# JFX500-2131

# Vacuum Unit (OPT-J0330) Installatioin Guide

Revision 1.1

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This manual for service engineers provides the necessary setup information for adding a vacuum cable to the flatbed UV inkjet printer JFX500-2131. When performing maintenance work, refer to this manual and the following related documents for details on working procedures.

#### Documents Related to this Device

Documents other than this manual that describe the JFX500-2131 are listed below. Refer to this documents as necessary.

- Operation Manual (included with the device)
- Mechanical Drawing
- Maintenance Manual

#### □ Warning signs

The meanings of the warning signs used in this manual are described below. Make sure you fully understand the meaning of these warnings before beginning work.

Sign	Title	Meaning
Warning	Danger sign	Indicates that there is a risk of death or serious injury if the directions are ignored or the device is not handled correctly.
Caution	Warning sign	Indicates that there is a risk of injury or that physical damage may occur if the directions are ignored or the device is not handled correctly.
(Important!)	Important sign	Describes important information in regards to carrying out the setup work. Make sure you understand this information before beginning work.
Ŷ	Hint sign	Describes useful information for performing setup work.
(P.1-10)	Reference page	Gives the page number of pages that contain related informa- tion. Check the reference page for additional information.

#### □ Caution

Caution

Before attaching work, be sure to turn off the main power of the main body and pull out power wire.

- When performing the work, fully be careful about the edge etc. of the sheet metal and not to get injured.
- When discarding packaging materials and unnecessary parts, be sure to obey the laws and the rules of the relevant country and the region.

## **Parts list**

	Check		Check		Check
4		<		Ű	
Part Name	Cable (with hexagonal locking screw)	Part Name	Cable clamp	Part Name	Banding band
Quantity	1	Quantity	4	Quantity	2
Remark		Remark		Remark	

0	Check		Chec	k		Check
Part Name	Tiflex hose	Part Name	Hose clamp	Part Name	Cuff	
Quantity	1	Quantity	1	Quantity	1	
Remark		Remark		Remark		

 This option consists of the vacuum unit and the connection parts.
Use it together with the other option below: Vacuum unit Extension between printer device and vacuum unit Extension of power wire of vacuum unit

#### 1. Turn off the power supply.

- (1) Move the Y bar to the waiting position (rear of main body).
- (2) Turn off the sub power switch of the operation panel.
- (3) Turn off the main power switch on the side of the main body.
- (4) Pull out power wire.

#### 2. Remove the covers.

(1) Remove the cover A and B (A: power supply front cover, B: BOX cover).

(2) Remove the connector cover near the vacuum valve.

#### 3. Fix the Dsub connecter.

(1) Remove the screw and the vacuum unit fixing plate.









(2) Fix attached cable on the vacuum unit fixing plate with the hexagonal locking screw.





(3) Push the cable edge of the opposite side into the hole.

(4) Fix the vacuum unit fixing plate on the original position with the screw.







#### 4. Perform wiring under the table.

- (1) Perform wiring on the bottom plate.
  - Add the attached clamp.

#### Work procedures

(2) Pass it through the rear hole of the bearing BOX and the side hole of the power supply rear cover (middle one of the three holes).

(3) Fix it with the existing clamp inside the power supply BOX.

(4) Connect it with CN14 and CN15 of the big/ small feeding and taking-up PCB.

#### 5. Perform wiring under the table.

(1) Loosen the hose clamp at the outlet of the collecting tube and separate the hose from the collecting tube.

- (2) Attach the cuff to the attached hose and fix it on the outlet of the collecting tube.
  - Reuse the hose clamp.











(3) Fix the original hose with the banding band as required. Put the hose newly attached out of the machine from beneath the bottom plate so that it may not contact with the X bearing.



Put the hose newly attached here out of the machine from beneath the bottom plate.

#### 6. Perform wiring/ piping of the vacuum unit side.

- (1) Connect the connector.
  - Cable between the printer main body and the vacuum is not included in this vacuum option.
  - For installation of the vacuum unit, refer to the manuals below separately: OPT-J0220 D500492 OPT-J0217/OPT-J0216 D500484
- (2) Tighten the hose clamp and connect the hose.





#### 7. Change the setting of the inverter.

• Refer to P.9 "Changing vacuum control unit parameter".

### Changing vacuum control unit parameter

**Operation procedures** [PROG/ RESET] key Operation mode [FUNC/ DATA] key Ψ Operation mode Program mode Display example 1 "1.F--" "1.E--" "1.C--" ---Menu (Display is changed with  $[ \bullet ]/[ \bullet ])$ T I Display example 2 ♦ "F00" "F01" --- "E01" "E02" --- "C01" "C02" ---Function code (Display is changed with  $[ \bullet ]/[ \bullet ])$ Λ 1 With the data fixed, go to the Without the data fixed, go to the function code. 1 Display example 3 I. function code. "1" (for F01)  $\mathbf{V}$ (Display is changed with  $[ \bullet ]/[ \bullet ])$ Function code data

It is necessary to change the parameter of the vacuum control unit.

1. Remove the screws (for four positions) and the control unit cover.



- 2. Disable the data protection function of the inverter.
  - (1) Enter into the function code data screen of the function code "F00".
  - (2) By pressing [STOP] + [▲] or [STOP] + [▼], change the function code data of F00 from "1" to "0".

#### 3. Change the setting of the function code data.

• Change three function codes below according to the table below:

Function code	Name	Setting before shipment	Changed example
C05	Multistage frequency 1	15.00	20.00
C06	Multistage frequency 2	10.00	40.00
C07	Multistage frequency 3	6.00	60.00

- C05, C06 and C07 are assigned to the inverter frequency setting of "WEAK", "STAN-DARD" and "STRONG" respectively.
- This frequency can be set in the range of 8Hz to 16Hz arbitrarily.
- For your reference, the absorption level and the static pressure value (actual measured value) are indicated below. The one to be set in this option is indicated in the gray line.



Static pressure in all-closed status

Do not change the function code data other than the target.
When you changed the function code data other than the ones in the table above and when you cannot figure it out, perform initialization of the function code data by changing the function code data of the function code "H03" to "1" once. Then, all are reset to the change value in the "Function code parameter" table of the following page.
Change "H03" with [STOP] key + [ • ] or [STOP] key + [ • ]. After initialization has been completed, it returns to "0" automatically.

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Function code	Nama	Function code data			
Function code	Ivanie	Default	Change value		
F01	Frequency setting1	4	1		
F02	Operation	2	1		
F03	Highest output frequency	60.0	60.0		
F04	Base frequency	60.0	60.0		
F05	Base frequency voltage	0	200		
F07	Acceleration time1	6.00	15.00		
F08	Deceleration time1	6.00	15.00		
F12	Heat damping time constant	5.0	0.5		
F14	Momentary-power-failure reboot	1	5		
F15	Frequency limiting circuit maximum	70.0	70.0		
F16	Frequency limiting circuit minimum	0.0	8.0		
E01	Terminal X1	0	0		
E02	Terminal X2	7	1		
E03	Terminal X3	8	5		
E20	Terminal Y1	0	3.5		
C05	Multistage frequency 1	0.00	20.00		
C06	Multistage frequency2	0.00	40.00		
C07	Multistage frequency3	0.00	60.00		
H98	Open-phase protection	3	7		

• Function code parameter

#### 4. Enable the data protection function of the inverter.

• Return the function code data of the function code "F00" from "0" to "1".

5. Attach the cover.

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