# EVAFLEX® 5-SE-G HT

Part No.20899-0**E-01

## Instruction Manual

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|---|---|---|---|---|---|
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| Rev. | ECN | Date | Prepared by | Checked by | Approved by |

This manual provides the insertion & withdrawal method and cautions to handle EVAFLEX 5-SE-G HT connector properly and safely.

◆Connector
Product Name : EVAFLEX 5-SE-G HT
Part No. : 20899-0**E-01 "**"= Connector position number

【Labelled Diagram of the Connector】

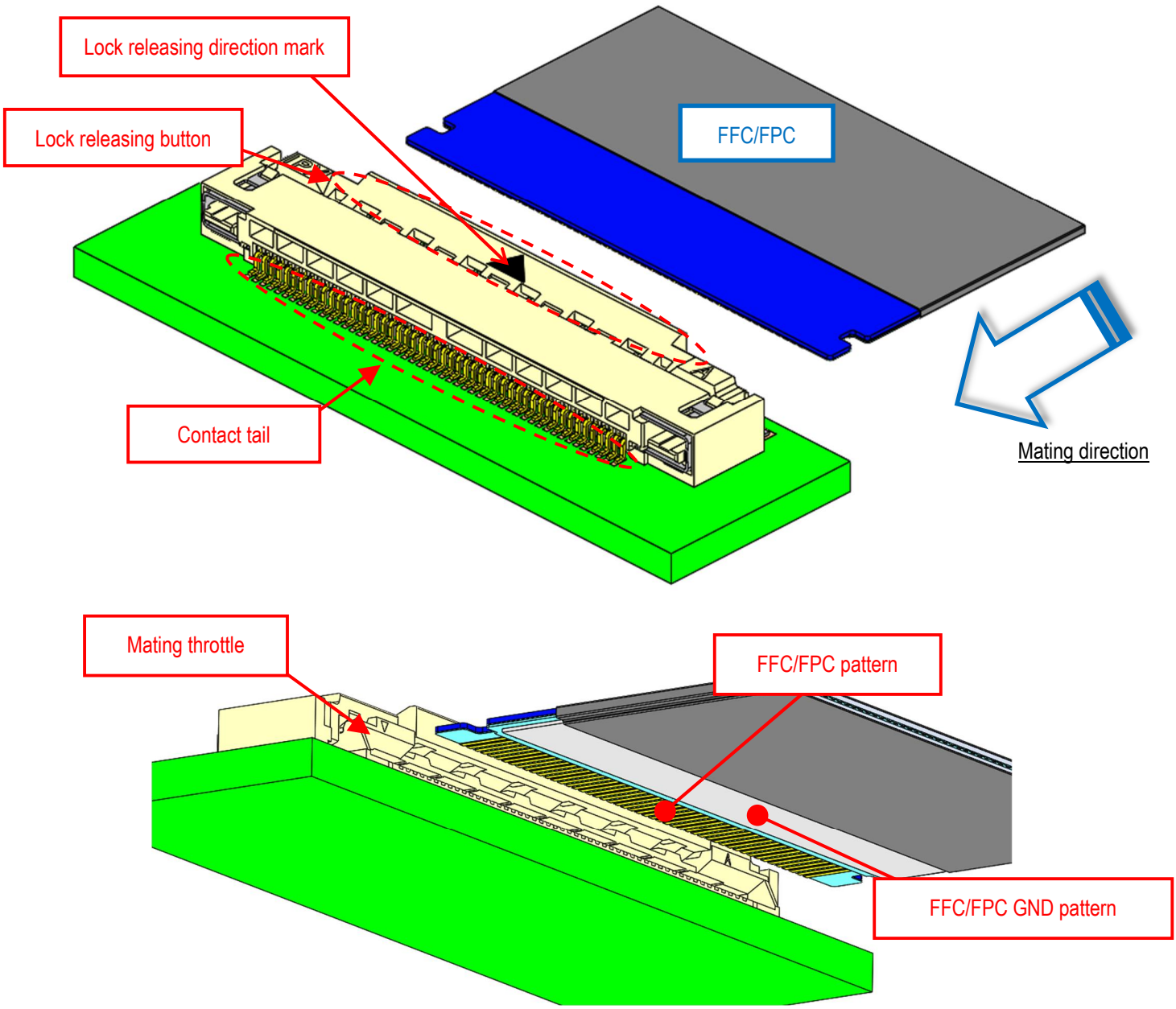



**Fig. 1 Labelled diagram of the connector**

【FFC/FPC Insertion Method】

① Check the orientation of the FFC/FPC.
Set the FFC / FPC so that the FFC/FPC pattern faces the contact tail side PCB side. (Fig.2-1)

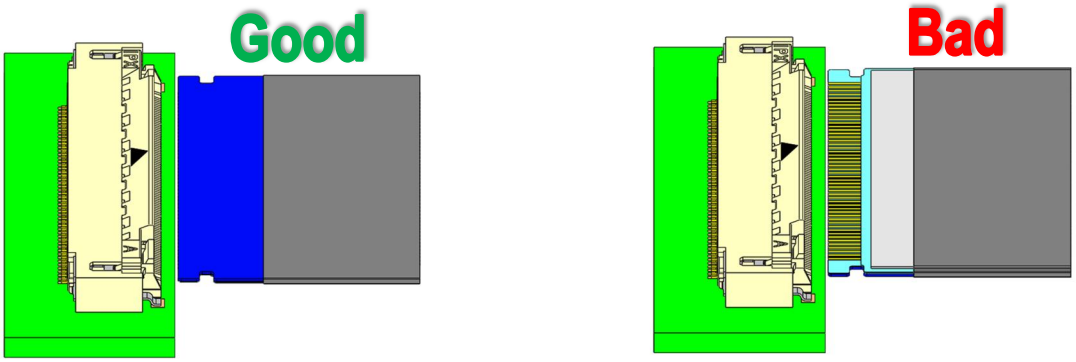



**Fig.2-1 FFC/FPC insertion method 1**

② Pre-insert the FFC/FPC into the connector.
The insertion angle in the contact pitch direction is within 10 ° as shown in Fig. 2-2. The insertion angle from the top side and the PCB side should be within 15 ° as shown in Fig. 2-3.
Pre-insert without applying excessive load in the insertion direction until the FFC / FPC is perpendicular to the connector.

**(a) Pitch direction**

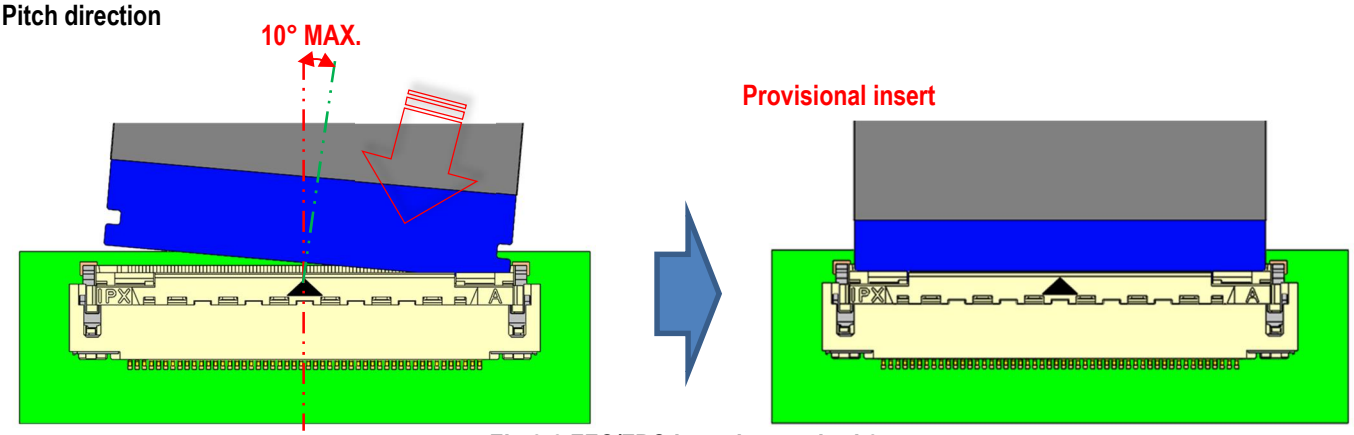



**Fig.2-2 FFC/FPC insertion method 2**

**(b) Top side and PCB side direction**

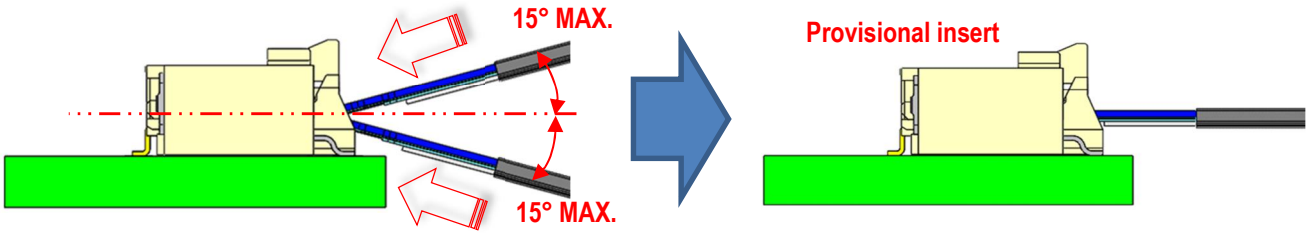



**Fig.2-3 FFC/FPC insertion method 3**

③ Insert the FFC / FPC completely keeping it horizontally to the connector as shown in Figure 2-4.

※FFC/FPC will be locked when insertion is completed.

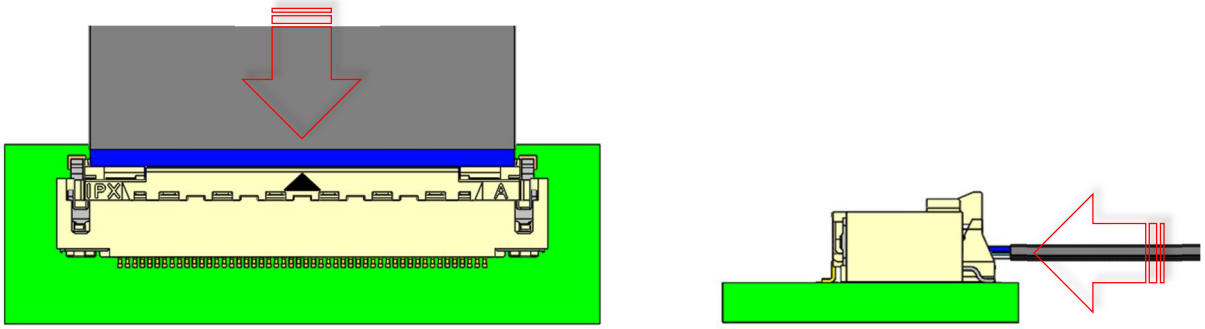


**Fig.2-4 FFC/FPC insertion method 4**

＜Caution 1＞

If the FFC / FPC is inserted at an angle as shown in Figures 2-5 and 2-6, a locking failure or connector and FFC / FPC damage may occur.

**(a) Pitch direction**

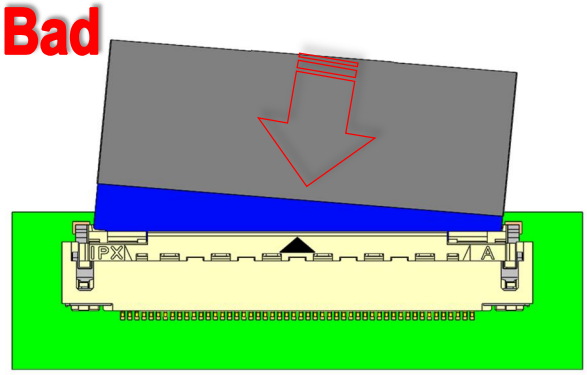



**Fig.2-5 Bad FFC/FPC insertion 1**

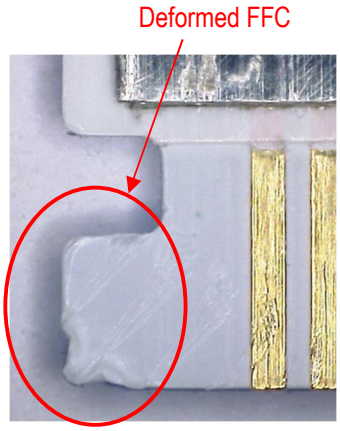



**Photo 2-1 Deformed FFC**

**(b) Top side and PCB side direction**

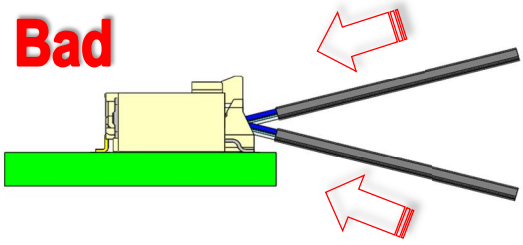



**Fig.2-6 Bad FFC/FPC insertion 2**

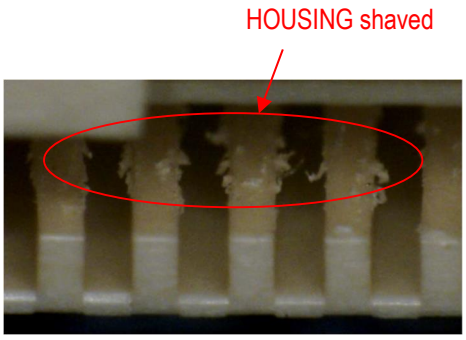



**Photo 2-2 Shaved housing**

【FFC/FPC Withdrawal Method】

① Pinching the FFC/FPC and the release button on the connector at the same time as shown as Fig. 3-1.

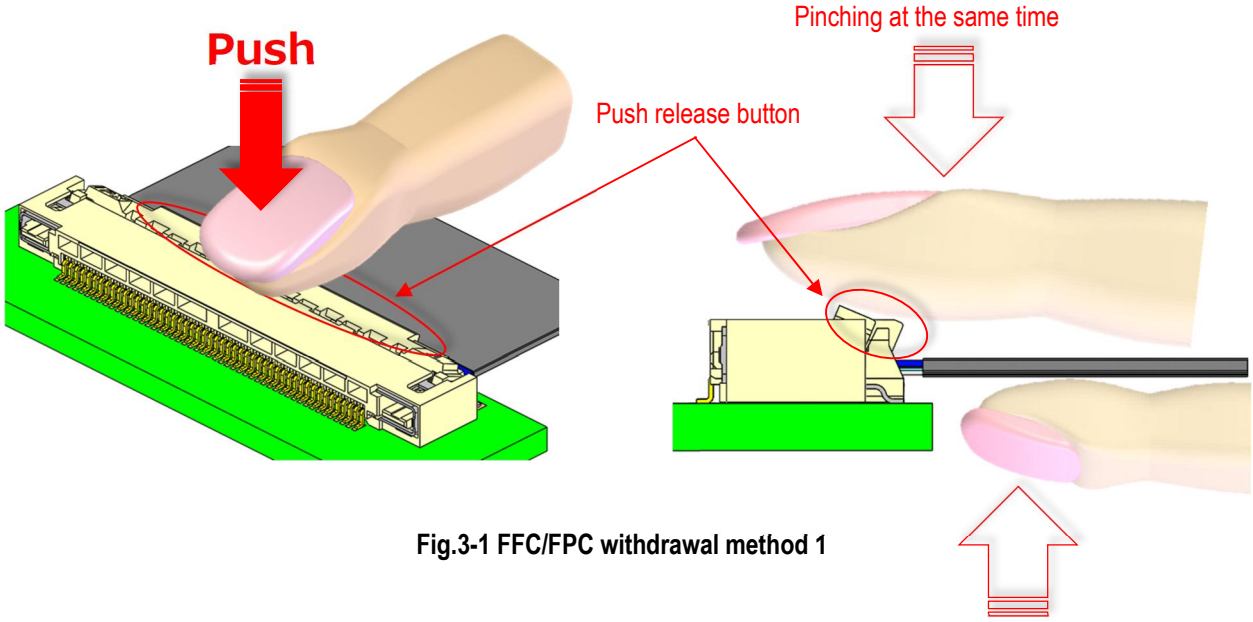



**Fig.3-1 FFC/FPC withdrawal method 1**

② Withdraw FFC/FPC from the connector horizontally while pushing the release button as shown as Fig.3-2.

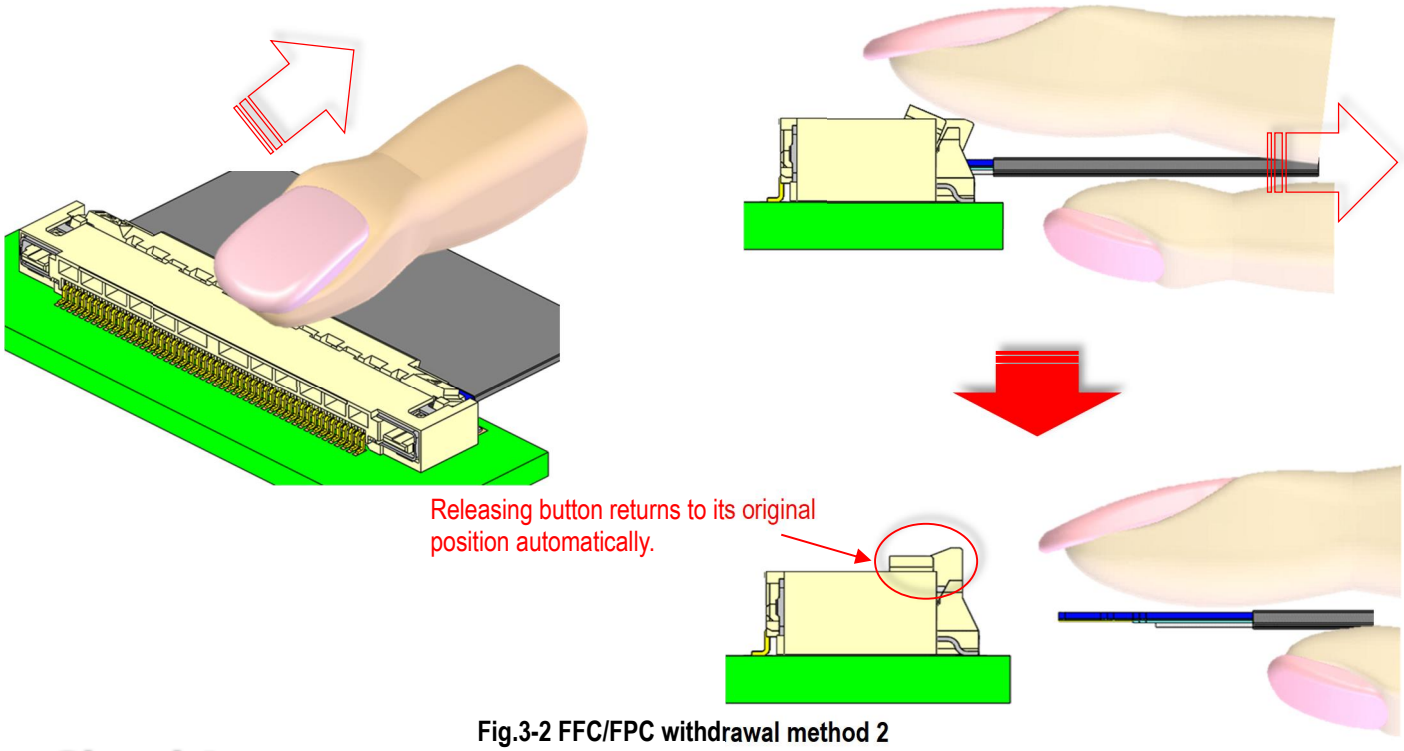



**Fig.3-2 FFC/FPC withdrawal method 2**

## Check!

Withdraw FFC/FPC from connector horizontally.

Do not withdraw FFC/FPC with rotation as shown in Fig.3-3. It may damage FFC/FPC pattern.

If you withdrew FFC/FPC with rotation, check that the FFC / FPC pattern is not damaged. (Refer to Photo 3-1)

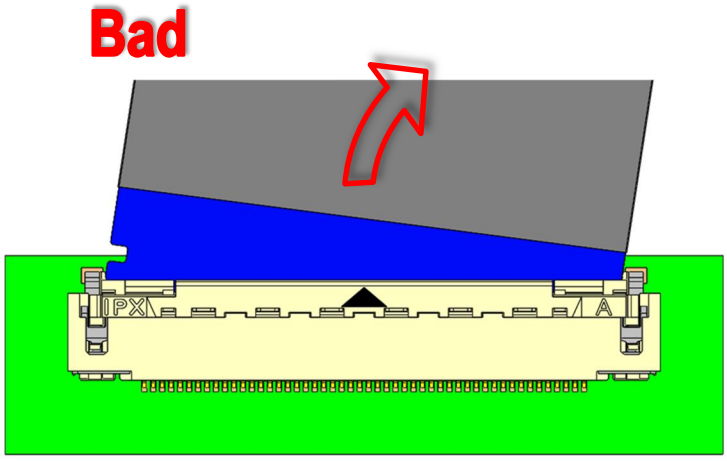



Fig.3-3 BAD FFC/FPC Withdrawing

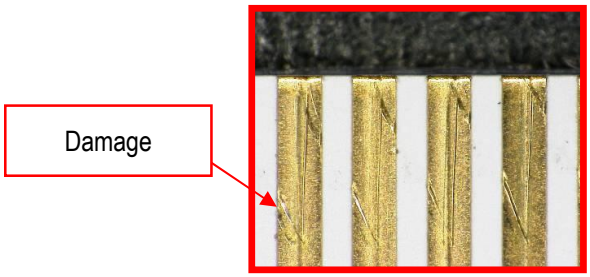



Photo 3-1 (a) Withdrawing with rotation

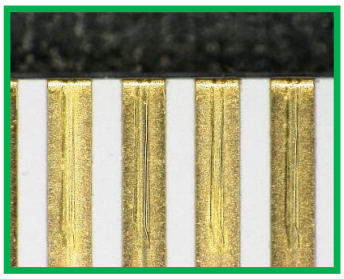


Photo 3-1 (a) Withdrawing FFC/FPC horizontally

＜Caution 2＞

Do not push the release button toward anti-operating direction or horizontally direction. It may cause button damage.

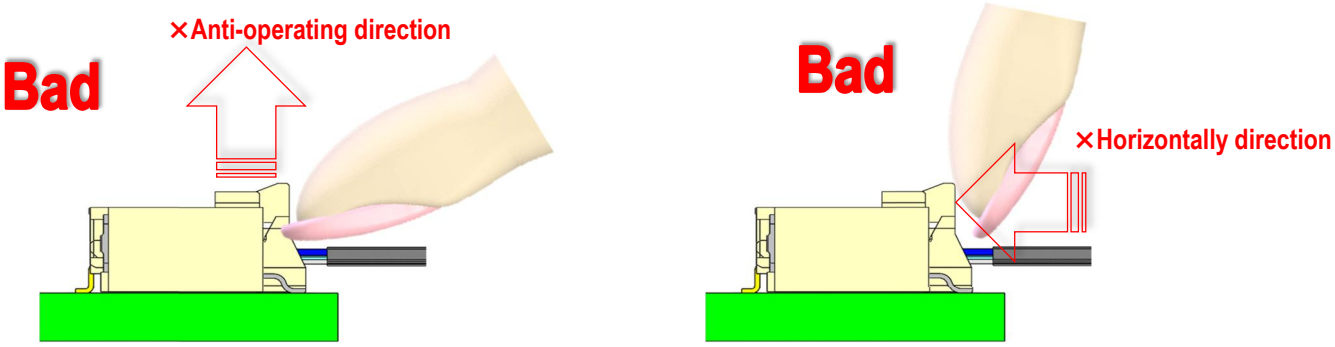



Fig.3-4 Bad Ways to Push Release Button

＜Caution 3＞

Do not push the release button using the nails. It may cause button damage.


Fig.3-5 Bad Ways to Push Release Button

＜Caution 4＞

Do not forcedly withdraw FFC/FPC without pushing a release button as shown in Fig.3-6.

It may damage FFC/FPC or the connector. (Refer to Photo 3-2)

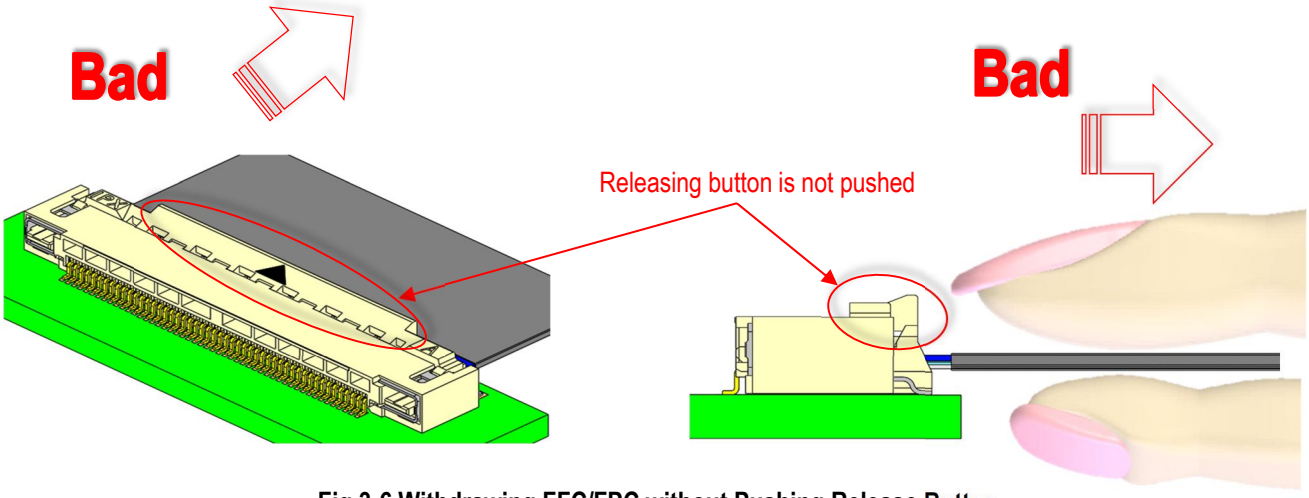
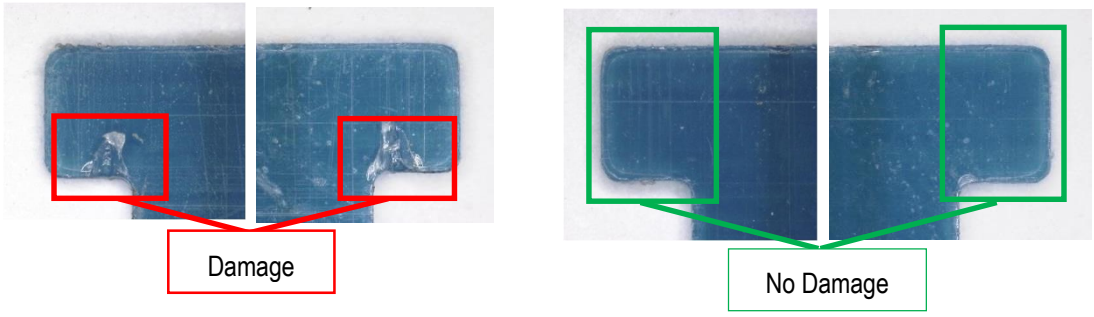



**Fig.3-6 Withdrawing FFC/FPC without Pushing Release Button**




**(a) Improperly withdrawn FFC** **(b) Properly Withdrawn FFC**

**Photo 3-2 Comparing Properly/ Improperly Withdrawn FFC**

【Cautions in handling the connector】

① Do not pull FFC/FPC toward vertical to PCB. It may damage FFC/FPC or the connector. (Refer to Photo. 4-1)


**Photo.4-1 Bad Example of Pulling FFC/FPC parallel**

② Do not apply excessive force to the connector and FFC/FPC. It may cause connector damage or FFC / FPC disconnection.

③ Do not route the FFC / FPC so that the connector is continuously stressed.
It may cause mating failure and damage to the connector and FFC / FPC.