

ENGLISH

**AT-45 the tape cutter device
for double-needle machine
INSTRUCTION MANUAL / PARTS LIST**

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PREFACE

Follow the installation manual can help you finish the installation in a short time;

Before the installation, make sure that input power of control box is correct.

The control box is banned to be taken apart. Avoid non-maintenance people operating the machine or unexpected impact on machine.

AC transmission can not be connected in the signal port, Otherwise, it will cause severely destroy.

Please recheck the power line before connecting the power source.

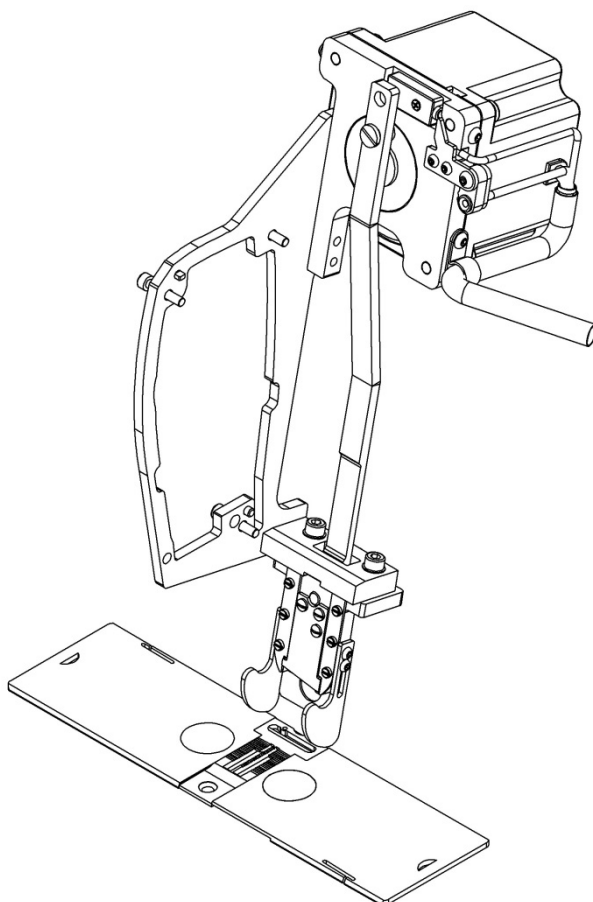
Kindly, don't touch any port while the power source is connected. The ground wire port must be connected correctly, which will enhance anti-jamming capacity of the product.



WARNING :

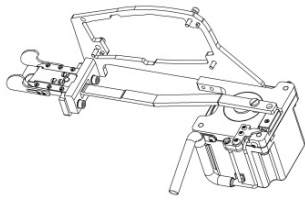
Shut down the power breaker before installation and only the technician people can operate.

AT-45 The tape cutter device for double-needle machine

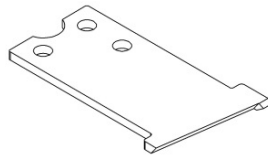


1. INSTALLATION INTRODUCTION

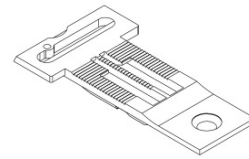
1-1. The components of the device



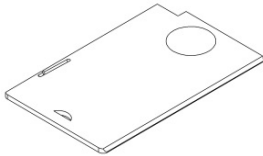
Tape Cutter Assembly



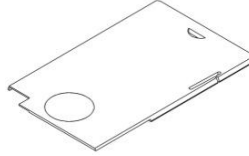
Moving Knife



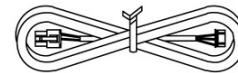
Needle Plate(Options)
* Refer to "5-2. Options Gauge part list" p.34.



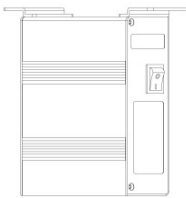
Left Cover



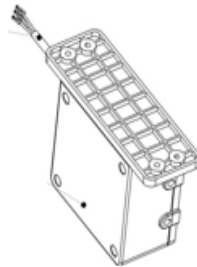
Right Cover



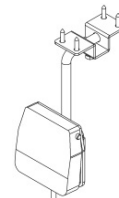
Signal Line



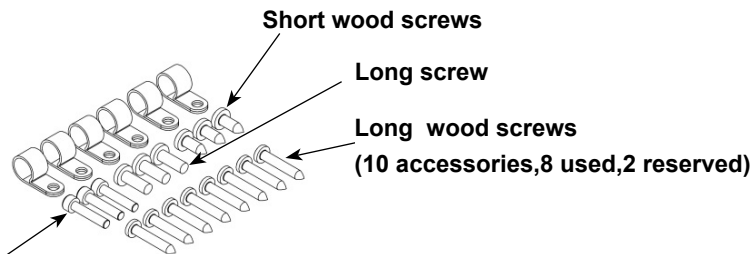
Control Box



Junction Box



Part No. 40232800
Foot Switch(Options)



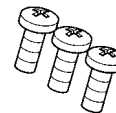
Head extension screw
Accessory



110V Switch Calbe
Use of 110V style



Ferrite Core



Screw

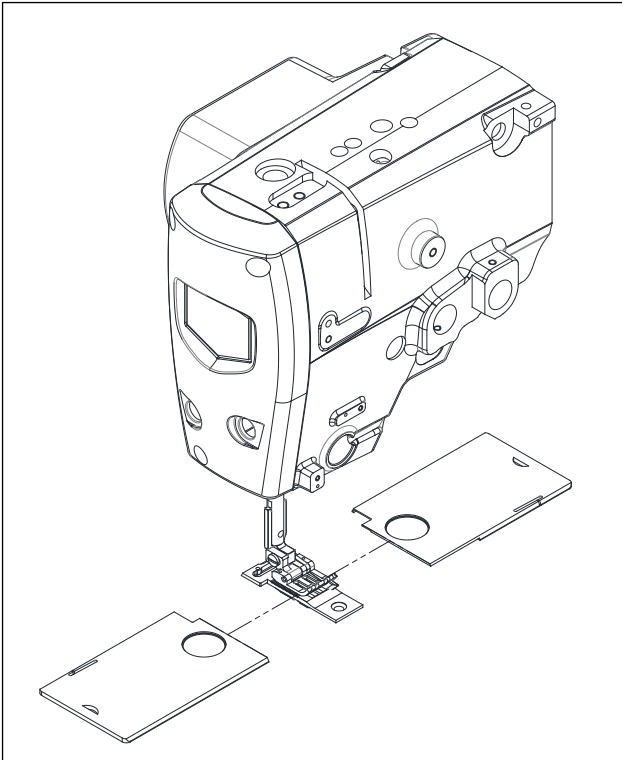
Use of single-phase 220V CE style



Please check the outside package box marks. The ticks represent the devices you buy.

1-2. The Installation of the device

1-2-1. Installation of the needle plate and cover

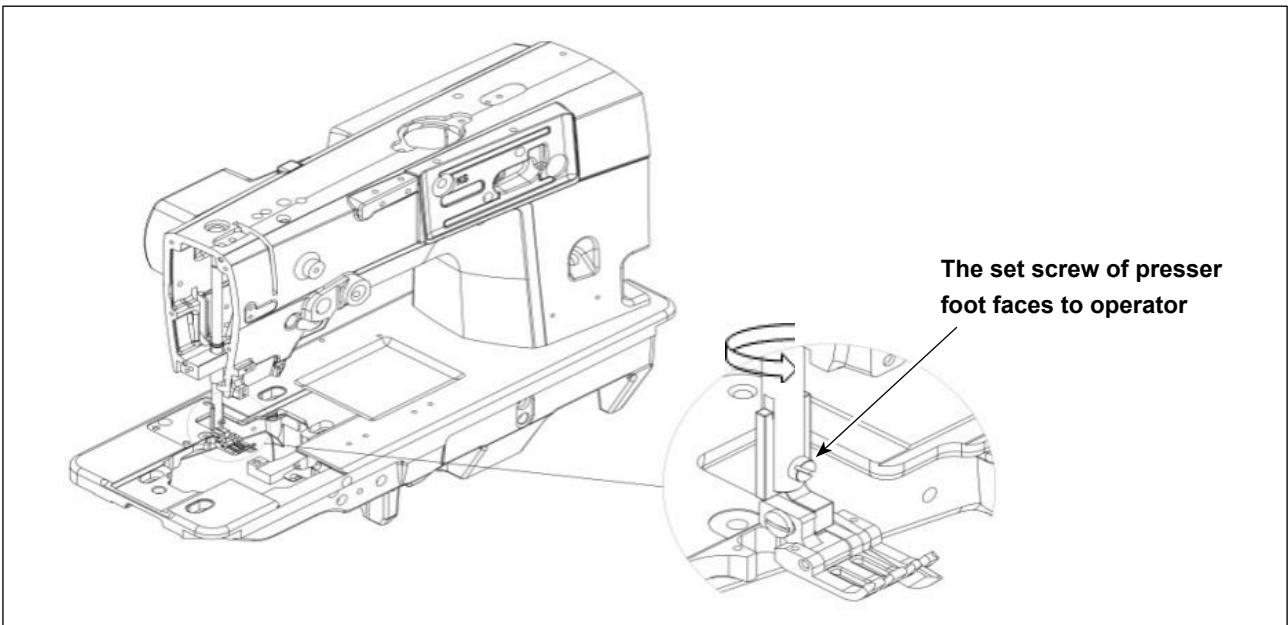


Use the needle plate and cover plate provided in the device to replace the original one.



Only the same specifications could be changed.

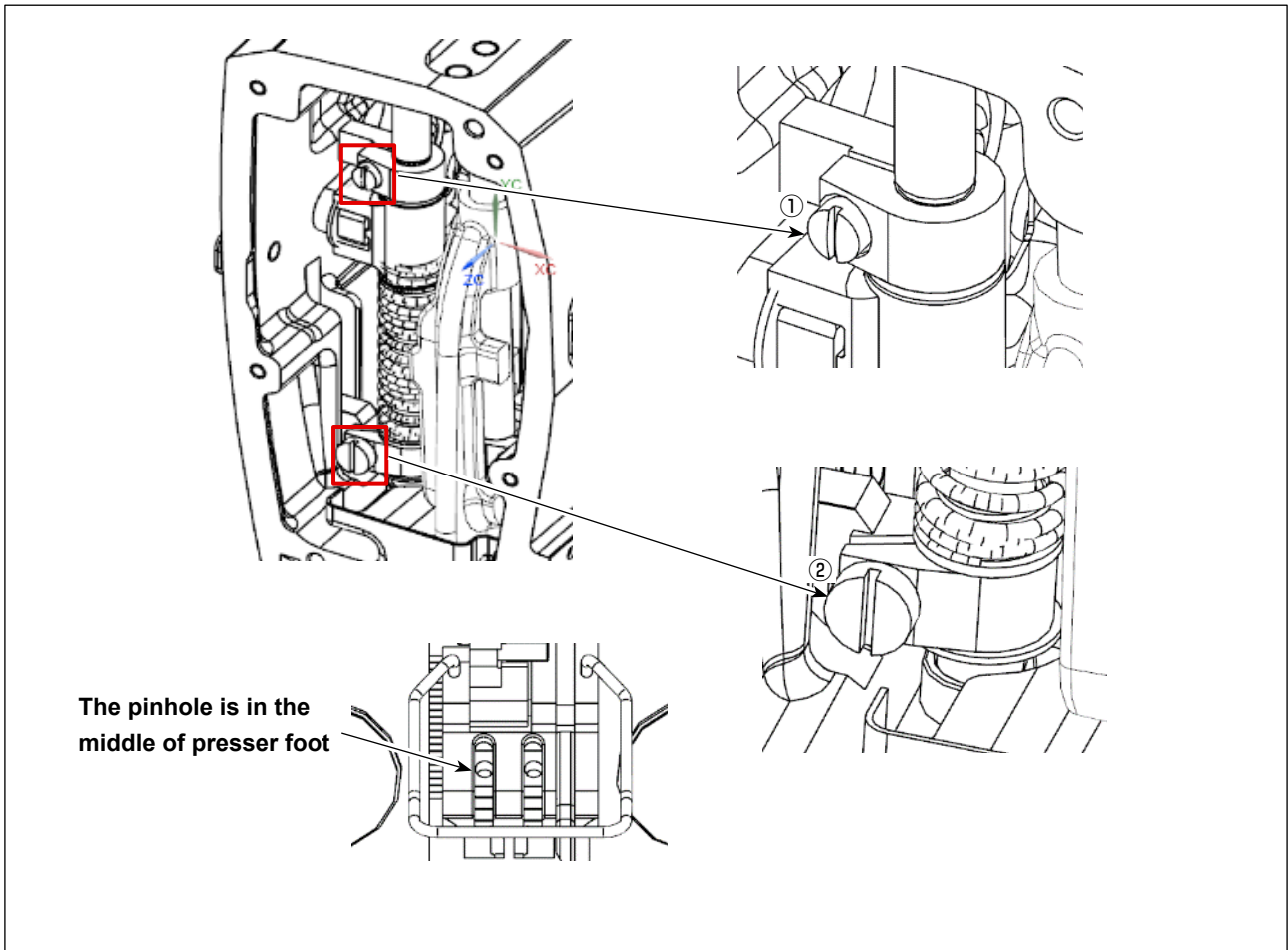
1-2-2. Installation of the tape cutter assembly



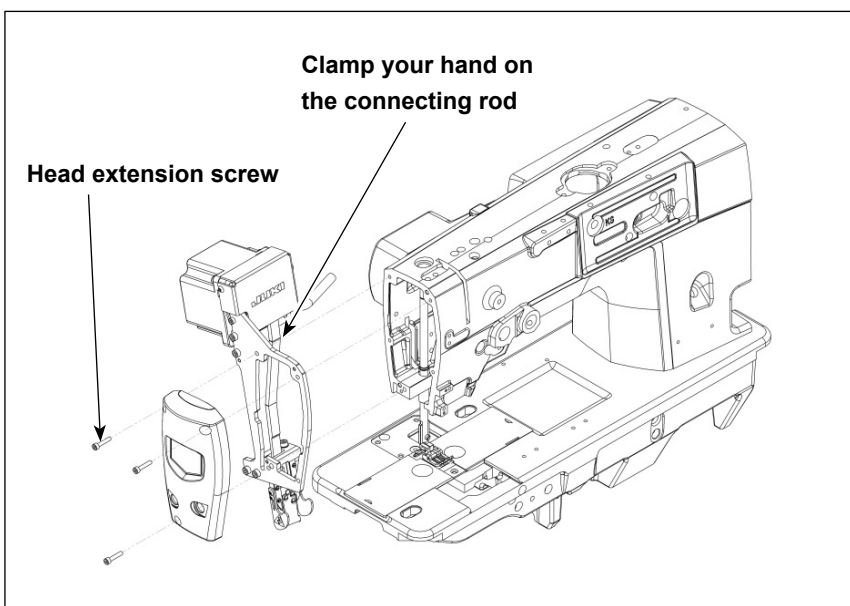
Release the three screws in panel. Release the screws that fix presser foot rod, rotate the presser foot 180 degrees and make the set screw of presser foot faces to operator.



Make sure the pinhole is in the middle of presser foot bath when you are rotating. Tighten the screw in presser foot rod.




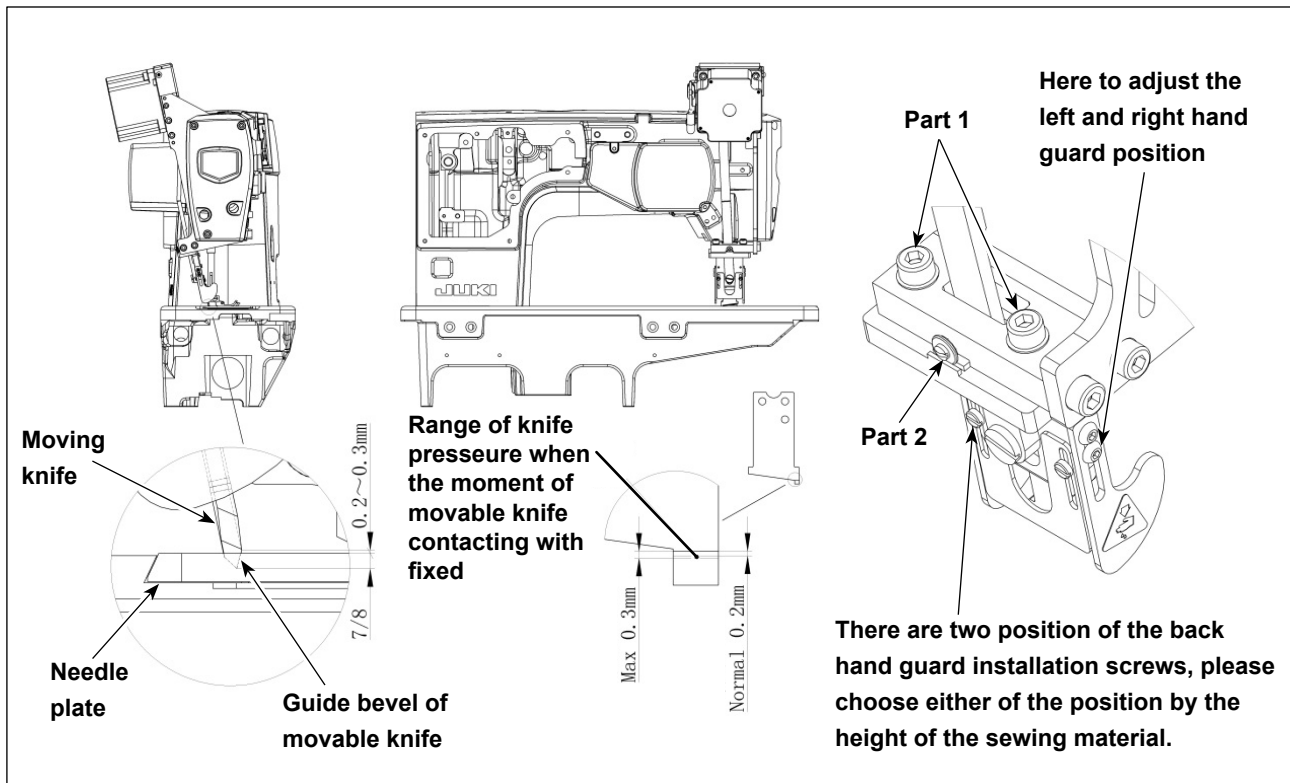
- ① When the upper screw is fixed, the lower end face of the marking line of the presser foot rod is flush with the upper end face of the fixed holding.
- ② When the lower screw is fixed, the presser foot fixed holding is close to the E-ring.



Install the tape cutter and the original cover plate of the sewing machine together on the sewing machine with the head extension screw provided in the device.

When installing the device, do not put your hand between the connecting rod and the sewing machine frame. It is easy to clamp your hand.



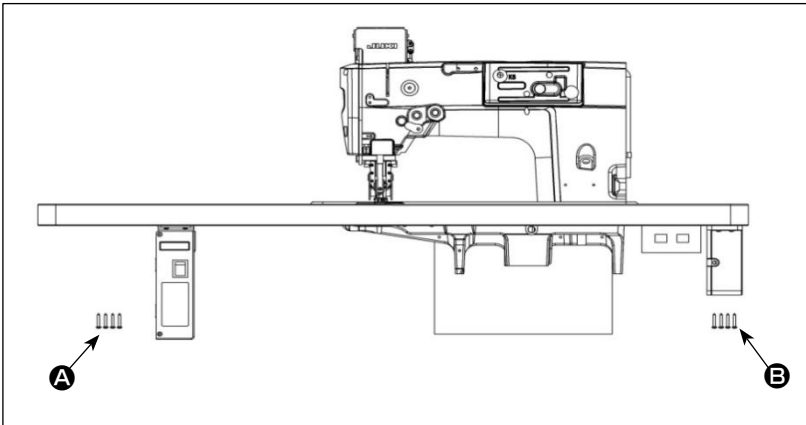


Loosen the part 1 two screws, pre tightening. Push the front and back position by hand, when 7/8 of the guide bevel of the moving knife is immersed into the needle plate and about 0.2 mm above the surface of the needle plate, then Adjust the front and back position of the moving knife by turning the part 2 screw. Make the guide bevel of the moving knife just contact with the fixed edge. Then use a wrench to tighten the part 1 two screws (25kg.cm). After the position of the moving knife conforms the position above, adjust the installation height of the hand guard to the suitable position (there hand guard at the left, right and back), then perform the cloth cutting test.



1. The knife life will be decreased rapidly because of the higher pressure, meanwhile maybe there will be the risk of colliding the knife; so when you make some adjustment, the size that the guide bevel of the moving knife above the needle plate can't exceed 0.3mm.
2. Please confirm the cut point always contact with moving knife and fixed knife in the cutting procession after installation of cutting device. Otherwise, please loosen the part 1 two screws for micro adjustment.
3. When adjusting the height of the hand guard, make sure to adjust the height as low as possible if it can pass through the sewing material to prevent the hand from getting cut.

1-2-3. Installation of the control box

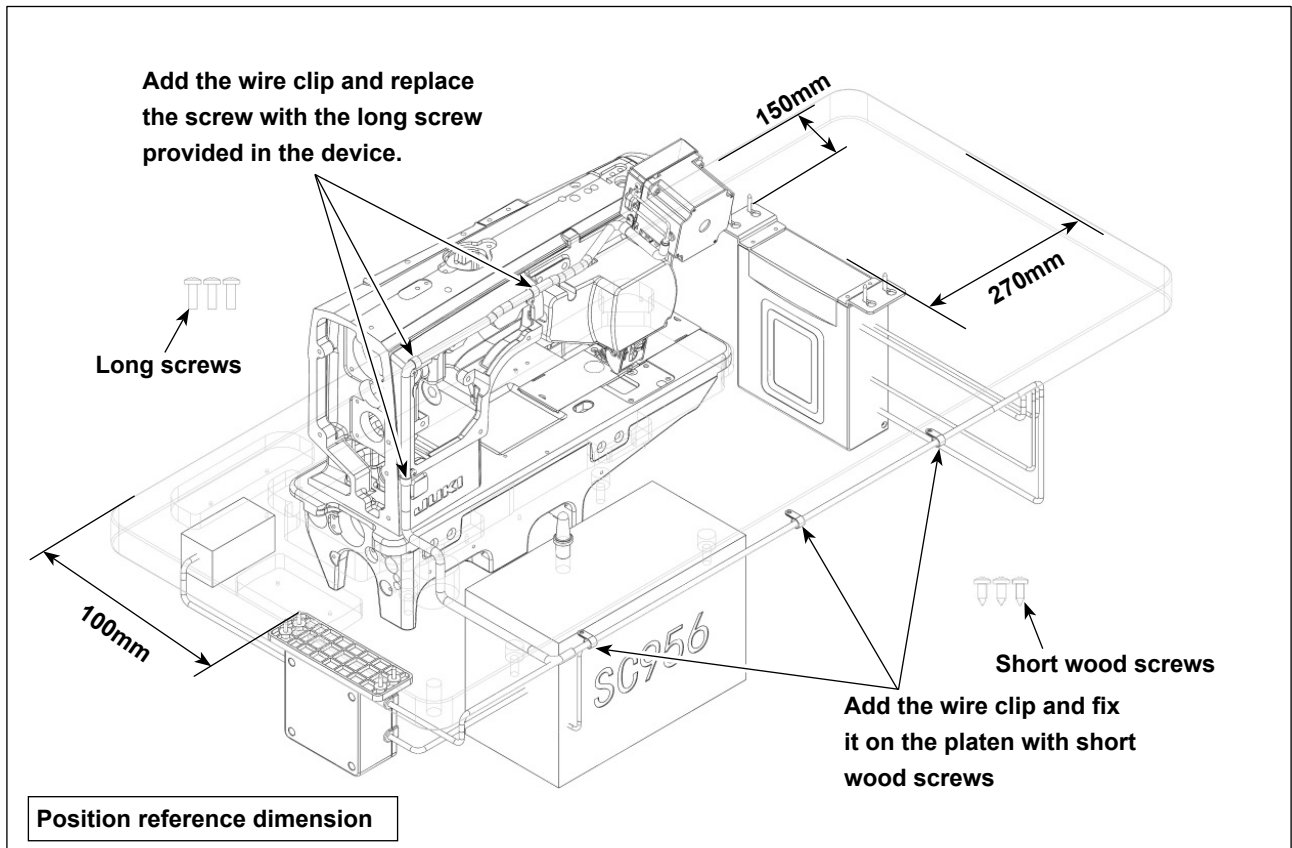


Use 8 Long Wood screw to install the control box and the junction box to the position as shown in the figure.

A : 4 Long Wood screw for the control box

B : 4 Long Wood screw for the junction box

1-2-4. Wiring



Add the wire clip and replace the screw with the long screw provided in the device.

Long screws

Short wood screws

Add the wire clip and fix it on the platen with short wood screws

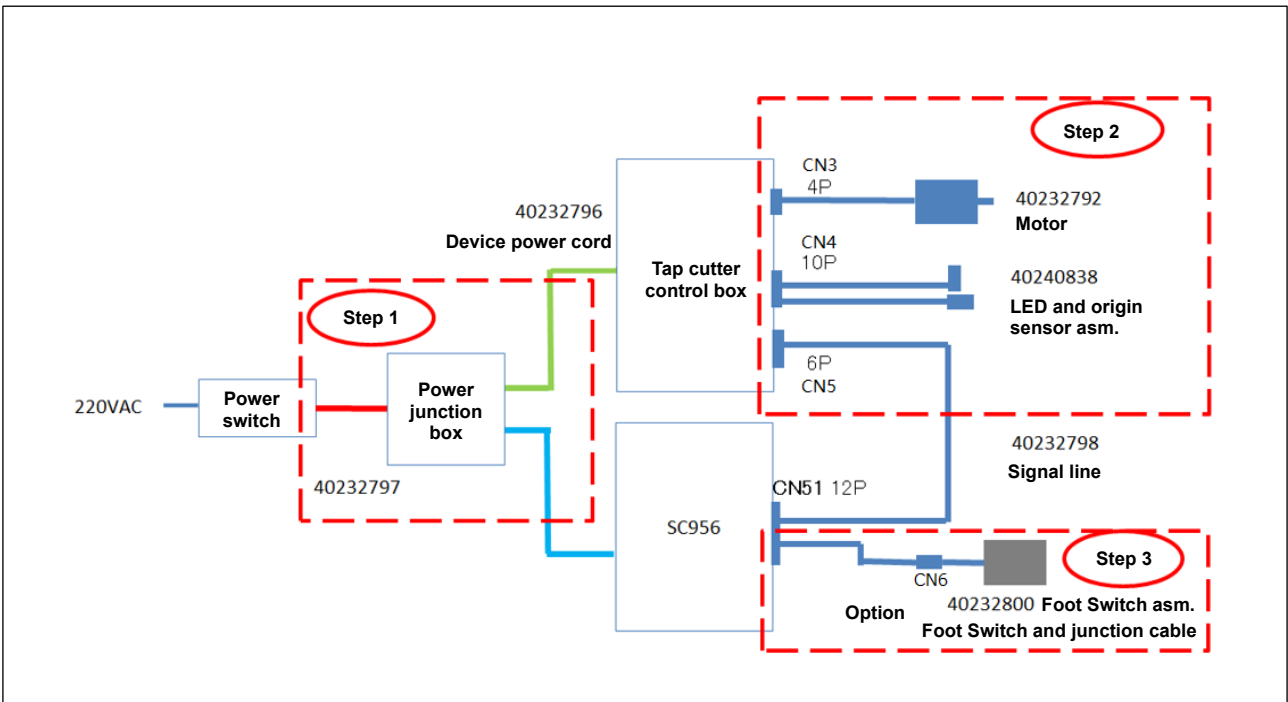
Position reference dimension

Wire as shown in the figure.



If a drill is needed, please drill the hole before wiring to prevent breakage.

1-2-4-1. Single-phase 220V

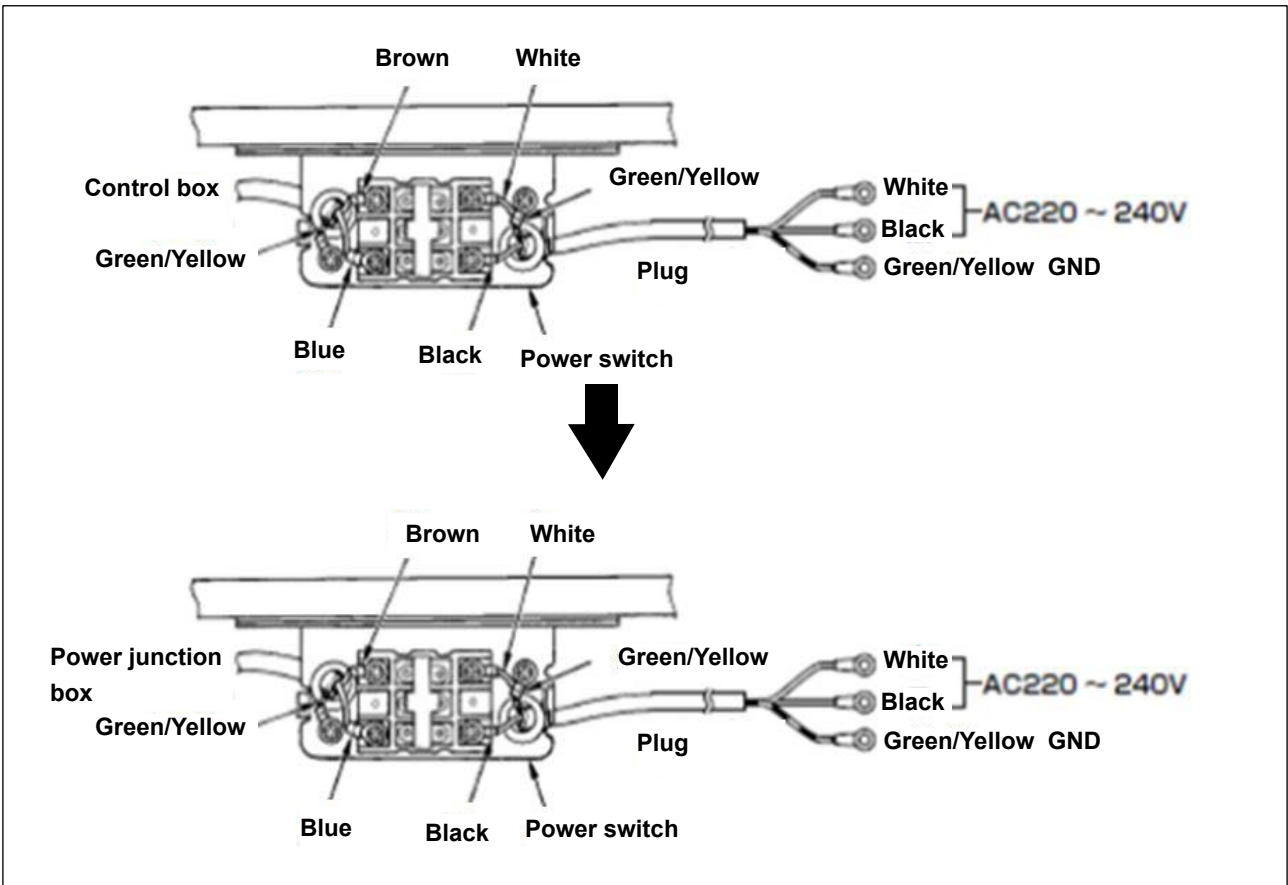


Wiring of junction box, control box and OP switch.

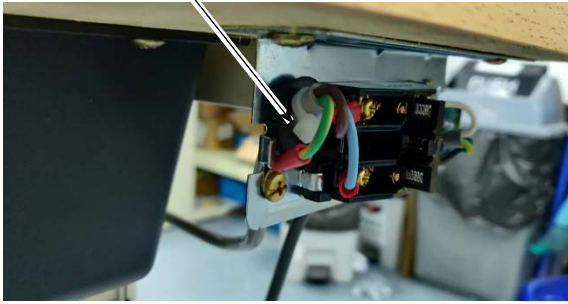
In order to use the cutting device, please follow the 3 steps below for wiring changes.

[Step1]

1. After opening the power switch box, remove the power line of the SC956 control box and replace it with the 40232797 Junction Box power line, then tie the ribbon to the power line to prevent it from being pulled out by external force.

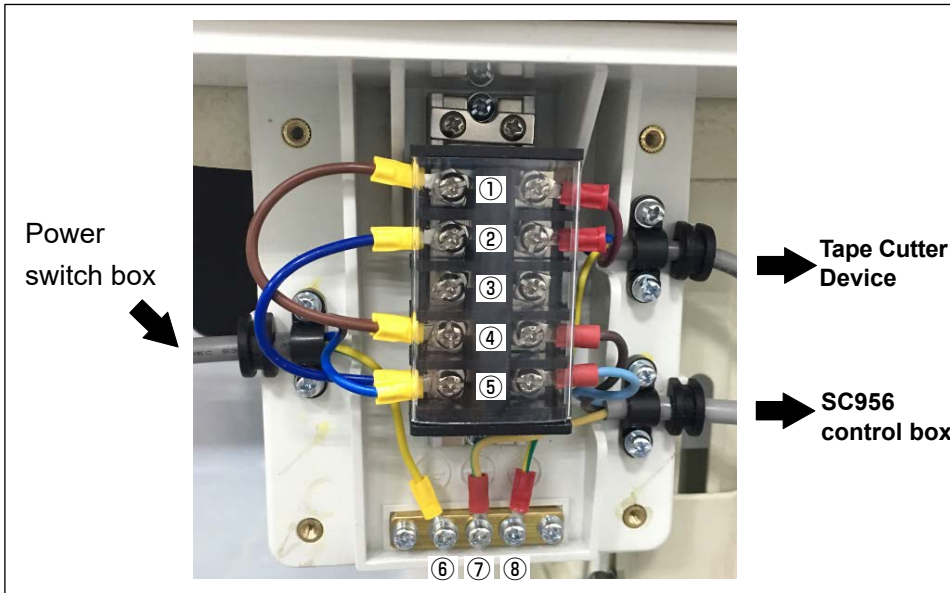


Fix cable clip band



• **Installation of harness**

After opening the power junction box, connect the power cord and ground cord as shown below and the connection box.



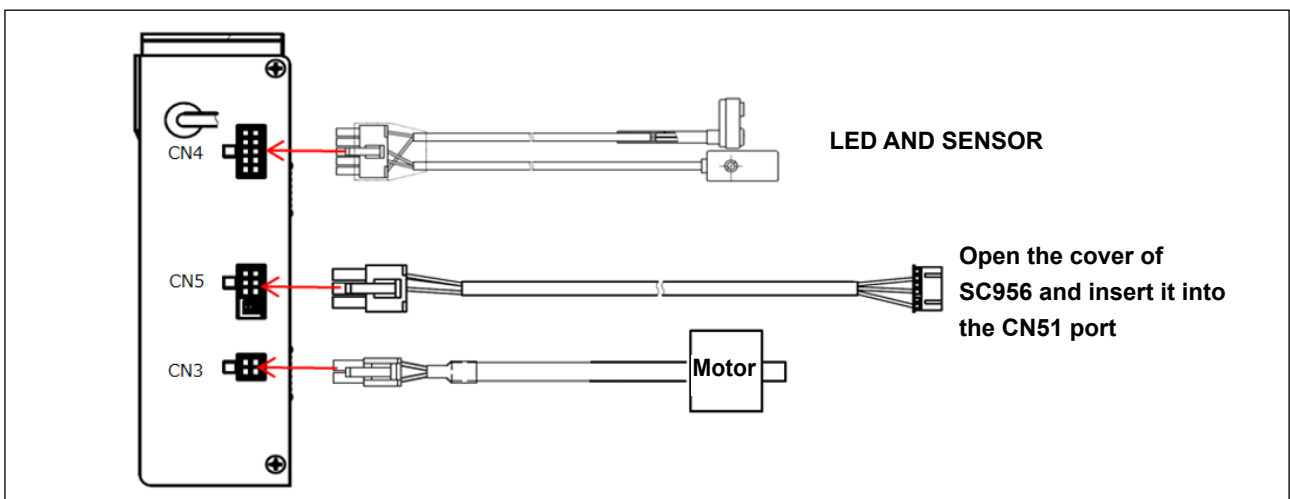
Connect the power cord as the connection box shown below.

Close the cover of power junction box and junction box, then turn the screws.

Wire name	Wire color	Connecting	Wire name	Wire color
40232797(Power supply)	Brown	④	SC956 power supply	Brown
Power connection	Brown			
40232797(Power supply)	Blue	⑤	SC956 power supply	Blue
Power connection	Blue			
Power connection	Brown	①	Tape cutter device power supply	Brown
Power connection	Blue	②	Tape cutter device power supply	Blue
40232797(Power supply)	Green/Yellow	⑥⑦⑧	SC956 power supply	Green/Yellow
			Tape cutter device power supply	Green/Yellow

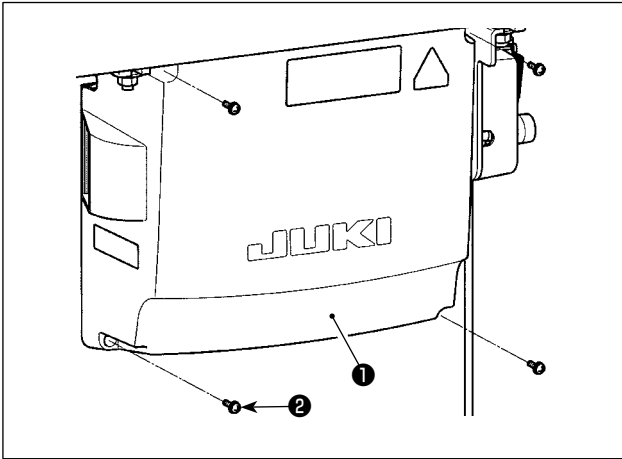
Connection box

[Step2]

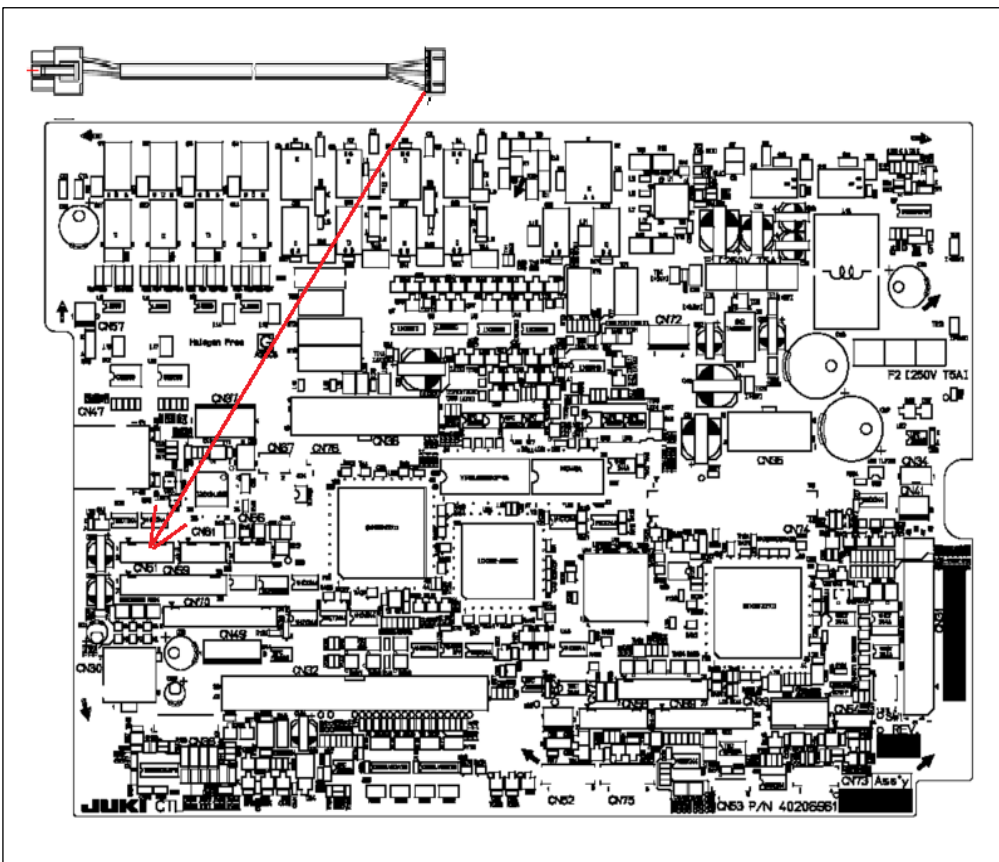


Connect the motor line , signal line , LED line , origin sensor line according to the direction of the red arrow.

[Step3]

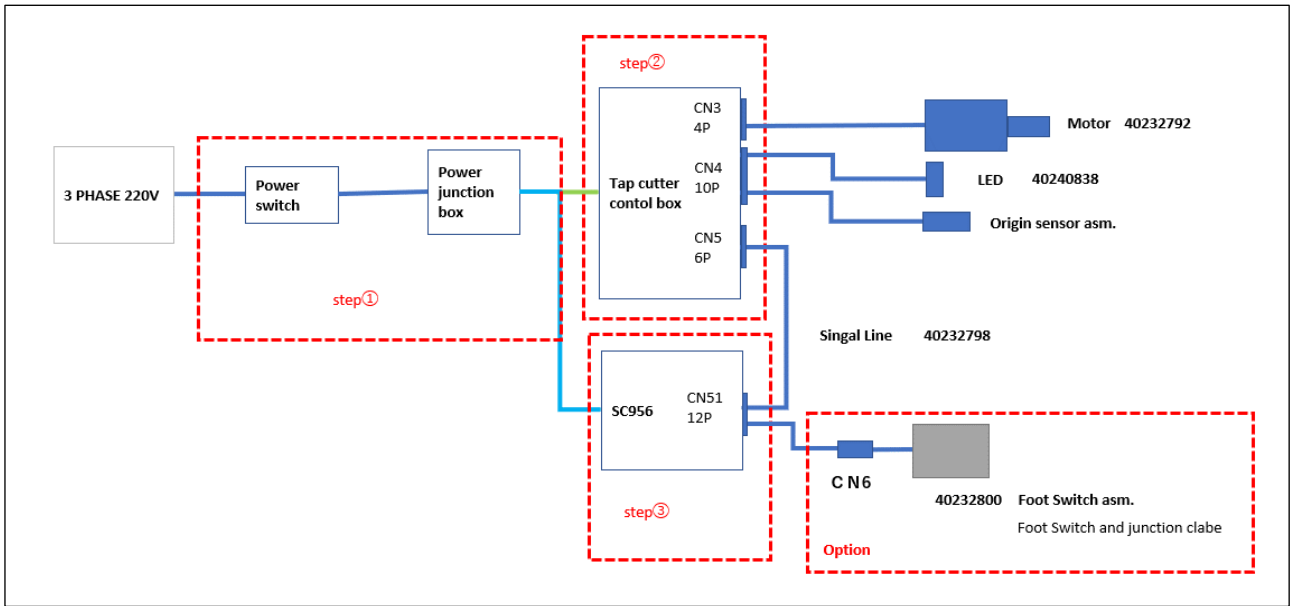


1. Loosen four setscrews ② of control box cover ① .
Remove control box cover ① .



2. Insert connector into the CN51 port.
3. Fix the control box cover with the screws.

1-2-4-2. Three-phase 220V



Wiring of junction box, control box and OP switch.

In order to use the cutting device, please follow the 3 steps below for wiring changes.



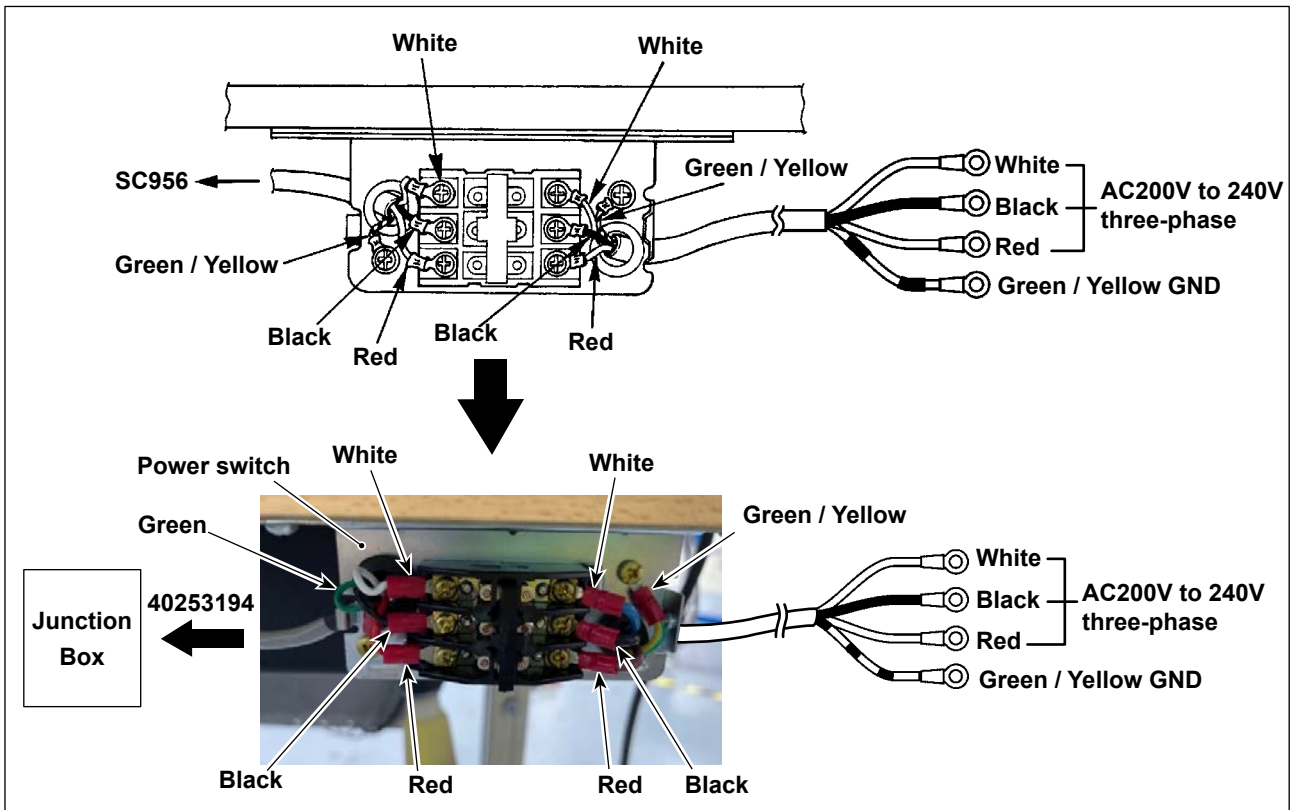
The default voltage of three-phase 220V / single-phase 110V style is three-phase 220V



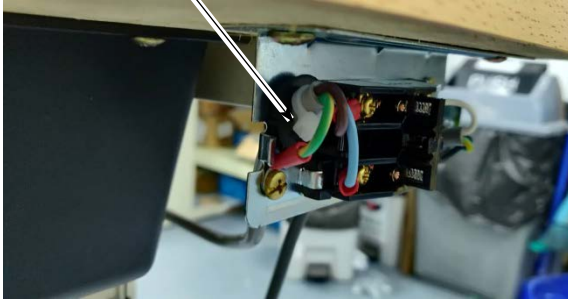
If the power supply is three-phase 220V, the 110V Switch cable in the accessory does not need to be used.

[Step1]

1. After opening the power switch box, remove the power line of the SC956 control box and replace it with 40253194 junction box power line, then tie the ribbon to the power line to prevent it from being pulled out by external force.

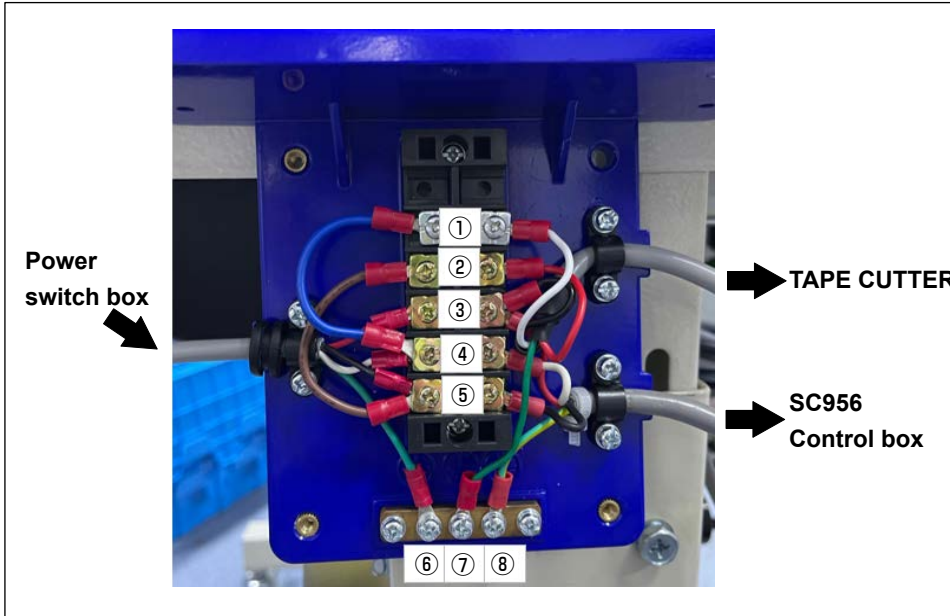


Fix cable clip band



• **Installation of harness**

After opening the power junction box, connect the power cord and ground cord as shown below and the connection box.



Connect the power cord as the wiring table shown below.

Close the cover of power switch box and junction box with screws.

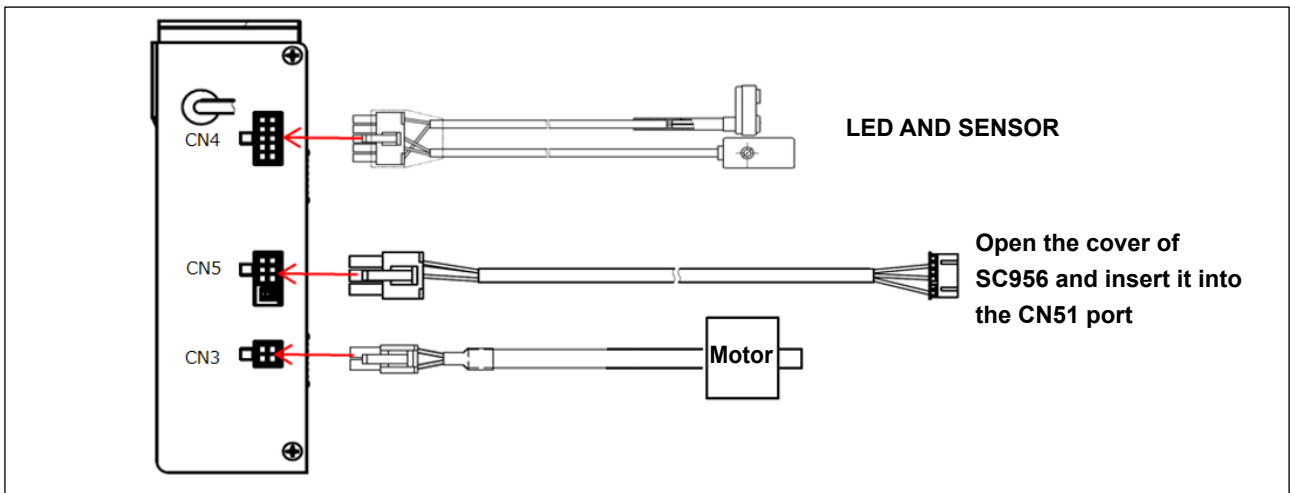
Wire name	Wire color	Connecting	Wire name	Wire color
Power connection	Blue	①	Tape cutter device power supply	White
Power connection	Brown	②	Tape cutter device power supply	Red
40253194(Power supply)	Red	③	Tape cutter device power supply	Black
			SC956 power supply	Red
Power connection	Blue	④	SC956 power supply	White
40253194(Power supply)	White			
Power connection	Brown	⑤	SC956 power supply	Black
40253194(Power supply)	Black			
40253194(Power supply)	Green	⑥⑦⑧	Tape cutter device power supply	Green/
			SC956 power supply	Green/Yellow

Wiring table



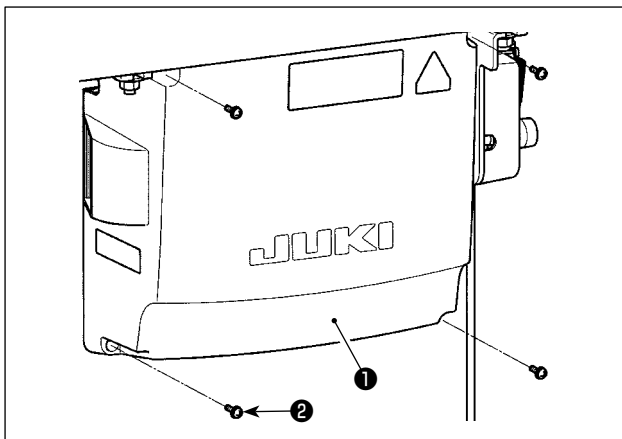
Please follow the instructions in the form. Please connect the power cord (Red) , the power cord (black) of Tape cutter and the power cord (red) of sc956 with the No. ③ connecting, otherwise it cannot be used normally.

[Step2]

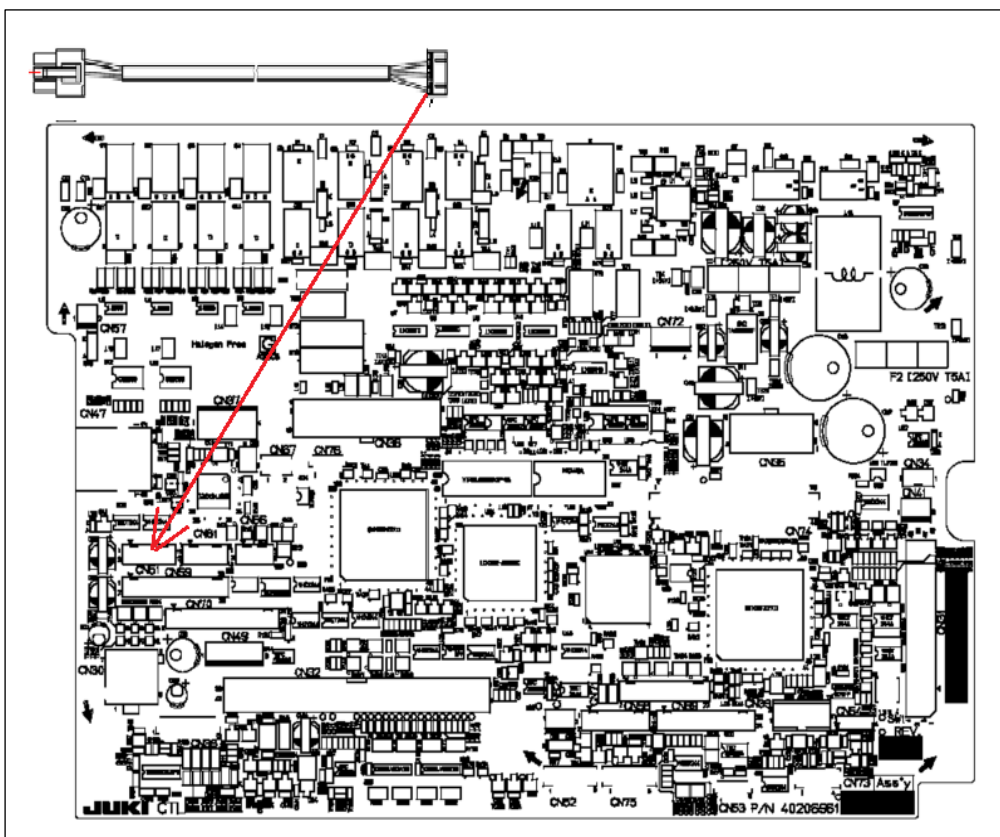


Connect the motor line , signal line , LED line , origin sensor line according to the direction of the red arrow.

[Step3]

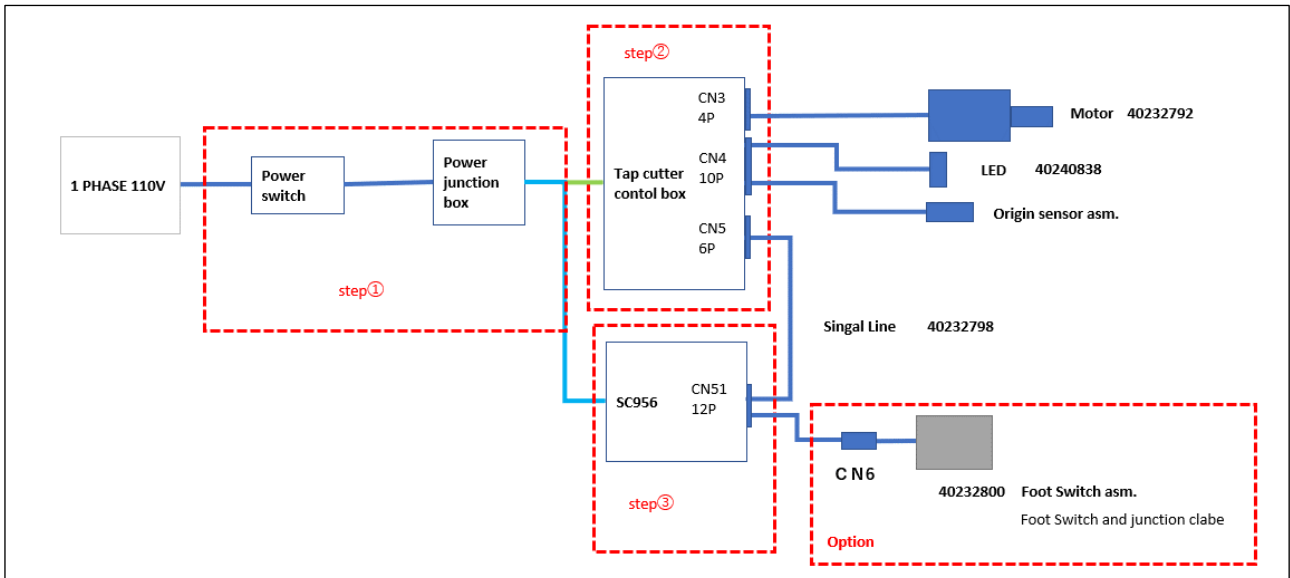


1. Loosen four setscrews ② of control box cover ① .
Remove control box cover ① .



2. Insert connector into the CN51 port.
3. Fix the control box cover with the screws.

1-2-4-3. Single-phase 110V



Wiring of junction box , control box and OP switch.

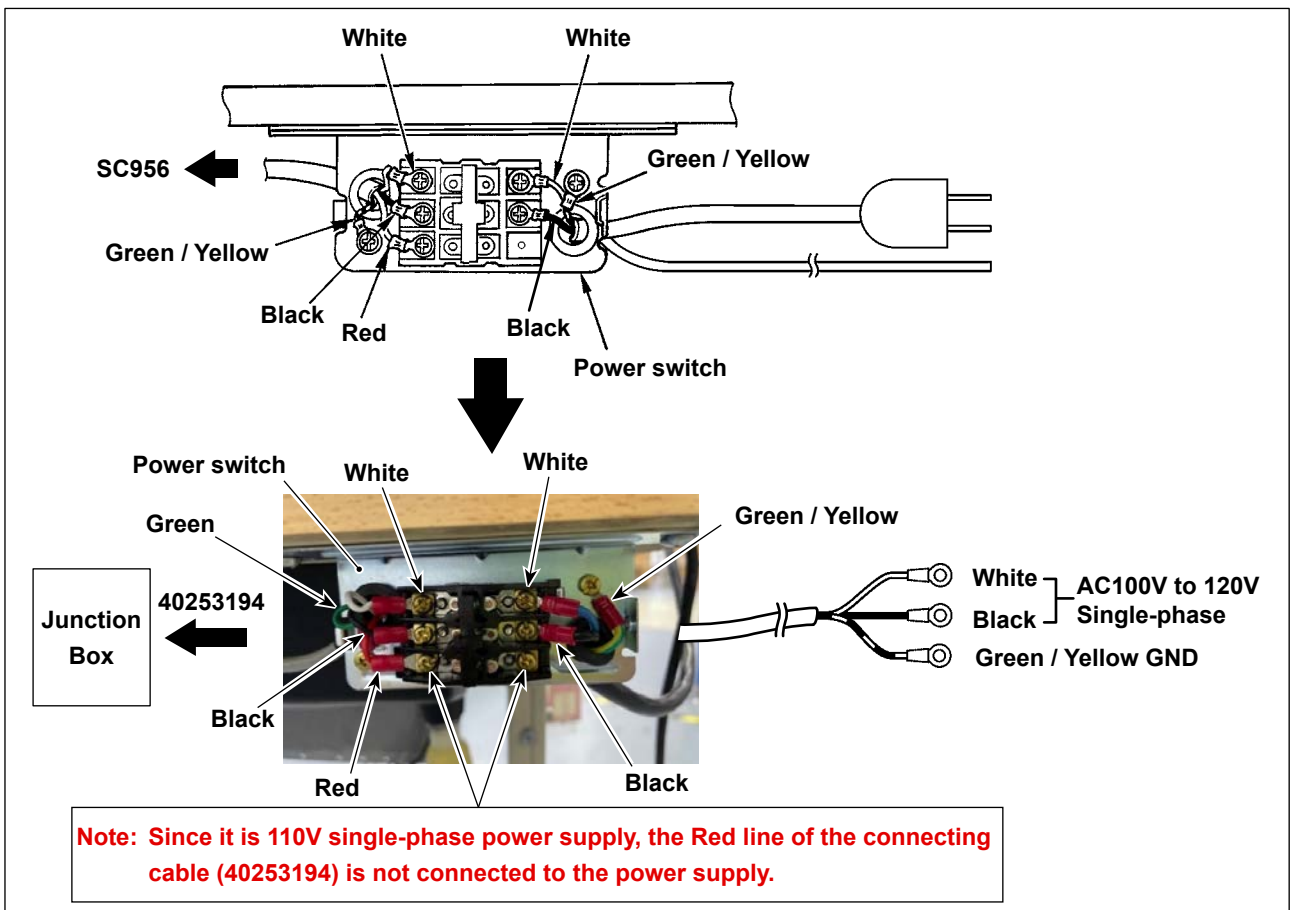
In order to use the cutting device , please follow the 4 steps below for wiring changes.



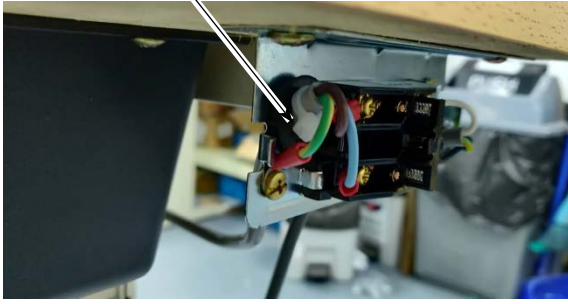
**The default voltage of three-phase 220V / single-phase 110V style is three-phase 220V
So when using 110V supply, make sure to follow the steps to make changes, Otherwise,
the electrical installation may be damaged, please pay attention to it.**

[Step1]

1. After opening the power switch box, remove the power line of the SC956 control box and replace it with 40253194 junction box power line, then tie the ribbon to the power line to prevent it from being pulled out by external force.

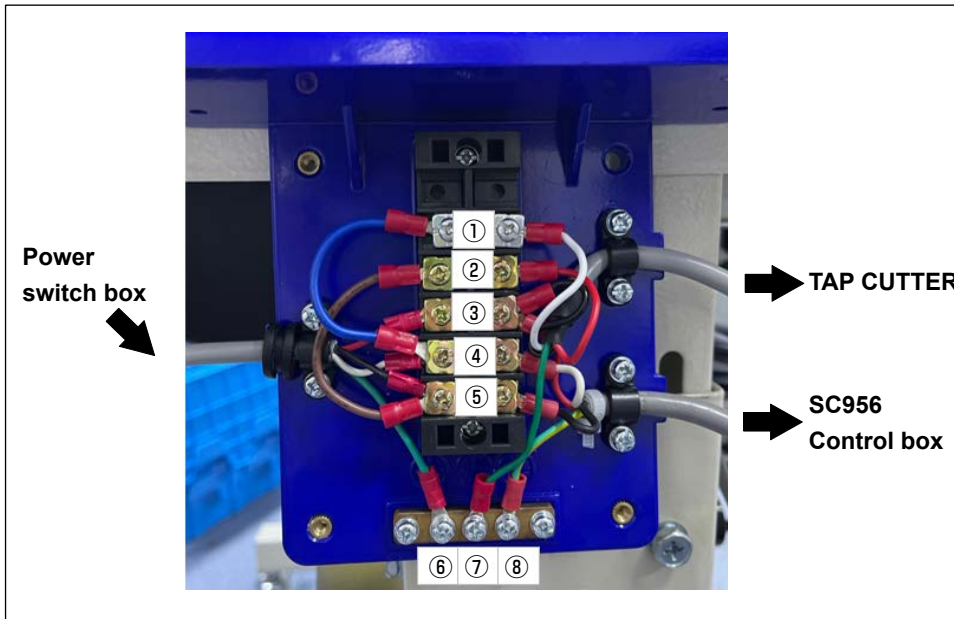


Fix cable clip band



• **Installation of harness**

After opening the power junction box, connect the power cord and ground cord as shown below and the connection box.



Connect the power cord as the wiring table shown below.

Close the cover of power switch box and junction box with the screws.

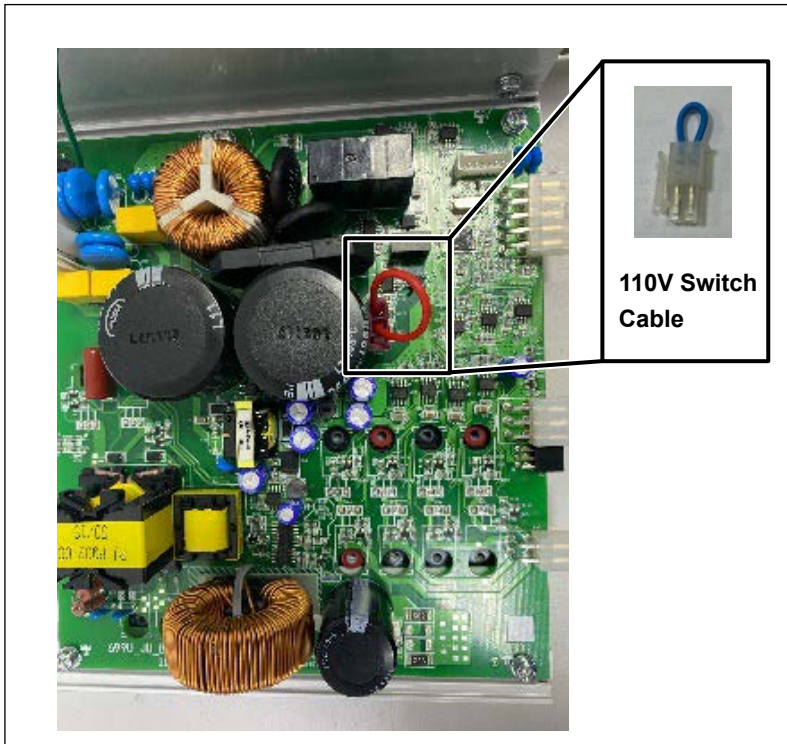
Wire name	Wire color	Connecting	Wire name	Wire color
Power connection	Blue	①	Tape cutter device power supply	White
Power connection	Brown	②	Tape cutter device power supply	Red
40253194(Power supply)	Red	③	Tape cutter device power supply	Black
			SC956 power supply	Red
Power connection	Blue	④	SC956 power supply	White
40253194(Power supply)	White			
Power connection	Brown	⑤	SC956 power supply	Black
40253194(Power supply)	Black			
40253194(Power supply)	Green	⑥⑦⑧	Tape cutter device power supply	Green/
			SC956 power supply	Green/Yellow

Wiring table



Please follow the instructions in the form. Please connect the power cord (Red) , the power cord (black) of Tape cutter and the power cord (red) of sc956 with the No. ③ connecting, otherwise it cannot be used normally.

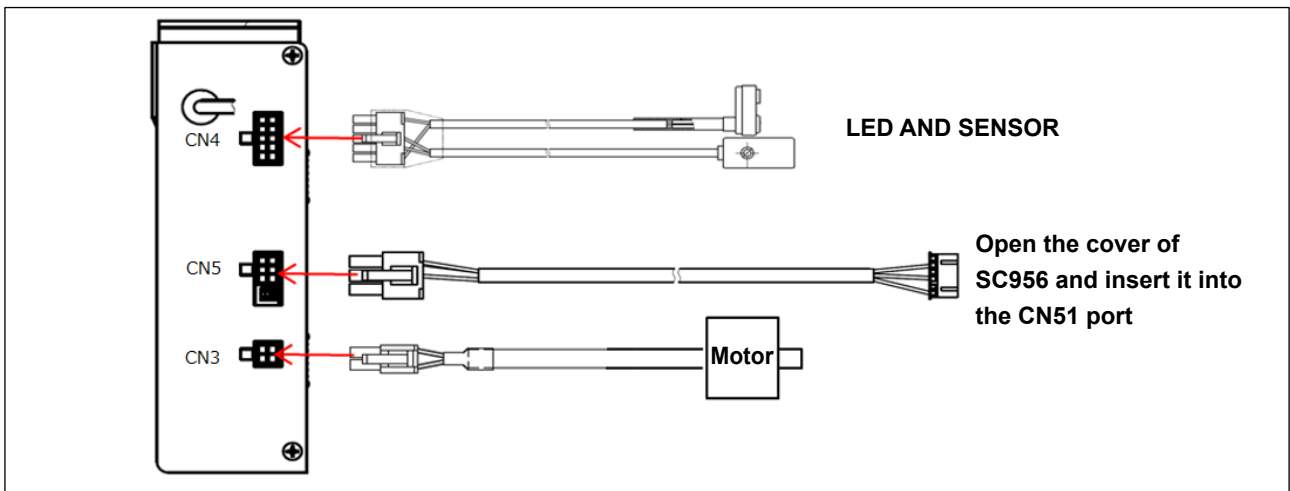
[Step2]



When the Tape cutter device uses 110V single-phase power supply, please insert the **110V Switch cable** into the box connector.

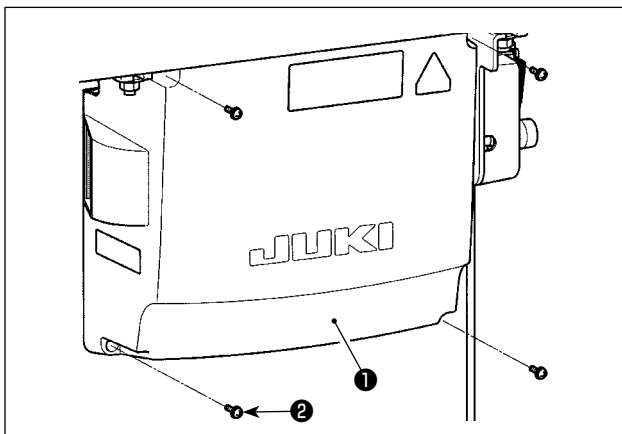


(The default voltage of three-phase 220V / single-phase 110V style is three-phase 220V, So when using 110V single-phase voltage, please pay attention to voltage switching)

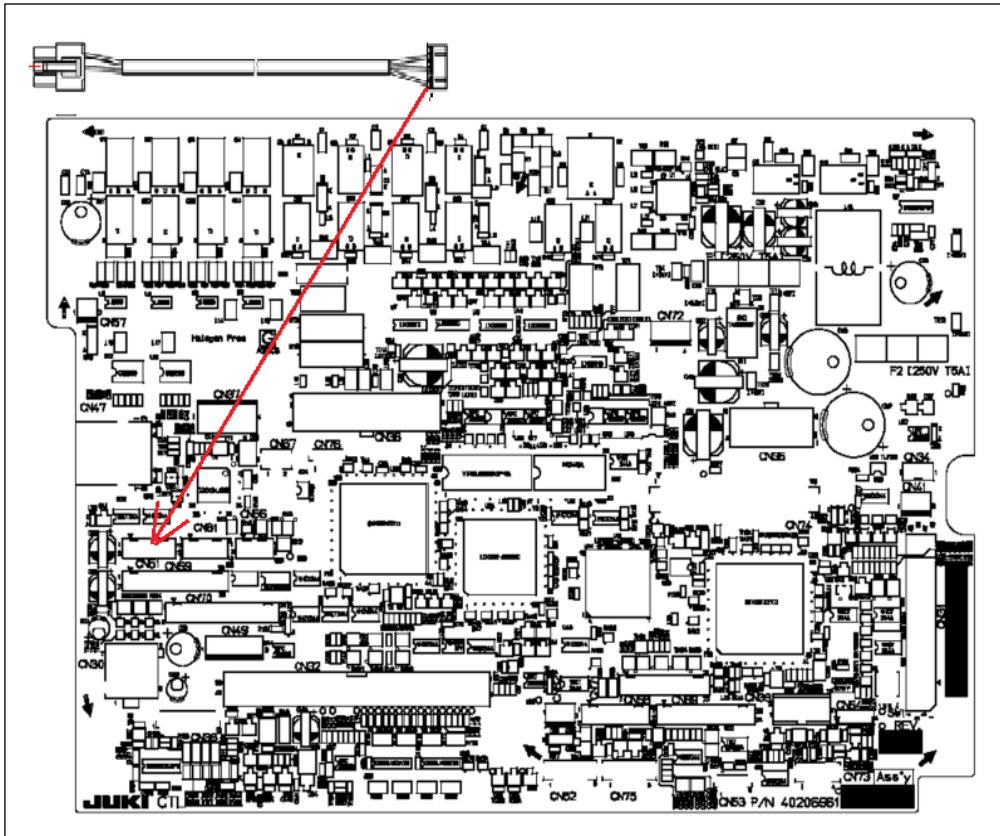


Connect the motor line , signal line , LED line , origin sensor line according to the direction of the red arrow.

[Step3]



1. Loosen four setscrews ② of control box cover ① .
Remove control box cover ① .



2. Insert connector into the CN51 port.
3. Fix the control box cover with the screws.

[Step 4] Change supply method of JUKI control box SC956 (110V/220V)



The default voltage of three-phase 220V / single-phase 110V style is three-phase 220V. So when using 110V supply, make sure to follow the steps to make changes, Otherwise, the electrical installation may be damaged, please pay attention to it.



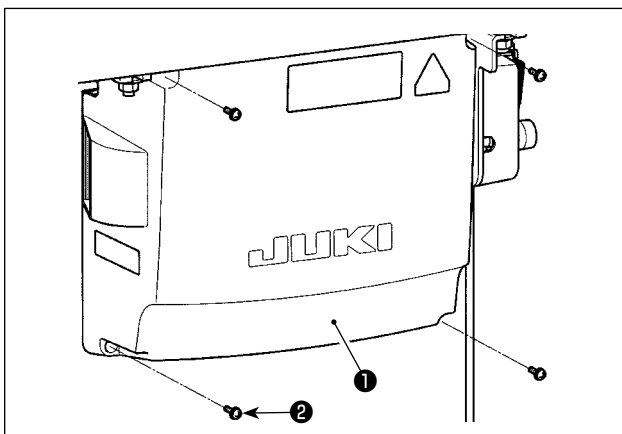
DANGER

1. To prevent personal injuries caused by electric shock hazards or abrupt start of the sewing machine, carry out the work after turning OFF the power switch and a lapse of 5 minutes or more.
2. To prevent accidents caused by unaccustomed work or electric shock, request the electric expert or engineer of our dealers when adjusting the electrical components.

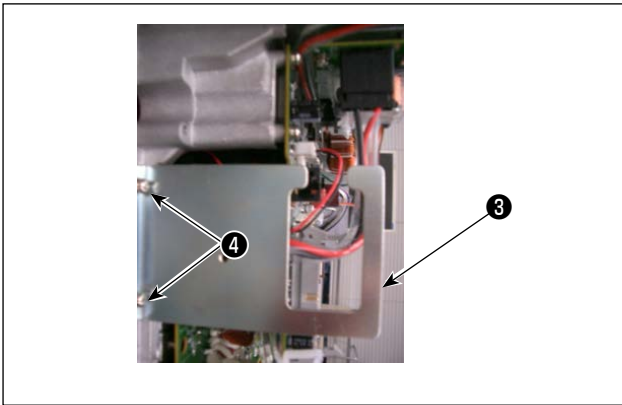


CAUTION

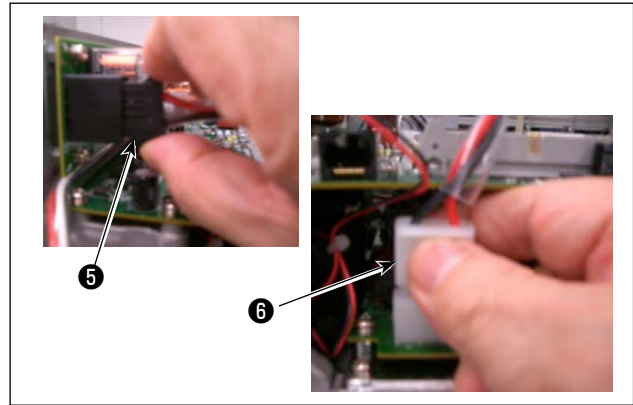
1. Only an electrical box with FLT-T PCB assembly can switch between 110V and 220V.
2. An electrical box with FLT-G/FLT-S PCB assembly cannot change to 110V.
3. Never make this change with a FLT-G/FLT-S PCB assembly because there is danger of an electric shock, a short circuit, a fire accident, and the breakage of an electrical box.
4. Before making this change, be sure to confirm the specification of a mounted FLT PCB assembly.



1. Loosen four setscrews ② of control box cover ① .
Remove control box cover ① .



2. Loosen the fixation screws ④ , and remove the plate ③ for exiting the cords.

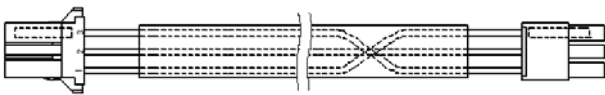


3. Remove the connector ⑤ and ⑥ , and then the power cord.

Caution The connector has a lock mechanism. Pull it out while pushing the lock mechanism part.

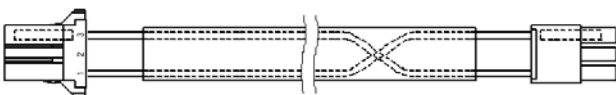
The power cord differs between the 110V system and/220V system.

Power cord for 110V
(JUKI part No. : 40175582)



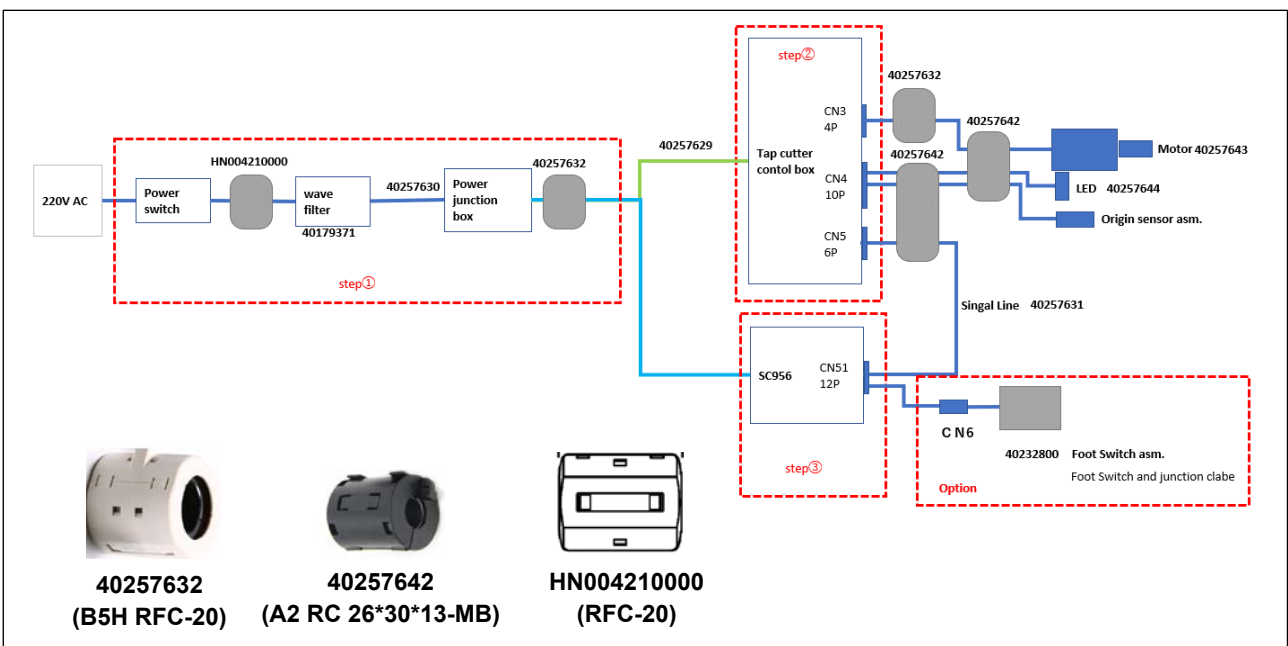
When you change the power voltage to the 110V system and 220V system, replace it by the power code of Part No. 40175582.

Power cord for 220V
(JUKI part No. : 40175581)



When you change the power voltage to 110V from 220V, replace it by the power code of Part No. 40175581.

1-2-4-4. Single-phase 220V CE

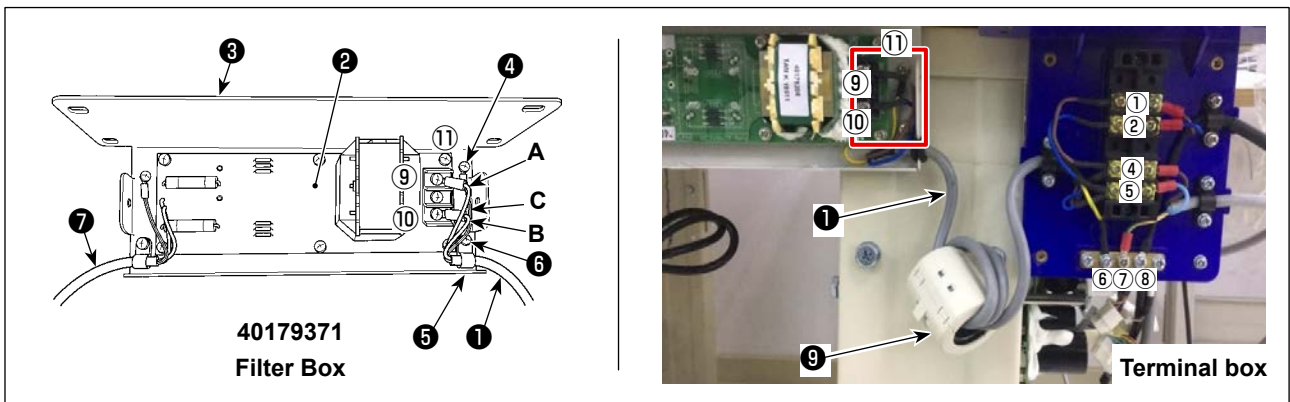
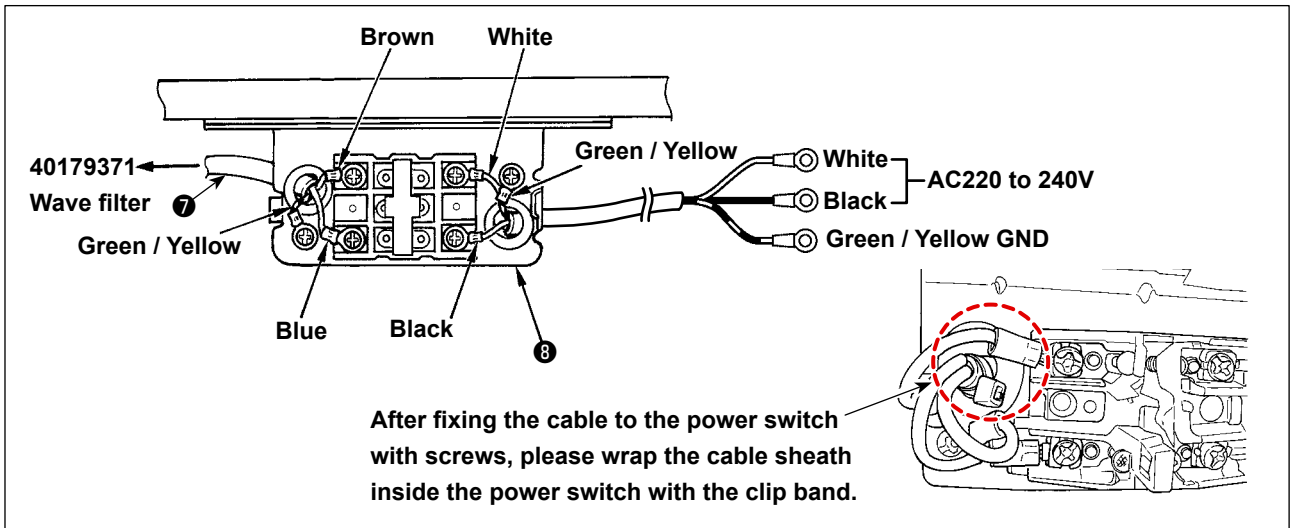


Wiring of junction box , control box and OP switch.

In order to use the cutting device , please follow the 5 steps below for wiring changes.

[Step1]

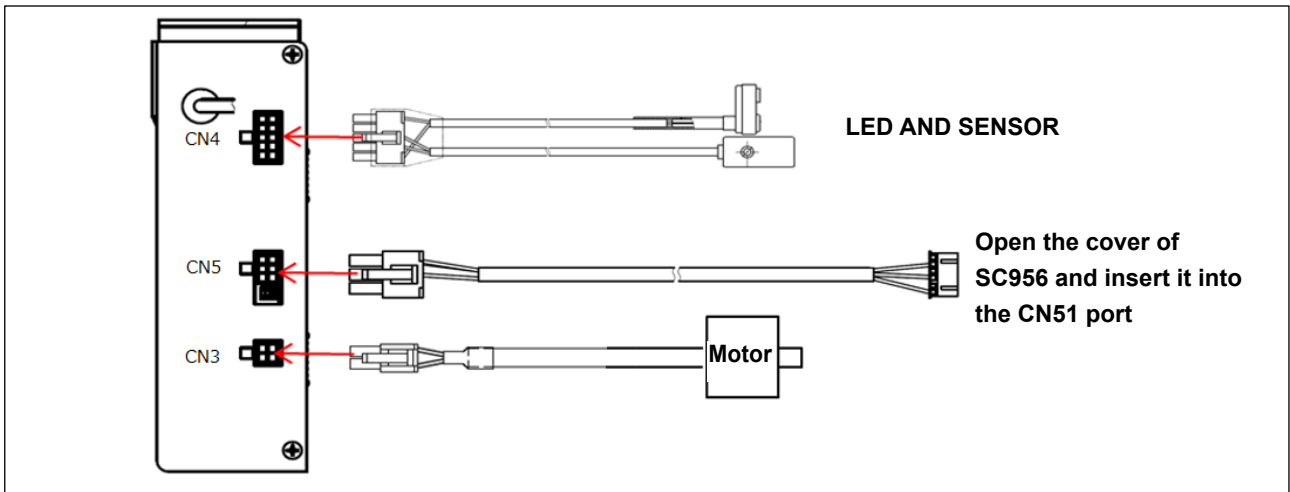
1. Install the terminal of the filter box ⑦ to the power switch ⑧, and connect according to the color indication in the figure.
2. Connect the terminal of power line ① to filter box base plate group ②, fix brown wire A to the first terminal of filter base plate group ②, fix blue wire B to the third terminal, and install green / yellow wire C to the base of filter box ③ with ground wire fixing screw ④.
3. The other end of power line ① is connected to terminal (④, ⑤, ⑥) of junction box (refer to the following wiring table for details)
4. The Ferrite Core ⑨ is wrapped on the cable ① for 2 turns (for details, please refer to [step 5. Installation of Ferrite Core])



Wire name	Wire color	Connecting	Wire name	Wire color	Connecting	Wire name	Wire color
-	-	-	Power connection	Brown	①	Tape cutter device power supply	Brown
-	-	-	Power connection	Blue	②	Tape cutter device power supply	Blue
40257630 (Power supply)	Brown (A)	⑨	40257630 (Power supply)	Brown	④	SC956 Power supply	Brown
-	-	-	Power connection	Brown			
40257630 (Power supply)	Blue (B)	⑩	40257630 (Power supply)	Blue	⑤	SC956 Power supply	Blue
-	-	-	Power connection	Blue			
40257630 (Power supply)	Green / Yellow (C)	⑪	40257630 (Power supply)	Green / Yellow	⑥⑦⑧	SC956 Power supply	Green / Yellow
						Tape cutter device power supply	Black

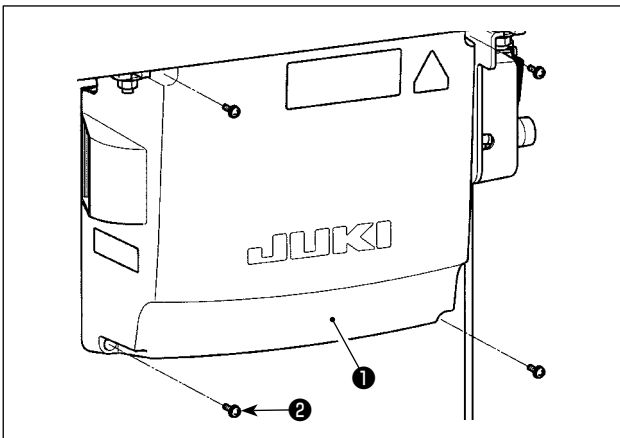
Wiring Table

[Step2]

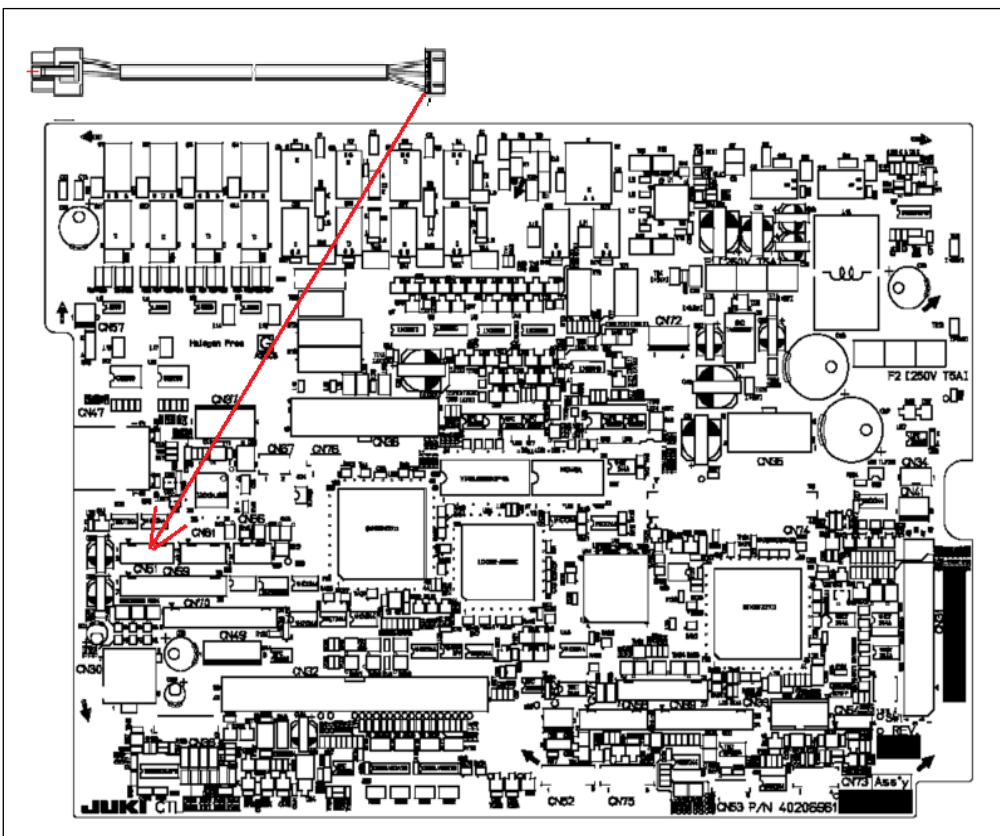


Connect the motor line , signal line , LED line , origin sensor line according to the direction of the red arrow.

[Step3]



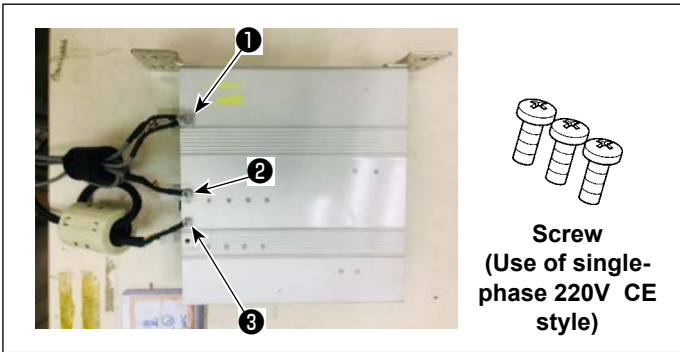
1. Loosen four setscrews ② of control box cover ① .
Remove control box cover ① .



2. Insert connector into the CN51 port.
3. Fix the control box cover with the screws.

[Step4 Grounding]

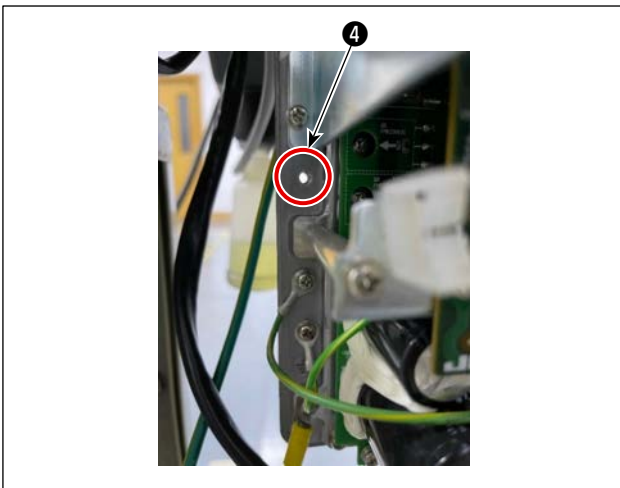
Follow shown in the figure below,ground the shield.



Tape cutter device Control box Side

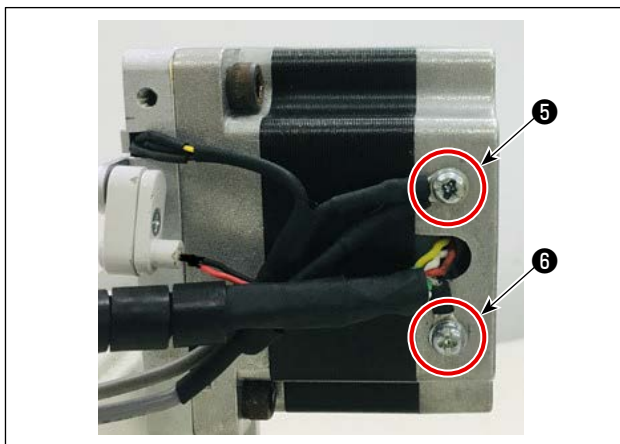
Use the three screws in the accessory for grounding.

Wire name	Connecting
Sensor cord	①
LED component cord	
Signal line	②
Motor cord	③



SC956 Control box Side

Wire name	Connecting
Signal line	④

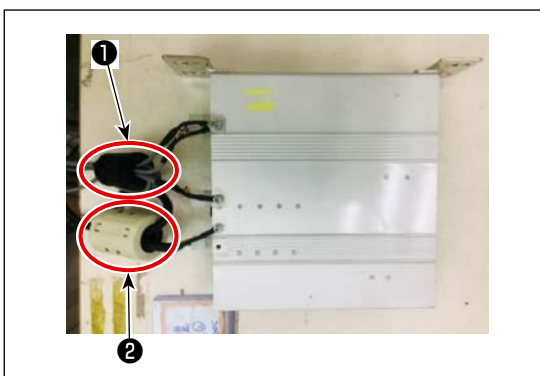


Motor part (Factory connected)

Wire name	Connecting
Sensor cord	⑤
LED component cord	
Motor cord	⑥

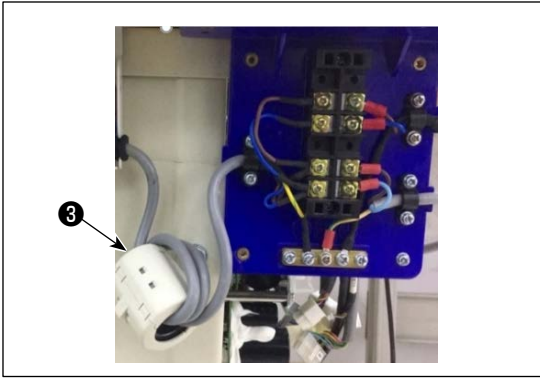
[Step5 Installation of ferrite core]

Follow the position and number of turns shown in the figure below Install the ferrite core.



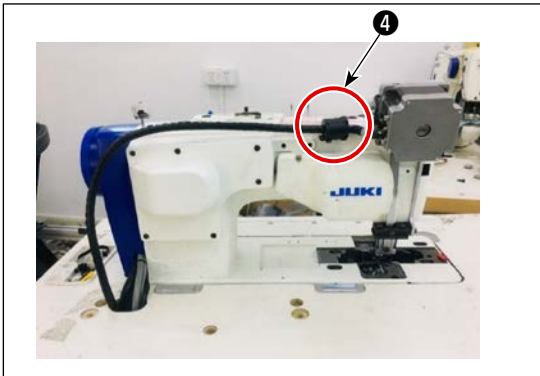
Tape cutter device Control box part

No.	Wire name	Model of ferrite core	Turn
①	Sensor cord	A2 RC 26*30*13MB	1
	LED component cord		
	Signal line		
②	Motor cord	B5H RFC-20	1



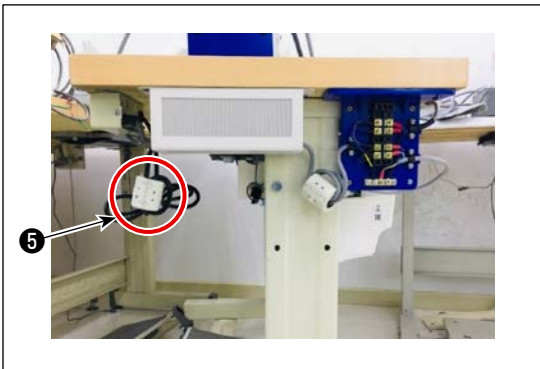
AC Power Side

No.	Wire name	Model of ferrite core	Turn
③	Power supply	B5H RFC-20	2



Motor Side

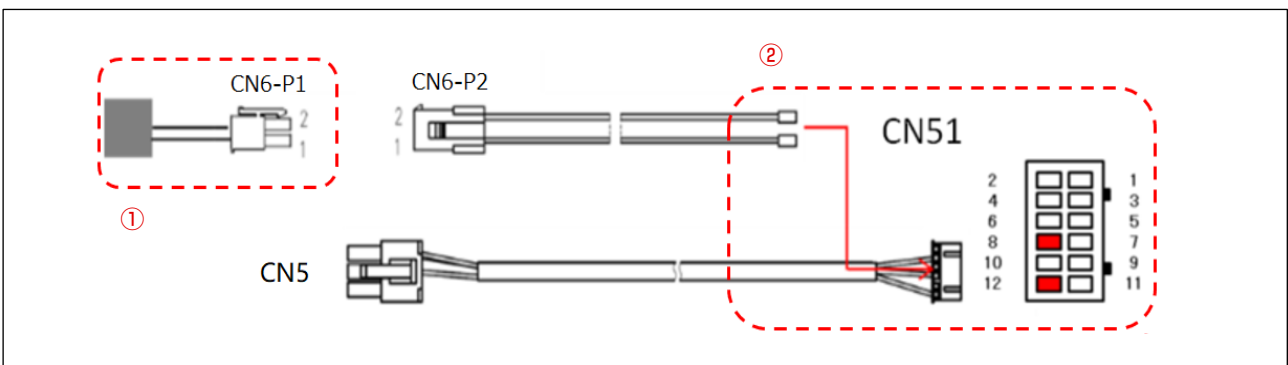
No.	Wire name	Model of ferrite core	Turn
④	Sensor cord	A2 RC 26*30*13MB	0
	LED component cord		
	Motor cord		



No.	Wire name	Model of ferrite core	Turn
⑤	AC Filter power line	RFC-20	1

The Ferrite Core originally installed on the sc956 power line was fixed by the filter power line and wound for 1 turn.

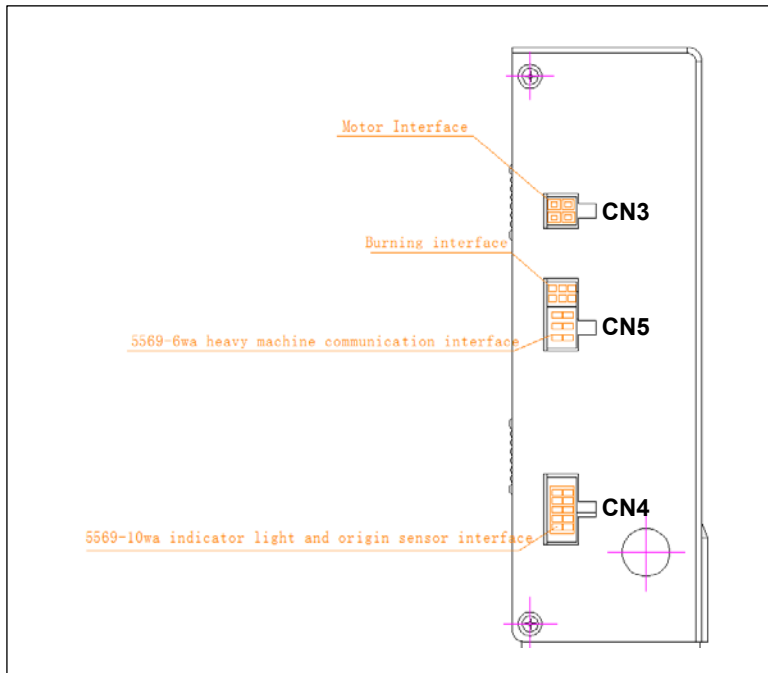
1-2-4-5. Connection of optional switch



- ① Please insert the core wire of OP Switch into the P1 connector as shown below.
- ② After connect the P1 and P2, insert the terminals of P2 into the CN51 as shown below

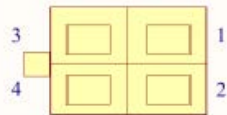
CN6-P1	CN6-P2	CN51
1 / White	2 / Red	8 / Red
2 / Black	2 / Black	12 / Black

1-2-4-6. Interface definition



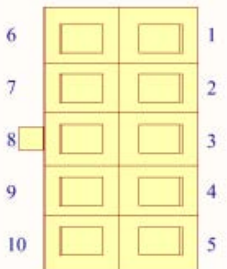
• Definition of the interface

CN3:



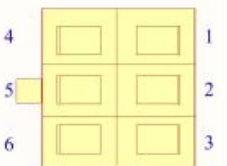
1	The motor 1	White
2	The motor 2	Green
3	The motor 2-	Red
4	The motor 1-	Yellow

CN4:



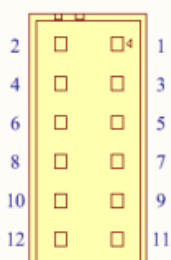
1	/	
2	/	
3	GND (Sensor negative)	Black
4	5V (Sensor positive)	Red
5	LED+ (Positive indicator)	Red
6	LED- (Pilot negative)	Black
7	/	
8	/	
9	SIGNAL (Sensor signal)	Yellow
10	/	

CN5:



1	Feedback signal	Yellow
2	/	
3	/	
4	Activating signal	Red
5	GND	Black
6	/	

SC956/CTL CN51:



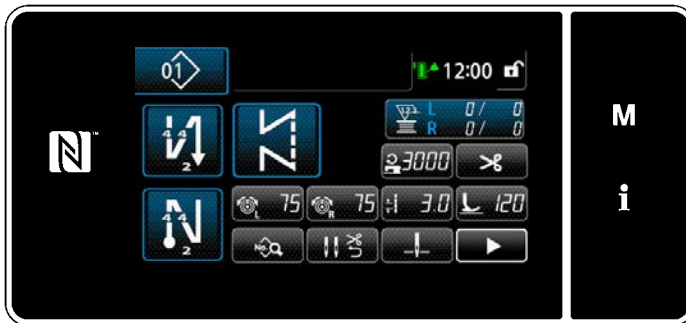
1-3	/	
4	Activating signal	Red
5-6	/	
7	Feedback signal	Yellow
8-10	/	
11	GND	Black
12	/	

2. SETTING THE OPERATION PANEL OF THE JUKI SEWING MACHINE



In the case of using a tape cutter, please note that the electrical main software version is 01.03.02.00 or higher, and the panel software version is 01.03.02.00 or higher.

2-1. Setting the function of the tape cutter



1) Turn ON the power to the sewing machine. Then, carry out setting procedure on the sewing screen of the operation panel.



2) Keep **M** **1** held pressed for three second.

The "menu list screen" is displayed.

Press **1. Display all**.



3) Press **▼**.



4) Setting the relevant memory switches
When you want to use the tape cutter function, firstly set the memory switch 145 to "1".

Memory switches 146, 147 and 148 are used for setting optional functions.

145	Tape cutter function	0: Not use 1: Use
146	Function of interlocking the tape cutter at the time of thread trimming	0: Not use 1: Use
147	Function of lifting the presser foot after the operation of the tape cutter device during midpoint stop of sewing	0: Not lift 1: Lift
148	Lifting height of the presser foot after the operation of the tape cutter device during midpoint stop of sewing (In the case you want to decrease the lifting amount of the presser foot while the needle bar stop position during midpoint stop of sewing machine has been set to the "lower position", take care not to allow the presser foot to interfere with the needle bar.)	0 to 13.5 mm

2-2. Assigning the tape cutter function to the machine head switch



1) Keep **M** **1** held pressed for three second.

Press .



2) Press .



3) Press .



4) Press .



5) Select **i62 Tape cutter** and press



2-3. Assigning the tape cutter function to the foot switch

If you want to control the tape cutter with any switch other than the machine head switch, carry out the following procedure.

Insert the red wire of the OP switch cable into CN51-8.

Insert the black wire into CN51-12.

Insert the connector CN51 into the PCB.



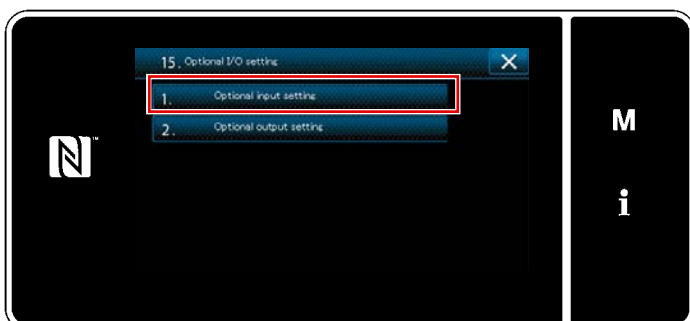
3) Keep **M** **1** held pressed for three second.

The "menu list screen" is displayed.

Press .



4) Press **15. Optional I/O setting**.



5) Select **1. Optional input setting**.



6) Press  .



7) Select  .

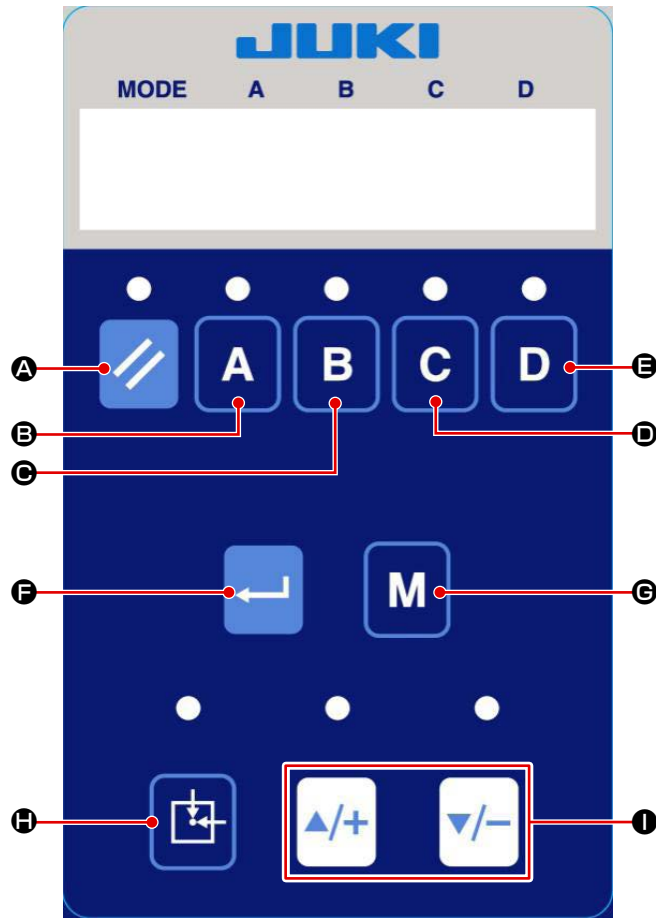


8) Select  and press



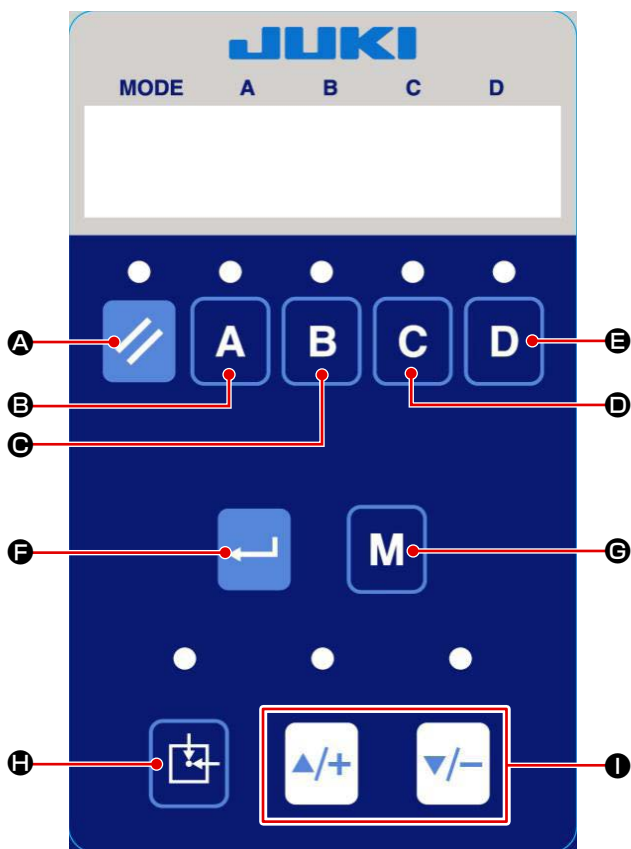
3. DEVICE CONTROL BOX INSTRUCTIONS

3-1. Key Definition



Ⓐ	Short press to display the current count; long press to clear the count.
Ⓑ	Thousands digit adjustment of parameter value.
Ⓒ	Hundreds digit adjustment of parameter value.
Ⓓ	Tens digit adjustment of parameter value.
Ⓔ	Units digit adjustment of parameter value.
Ⓕ	Confirm the storage after parameter adjustment.
Ⓖ	Short press to enter the parameter setting; long press to enter the password input interface.
Ⓗ	Return to the original point; clear the alarm reminder after troubleshooting.
Ⓘ	Parameter number adjustment.

3-2. Operation Instructions



3-2-1. Return to origin

After power on, if the stepper motor is not at the origin position, press the key **H** first, and let the stepper motor run to the origin position (if the motor has stopped at the origin position, the motor will not run). During operation, if the stop position caused by motor out of step is not correct, you can also press key **H** once to move the motor to the original position.

3-2-2. Clear alarm reminder

In case of alarm during operation. After troubleshooting, the alarm reminder can be cleared by pressing key **H**, and the stepping motor can return to the zero position

3-2-3. Parameter adjustment

Press key **G** once to enter the parameter adjustment interface. The two digits on the left side of the display area indicate the parameter number. The serial number can be adjusted by pressing the key **I**. The four digits on the right side of the display area represent the parameter value. If the maximum value is several digits, several digits will be displayed. The parameter value can be adjusted by pressing the key **B** **C** **D** **E**. The parameter value will be incrementally changed by polling the current number of digits. When adjusting the parameter, please adjust the value of each digits from right to left. After the parameter modification is completed, press the key **F** once for storage.

3-2-4. Count display and clear

After power on, enter the counting display interface by default. Four digits are displayed on the right side of the display area to indicate the current count. In this interface, long press the key **A** to clear the count. When in other interfaces, press the key **A** once to enter the counting display interface.

3-2-5. Password Input

Long press key **G** in the counting display interface to enter the password input interface. Two letters F are displayed on the left side of the display area, and the four digits on the right side represent the password. The password value can be adjusted by pressing **B** **C** **D** **E**. The password value will be incrementally changed by polling the current number of digits. After the password is input, press **F** once. If the password is correct, enter the 11 parameter setting interface. If the password is wrong, return to the counting display interface.

3-3. Parameter description

Parameter cate	No.	Description	Default	Range	Remark
Operator parameters	1	Step rotation number setting	1	1 to 5	Count of turn
	2	Speed setting	5000	2000 to 6000	(200 to 600 rpm/min) Affected by "maximum speed setting"
	3	Current count	0	0 to 9999	When the knife fails to complete the action, it is also counted; it is not affected by the setting of step rotation times. When reach the maximum value, the counting will stop, please clear the counting in time.
Engineer parameters	11	Maximum speed setting	5000	2000 to 6000	(200 to 600 rpm/min)
	12	Manual return to origin speed setting	1000	1000 to 6000	
	16	Motor running direction		0 : Clockwise 1 : Counter-clockwise	
	17	Restore factory settings	0	0/1	After setting to 1 then Press OK , and the value will be restored to 0 after factory default setting. When recovering, it will not respond to the action signal
	18	Technician password setting	0	0 to 9999	
	19	Software version number			Read-only
	22	Acceleration time setting	200	100 to 500	No unit (corresponding to 10-50ms, default 20ms)
	24	Alarm angle when return to the original point is not in place	15	0 to 45 degree	
	25	Holding current	1	1 to 2A	Holding current at motor stop
	26	Maximum current	12	1 to 12A	Maximum current when the motor is working


3-4. Error code list

Error Code	Problem	Status / Measurement
E2	System over-voltage	Please check the power supply voltage is normal or not. (the voltage shall not be higher than 276V)
E3	System under-voltage	Please check the power supply voltage is normal or not. (the voltage shall not be lower than 170V)
E4	Motor overload	<ol style="list-style-type: none"> 1. Cut off the power, pull up and down the mechanical Connecting rod, and check whether the whole knife device mechanism is smooth without any sticking point. 2. Cut off the power and check whether the knife is worn. 3. Whether the cut cloth is too thick. 4. Cut off the power supply and check whether the knife magnitude interference is too large. 5. Please check the parameter 2 speed is too high, please reduce speed and try again. 6. Please check the stop position is the highest point or not (if not, it is sensor problem, please check the origin switch plug is not connected or loose, if still have problem, replace the sensor). If above all no problem, please contact after-sales service person.
E5	Return to origin fault	<ol style="list-style-type: none"> 1. If you turn on the switch when cutter isn't in the origin position, Please reference "3-2-1. Return to origin" p.28. 2. Decrease the value of parameter 12. 3. Please check the stop position is the highest point or not (if not, it is sensor problem, please check the origin switch plug is not connected or loose, if still have problem, replace the sensor). If above all no problem, please contact after-sales service person.
E6	Motor over-current	<ol style="list-style-type: none"> 1. Please kindly check the hardware is short-circuit or not. 2. Please kindly check the motor is short-circuit or not. If still can't solve, please contact after-sales service person.
E42	Storage failure	<ol style="list-style-type: none"> 1. Restart and check all parameter values are set values. If not, please reset. 2. If the fault still occurs after restart, please contact after-sales service person.
E71	Phase Less failure	<ol style="list-style-type: none"> 1. Restart and check the power cables are correctly connected. 2. If the fault still occurs after restart, please contact after-sales service person.

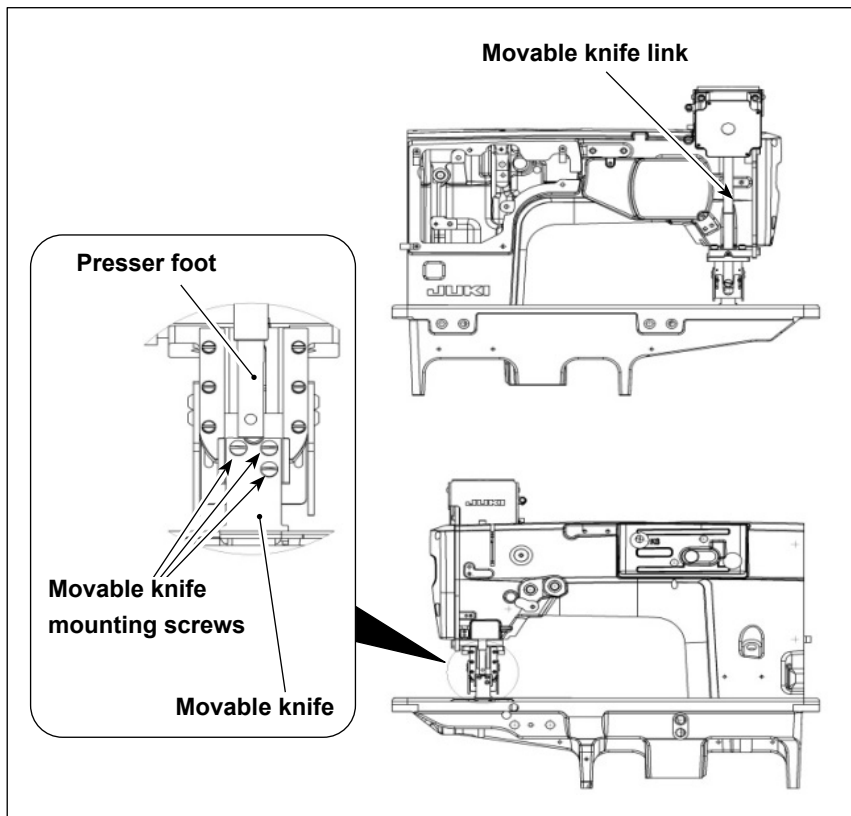
4. REPAIR AND MAINTENANCE

4-1. Repair

4-1-1. Common problems and Solutions

No.	Problem	Reason	Solution
1	System over-voltage	Step motor is not at the origin	Press return key to return to origin position.
2	Knife can not cut the tape.	<ol style="list-style-type: none"> Poor matching of moving and fixed knives Movable knife is seriously worn Motor over-load Cloth is too thick 	<ol style="list-style-type: none"> Refer to "1-2-2. Installation of the tape cutter assembly p.5". Change movable knife, refer to "4-1-2. Change of the moving knife p.31". Adjust the knife pressure, refer to "1-2-2. Installation of the tape cutter assembly p.5". Refer to "3-4. Error code list (Code E4) p.30". Please check the parameter 2 speed, reduce speed and try again.
3	After changing the movable knife, can not cut the tape in a short time.	The knife edge is curling and damaged due to the poor adjustment of knife pressure.	Change movable knife, refer to " 4-1-2. Change of the moving knife p.31 ". Adjust knife pressure, refer to " 1-2-2. Installation of the tape cutter assembly p.5 ".
4	Forget password		Press and hold two  keys at the same time to start the machine, and the password will be restored to the factory password.

4-1-2. Change of the moving knife



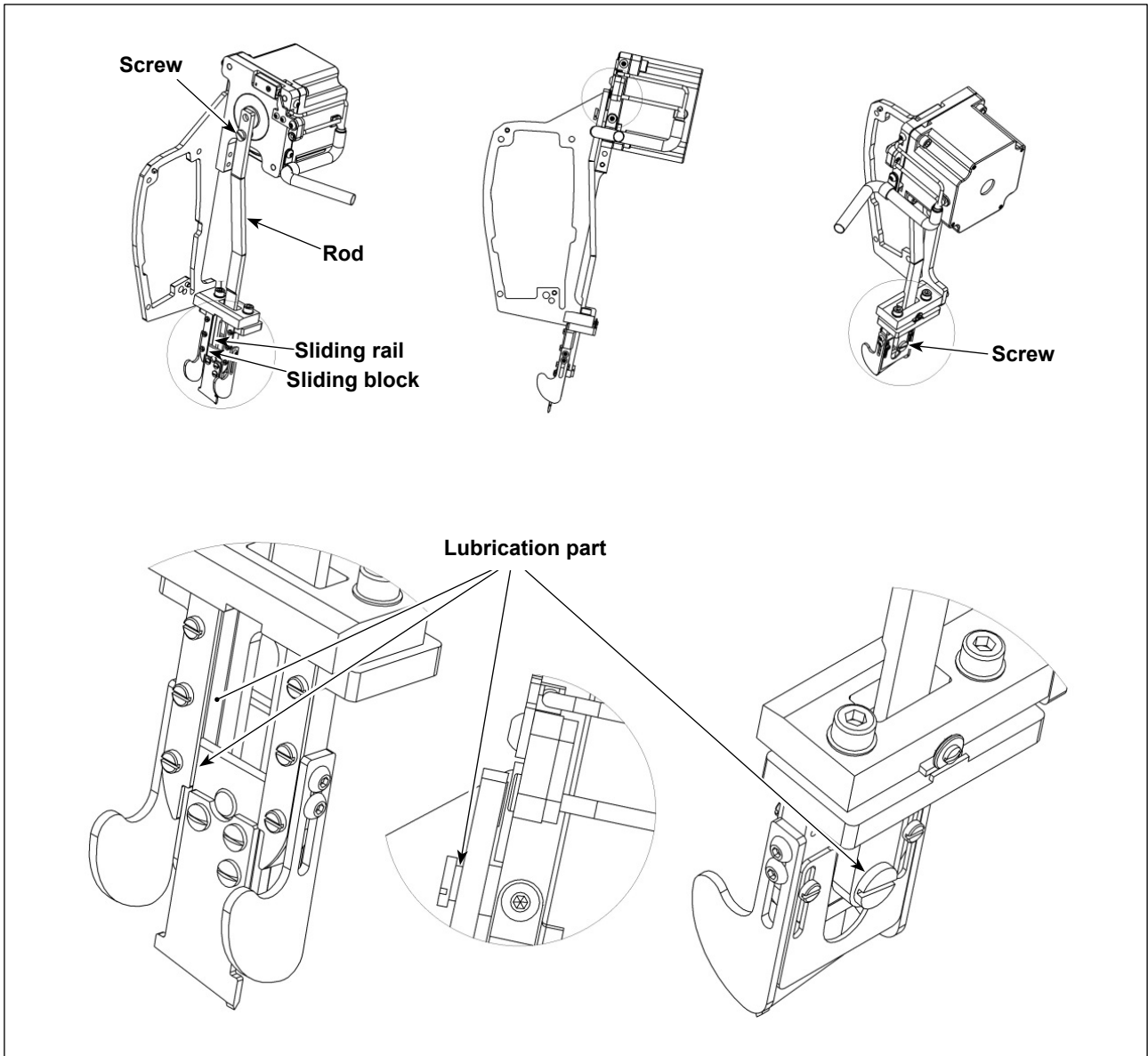
Remove the presser foot and lift the presser foot lever to the highest position. Push the movable knife link to lower the movable knife to the lowest position and expose the movable knife mounting screw. Remove the mounting screws of movable knife, and change movable knife. After replacing movable knife, confirm the position of movable knife according to "[1-2-2. Installation of the tape cutter assembly p.5](#)" and carry out cutting test. Lower the presser foot lever and refit the presser foot.



Then replacement must be operated by professionals.

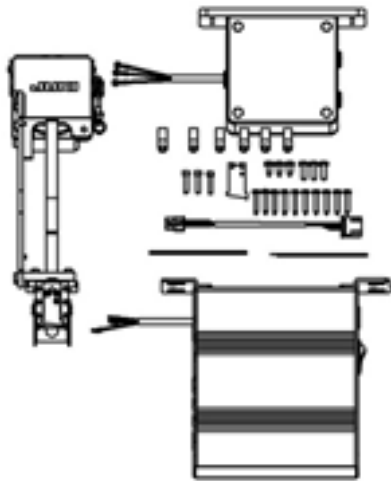
4-2. Maintenance

Use JUKI grease 40006323 to lubricate the contact parts of sliding block, screw and connecting rod once a month.



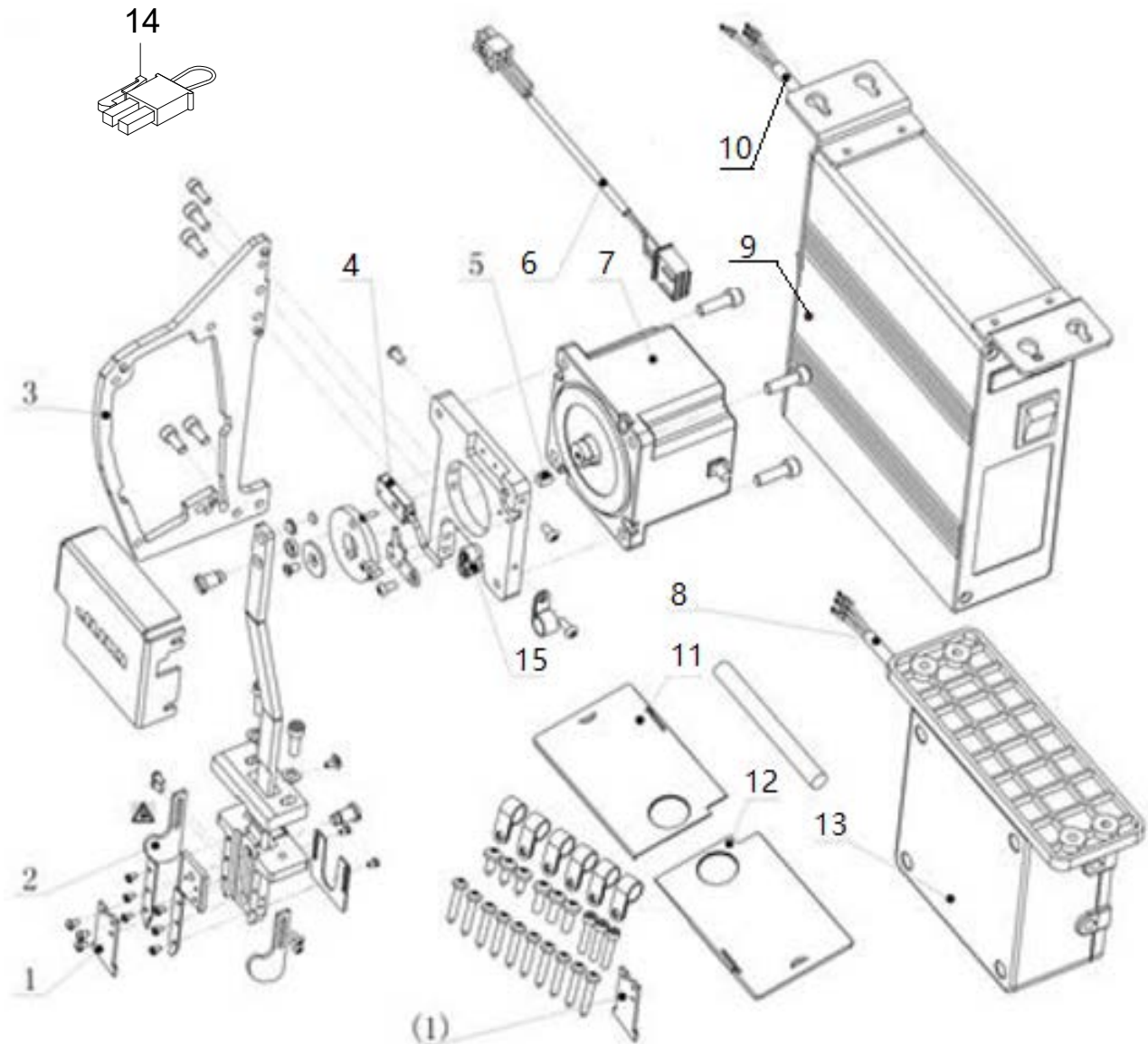
5. RECOMMENDABLE PARTS MANUAL

5-1. Belt Cutter Assembly



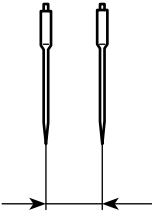

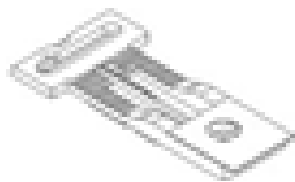
No.	JUKI Parts No.	Qty
1	40232788	2
2	40232789	2
3	40232787	1
4	#05 40232793	1
	#04 40257664	1
5	40240839	1
6	#05 40232798	1
	#04 40257631	1
7	#05 40232792	1
	#04 40257643	1
8	#03 40232797	1
	#01 40253194	1
	#04 40257630	1
9	#03 40232795	1
	#01 40251094	1
	#04 40256857	1

No.	JUKI Parts No.	Qty
10	#03 40232796	1
	#01 40253193	1
	#04 40257629	1
11	40232790	1
12	40232791	1
13	40232799	1
14	#02 40252342	1
	#04 40257663	1
15	#05 40232794	1



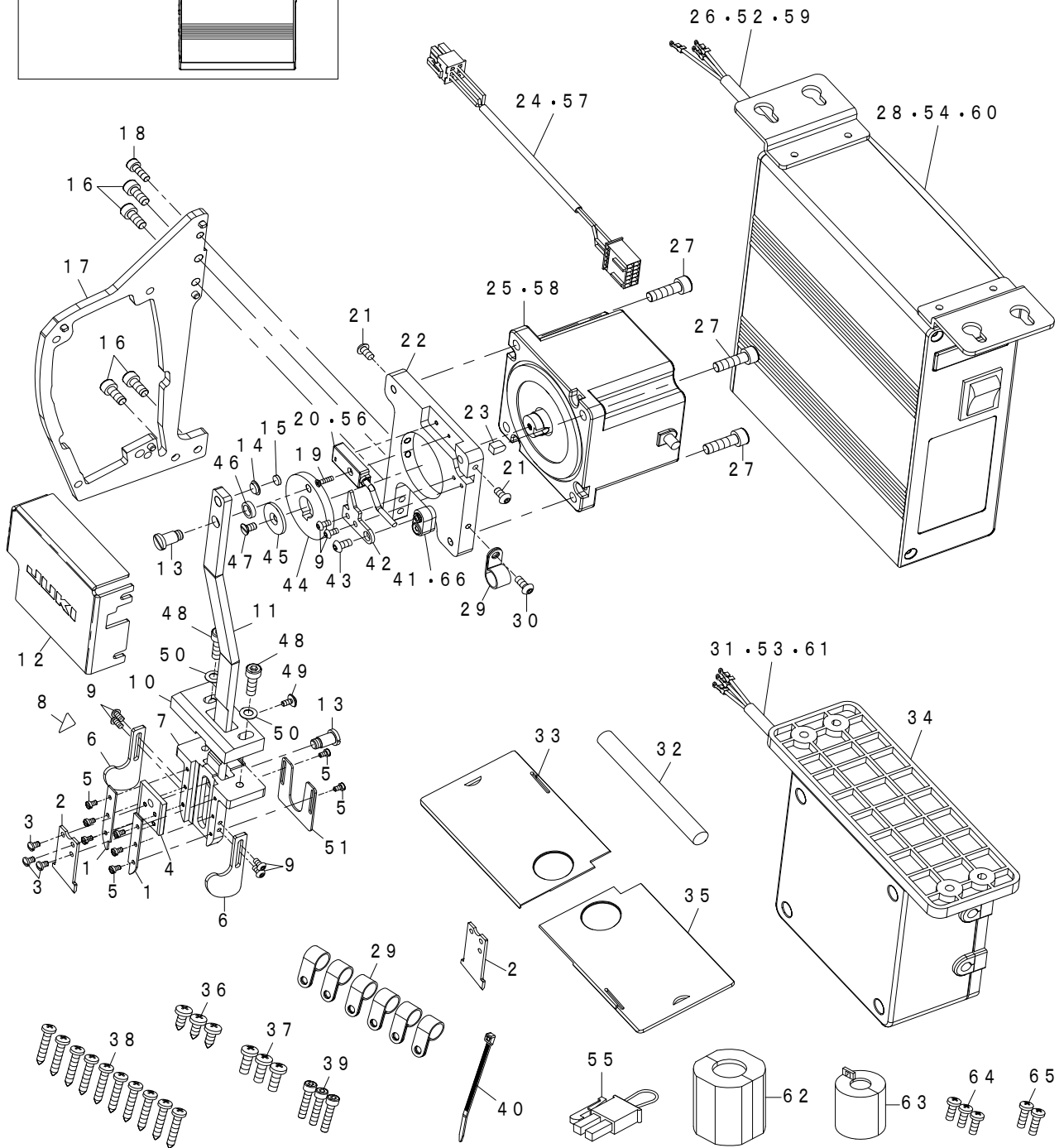
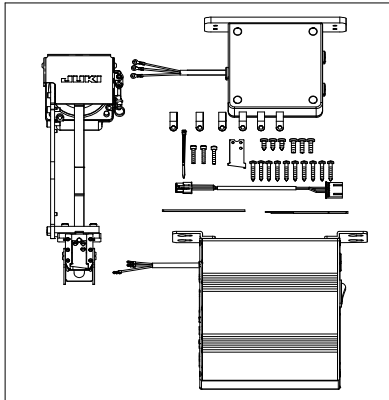
NOTE #01 ... FOR Three-phase 220V / Single-phase 110V
 #02 ... FOR Single-phase 110V
 #03 ... FOR Single-phase 220V
 #04 ... FOR Single-phase 220V CE type
 #05 ... FOR Single-phase 220V, Three-phase 220V / Single-phase 110V Common

5-2. Options Gauge part list

Needle gauge size		Throat plate	Throat plate with guide	
Code				
	inch	mm	Part No.	Part No.
D	3/16	4.8	40240834	40246475
E	7/32	5.6	40240833	40246476
F	1/4	6.4	40240832	40246477
G	9/32	7.1	40240835	40246478
H	5/16	7.9	40240836	40246479

6. PARTS LIST

6-1. AT-45 the tape cutter device for double-needle machine



REF.NO	NOTE	PART NO	DESCRIPTION	品名	Qty
1		402-41197	DRIVING_KNIFE_GUARD	動メスガイド板	2
2		402-32788	DRIVING_KNIFE	動メス	2
3		402-41198	SCREW	ねじ	3
4		402-41196	SLIDER	スライド板	1
5		402-41174	SCREW	ねじ	8
6		402-32789	FINGER_GUARD	指ガード	2
7		402-41176	TOOL_APRON	メス土台	1
8		CM-3002000-01	FINGER INJURY CAUTION LABEL (16)	指げが注意シール (16)	1
9		402-41172	SCREW M3 L=5	ねじ M3 L=5	6
10		402-41195	SLIDE_BLOCK	スライドブロック	1
11		402-41192	LINK	リンク	1
12		402-41168	MOTOR_COVER	モーターカバー	1
13		402-41175	SCREW	ねじ	2
14		402-41200	SLEEVE	メタル	1
15		402-01199	1.50A 0966A01 B INSTALL ASM	1.50A 0966A01 B インストール組	1
16		402-41177	SCREW M5 L=12	ねじ M5 L=12	4
17		402-32787	BASE_PLATE	ベース板	1
18		402-41180	SCREW M4 L=12	ねじ M4 L=12	1
19		402-41182	SCREW	ねじ	1
20	#05	402-32793	SENSOR	センサー	1
21		402-41181	SCREW M4 L=6	ねじ M4 L=6	2
22		402-41186	MOTOR_BASE	モーターベース	1
23		402-40839	KEY	キー	1
24	#05	402-32798	CONTROL_BOX_CORD	信号ケーブル	1
25	#05	402-32792	MOTOR	モータ	1
26	#03	402-32796	POWER_CORD	電源中継ケーブル	1
27		402-41170	SCREW M6 L=20	ねじ M6 L=20	3
28	#03	402-32795	CONTROL_BOX	電装ボックス	1
29		402-41188	CLAMP	R型クリップ	7
30		402-41169	SCREW M4 L=10	ねじ M4 L=10	1
31	#03	402-32797	CONTROL_BOX_POWER_CABLE	電装電源ケーブル	1
32		402-41185	SPIRAL_TUBE	スパイラルチューブ	0.72
33		402-32790	SLIDE_PLATE_L	左スライド板	1
34		402-32799	TERMINAL_BOX	配線ボックス	1
35		402-32791	SLIDE_PLATE_R	右スライド板	1
36		402-41189	SCREW M4.8 L=13	ねじ M4.8 L=13	3
37		402-41190	SCREW M5 L=14	ねじ M5 L=14	3
38		402-41191	SCREW	ねじ	10
39		402-41187	SCREW M4 L=20	ねじ M4 L=20	3
40		402-42672	CABLE BAND	束線バンド	1
41	#05	402-32794	LED COMPONENT	LED組品	1
42		402-41183	LED_PLATE	LED板	1
43		402-41184	SCREW M4 L=6	ねじ M4 L=6	1
44		402-41204	DRIVING_RING	駆動リング	1
45		402-41202	RING	リング	1
46		402-41201	BUSH	ブッシュ	1
47		402-41203	SCREW	ねじ	1
48		402-41193	SCREW M5 L=16	ねじ M5 L=16	2
49		402-41171	SCREW	ねじ	1
50		402-41194	DISC_SPRING	ディスクスプリング	2
51		402-41173	FINGER_GUARD_PLATE	指ガード板	1
52	#01	402-53193	POWER_CORD	電源中継ケーブル 110V単相/220V	1
53	#01	402-53194	CONTROL_BOX_POWER_CABLE	電装電源ケーブル 110V単相/220V三相	1
54	#01	402-51094	CONTROL_BOX	電装ボックス 110V単相/220V三相	1
55	#02	402-52342	110V SWITCH CABLE	110V用切替ケーブル	1
56	#04	402-57664	SENSOR	センサー	1
57	#04	402-57631	CONTROL_BOX_CORD	信号ケーブル	1
58	#04	402-57643	MOTOR	モータ (CE仕様)	1
59	#04	402-57629	POWER_CORD	電源中継ケーブル	1
60	#04	402-56857	CONTROL_BOX_CE	電装ボックス (CE仕様)	1
61	#04	402-57630	CONTROL_BOX_POWER_CABLE	電装電源ケーブル	1
62	#04	402-57632	CORE	コア	1
63	#04	402-57642	CORE	コア	1
64	#04	402-57680	SCREW	ねじ (M4*6)	3
65	#04	402-57679	SCREW	ねじ (M4*8)	2
66	#04	402-57663	LED COMPONENT	LED組品	1
		NOTE(注記)	#01....FOR 3-PHASE 220V,1-PHASE 110V	三相 220V用, 単相 110V用	
			#02....FOR 1-PHASE 110V	単相 110V用	
			#03....FOR 1-PHASE 220V	単相 220V用	
			#04....FOR CE	CE用	
			#05....FOR 3-PHASE 220V,1-PHASE 110V, 1-PHASE 220V	三相 220V用, 単相 110V, 単相 220V用	