

ENGLISH

**Condensation stitching device
INSTRUCTION MANUAL**

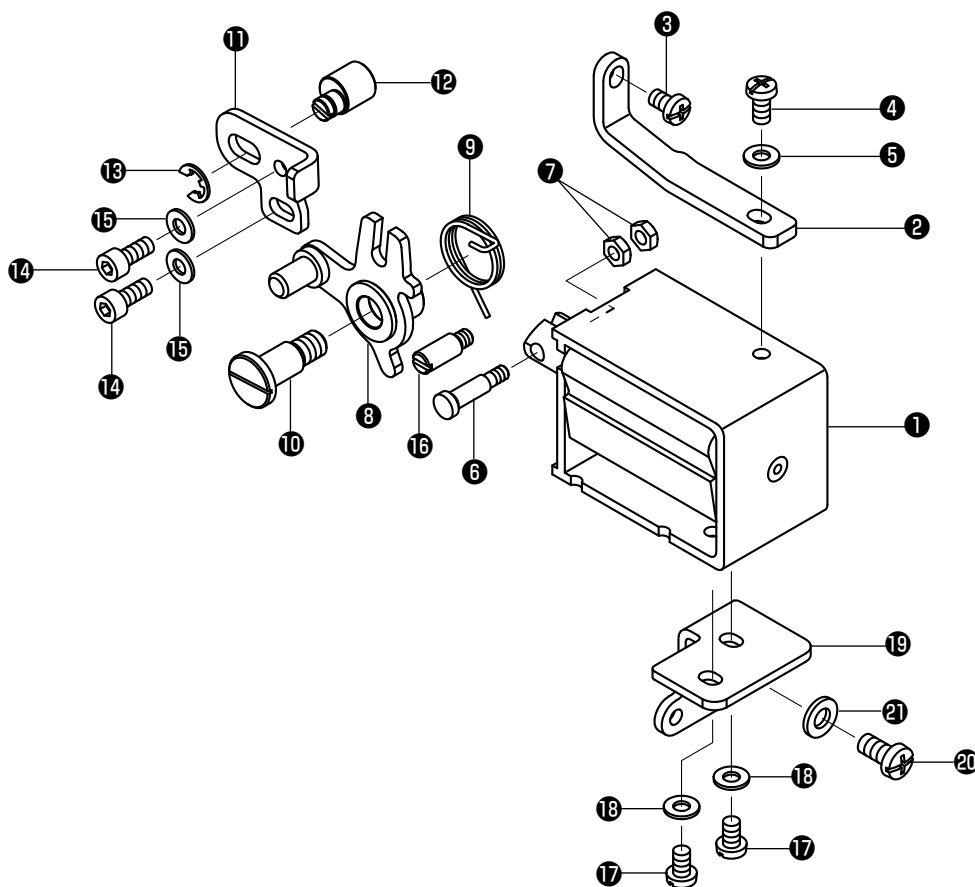
CONTENTS

1. Condensation stitching device for DDL-8000A	1
1-1. Subassembly	2
1-2. Installing parts to the machine head	3
1-3. Adjusting the condensation stopper	5
2. Setting	7

Congratulations on your purchase of the parts for JUKI industrial sewing machine. Be sure to carefully read "Safety precautions" and the Instruction Manual for the model of your sewing machine.

1. Condensation stitching device for DDL-8000A

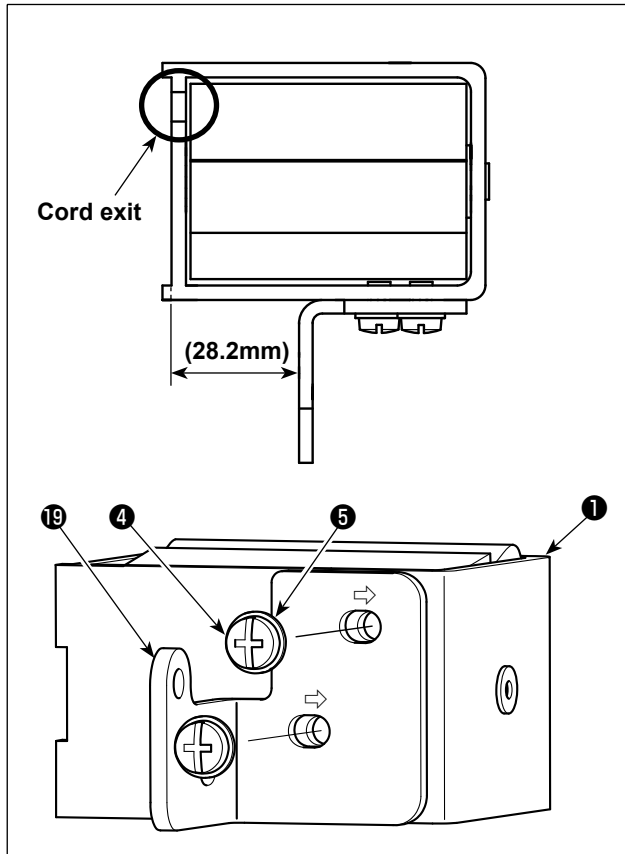
Condensation solenoid is used to decrease the feed pitch before thread trimming in order to reduce the length of the needle and bobbin threads that remain after thread trimming



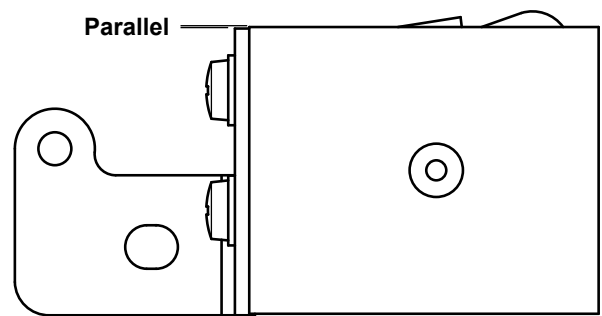
No.	Part number	Part name	Quantity
①	40214667	Condensation solenoid	1
②	40213287	Solenoid mounting plate	1
③	SM4050855SP	Screw	1
④	SM4051055SP	Screw	1
⑤	WP0501016SD	Washer	1
⑥	22962906	Plunger arm shaft pin	1
⑦	NS6110350SP	Nut	1
⑧	40100038	Condensation arm shaft asm.	1
⑨	40100050	Condensation arm return spring	1
⑩	SD1001506TP	Hinge screw	1
⑪	40213286	Condensation stopper	1
⑫	40060833	Condensation stopper shaft	1
⑬	RE0600000K0	E ring	1
⑭	SM6051202TP	Setscrew	2
⑮	WP0531000SD	Washer	2
⑯	40100172	Condensation arm stopper	1
⑰	SM4050855SP	Screw	2
⑱	WP0501016SD	Washer	2
⑲	40213288	Solenoid mounting plate B	1
⑳	SM4061255SP	Screw	1
㉑	WP0641601SP	Washer	1

1-1. Subassembly

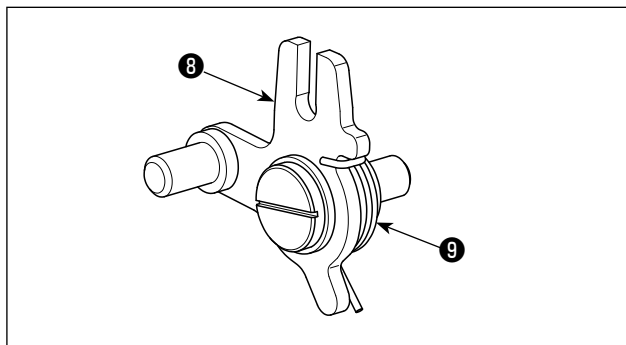
① Subassembling the solenoid mounting plate B



- 1) Secure solenoid mounting plate B 19 to solenoid 1 according to the orientation shown in the figure.
 - 2) Shifting the solenoid mounting plate B to the right side of slot, attach the mounting plate 19 so that it is in parallel with solenoid 1.
- Parts to be used: M5 pan head screw, short 4 ; washer, small 5
(Tightening torque: 1.9 - 2.9 N·m)
(20 – 30Kgf·cm)

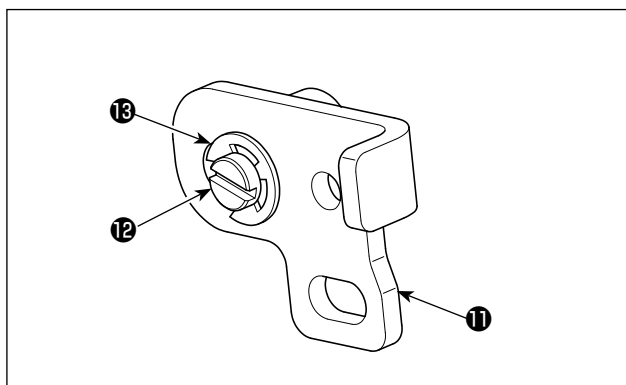


② Subassembling the condensation arm return spring



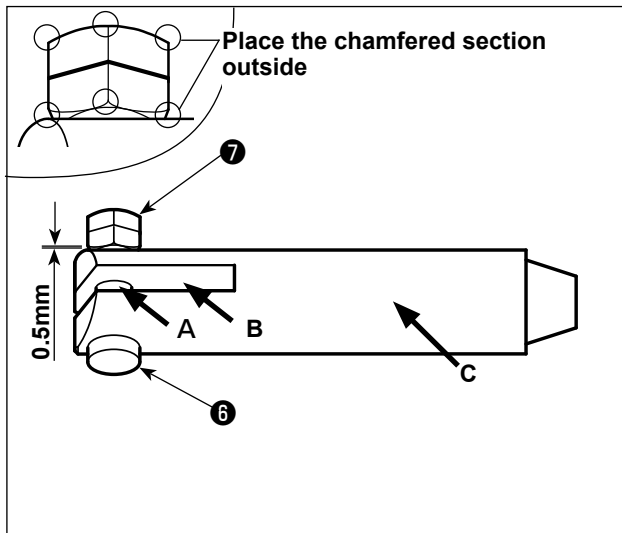
- 1) Install condensation arm return spring 9 to condensation arm 8 according to the orientation shown in the figure.
- 2) Apply JUKI Grease A to the boss section (the section that comes in contact with the spring) of condensation arm 8 and both ends of spring.

③ Subassembling the condensation stopper eccentric pin



- 1) Pass condensation stopper shaft 12 through the hole in condensation stopper 11 according to the orientation shown in the figure. Then, attach E ring 13.

④ Subassembling the solenoid plunger pin



- 1) Apply JUKI Grease A to the shaft section **A** of plunger pin **6**.
 - 2) Holding the plunger while turning its forked section to the left and its notch upward, pass plunger pin **6** from this side to the far side according to the orientation shown in the figure.
 - 3) Tighten first nut **7** so that a clearance of 0.5 mm is provided between the plunger and nut **7**.
 - 4) Securing first nut **7** with a spanner so that it will not move, tighten second nut **7**.
- (Tightening torque: 4.4 - 5.5 N·m) (45 – 55kgf·cm)



Assemble nuts **7 while turning their chamfered sections outside.**

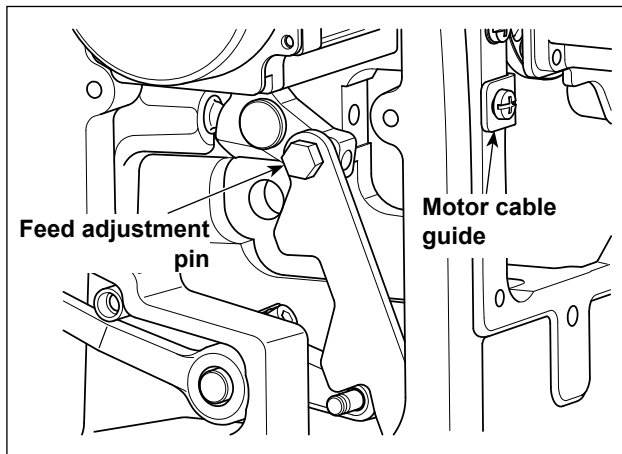
- 5) Apply JUKI Grease A to the forked section **B** and periphery **C** of the plunger.

1-2. Installing parts to the machine head

① Removing the AK cover, pulley and electrical box

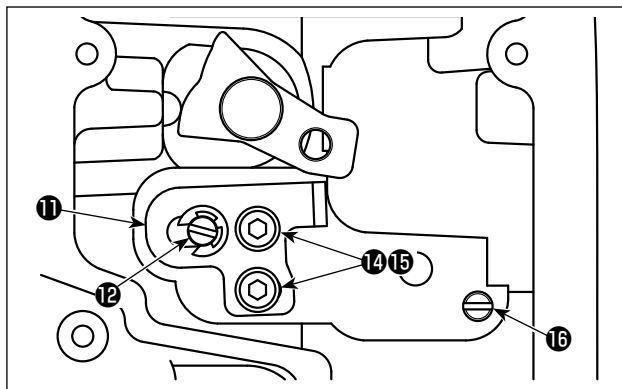
Remove the AK cover, pulley and electrical box.

② Removing the motor cable guide and feed adjustment pin



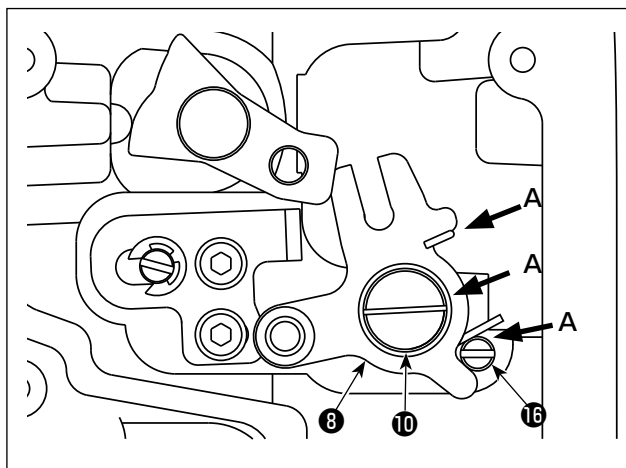
- 1) Remove the motor cable guide.
 - 2) Loosen the feed adjustment pin setscrew. Remove the feed adjustment pin.
- At this time, remember the orientation of the feed adjustment pin. The forward / reverse feed adjustment will be easy when installing the pin in the aforementioned orientation.

③ Installing the condensation stopper and condensation arm stopper



- 1) Secure condensation arm stopper **16** to the position shown in the figure.
 - 2) Insert condensation stopper shaft **12** of condensation stopper **11** into the hole in the arm, and temporarily secure condensation stopper **11** with M5 hexagon socket head cap screw **14** and washer, small **15**. (Adjustment is to be carried out later.)
- Screw to be used: M5 hexagon socket head cap screw, washer small

④ Installing the condensation arm

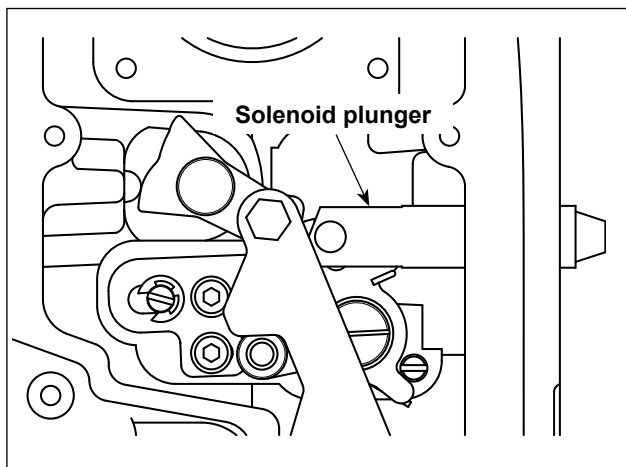


- 1) Apply JUKI Grease A to the sliding surfaces A of condensation arm **8** and hinge screw **10**, and the contact surfaces of the spring and condensation arm **8** ..
- 2) Secure condensation arm **8** to which the condensation arm return spring is attached, with hinge screw **10**.
(Tightening torque: 7.8 - 8.8 N·m (80 - 90 kgf·cm))
- 3) Put one end of the condensation return spring on condensation arm stopper **16**.

⑤ Installing the feed adjustment pin

- 1) Reversing the removal procedure, install the feed adjustment pin.
- 2) Carry out adjustment of the forward / reverse feed alignment, etc. where appropriate.
- 3) Apply JUKI Grease A to the sliding surfaces.

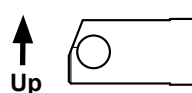
⑥ Setting up the condensation plunger



- 1) Apply JUKI Grease A to the sliding surfaces of condensation arm **8** and hinge screw **10**, and the contact surfaces of the spring and condensation arm **8**.
- 2) Place the solenoid plunger in the forked section of condensation arm **8**.



Turn the notched side of the solenoid plunger upward. If the solenoid plunger is attached in the wrong orientation, the condensation stitch device will not move.



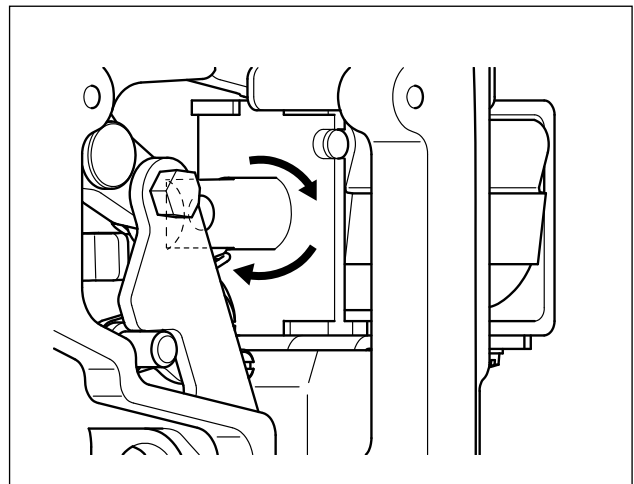
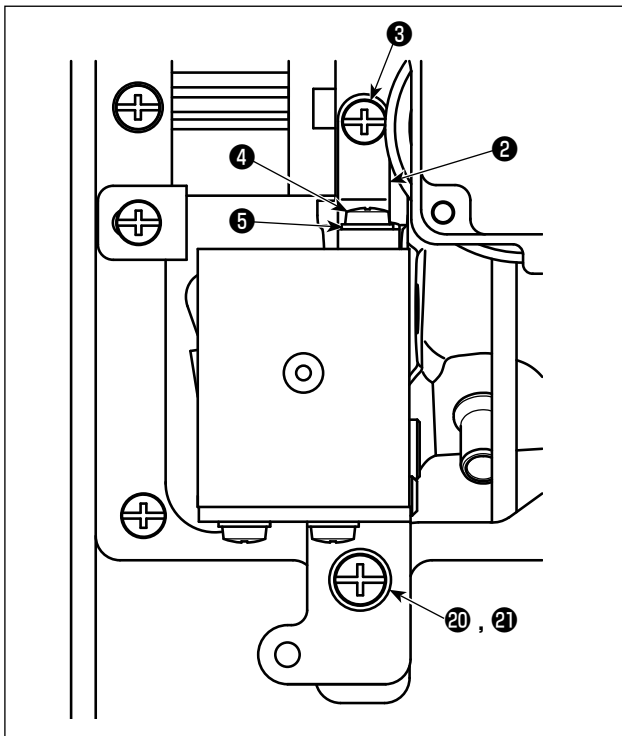
⑦ Assembling the condensation solenoid

- 1) Temporarily secure solenoid mounting plate ② to the arm with M5 pan head screw, short ③ .
- 2) Temporarily secure sub-assembled condensation solenoid to the arm with M6 pan head screw ②⑩ and washer, large ②⑪ . Then, temporarily secure the condensation solenoid to solenoid mounting plate ② which has been temporarily fixed in the aforementioned step 1) with M5 pan head screw, long ④ and washer ⑤ .
- 3) Fix screw ②⑩ so that it is brought to the top end of the slot. Then, tighten screw ③ while pressing mounting plate ② against the condensation solenoid. Then, tighten screw ④ .

At this time, check first to make sure that the solenoid plunger is allowed to rotate in the axial direction, to smoothly rotate and to return to its initial position by the spring. Then, securely tighten the screws.

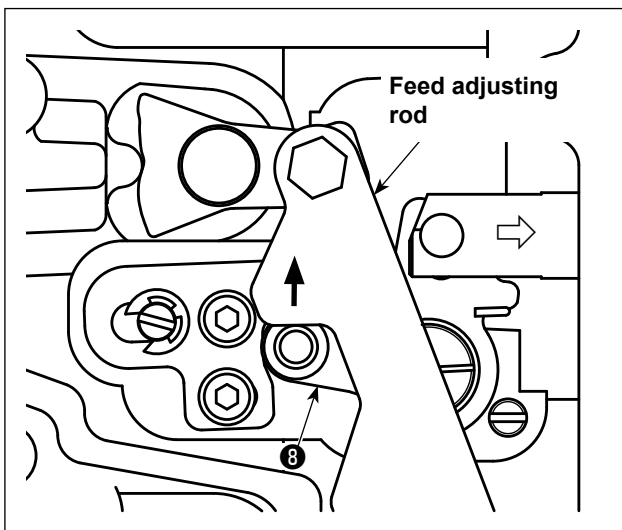
(Tightening torque: 1.9 - 2.9 N·m (20 - 30 kgf·cm))

- 4) After tightening the screws, check to make sure that relevant parts normally operate and the screws are securely tightened.



If the solenoid plunger fails to rotate in the axial direction or fails to operate smoothly, the solenoid plunger has been assembled off-center. In this state, operation failure and abnormal wear can occur. Re-install the solenoid plunger correctly.

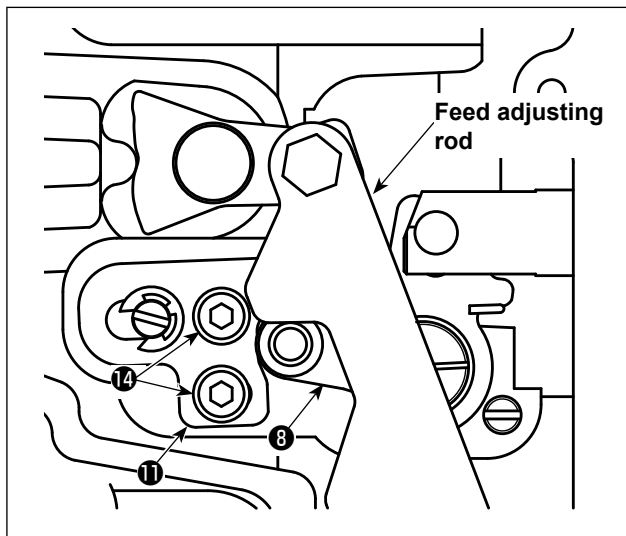
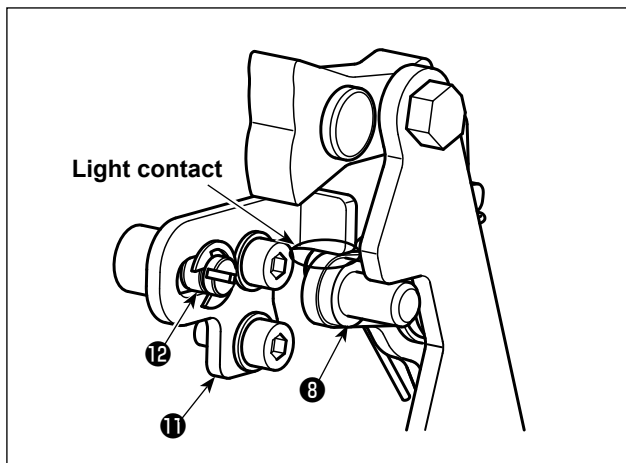
1-3. Adjusting the condensation stopper



- 1) Set the stitch dial to "0.5". (For the H type model, set it to "0.75".)
- 2) Pull the plunger in the direction of the arrow (or move condensation arm ⑧ in the direction of the arrow) until condensation arm ⑧ comes in light contact with the feed adjusting rod.



Take care not to allow the feed adjustment rod to move. If the feed adjustment rod moves, the condensation pitch cannot be adjusted as desired, resulting in thread trimming failure or in longer remaining length of thread after thread trimming.



- 3) Keeping the state as described in 2), turn condensation stopper shaft 12 until condensation stopper 11 comes in light contact with condensation arm 8 .

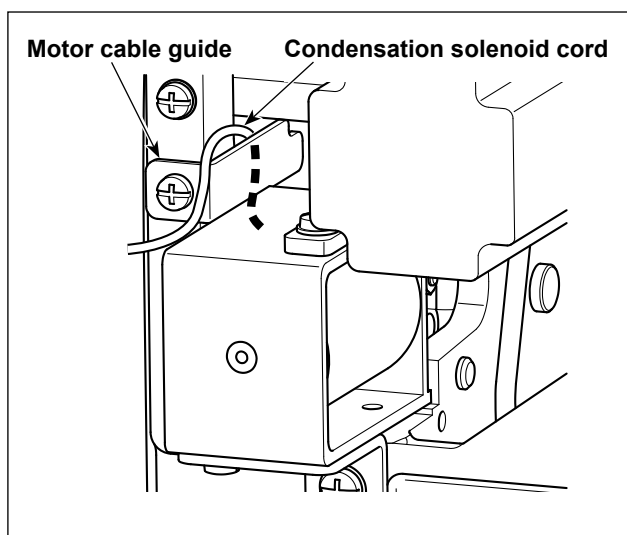


Take care not to allow condensation arm 8 to move when condensation stopper 11 comes in light contact with condensation arm 8 . If condensation arm 8 moves, the condensation pitch cannot be adjusted as desired, resulting in thread trimming failure or in longer remaining length of thread after thread trimming.

- 4) Keeping the state as described in 3), tighten set-screw 14 .
(Tightening torque: 4.8 - 5.8 N·m (50 - 60 kgf·cm))

- 5) After tightening the setscrew, check to make sure that condensation arm 8 comes in contact with the feed adjusting rod and condensation arm 8 without a gap. If condensation arm 8 comes in contact with the feed adjusting rod but there is a gap between the arm and condensation stopper 11 , the condensation pitch will be decreased. If, on the other hand, condensation arm 8 comes in contact with the condensation stopper 11 but there is a gap between the arm and feed adjusting rod, the condensation pitch will be increased. In either case, carry out the adjustment again.

⑨ Attaching the motor cable guide

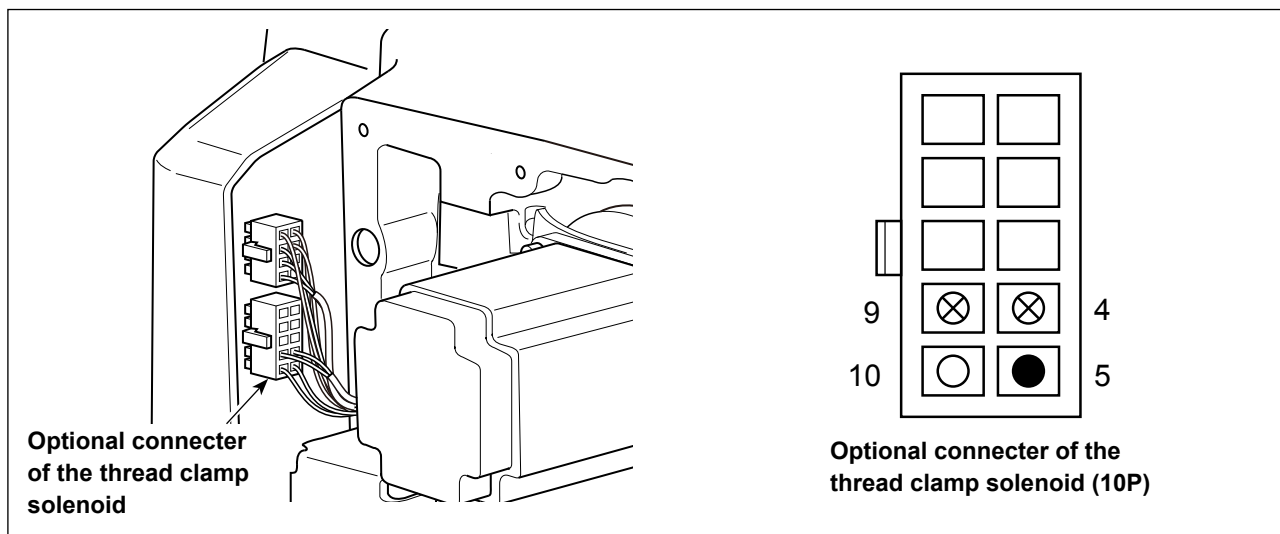


- 1) Secure the motor cable guide on the condensation solenoid cord. Then, pass the cord from below upward, on the far side of the motor cable guide. Then, pull the cord toward the near side.

⑩ Connecting the cord

Insert the condensation solenoid pins into the optional connector of the thread clamp solenoid, as shown in the figure.

(Insert the black pin to No. 5 and the white pin into No. 10 of the 10-pin connector. The thread clamp solenoid pins have already inserted into Nos. 4 and 9.)



⑪ Installing the AK cover, pulley and electrical box

Reversing the disassembly procedure, install the AK cover, pulley and electrical box.

2. Setting

① Initial setting

Change the set values according to the function setting procedure (Instruction Manual "[4-6. Function setting](#)").

P132 Operation starting duty of the condensation solenoid: 55

P133 Duty when the condensation solenoid operates: 10

Change the set values to the aforementioned value in order to operate the condensation solenoid without fail.

② Setting the number of stitches

Set the number of condensation stitches at the end of sewing to 2.

P129 Number of condensation stitches at the end of sewing: 2