

PS-910 Needle thread clamp device INSTRUCTION MANUAL



CAUTION:

This Instruction Manual describes the needle thread clamp. When you want to use your sewing machine with this product attached, refer to the "Safety precautions" in the Instruction Manual for your sewing machine carefully until you fully understand the included precautions in prior.

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1. Component parts list

| Be aware that the sewing area in the Y direction is changed by installing the needle thr | | | | | | |
|--|---------------------------------|-----|---------------------|--------------------|---|--|
| | clamp device. (Refer to p.10 .) | | | | | |
| | Model | | Before installation | After installation | | |
| ¦ 🖤 | PS-910-6055 | X:Y | 600×550 | 600×510 | | |
| - | PS-910-13090 | X:Y | 1300×900 | 1300×820 | | |
| l | | | | | - | |

In the shipped state, the needle thread clamp device has been installed for use with the PS-910-6055. The customer who has purchased the PS-910-13090 should change component part $\bigcirc \rightarrow \bigcirc$. (Refer to "5-1-2. In the case of installation to the PS-910-13090" p.14 for details.) Check the parts shown below.





40289313 Needle thread clamp device asm.

| No. | Part number | Part name | Quantity | |
|-----|-------------|---|----------|------------------|
| 0 | PA1003028A0 | Air cylinder | 1 | |
| 0 | PA900081000 | Sensor band | 1 | |
| 3 | 40294704 | Thread retaining base A | 1 | |
| 4 | 40294705 | Thread retaining base B | 1 | |
| 6 | 40294706 | Thread retaining base C | 1 | |
| 6 | 40294707 | Thread retaining base D | 1 | For PS-910-6055 |
| 0 | 40228907 | Thread retaining lever | 1 | |
| 8 | 40228908 | Fulcrum of the thread retaining lever | 1 | |
| 9 | 13442702 | Bobbin thread trimmer connecting pin | 1 | |
| 0 | 40020746 | Wiper | 1 | |
| 1 | 40026326 | Bearing shaft | 1 | |
| Ð | BT0400251EB | Polyurethane tube 4x2.5 | 0.38m | |
| ₿ | BT0400251EB | Polyurethane tube 4x2.5 | 0.42m | |
| Ø | BT0400251EB | Polyurethane tube 4x2.5 | 0.42m | |
| ₿ | NM7040032SC | Hexagon cap nut, Type 3, M4x0.7 | 1 | |
| ₿ | PA1000506A0 | Cylinder | 1 | |
| Ð | PA900034000 | Double notched knuckle joint | 1 | |
| ₿ | PJ304040504 | Union | 2 | |
| ₿ | PX950013000 | Plug | 2 | |
| 2 | SL6040892TN | Hexagon socket head cap screw with washer M4 L=8 6 | | |
| 4 | SL6041292TN | Hexagon socket head cap screw with washer M4 L=12 | 1 | |
| 2 | SM3041252TN | Round screw M4 L=12 | 2 | |
| 23 | SM8040412TP | Setscrew M4X4 | 1 | |
| 2 | 40282414 | Needle thread clamp sensor | 1 | |
| ❹ | 40282415 | HEAD PCB junction wire A (for the OP device) | 1 | |
| 29 | 40282416 | HEAD PCB junction wire B (for the OP device) | 1 | |
| Ø | 40282421 | Needle thread clamp junction wire A (for the OP device) | 1 | |
| 23 | 40282422 | HEAD PWB 3 | 1 | |
| 29 | 40282423 | Needle thread clamp junction wire B (for the OP device) 1 | | |
| 3 | 40282425 | Needle thread clamp junction wire C (for the OP device) 1 | | |
| 3 | 40234513 | Screw | 4 | |
| 62 | 40294709 | Y sensor base_6055 | 1 | |
| 63 | 40294710 | Y sensor base_13090 | 1 | |
| 34 | 40295195 | Thread retaining base D_13090 | 1 | For PS-910-13090 |
| 69 | SS7111120TP | Screw | 1 | |
| 60 | WP0501016SD | Washer | 1 | |

2. Changing the Y sensor mounting sheet metal fitting

The sewing area in the Y direction is changed by installing the needle thread clamp.) It is therefore necessary to change the Y sensor mounting sheet metal fitting. If not, the sewing machine and the device will interfere with each other. So, be careful.

2-1. Changing the Y sensor mounting sheet metal fitting of the PS-910-6055



1) Turn the power ON and reset the sewing machine. Then, press the "Next".

| Test | Test 2030-08-13 12:36:44 | | | | |
|----------------|--------------------------|-------------|-------|---------------------|--------|
| QEP 5 | Frame | OUT1 | OUT6 | 0UT11 | 10 |
| Winding + | Foot | 0UT2 | OUT7 | 0UT12 | >8 |
| 1800 | Trim | OUT3 | OUTS | LED | ITIM |
| Winding 🖡 | Thread pull | OUT4 | OUT9 | Pause Position | Needle |
| Allow | Thread loosing | OUT5 | OUT10 | Cosmon functions | Foot |
| change shuttle | | | | | |
| Extend | Reset | CO - | C Ce | Move Frame | Return |

2) Press the "Manual Feed" button.

| Move Frame | 2030-08-13 12:37:57 | | | | |
|-----------------------|---------------------|-------|-------|----------------|-------------------|
| Y coordinate | Axis1 | UP b | utton | Axis2+ | Axis2- |
| X 07.04 0.0 | Z+ | | | - | Axis3+ |
| ¥ 510.04 0.0 | | - | | - | Axis3- |
| Speed changeo | ver but | tton | | | No. |
| Step position Axis4- | Z- | | ,▼ | - | Up Down Needle |
| Extend axis Reset Fra | DO | WN bu | utton | @ (D -2 | Return |

 Press the "UP button" or "DOWN button" to move the Y axis to the position of the Y coordinate: 510.

It should be noted that the traveling speed can be adjusted with the "Speed changeover button".





4) In the power-OFF state, remove the resin cover from the left side of the main body of the sewing machine.

5) Change the Y-direction sensor mounting sheet metal fitting with "Y sensor base_6055" 🕹 .



6) Turn the power ON. Adjust the mounting position of sheet metal fitting

 Get the sheet metal fitting at the position where the Y-direction sensor just lights up.







8) Press the "Menu" button.

9) Press the "Machine Parameter" button.

| fachine Parameter 2030-08-13 12:39:05 | | | |
|---------------------------------------|------------------------|---------------------|--------|
| Shaft Angle Setting | Input Port Setting | Output Port Setting | R |
| Platen Size Setting | Axis Run Parameter | Delay Setting | |
| Dynamic Foot | Turning Point Speed | Swing Setting | Next |
| Oil supply setting | Bond Polarity | Cutter Setting | |
| Non Standard Setting | Rotation Setting | Head Offset | Return |





10) Press the "Platen Size Setting" button .

11) Set the "Y+Position Limit" to 510.

12) Press the "Save". Then, press the "Confirm" to change the sewing range in the Y direction to 510 mm.

2-2. Changing the Y sensor mounting sheet metal fitting of the PS-910-13090



| Test | | | 203 | 0-08-13 12:3 | 6:44 |
|----------------|----------------|--------------|-------|---------------------|-------------------|
| QEP 5 | Frame | OUT1 | OUT6 | 0UT11 | 10 |
| Winding 1 | Foot | 0UT2 | OUT7 | 0UT12 | >% |
| 1800 | Trim | OUT3 | OUTS | LED | Trim |
| Winding \$ | Thread pull | 0UT4 | OUT9 | Pause Position | Up Down Needle |
| Allow | Thread loosing | OUT5 | OUT10 | Common functions | Foot |
| change shuttle | | | | | |
| Extend | Reset | C O O | C Ce | Move Frame | Return |





1) Turn the power ON and reset the sewing machine. Then, press the "Next".

2) Press the "Manual Feed" button.

 Press the "UP button" or "DOWN button" to move the Y axis to the position of the Y coordinate: 820.

It should be noted that the traveling speed can be adjusted with the "Speed changeover button".

 In the power-OFF state, remove the resin cover from the left side of the main body of the sewing machine.





 Turn the power ON. Adjust the mounting position of the sheet metal fitting (2) to secure the fitting at the position where the Y-direction sensor barely lights up.



 Tighten the fixing screws to secure sheet metal fitting (3) and the Y-direction sensor.



8) Press the "Menu" button.



| fachine Parameter 2030-08-13 12:39:05 | | | |
|---------------------------------------|------------------------|---------------------|--------|
| Shaft Angle Setting | Input Port Setting | Output Port Setting | |
| Platen Size Setting | Axis Run Parameter | Delay Setting | |
| Dynamic Foot | Turning Point Speed | Swing Setting | Next |
| 011 supply setting | Bond Polarity | Cutter Setting | |
| Non Standard Setting | Rotation Setting | Head Offset | Return |





9) Press the "Machine Parameter" button.

10) Press the "Platen Size Setting" button .

11) Set the "Y+Position Limit" to 820.

12) Press the "Save". Then, press the "Confirm" to change the sewing range in the Y direction to 820 mm.

3. Removing the wiper device



1) Push the air cock to the left to disconnect the air supply to the sewing machine.



2) Remove the fixing screws of the intermediate presser motor cover. Remove the cover.



3) Remove two air tubes of the wiper device cylinder that are mounted to the solenoid valve.



4) Remove the fixing screws of the cylinder and wiper. Then, remove the cylinder and the wiper device.

Keep the parts you have removed separately.

Reference image of the parts in the removed state

4. Removing the disk presser (for the S and H types)



1) Remove the disk presser and the air tubes that blow air to the needle thread.



2) Remove the disk presser and the needle thread air blow duct with a 2.4 mm hexagonal wrench or smaller one.

Keep the parts you have removed separately.

Reference image of the parts in the removed state

5. Installing the needle thread clamp device

5-1. Installing the main body

5-1-1. In the case of installation to the PS-910-6055



 Install the needle thread clamp device to the left side of the machine head with screws (2) and (3) and washers (3).





is a hexagonal socket head screw.
 is a 1-inch slotted screw. Be careful not to use the wrong screw mistaken-

5-1-2. In the case of installation to the PS-910-13090



Remove two screws that fix thread retaining base D in the needle thread clamp device.
 Remove thread retaining base D i.



Secure thread retaining base D_13090 to the needle thread clamp device with two screws .



Install the thread retaining base with the sides marked with the arrows aligned.

Install the needle thread clamp device to the left side of the machine head with screws (2) and (3) and (3) and washers (3).







5-2. Adjusting the main body



 Loosen the screws. Adjust the longitudinal position of the device and make sure that the thread retaining base and the needle bar guide do not interfere with each other. Adjust the clearance to 3 mm ±1 mm.

2) Loosen the screws. Adjust the vertical of the device so that the wiper does r with the presser foot and the needle with the presser foot and the p



2) Loosen the screws. Adjust the vertical position of the device so that the wiper does not interfere with the presser foot and the needle when the presser foot goes up and the wiper extends. Adjust the clearance to 3 mm ±1 mm.



 Loosen the screws. Adjust the lateral position of the device so that the needle is located at the center position of the wiper in terms of lateral direction.

5-3. Piping procedure



 Connect one sides of supplied air tubes (2) to (2) to the needle thread clamp device.



2) Connect the other sides of air tubes (2) to (2) to the solenoid values of the sewing machine head. (Refer to the figure on the left for the connecting locations of the respective air tubes.)
Connect one plug for the A type and two plugs (1) for the S or H type to the solenoid values of the sewing machine head to which no air tube has been connected.

6. Adding the HEAD PCB

WARNING :

1. Installation procedure of the automatic bobbin changer must be carried out by a trained technical expert.



- 2. Request your distributor or a specialized electrician to carry out electric wiring.
- 3. Do not connect the power plug of the sewing machine before completing the installation procedure.
 - If the start button is pressed during the work by mistake, the sewing machine will actuate, posing a great risk.
- 4. Be sure to connect the ground wire.
 - If the ground wire connection is not proper, electric shock can be caused.





 Secure HEAD PCB 3 (2) to the side face of the shelf of the electrical control box with screws (3).

7. Wiring

List of wiring parts:

| No. | Part name | Quantity |
|----------|---|----------|
| Ð | HEAD PCB junction wire A (for the OP device) | 1 |
| 20 | HEAD PCB junction wire B (for the OP device) | 1 |
| Ø | Needle thread clamp junction wire A (for the OP device) | 1 |
| 23 | HEAD PWB 3 | 1 |
| 29 | Needle thread clamp junction wire B (for the OP device) | 1 |
| I | Needle thread clamp junction wire C (for the OP device) | 1 |

Overall view of wiring is as shown below.

Refer to the description given in 7-1. and beyond for details of the wiring procedures for the respective wires.



7-1. Wiring the HEAD PCB and the electrical control box







1) Remove the setscrews of the electrical control box cover to open the cover.

2) Connect HEAD PCB junction wire A low to the connector (J33) on the MAIN PCB.

3) Connect HEAD PCB junction wire A (2) to the connector (J15) on the DRIVER PCB.



Fit connector of HEAD PCB junction wire A line the hole in the side face of the electrical control box.

5) Connect HEAD PCB junction wire B 🕲 to the connector of HEAD PCB junction wire A 🌚 .



6) Route HEAD PCB junction wire B ③ in the topface wiring duct according to the path shown in the figure.



- 7) Route HEAD PCB junction wire B ④ from the top-surface wiring duct to the HEAD PCB side according to the path shown in the figure.
- * The wiring path differs with the model.



 Connect the connector of HEAD PCB junction wire B ⁽¹⁾/₍₂₎ to the connector (J9) on the HEAD PCB 3.

7-2. Wiring the needle thread clamp sensor



 Connect the connector of the needle thread clamp sensor to the connector (white/2-pin) of the slip ring cable (D89).



 Open the wiring duct cover to find the connector (white/2-pin) of the upper slip ring extension wire (D86) in the duct.

Connect this connector to the connector of the needle thread clamp junction wire A **③** .



 Connect the rod terminals of needle thread clamp junction wire A ② to the IN6 and GND of the connector J12 on HEAD PCB 3 ③ .

| | Needle thread clamp junc- |
|-----|---------------------------|
| | tion wire A 🕑 |
| IN6 | Brown |
| GND | Blue |

7-3 Wiring the clamp and wiper solenoid valve



 Remove the presser connector (black/2-pin) from the electrical control box. Connect it to the connector of needle thread clamp junction wire B
 .

Remove the wire connector (blue/2-pin) from the electrical control box. Connect it to the connector of needle thread clamp junction wire C 0.



2) Connect the rod terminals of needle thread clamp junction wire B (2) to the OUT 1 (displayed as OUT11 in the operation panel) of the connector J13 on HEAD PCB 3 (2).
Connect the rod terminals of needle thread clamp junction wire C (1) to the OUT 2 (displayed as OUT12 in the operation panel) of the connector J13 on HEAD PCB 3 (2).

| HEAD PWB 3 (J13) | Needle thread clamp junction wire B 🕲 |
|------------------|---------------------------------------|
| OUT1 + | Brown |
| OUT1 - | Blue |

| HEAD PWB 3 (J13) | Needle thread clamp junction wire C 🗐 |
|------------------|---------------------------------------|
| OUT2 + | Brown |
| OUT2 - | Blue |

8. Upgrading the software

Combination of the below-stated pieces of software is required in accordance with the type of the PS910. Preliminarily check to make sure that three types (instruction file, parameter file and command file) of software have been stored on the USB thumb drive according to the type of the sewing machine.

Refer to the description below for how to write the software.

| Area size | Туре | BK-10 | Automatic start after changing the bobbin | Instruction file (.xhc) | Parameter file (.xhp) | Command file (.xcc) |
|--------------|-------------------------------|--------|---|---------------------------------------|-----------------------------|----------------------|
| | | Unused | | CM BS010 12000 CI AMB 1001 Mapual via | | |
| | Standard | Used | Disabled | | PS910-13090SZ_CLAMP-001.xhp | |
| 13000 | | Used | Enabled | CM_PS910_13090_CLAMP_J001_Auto.xhc | | |
| 13090 | Laser | Unused | | CM DC010 12000 CLAND 1001 Manual via | | |
| | | Used | Disabled | PS910-13090SC_CLAMP-001.xhp | | |
| | | Used | Enabled | CM_PS910_13090_CLAMP_J001_Auto.xhc | | DS010 CLAMD 1001 yes |
| | | Unused | | CM DOMA COSE OF AND 1004 Manual vita | | |
| | Heavy- weight materials | Used | Disabled | | PS910-6055HZ_CLAMP-001.xhp | |
| 6055 | materialo | Used | Enabled | CM_PS910_6055_CLAMP_J001_Auto.xhc | | |
| 6055 | | Unused | | CM DS010 S055 CLAMD 1001 Manual via | | |
| | Air bags | Used | Disabled | | PS910-6055AZ_CLAMP-001.xhp | |
| | | Used | Enabled | CM_PS910_6055_CLAMP_J001_Auto.xhc | | |

Table 1

8-1. Writing the command file (.xcc)



1) Press the "Menu" button.











2) Press the "Assist settings" button.

3) Press the "System upgrade" button.

 Press the "Drop Down Flag" buttonto select the "Command".

5) Select the "USB" button and select the command file "PS910_CLAMP_J001.xcc".

6) Select the "Command Upgrade" button.



8-2. Re-writing the instruction file (.xhc)

X:200.0 Y:130.0

Lock File Test1

Speed 7

1800

2030-08-13 12:41:01

5:H仕様デロモー 7:xxxx-03

28:07135

30:重机圆弧测

1) Press the "Menu" button.

2) Press the "System upgrade" button.

3) Press the "System upgrade" button.

4) Press the "Programming" button.

5) Select the "USB" button.

| Programming | 2030-08-13 12:42:57 |
|-------------------------|---|
| M PS910 6055 CLAMP 1001 | Programming instruction has been closed: |
| / MSR | FLASH |
| / M9 | |
| / PS910 | |
| // prog | |
| Close | Delete Write Return |

| Programming | 2030-08-13 12:42:57 | | |
|--------------------------|-------------------------|--|--|
| CM_PS910_6055_CLAMP_J001 | Programming instruction | | |
| System Volume Informatic | has ocen cloked: | | |
| // MSR | 7.2 | | |
| /[M9 | I-Z | | |
| / PS910 | 7.1 | | |
| / prog | | | |
| | | | |
| Close | Delete Write Return | | |

| Programming | 2030-08-13 | 12:43:50 |
|--------------------------|----------------------------|----------|
| 13:PS900_BK10_自動交換_1 | Proventing to starting the | |
| 14:CM_PS910_6055A_J002_1 | has been closed | |
| 15:CM_PS910_6055A_J002_1 | | |
| 16:CM_PS910_6055A_J004_A | | |
| 17:CM_PS910_6055_CLAMP_ | | |
| 18:CM_PS910_6055A_J004_A | | Export |
| Close | Delete Write | Return |



| Programming | 2030-08-13 12:45:12 |
|--------------------------|--|
| ○01:CM_PS910_6055上系クラ | Hane: CH P5310 6055 CLARP_1001_Auto. xhe |
| 02:PS910_6055_手動交換_B | Iver: V. 1000, 119 Iver: V2.1. 2312, 1 T5, 112,1020 Date: 2030-05-15 12:144:31 |
| 03:NT8804-NEW1 | |
| ◎04:PS900_BK10_自動交換_0 | |
| 05:CM_PS910_6055A_J002_1 | |
| 06:JUKI-IN23-A | Esport |
| Close | Delete Write Return |

6) Select the instruction file you want to write on the panel memory.

- 7-1) Press the "Import" button to import the file into the panel memory.
- 7-2) Press the "FLASH" button to return to the the panel memory display screen.

8) Select the instruction file you want to write.

9) Press the "Write" button.

10) Confirm that the name of the instruction file you have written is displayed to complete upgrading.

8-3. Re-writing the parameter file

Speed 7

1800

Speed

Reset

Bas

T

Menu

File Manag

User Paran

1) Press the "Menu" button.

2) Press the "Param File" button.

- 3) Enter the password.
 - The password is "11111111" (provided that you have not changed the password).

- Flash Param File 2030-08-13 12:46:30 07:PS910-6055AZ-002 01:PS910-6055HZ-001-in5(1) 02:PS910-6055AZ-003 08:PS910-6055HZ-002 03:PS910-6055参数temp 04:PS910-6055HZ-001 Ex 05:测试参数 Backup 10 SSAZ_CLAMP-003. she Delete Write Return Export
- Select the parameter file (.xhp) in accordance with the type of the sewing machine referring to Table 1.

Then, press the "Write" button.



Password

6

9

8

214

Trim

Foot

 Jome
 2030-08-13
 12:34:45

 Lock File
 356854
 X:200.0
 13:rftt

 Drestline
 14:ergft
 14:ergft

5:356854

7:adjust4

< File

l6:ks

8:yfr

2030-08-13 12:46:10

4

CI

±

am File

st Setting

gramming ting

Return

9. Creating a pattern

9-1. In the case of creating a new sewing pattern with the pattern editing software

| | | 11 | Don't Set Ref. | Set Table Size | near point | Change Size | |
|----------------------|--------|---------------|--|--|------------------|-------------|---|
| Open file | Intert | Save as | Remove overlap when open the file? Version : V220100-P(C) | $\Box Line don't auto Link \Psi = 0.000 \text{ am}, H = 0.000 \text{ am}$ | X = 0.0, Y = 0.0 | | - |
| yer Outp Sha | pa . | Change layer | | | | | |
| | 1 | Shape Clone | | | | | |
| (OPEN FI | LE) Op | en a file. | | | | | |
| | 1 | Nore Op. | | | | | |
| | | Change Shape | | | | | |
| | | Edit Shapa | | | | | |
| | | Layer Setting | | | | | |
| dle v | 1 | mr. Back | | | | | |
| Ok | 0 | t Add shape | | | | | |
| Up Down | Up | Down | | | | | |
| | | 1 | | | | | |
| Jusp size(an) | - | × → | | | | | |
| 0.10 | | $\hat{1}$ | | | | | |
| X Mirror | | 4 Angle | | | | | |
| Y Hirror | Rotate | 190.00 | | | | | |
| Default instructions | set | Cosmon Op. | | | | | |
| Farmater set | 1 | Zoon | | | | | |
| Insert may set | | Drag show | | | | | |
| | 1 | 1222201820000 | | | | | |

1) Activate the sewing pattern editing software that supports the needle thread clamp device. Open the sewing pattern you want to use.

The sewing pattern editing software that supports the needle thread clamp device is the software shown below.

- Ea 通い形状(E) SIX Don't Set Ref. Set Tuble Size new point Change Size Open file Save as Innert Bamove everlap when open the file? Variion : #220108-F(C) Line don't ento Link I = 179.998 mm, I = 29.995 mm Change layer Layer Output Layer1 Ten Shape Shapel Shapel Shapel Shapel Shape Clone Sot as Ref. Morn Op. Change Shape Edit Shape 1Needle 0k 1 Ok Add shape Up Down. Up Down. Junp size(nm) 0.10 1 X Mirror Y Mirror Rotate 100.00 Click the "Operation" Drag show Reset Show Del Short Show whole Show layer Show order Auto Lepayed Order Rait
- · V220108-P©_CLAMP

2) Click the "Operation".

| 1 | | | | Din 1 Set Ref. | Set Table Size | | nest point | Change Size | |
|--------|--------------|------------------|---------------|--|------------------------|-------------------------------|---------------------------|-------------|--|
| 0 | open fils | Insert | Save as | Benove overlap when open the file? | . Li | ne don't auto Link | | | |
| Layer | Output | Shapa | Change layer | Versien : V220100-F(C) | ¥ = 370.600 em . X = 1 | 298.520 m | I = 179.990 mm, Y = 29.99 | J na | |
| Laperi | Tes | Shape2 Shape3 | Shape Clone | | \wedge | \land | | | |
| | | Shape4 | Set as Ref. | Output process | | 1 | | | |
| | | | Roce Op. | -> 1Needle Nove to1> St | napel | Instruction I Axes set | | | |
| | | | Change Shape | Layeri> Shag Move tol> Sh | sel | Ex_Axes Delay Output IO | - | | |
| | | - | Edit Shape | Layer1> Shag Move to1> Shag Layer1> Shag | na Lape3 M3 | C== Input IO Speed | | | |
| | | | Layer Setting | Move to1> Sh Layer1> Shag | sspe4 se4 | I Axes Speed Coor_Clear | | | |
| Feedle | ¥. | | OF. Back | | | Loop MainAxes Pos is | ute | | |
| 1 | Ch | 1 | Ck Add shape | | | C. Brindman i | · | | |
| 0) | | Den | Rp Down | | | Elst Canfagurat | TT III | | |
| Junp | size(an) | - | | | | □ope Click | the "Save as" | | |
| 0.1 | 10 | _ | î | | | X: 100,00 Y: 100,00 | | | |
| | I Mirrer | | Angle | 1 | 9 | Save a | | | |
| | 1 Miller | Rota | te 180.00 | Up Down | Delete | Exit | | | |
| Def | fealt instru | tions set | Connon Op. | | | \frown | \frown | | |
| | Twieter | And . | Zion | | \vee | \vee \vee | | 1 | |
| Intert | 5+7 Q44 | | Drag show | | | | | | |
| | Operati | ê de | Reset Show | | | 100 C | | | |

3) Click the "Save as".

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| 整理 ▼ 新しいフォルダー | | ⊾ - (? |
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| ピクチャ | | |
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| 1 相关资料分享 | | |
| S _ OneDrive | | |
| ファイル名(N): 縫い形状④ | | 8 |
| ファイルの種類(T): xdg(*.xdg) | | Click the "Save". |
| | | + |

- 4) Click the "Save".
- * The command for the needle thread clamp is automatically registered in the sewing pattern by conducting the aforementioned steps of procedure 1) to 4) with the sewing pattern creation software V220108-P©_ CLAMP.







- Collect Graphics
 2030-08-13 12:48:34

 Graph Zdlt
 FX:0.00

 Fates Preset
 Step 2:50

 Botate
 Fates

 Rotate
 Collect

 Return
 Other

 Reset
 Foot

 Code
 Under
- 4) Select the "Edit a graphic".

1) Select the sewing pattern you want to modify.

2) Select the "Menu" and "File Edit" on the screen in the written order. Then, select the "Edit a file".

3) You can select whether the file is reset or not.

| Graph Edit | 2030-08-13 12:4 | 8:55 |
|-------------|----------------------------------|---------------|
| Delete | Undo Graph Switch Step: 2.50 < 🗩 | Fasten |
| Copy | Note | Node Edit |
| Step | → Move XY axis? — | Stitch Edit |
| Reverse | No No | Rotate needle |
| Rotate edit | | Code |
| Return | Foot 🔍 Single 👿 🔍 ALL | Array |









5) You can select whether the XY axes are moved or not.

- 6-1) Change the selection method to the "Single Selection".
- 6-2) Select the first stitching line.
- 6-3) Then, select the "Command".

 Select the third stitch from the top of the stitching line. When you check the target stitch with the arrow, the cross mark moves to the third stitch position.

8) Select the "Add".

| Code | and the strength of the second states | 2030-08-13 12:51:09 |
|------|---------------------------------------|---------------------|
| Ac | New Comman | nd 🖉 🛆 |
| | Output IO | |
| Ed | Reverse output 10 | |
| Del | Input IO | |
| | Delay | |
| Cla | Secondary origin | |
| Ret | Return Single 📰 OK | Add V |

| Code | | 2030-08-13 12:51: | :19 |
|------------|-----------------|---|-------------|
| A | 10-1 lit Comman | d in the second s | \triangle |
| | Outp Output IO | | |
| Ed | 12 | | |
| | Level | | |
| Del | Inp High | | |
| | De | | |
| Cle Se | conda 10-2 | | |
| | I E Sava | | |
| Ret Return | s s | Add | |

| Code | | | 2030-08-13 12: | 51:40 | | | |
|------|-------------------|-------------|----------------|-------|--|--|--|
| Ac | New | New Command | | | | | |
| | Output 10 | | | | | | |
| Ed | Reverse output IO | | | | | | |
| Del | Input IO | | | | | | |
| | Delay | | | | | | |
| Cle | Secondary origin | | | | | | |
| Ret | Return Single 🔽 | ОК | Add | | | | |



| Code 2030 | -08-13 12:52:09 | 1 |
|--------------------|-----------------|-------------|
| Add | Output IO | \triangle |
| Edit | | |
| Delete | | |
| Clear | | |
| Return ALL Q 🗹 📐 🔍 | | ∇ |

9) Select the "Output IO" and click the "OK".

- 10-1) Enter "12" in the "Output IO" field and "High" in the "Level" field.
- 10-2) Then, click the "Save".

11) Click the "Add".

12) Click the "Output IO" command that appears on the right side.

13) After you have selected the command, click the "Edit".

| Code | | | 2030-08 | -13 12:53:44 | 4 |
|--------|-----|-----------------|---------|--------------|-------------|
| Add | | 14-1 it Command | | Output 10 | \triangle |
| Edit | | Output IO | | | |
| Delete | ••+ | High | 1 | | |
| Clear | - | 14-2 | | | |
| Return | ALL | Save | €. | | |



| Graph Edit | 2030-08-13 12 | 2:54:22 |
|-------------|------------------------------|---------------|
| Delete | Undo Graph Switch Step: 2.50 | Fasten |
| Copy | | Node Edit |
| Step | <u>→</u> | Stitch Edit |
| Reverse | | Ratate needle |
| Rotate edit | A State of the second | Code |
| Return | Foot Q Single Q AL | Array |



| Collect Graphics | 2030-0 | 8-13 12:54:36 |
|-------------------|------------------|---|
| Graph Edit | | PX:-49.52 AX:257.52 PY:-275.00 AY:275.00 |
| Fasten Preset | Note | |
| | | |
| Rotate Rotate | No | |
| 00 - | | |
| Return Other Rese | r Foot Code Undo | Collect As |

- 14-1) Check whether the content of the "Instruction Edit" is correct.
- 14-2) If the content has no problem, click the "Save".

15) Click the "Return".

16) For other stitching lines, also carry out setting of the needle thread clamp following the steps of procedure 6-1) to 15) in "9-2. In the case of using the needle thread clamp with an existing sewing pattern".

17) After you have completed setting of all stitching lines, click the "Return" to return to the "Graphic Collect" page.

18) Click the "Return". Then, click the "Save" to complete the pattern modification.

10. Changing the sewing range

10-1. Changing the sewing range of the PS-910-6055

The sewing range in the Y direction is changed from 550 mm to 510 mm by conducting "2-1. Changing the Y sensor mounting sheet metal fitting of the PS-910-6055".

The template corresponding to the maximum sewing range dimensions after the change is as shown below.



| | Dimensions (mm) | | | | |
|----------|--|------|--|--|--|
| Position | With the needle thread clamp Without the needle thread cla | | | | |
| A | 135.7 | 95.7 | | | |
| В | 510 | 550 | | | |

10-2. Changing the sewing range of the PS-910-13090

The sewing range in the Y direction is changed from 900 mm to 820 mm by conducting "2-2. Changing the Y sensor mounting sheet metal fitting of the PS-910-13090".

The template corresponding to the maximum sewing range dimensions after the change is as shown below.



| | Dimensions (mm) | | | | |
|----------|--|-----|--|--|--|
| Position | With the needle thread clamp Without the needle thread cla | | | | |
| С | 159 | 79 | | | |
| D | 760 | 840 | | | |
| E | 820 | 900 | | | |

10-3. Measures to use old templates

① In the case the dimensions of the old template match those of the changed template, the old one can be used with no change.



 In the case the dimensions of the oil template are made equal to those of the changed template by adding an extension plate to the top of the old one, use the added extension plate.
 Dimensions of the extension plate are as shown below.

[PS-910-6055]



[PS-910-13090]



③ Re-create a template referring to the sewing ranges given in "10-1. Changing the sewing range of the PS-910-6055" and "10-2. Changing the sewing range of the PS-910-13090".



11. Checking the functions

11-1. Manual checking









 After you have completed installation of all relevant parts, return the wiper by hand, supply air to the sewing machine and reset the sewing machine.

 Press the "Next" button to move the screen to the Test screen. Check the background color of the "OUT11" and "OUT12" buttons and the state of the wiper and thread retaining mechanism.

[OUT11 (wiper)]

| Background color of the button | Wiper position | Determination |
|-----------------------------------|----------------|---------------|
| White | Backward | ОК |
| White | Forward | NG |
| Blue | Forward | ОК |
| Blue | Backward | NG |

| Test | | | 203 | 0-08-13 12: | 57:09 |
|----------------|----------------|-------------|----------|---------------------|--------|
| QEP 5 | Frame | OUT1 | OUT6 | OUT11 | White |
| Winding + | Foot | OUT2 | OUT7 | 0UT12 | > |
| 1800 | Trim | OUT3 | OUTS | LED | Irim |
| Winding 👃 | Thread pull | OUT4 | OUT9 | Pause Position | Needle |
| Allow | Thread loosing | OUT5 | 0UT10 | Common functions | Foot |
| change shuttle | | | | | |
| Extend | Reset | CO 9 | @ | Move Frame | Return |



| Test 2030-08-13 12:57:20 | | | | | |
|--------------------------|----------------|------|---------------|---------------------|--------|
| QEP 5 | Frame | OUT1 | OUT6 | OUT11 | 10 |
| Winding + | Foot | OUT2 | OUT7 | 0UT12 | >% |
| 1800 | Trim | OUT3 | OUTS | LED | Irim |
| Winding 🖡 | Thread pull | OUT4 | OUT9 | Pause Position | Needle |
| Allow | Thread loosing | OUT5 | 0UT10 | Common functions | Foot |
| change shuttle | | | | | |
| Extend | Reset | 00 | (()- | Move Frame | Return |



| Test | | 0-08-13 12:57:31 | | | |
|----------------|----------------|------------------|-------------|---------------------|--------|
| QEP 5 | Frame | OUT1 | OUT6 | 0UT11 | 10 |
| Windlog +1 | Foot | OUT2 | OUT7 | 0UT12 | >8 |
| 1800 | Trim | OUT3 | OUTS | LED | Irim |
| Winding 👃 | Thread pull | OUT4 | OUT9 | Pause Position | Needle |
| Allow | Thread loosing | OUT5 | 0UT10 | Common functions | Foot |
| change shuttle | | | | | |
| Extend | Reset | CO - | C De | Move Frame | Return |

[OUT12 (thread retaining)]

| Background color of the button | Thread retaining mechanism | Determination |
|-----------------------------------|----------------------------|---------------|
| White | Close | OK |
| White | Open | NG |
| Blue | Close | ОК |
| Blue | Open | NG |

If the determination is "NG", check the wiper, cable wiring of the thread retaining mechanism and the connection of air tubes for any mistakes.

3) Be sure to lift the intermediate presser and the needle bar in the reset state. Preliminarily, press the "OUT12" button to change its color to blue and check to make sure that the thread retaining mechanism opens.

At the same time, check to make sure that the thread retaining mechanism does not interfere with the needle bar. Otherwise, adjust the position of the needle thread clamp device.

4) After the step 3), be sure to lift the intermediate presser and the wiper without exceptions. Then, press the "OUT11" button to change its color to blue and check to make sure that the wiper has advanced.

At the same time, check to make sure that the wiper does not interfere with the intermediate presser and the needle. Adjust the position of the device if necessary.



| Test | Test 2030-08-13 12:57:31 | | | | |
|----------------|--------------------------|-------------|-------------|---------------------|--------|
| QEP 5 | Frame | OUT1 | OUT6 | OUT11 | 10 |
| Winding 1 | Foot | 0UT2 | OUT7 | 0UT12 | >8 |
| 1800 | Trim | OUT3 | OUTS | LED | IT IM |
| Winding 👃 | Thread pull | OUT4 | OUT9 | Pause Position | Needle |
| Allow | Thread loosing | OUT5 | 0UT10 | Common functions | Foot |
| change_shuttle | | | | | |
| Extend | Reset | CO 9 | CO e | Move Frame | Return |



5) Once you have checked that there is no problem, press the "Reset" button to check whether or not the device returns the wiper and closes the thread retaining mechanism in the written order. If not, check whether or not the "Programing file" has been installed correctly.





11-2. Confirmation for sewing

11-2-1. Checking the opening of the thread retaining mechanism at the start of sewing



 After you have implemented a new pattern in the panel and started sewing to sew the set number of stitches (three stitches in general), observe whether or not the thread retaining device has opened.

If not, check whether or not the command has been added to the pattern.

11-2-2. Checking the functions of the wiper and thread retaining device at the end of sewing



 Observe whether or not the wiper moves forward first and, then, moves backward to pull back the thread into the thread retaining device after sewing with each thread has completed and the intermediate presser has been lifted. Then, check whether or not the retaining device

has closed to secure the thread.

If not, adjust the position of the needle thread clamp device and check the content given in "12-4. Operation of the thread retaining device is not correct at the end of sewing." -2)p.47.



Thread is retained

12. Troubleshooting

12-1. Operation of the thread retaining device or the wiper is not correct in the reset state.



- 1) After resetting, the thread retaining device is in the open state.
- ① Check whether connection of the air tube of the thread retaining cylinder is correct.



- The backward or forward movement of the wiper, after resetting, is blocked by the thread retaining device.
- Check whether connection of the air tubes of the wiper cylinder is correct.

12-2. The thread retaining device fails to operate at the start of sewing.



| Flash Param File 2030-08-13 12:58:04 | | | |
|--------------------------------------|---|--------------------------------------|--------|
| 01:PS910-6055HZ-001-in5(1) | 07:PS910-6065AZ-002 | | 俞 |
| 02:PS910-6055AZ-003 | 08:PS910-6055HZ-002 | | Hone |
| 203:PS910-6055参数temp | | | |
| 04:PS910-6055HZ-001 | | | |
| 205:例试参数 | | | Lacet |
| 06:P5910-6055A2_CLAMP-001 | | | Backup |
| Export | Rame:P2910-6055A2_ Buer: IV. NKO5, 214 Iver: SV2.4, 2312.1 TP Date: 2030-605-13-12 | 5, 112,1020 5, 112,1020 129:44 | Return |

 Check whether or not the "Parameter file" has been written correctly. Reference Confirm the parameter file version referring to "8-3. Re-writing the parameter file" -4)p.30.

12-3. Abnormal noise is heard during sewing.



 Check whether or not the mounting position of the device is excessively close to the needle bar to cause interference.

 Set the IO for the pattern editing software. Then, click the "x" displayed at the upper right on the screen instead of clicking the "OK" and "End".

12-4. Operation of the thread retaining device is not correct at the end of sewing.



- 1) In the case the error "The wiper is not reset" occurs:
- ① Check whether wiring of the cylinder sensor is correct.



- In the case the needle thread cannot be pulled back by the wiper after thread trimming:
- Since the mounting position of the device is wrong, adjust the mounting position and carry out a test.
- ② Check whether or not the thread trimming function is normal.
- ③ In the case of using a material thickness of which changes greatly after sewing, push down the material appropriately.