

ENGLISH

**PS-800SB-2850 Suction device
INSTRUCTION MANUAL**

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1. List of parts comprising the suction device

Check the parts.



40275338 Suction device asm.

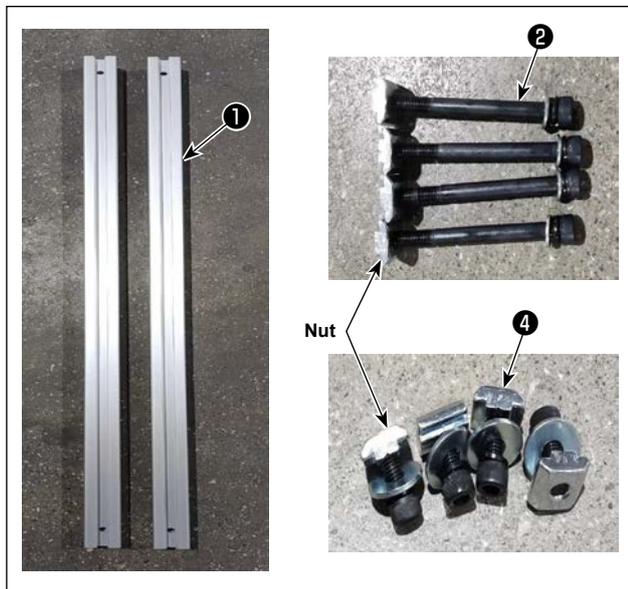
	No.	Part name	Quantity	Description
Parts of the fan	①	Aluminum frame	2	
	②	Screw asm.	4	Provided with a slider nut M6-80
	③	Blower	1	Provided with the power switch
	④	Screw asm.	4	Provided with a slider nut M6-16
	⑤	Silencer	1	
	⑥	Lid	4	
Parts of the filter box	⑦	Filter box	1	
	⑧	Screw	4	M4-10
	⑨	ø60×ø68 pipe	2	Long: 1.1 M; Short: 0.9 M
	⑩	Pipe band	4	
	⑪	Suction cover	1	
	⑫	Flat head screw	12	
Parts of the solenoid valve	⑬	Solenoid valve	1	Provided with a fixing screw
	⑭	Air tube	2	Numbered: 15, 16
Parts of the pedal switch	⑮	Pedal	1	Provided with a terminal

2. Installing the suction device

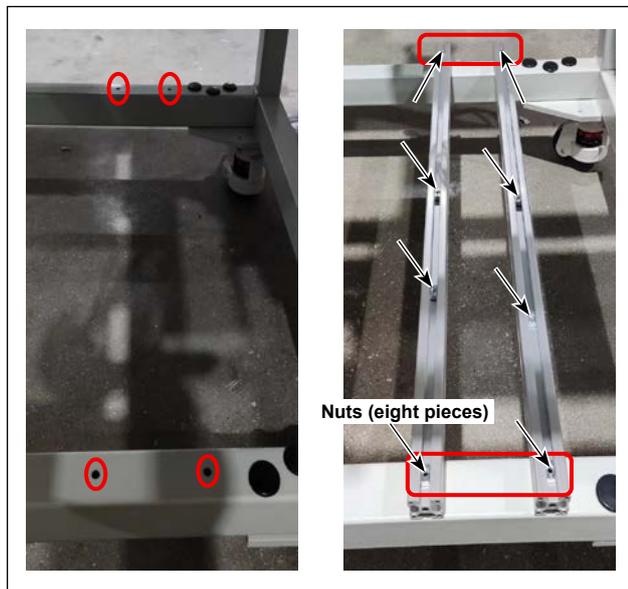


Turn OFF the power supply and air supply for the sewing machine.

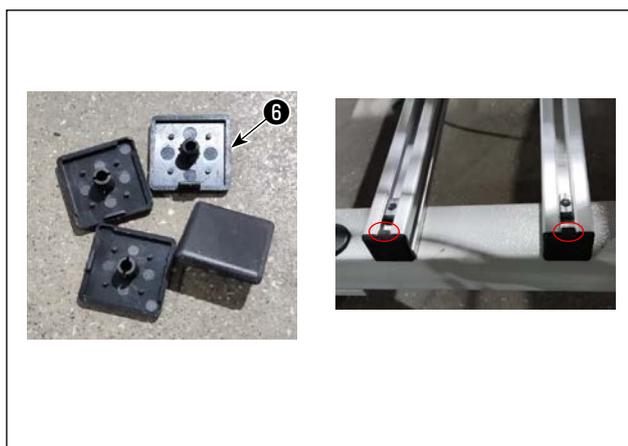
2-1. Installing the blower



- 1) Loosen nuts of screws **2** and **4** (provided with a washer). Insert them into the corresponding holes in aluminum frames **1**.



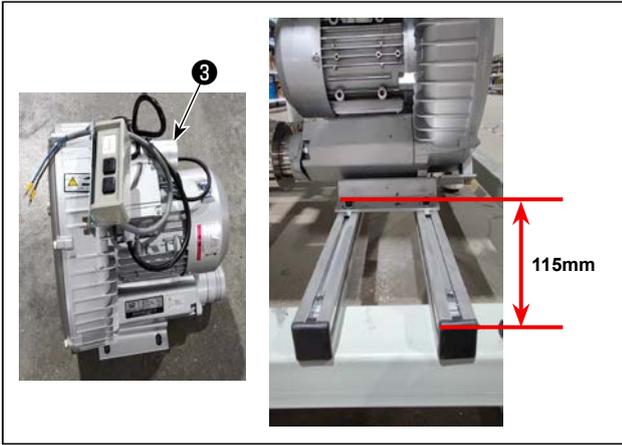
- 2) Align the aluminum frames **1** with the corresponding holes in the table stand. Then, secure the aluminum frames with screws **2**. (Tighten the outer nuts.)



- 3) Attach lids **6** to the aluminum frames.



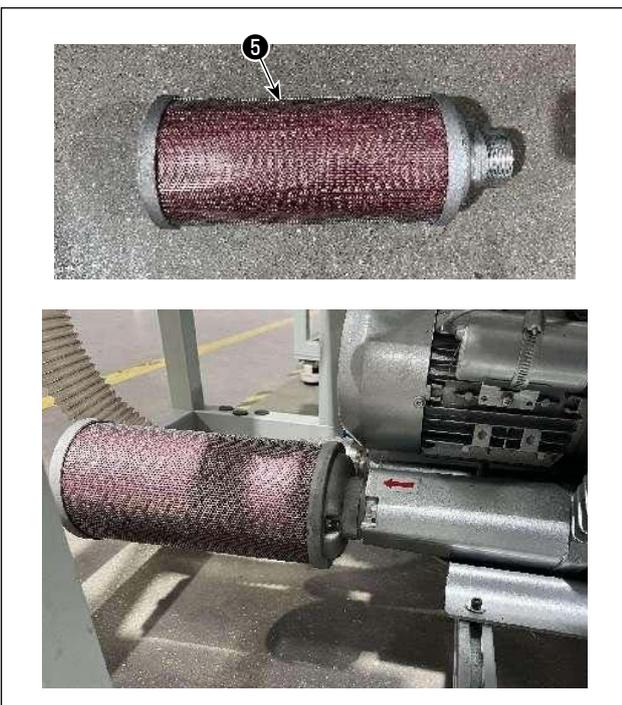
Turn the protruding part of the lids upward.



- 4) Place blower **3** on aluminum frames **1** . Insert screws **4** into the corresponding holes in the metal plate and nuts of the blower.

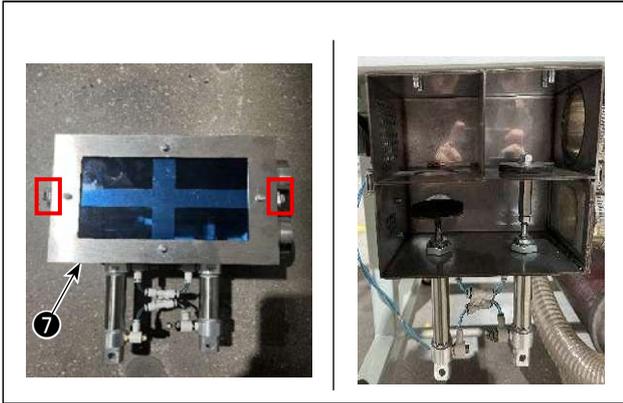


- 5) Adjust the longitudinal position of blower **3** so that the distance between blower **3** and the front ends of aluminum frames **1** is 115 mm as observed from this side of the sewing machine. Then, tighten screws **4** .

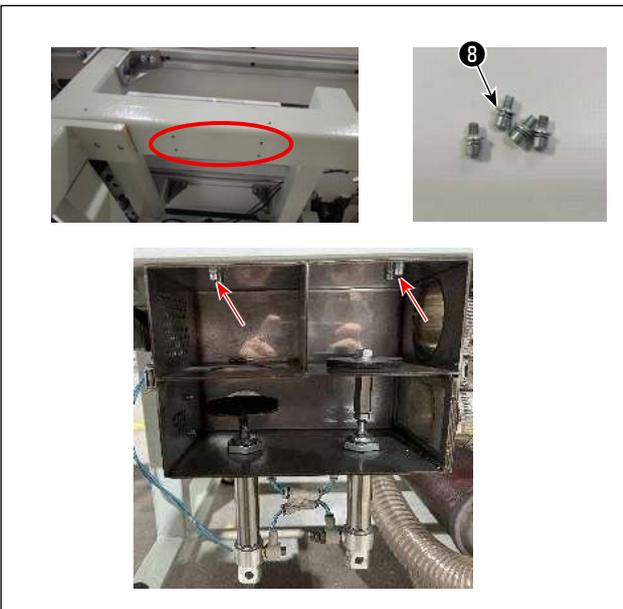


- 6) Install silencer **5** to blower **3** .

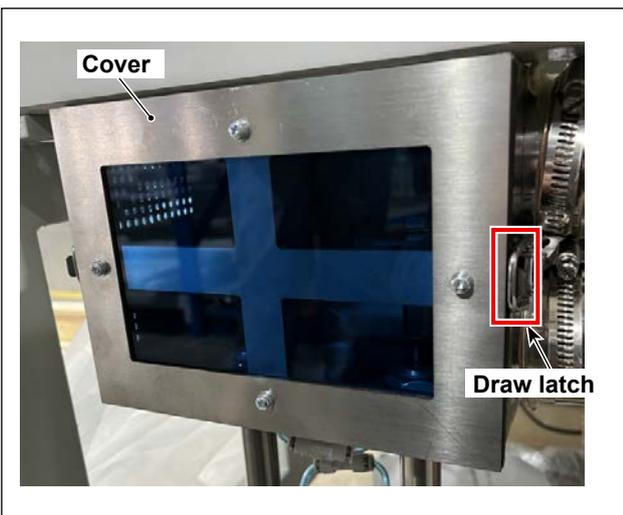
2-2. Installing the filter box



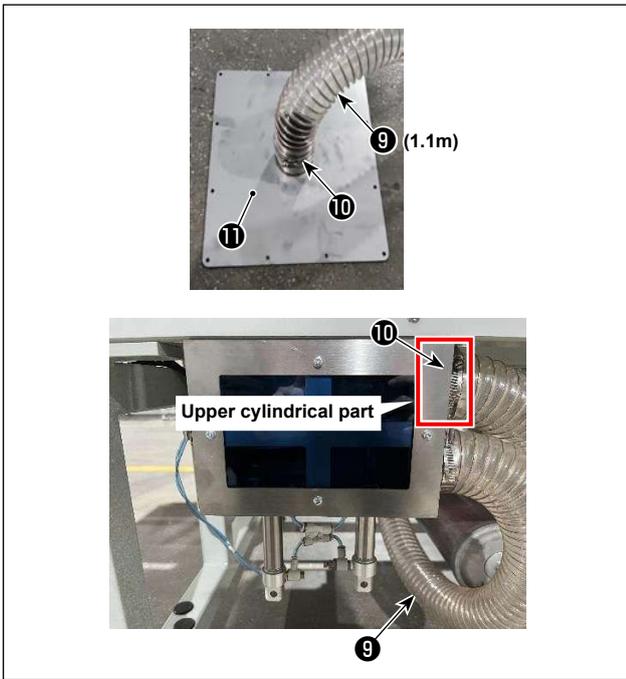
- 1) Release draw latches (2 pieces) on the side face of filter box 7 to remove the cover.



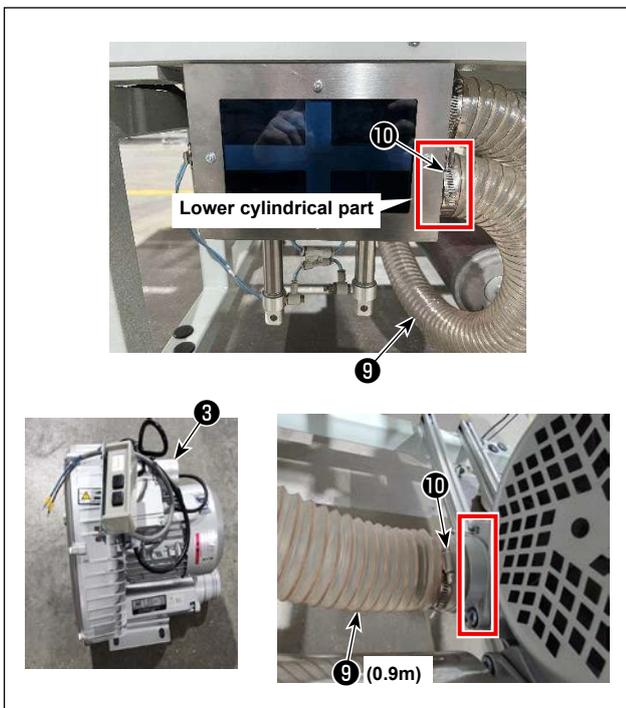
- 2) Install the filter box to the table stand with screws 8 (four pieces).



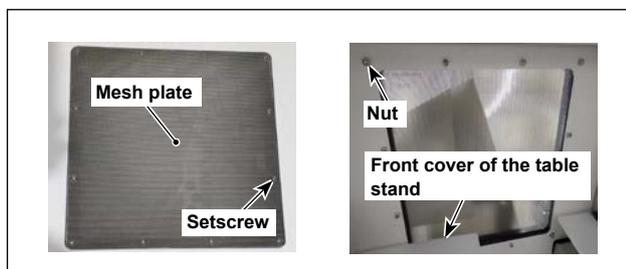
- 3) Attach the cover to the box and secure with draw latches (2 pieces).



- 4) Put one end of pipe 9 (1.1 m) over the cylindrical part of suction cover 11 and the other end over the upper cylindrical part of filter box 7 until they will go further and secure both ends of the pipe with pipe bands 10 .

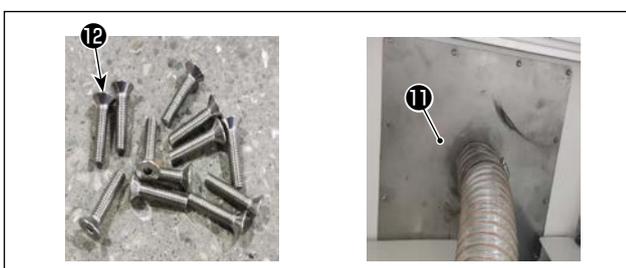


- 5) Put one end of pipe 9 (0.9 m) over the cylindrical part of blower 3 and the other end over lower cylindrical part of filter box 7 until they will go no further and secure both ends of the pipe with pipe bands 10 .



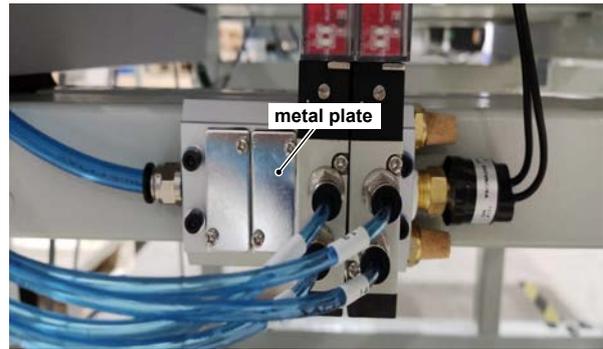
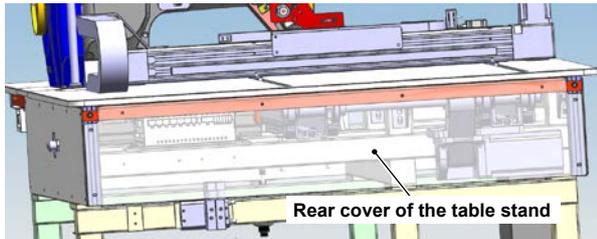
- 6) Remove the table stand cover. Loose the set-screws of the mesh plate.

Caution
There are nuts on the reverse side of the table. Take care not to allow the nuts to come off when you loosen the screws.



- 7) Replace the setscrews of the mesh plate with screws 12 . Secure suction cover 11 with screws 12 and the nuts.

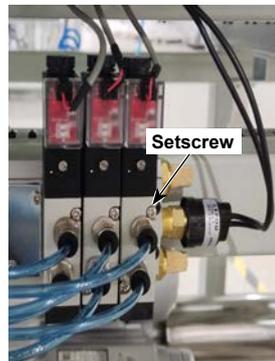
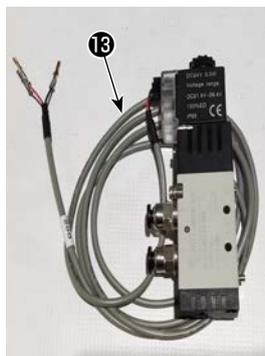
2-3. Installing the solenoid valve



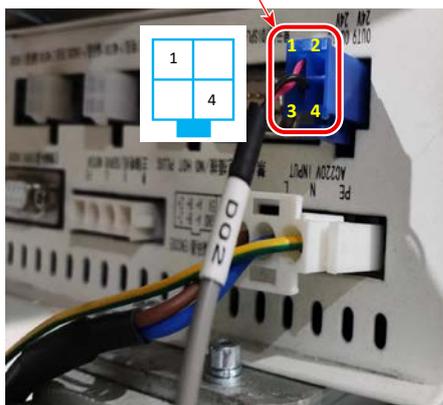
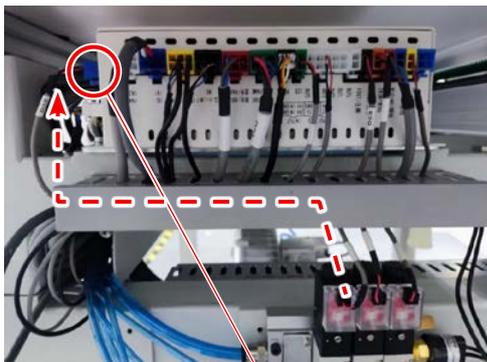
- 1) Remove the rear cover of the table stand.
- 2) Detach the metal plate (second from the left) from the manifold.



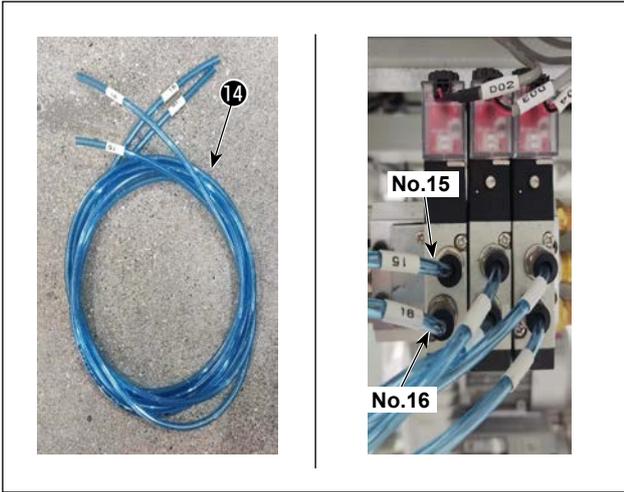
There is a rubber sheet between the metal plate and the manifold.



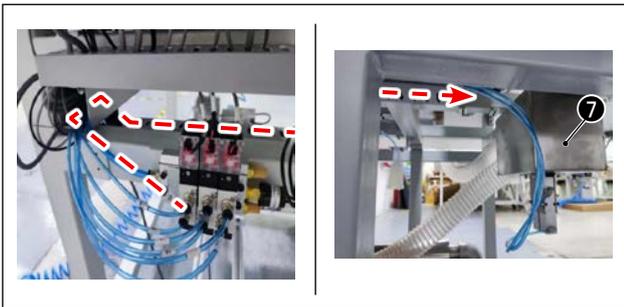
- 3) Fit the rubber sheet in place and secure solenoid valve 13 .



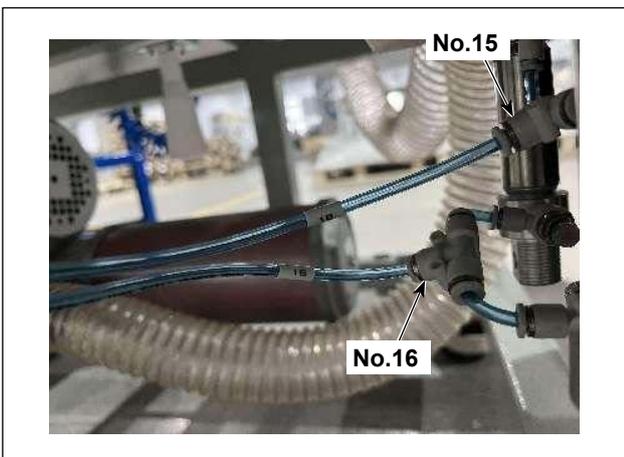
- 4) Pull out the connectors from the electrical control box. Insert the cables of solenoid valve 13 into the connectors .
Insert the red cable into the connector No. 1 .
Insert the black cable into the connector No. 3 .
Put the cables in the duct for wiring. Connect the connectors to the corresponding ports of the electrical control box.



5) Insert air tubes 14 into solenoid valve 13 .
Insert air tube No. 15 into the upper port and air tube No. 16 into the lower port of the solenoid valve.

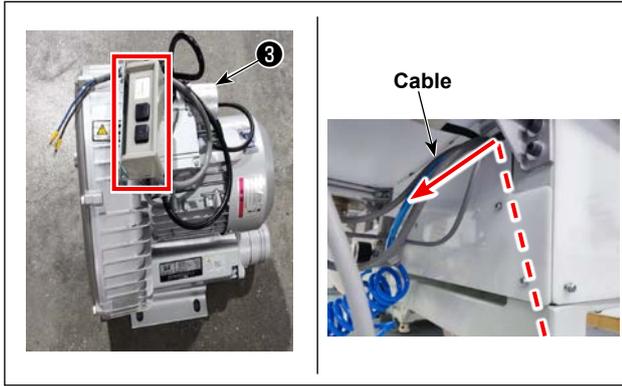


6) Route air tubes 14 as shown in the figure.

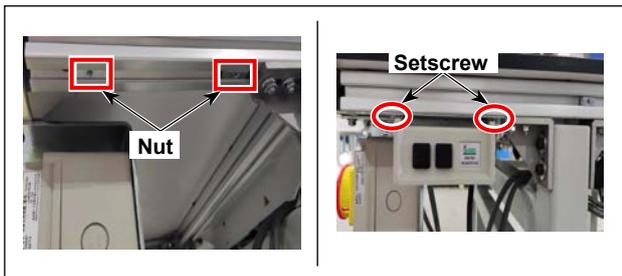


7) Connect air tubes 14 to the cylinders of filter box 7 .

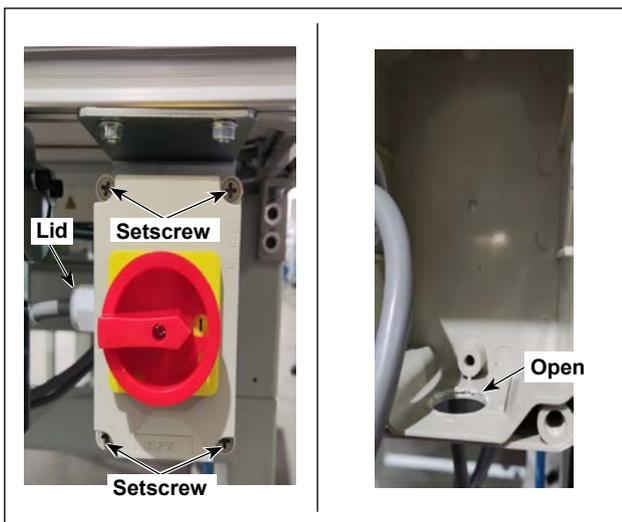
2-4. Installing the power switch



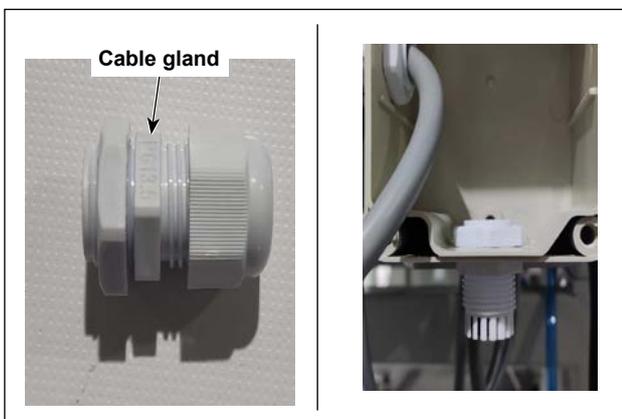
- 1) Route the power switch and cable of blower ③ from under the table stand.



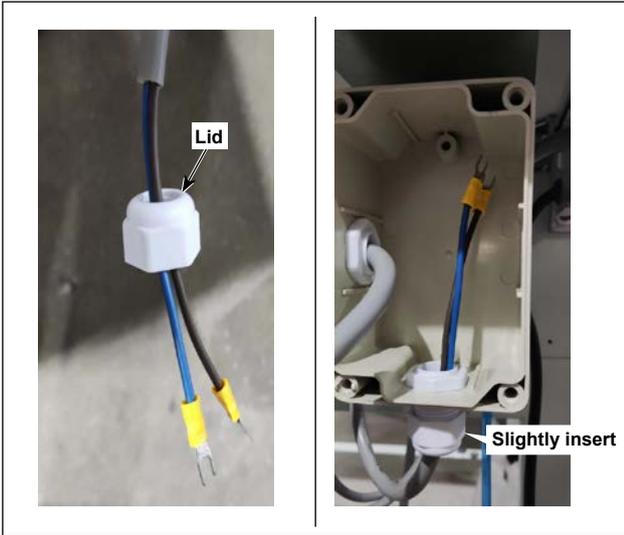
- 2) Loosen the screws and the nuts attached to the power switch. Put the nuts in the corresponding holes in the aluminum frames and secure the power switch to the aluminum frames of the table stand with the screws and nuts.



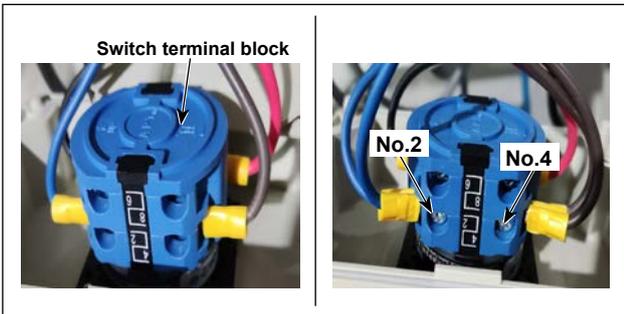
- 3) Loosen the setscrews of the cover of the power switch of the sewing machine and the lid of the cable gland. Open the switch cover to pull out the switch. Make a hole in the bottom of the power switch box.



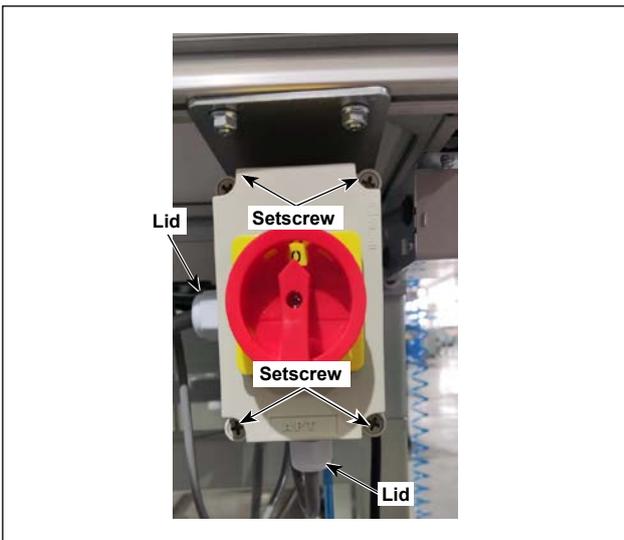
- 4) Put the cable gland located at the cable of the blower power supply into the hole in the power supply box.



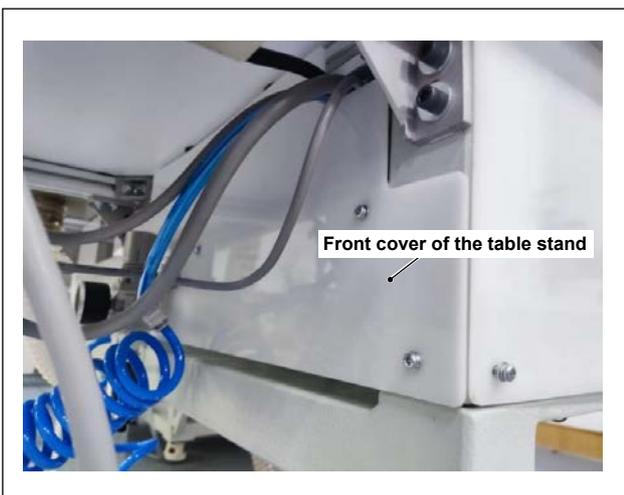
- 5) Put the cable gland lid on the cable. Pass the cable through the cable gland. Insert the lid slightly into the gland.



- 6) Insert the power cables into the switch terminal block and secure them with the screws. Insert the blue cable into terminal No. 2. Insert the brown cable into terminal No. 4.

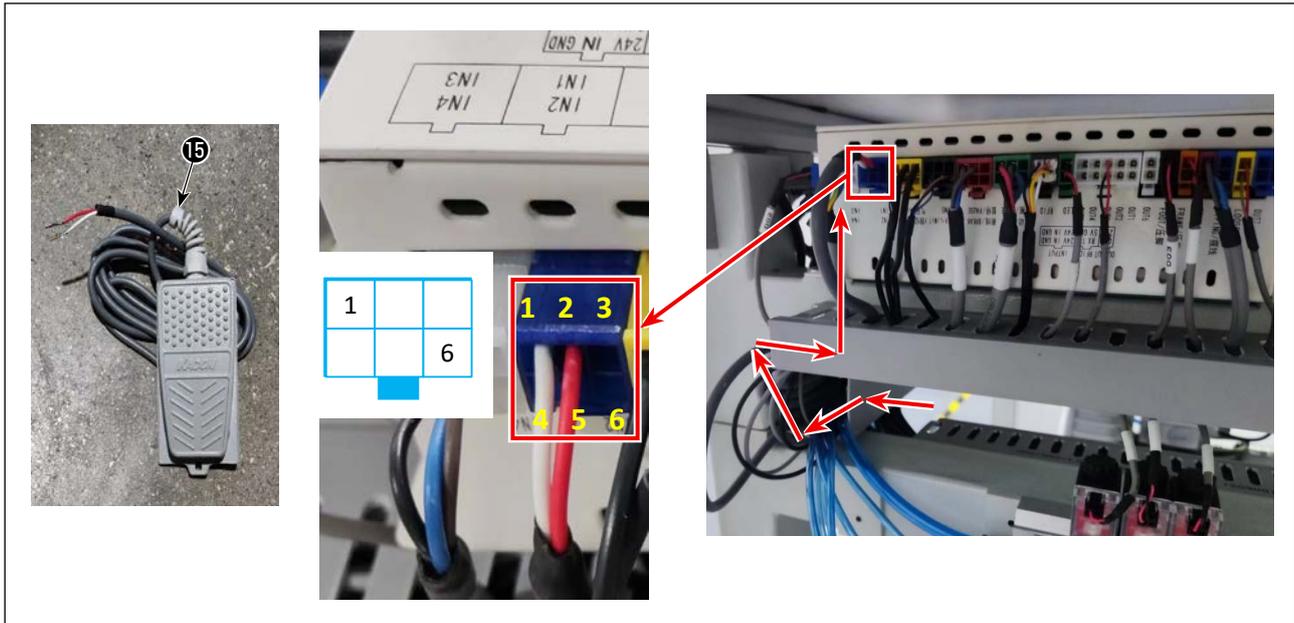


- 7) Pull out the left and lower remaining cables from the power supply box. Put the switch in the power supply box and tighten the setscrews.

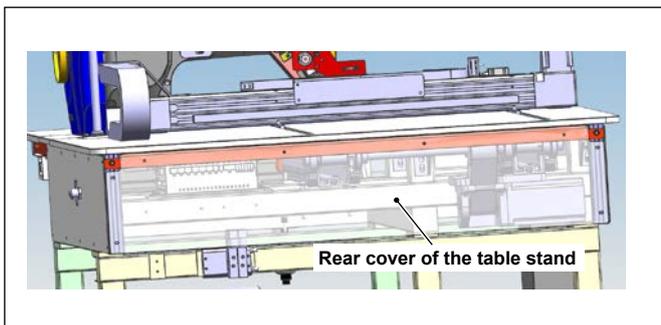


- 8) Place the excess cables inside the table stand and secure the table stand front cover.

2-5. Installing the pedal



- 1) Pull out the connectors from the electrical control box. Insert cables of the pedal 15 into the connectors. Insert the white cable into the connector No. 1. Insert the red cable into the connector No. 2.
- 2) Route the pedal cables as shown in the figure.

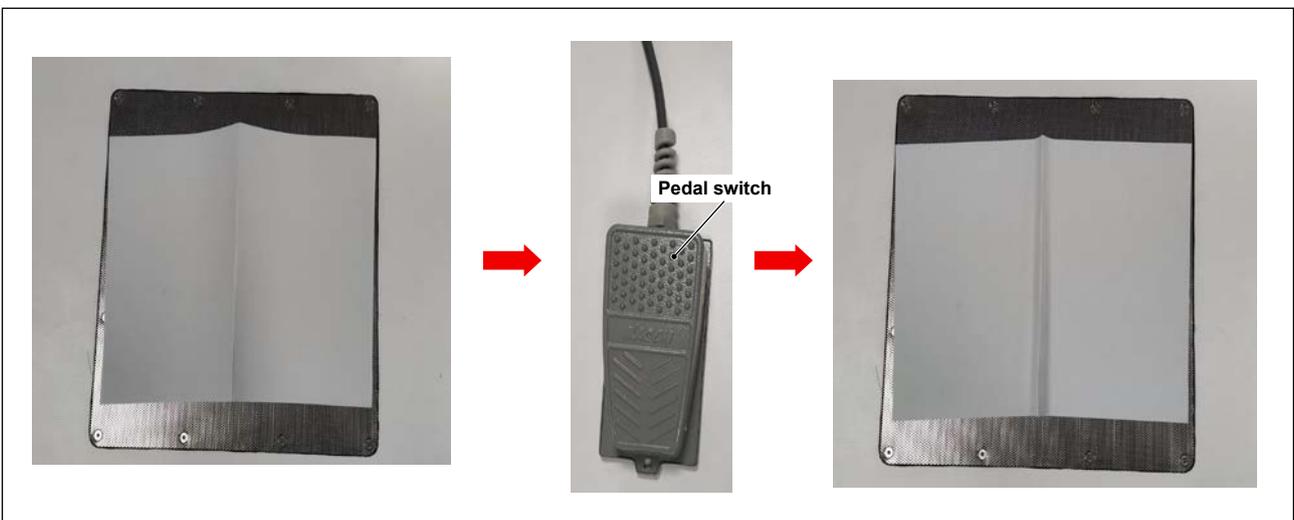


- 3) Secure the table stand rear cover.

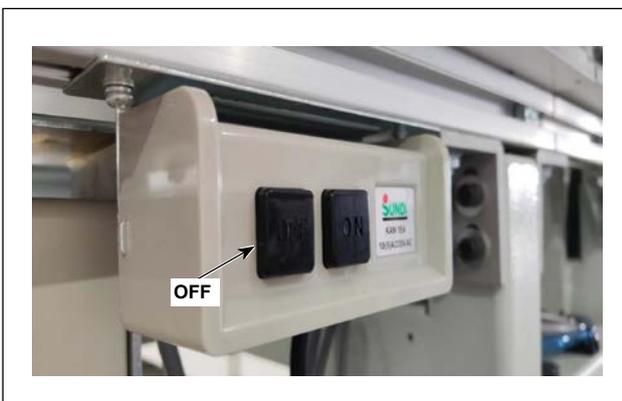
3. Checking the function of the suction device



- 1) The blower operates when the power supply for the blower is turned ON.



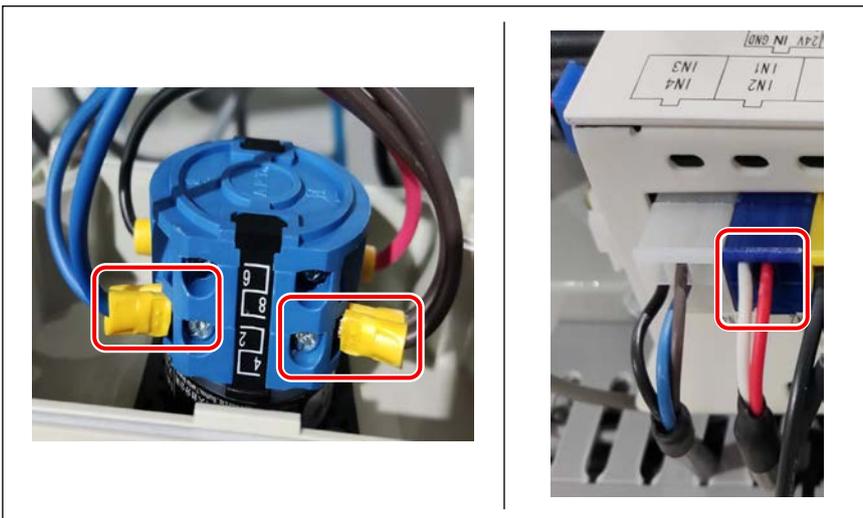
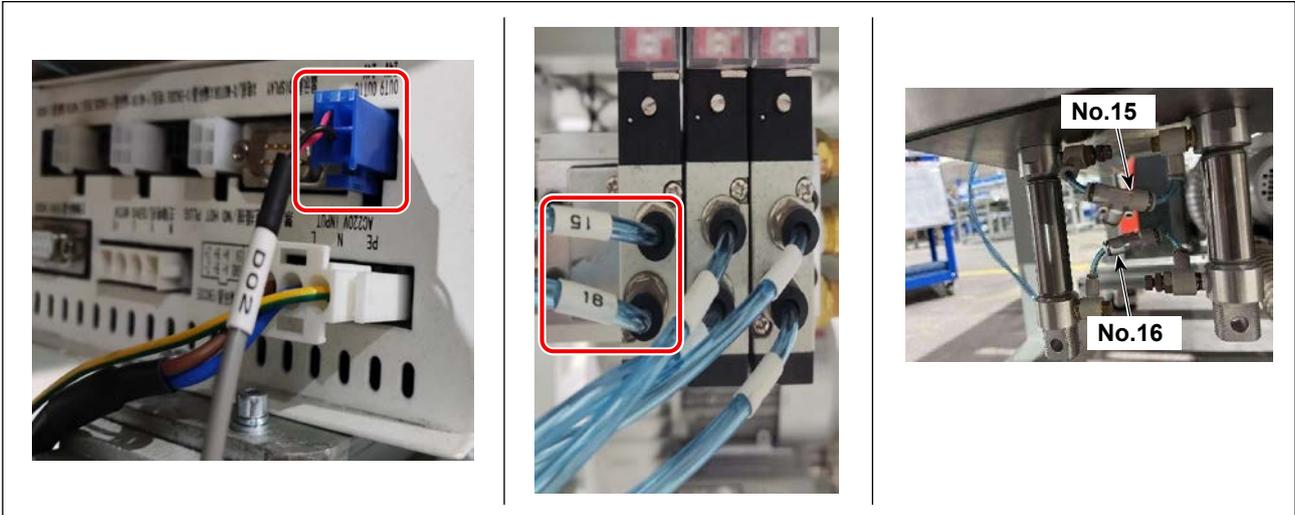
- 2) Place a sheet of paper (or cloth) on the mesh plate. Depress the pedal switch to suck up the paper (or the cloth). Then, depress the pedal switch again to disable the suction power. In this way, confirm that the suction capability of the suction device works properly.



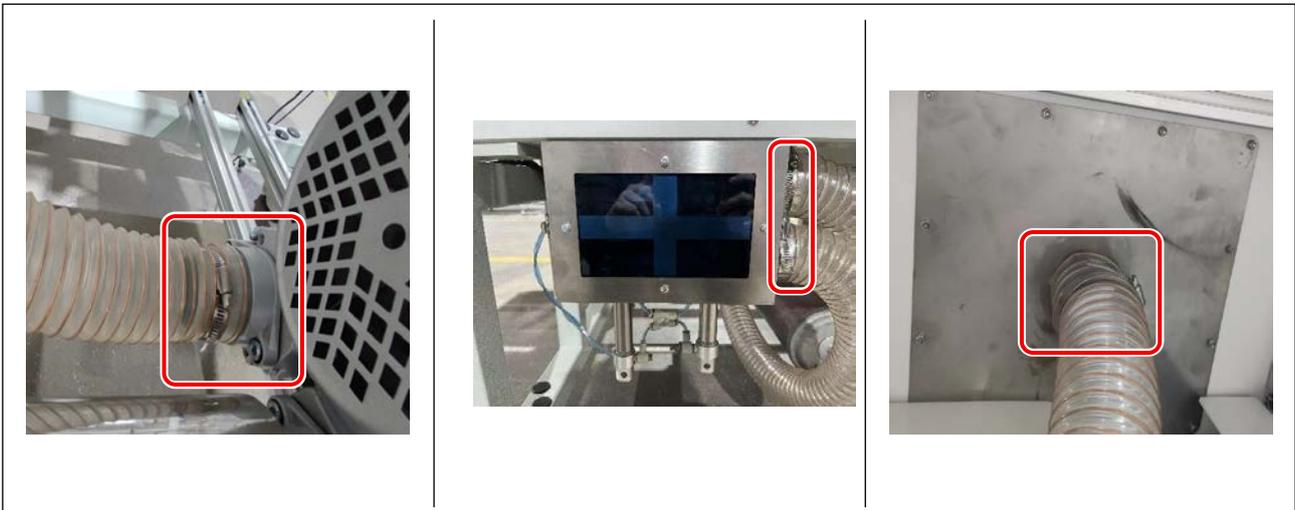
- 3) Press the OFF button to stop the blower.

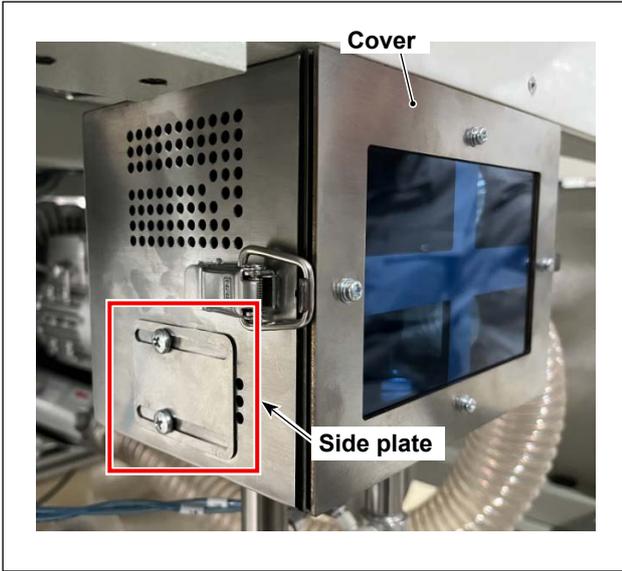
4. Troubleshooting

- 1) When the suction device is in operation, it fails to provide the suction power even if you depress the pedal.
 - ① Check to make sure that the pedal switch cables, solenoid valve cables and air tubes are properly connected.



- 2) The suction device is able to suck up, but the suction power is inadequate.
 - ① Check for air leakage from the pipe connecting portion of the blower, suction cover and filter box. If air leaks, secure the pipe clamp firmly.





- ② The filter box cover is poorly installed to cause air leakage. Unlock the draw latches. Then, re-lock them properly.
- ③ The side plate for finely adjusting the air that flows to the side face fails to hide all holes in the box. Re-adjust the side plate.