current stitch count, frame back will be performed.
- Pressing "SET" will cause the machine to perform frame forward (frame travel) to the inputted stitch position.

Frame forward

The machine will perform frame forward.



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.

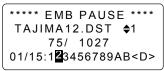
1. Select forward



2. Keep on pressing "forward".



3. Stop at color change position



- When 1 stitch unit is set, pressing "forward" once will cause the machine to perform frame forward by one stitch.
- Pressing "FORWARD" for one second or longer will cause the frame to move until color change even if it is released. To stop the frame, press the stop switch.

9-10 JZ05

Frame back

Frame back

The machine will perform frame back.



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.

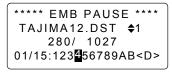
1. Select back



2. Keep on pressing "back".



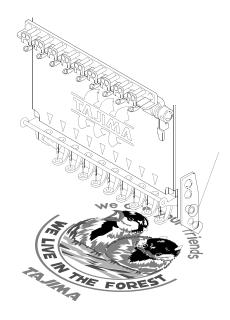
3. Stop at color change position



- When 1 stitch unit is set, pressing "back" once will cause the machine to perform frame back by one stitch.
- Pressing "BACK" for one second or longer will cause the frame to move until color change even if it is released. To stop the frame, press the stop switch.
- Frame back will be continued to the position of color change.

10. Outline of functions

Rotate	10-2
Mirror	10-2
Size	10-3
Repeat	10-3
Offset	10-4
Satin adjustment	10-6
Trace	10.6

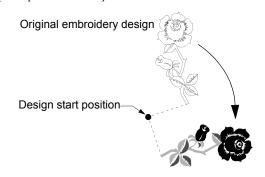


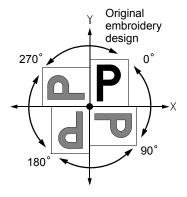
Rotate

This function rotates design of which data has been set.

The design is rotated centering the design start position.

Unit of rotation: 90° [Example: 90° rotation]





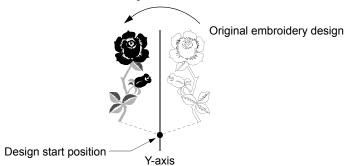
Mirror

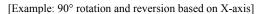
This function reverses design of which data has been set.

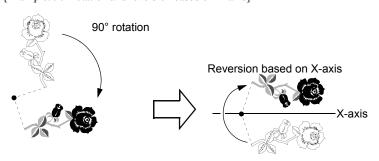
Design will be reversed horizontally/vertically based on a start position of design as the origin.

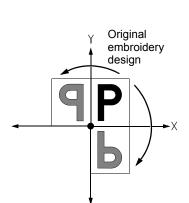
Reversing axis: X (Symmetric with respect to the X-axis)/Y (Symmetric with respect to the Y-axis)

[Example: Reversion based on Y-axis]









When both rotation and mirror are set, priority order will become rotation → reversion.

Size

This function enlarges/reduces design of which data has been set. It is possible to change scale ratio within a range of 80 to 120%.

Unit of scaling: 1%

[Example: 120%]



Original embroidery design

Repeat

This function repeats embroidery of a design of which data has been set. Set embroidery direction, the number of times of repeat, and design interval.

II is possible to rotate and/or reverse (mirror) the design repeatedly arranged. Priority order: Repeat → Rotation → Mirror

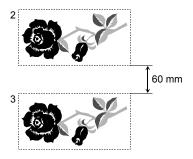
[Example Direction: Horizontal, The number of times: 4, Space: 55 mm

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: Horizontal, The number of times: 3, Space: 60 mm, rotation: 90°, Mirror:Y]

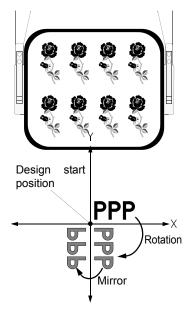


Direction: horizontal (Even if you set horizontal direction, the machine will actually perform embroidery in vertical direction because the design is rotated by 90°.)



If mirror is set to X-axis in the repeat setting illustrated above, embroidery will be performed in reversed order.

Even if a size of design data changes, the start position of design will remain unchanged.



ш

Offset

This function makes the frame move to the position set by offset, and return the frame to the original position after working.

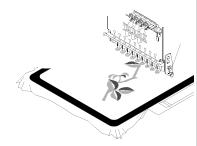
Offset includes manual/automatic setting (frame setting).

1. Manual Offset

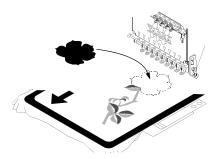
Pressing "OFFSET" at machine stop will cause the frame to move to the offset position. Pressing the "OFFSET" once more will cause the frame to return to the original position.

[Example: Placing applique]

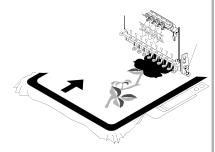
(1) Stop the machine



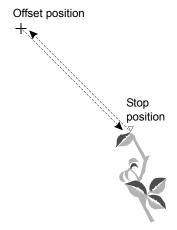
- (2) Move the frame to the offset position
- (3) Place applique



(4) Press the offset button to return the frame to the original position. (Pressing the start button will cause the frame to return to the original position to restart the embroidery.)



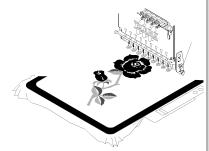
 \square Setting a temporary stop at color change will facilitate arranging applique etc. Setting for temporary stop => p.5-4



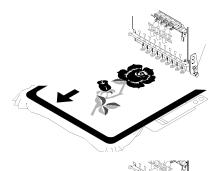
2. Automatic offset

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]

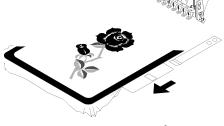
(1) Embroidery is finished



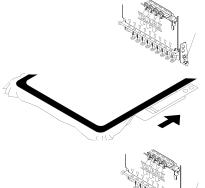
(2) Move the frame to the offset position



(3) Change the frame

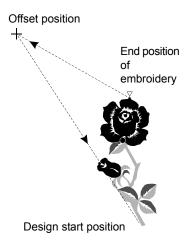


(4) New frame (Re-stretching of cloth)



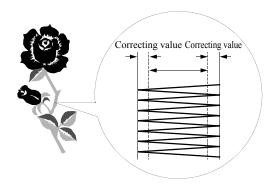
- (5) When pressing the start button, the frame will move to the design start position and embroidery will start.
- To embroider the same design, set frame setting "Origin return" to auto so that the machine performs embroidery from the same start position.

Origin return => p.8-4



Satin adjustment

This function expands satin stitch length.



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

Setting value: Off, 1 to 5

Stitches of 1.5 mm or longer will be corrected according to setting value. In case of stitches less than 1.5 mm, correcting value will be smaller.

Switching the DIP switch (2DWS) of the operation panel will correct stitches of 0.6 mm or

Switching the DIP switch (2DWS) of the operation panel will correct stitches of 0.6 mm or longer.

DIP switch \Rightarrow p.2-7

Trace

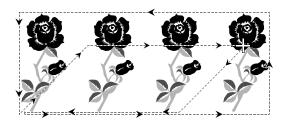
This function makes the frame move along an embroidery range of design of which data has been set as a square or contour.

When the machine starts tracing of the set design, it will go to the square corner on the front left and return to the start position of design after circling four corners or contour.

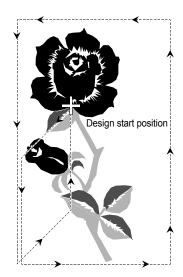
When repeat is set, the machine will trace the whole embroidery space.



If mirror: Y is set to the repeat shown above, the machine will perform trace as shown below.



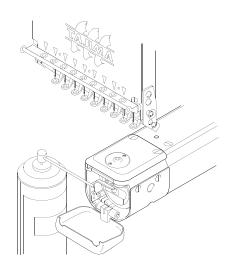
Pressing the trace key will cause the trace starting position to become a start position of design.



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11. TROUBLESHOOTING AND MAINTENANCE

When the machine is stopped during operation	11-2
When trouble occurs	11-4
Daily Maintenance	11-5



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)

An example of stop caused 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. In addition, If a code number of 300 series is displayed, contact your local 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 main shaft stop position to the fixed position. => p.11-3	
225	Embroidery space was exceeded.	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.11-3 •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 exceeded the memory capacity.	Press the ESC key to stop data input. Input design data again after deleting unnecessary design data. Press the SET key to enable embroidery by data set without data input. When the power is shut down in the middle of embroidery, the 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 and/or the external device.	
3D5	RAM memory error	Install the operation program again. Replace the Console 1 card.	
B01	Format error of the floppy disk	Format the floppy disk. Replace with a new formatted floppy disk.	
B04	A floppy disk is not inserted.	Insert the floppy disk.	
BC1	No design is registered in the floppy disk.	Insert the floppy disk in which design data is registered.	
	The disk driver has an abnormality.	Replace the disk driver.	
BC3	Sector(s) of the floppy disk are damaged.	Format the floppy disk. Replace with a new formatted floppy disk.	
	Floppy disk cannot be read.		
C01	The disk driver does not work.	Check if the floppy disk is set at the fixed position. Check the disk driver connector. If there is no problem with the connection, replace the disk driver unit.	



2. Maintenance stop

Maintenance stop is a stop to perform maintenance. It is not a stop by 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. After the lubrication, press the stop button to release the maintenance mode to continue working.

Lubrication=> p.11-7

MAINT. REQUIRD One drop of oil

→As per Inst. Manual

When the message shown right is displayed on the screen, grease the specified spots. After the greasing, press the stop button to release the maintenance mode to continue working.

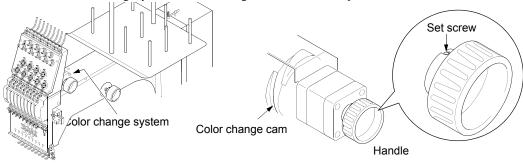
Greasing=> p.11-8

MAINT. REQUIRD Grease→Cams Takeup, 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.

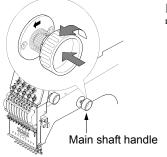
(1) Rotate the handle of color change system so that the fixing screw comes to the top.



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: 123456789AB<D> When main shaft stop comes off from the fixed position, the black square as shown left will blink. Perform manual color change to rotate the main shaft to return the stop position to the fixed position. After the main shaft stop returns to the fixed position, perform manual color change once again to return the needle bar to the original one. Manual origin return=> p.9-2



Turning the main shaft handle to the position where blinking of the black square stops will result in stop position of the main shaft. Turn the main shaft handle while pushing it.

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When trouble occurs



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
	Loose or broken belts	Adjust the belt tension or replace the belt.
Machine cannot start	Needle position signal, NOT detected.	Adjust needle position. => p.11-3
	Poor connection of connector	Securely connect the connectors.
a	Loose or soiled belt	Adjust the belt tension or clean the belt.
Stop position error	Galling of driving parts	Adjust or replace the needle bar drive system and/or rotary hook.
	Stop position is incorrect.	Adjust the position.
Incorrect color	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.
changing	Needle position NOT detected.	Adjust the needle position so that needle position is properly indicated in the manual color change section on the operation panel. => p.11-3
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.
	Incorrect tension of frame drive belt	Adjust the belt tension.
	Malfunctioning of frame drive system	Replace/adjust the parts.
Design displaced	Overall frame weight is excessive.	Lower the r.p.m. of the main shaft.
	Drive varit (V. V. even) defective	Replace the drive unit.
	Drive unit (X, Y-axes) defective	Replace the X-axis/Y-axis drivers.
	Wrong needle-rotary hook timing or improper gap	Adjust the timing or gap.
	Wrong needle bar lower dead point	Readjust the lower dead point.
Thread breakage	There are flaw(s) in the course where thread passes.	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	The machine cannot trim thread.	Adjust the ATH knife position.

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Daily Maintenance

1. Warning and cautions

MARNING

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.

A 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.

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2. Cleaning

WARNING

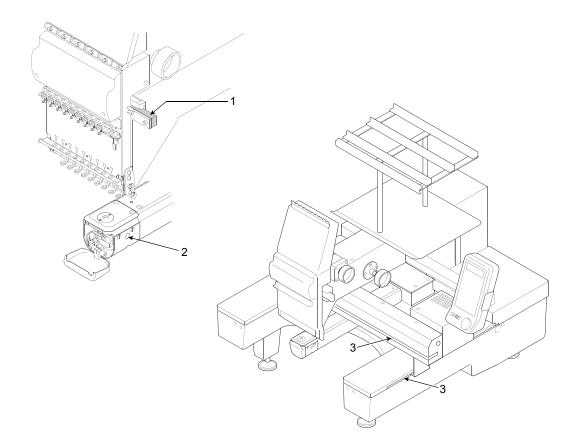
Before starting cleaning of the machine, be sure to disconnect the primary power to the machine and wait for four minutes. You could sustain electric shock or injury due to being entangled by the machine.

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 a week
(2) ATH section	Everyday
(3) X/Y-axis drive system	Once/2 weeks

1-needle machine does not have case linear.



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3. Lubrication

A WARNING

During machine lubrication, turn OFF the power switch. You could sustain severe injuries due to being entangled by moving machine units.

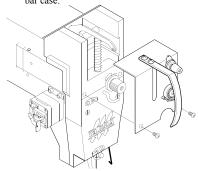
A CAUTION

Reep the lubrication cycles as shown below. Deviated lubrication cycles could cause thread breakage.

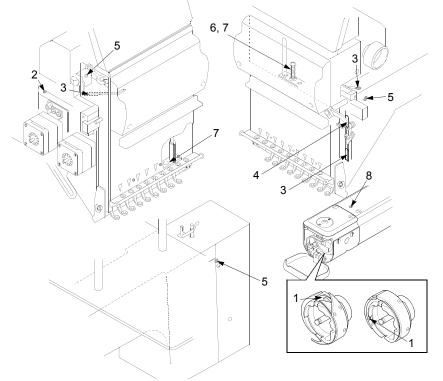
When supplying lubricating oil, use only Tajima's genuine TF oil or equivalent (#150 spindle oil: ISO viscosity grade=VG18).

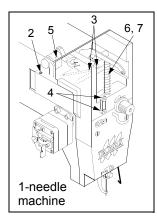
Lubrication points	Lubrication cycle
(1) Rail section of rotary hook	Every 3 to 4 hours of operation
(2) Drive shaft of presser foot reciprocator (3) Needle bar drive shaft	Once/day
(4) Presser foot drive shaft(5) Inside of the arm(6) Needle bar(7) Felt packing (needle bar)	Once/week
(8) Inside of the cylinder bed	Once/3 months

When performing lubrication to a 1-needle machine, detach 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 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. Maintenance stop=> p.11-3







4. Greasing

WARNING

During machine greasing, turn OFF the power switch. You could sustain severe injuries due to being entangles by moving machine units.

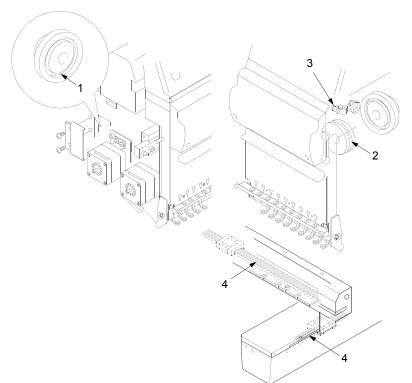
CAUTION

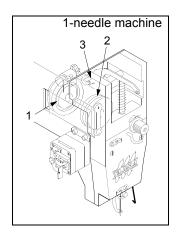
Please contact the distributor for further information about greasing.

Be sure to use the recommended commodity (mineral oil-based lithium grease) or the 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 on the operation panel. When the maintenance information is displayed, turn OFF the power switch and perform greasing to the specified spots. For other greasing, refer to the chart shown above. Maintenance stop=> p.11-3





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5. Inspections

A 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.

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

A 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.



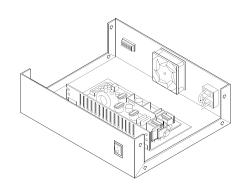
For the machine repairs, use TAJIMA genuine parts for replacement.

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11. TROUBLESHOOTING AND MAINTENANCE Daily Maintenance

12. Electro-component parts

Power supply box	12-2
Panel CPU card	12-2
Controller card	12-3
Main shaft power card	12-3
Driver card	12-3
Layout Drawing of Electrical Parts	12-4
Layout Drawing of Electrical Parts (1-Needle Machine)	12-5
Flectrical System Diagram	12-6



A CAUTION



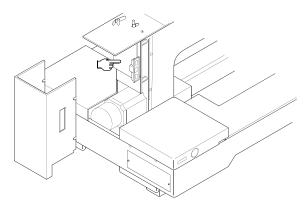
O Do not block wind flow of the cooling fan. Inside of the box will overheat to lead to breakdown.

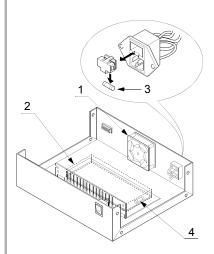
Power supply box

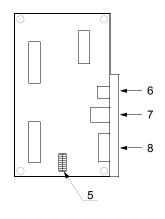
- 1: Cooling fan
- 2: DC power supply
- 3: Glass tube fuse (250 V/6.3 A) for AC power supply
- 4: Glass tube fuse (250 V/8 A) for AC power supply

Panel CPU card

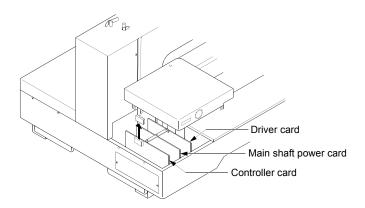
- 5: DIP switch
- 6: USB port
- 7: LAN port
- 8: RS232C port







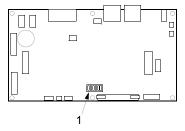
JZ05 12-2



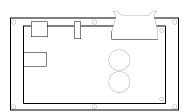
When you take off the cover, also disconnect the power supply harness from the controller card that is located at the cover.

Controller card

1: DIP switch

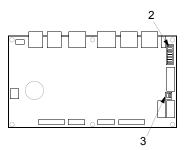


Main shaft power card

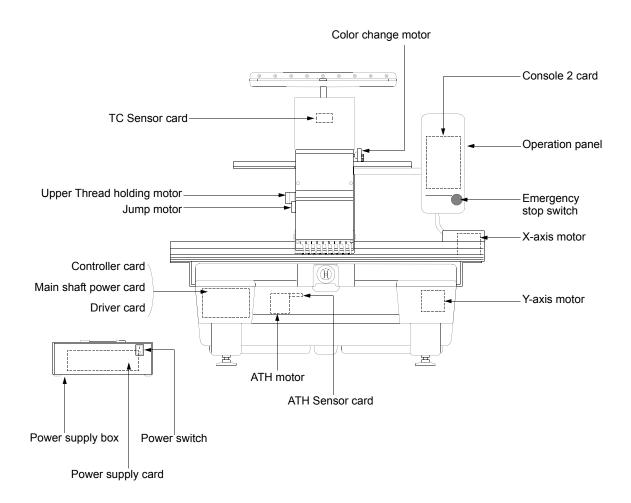


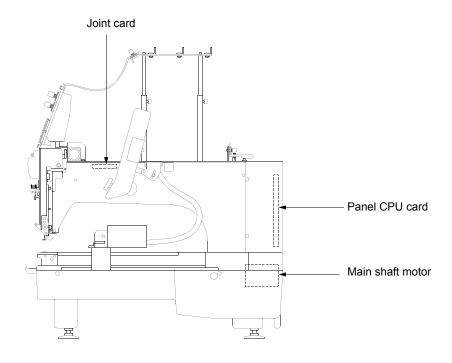
Driver card

- 2: DIP switch
- 3: DIP switch

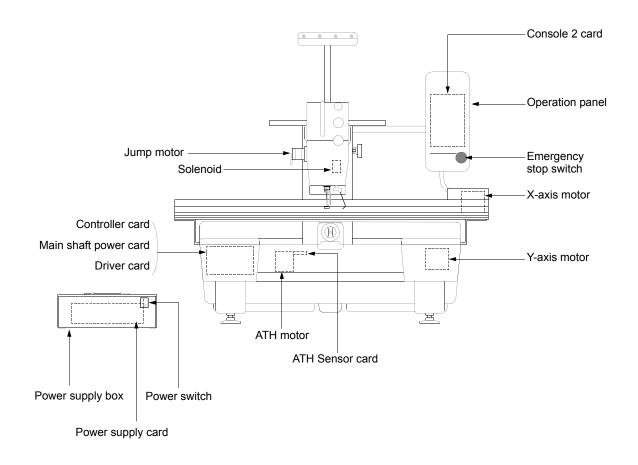


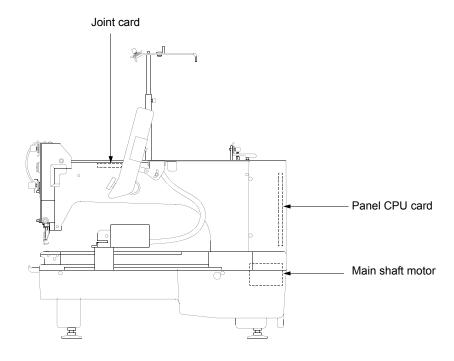
Layout Drawing of Electrical Parts





Layout Drawing of Electrical Parts (1-Needle Machine)

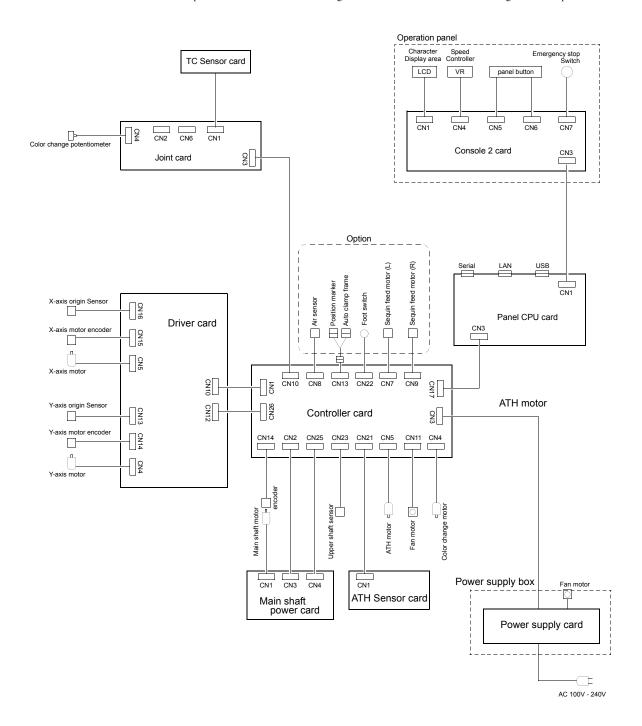




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Electrical System Diagram

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



■ Manufactured by: Tokai Industrial Sewing Machine Co., Ltd.

NO.1800, Ushiyama-cho, Kasugai, Aichi-pre., 486-0901, Japan Telephone:568-33-1161 Fax:568-33-1191

■ Distributed by:

Tajima Industries Ltd.

19-22, Shirakabe, 3-chome, Higashi-ku, Nagoya, 461-0011, Japan Telephone:52-932-3444 Fax:52-932-2457

■ Authorized Distributor:



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