

CABLINE®-CAF

Part No. 3437-0**1 (SHELL Only), 20858-0**T-01 (SHELL ASS'Y)

Instruction Manual

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Rev.	ECN	Date	Prepared by	Checked by	Approved by

This manual outlines how to correctly mate and unmate CABLINE-CAF connectors, as well as precautions for proper handling of the product.

【Connector Name, Part number】

◆FPC side connector

Product Name : CABLINE-CAF PLUG
Part No. : 20858-0**T-01 SHELL ASS'Y (With LOCK BAR)
3437-0**1 SHELL (Without LOCK BAR)

◆PCB side connector

Product Name : CABLINE-CA RECEPTACLE
Part No. : 20525-※**E-※※※

“***”: Connector pin count.

“※”: Connector variation type. Refer to the drawing for the details.

【Labelled diagram of the connector】

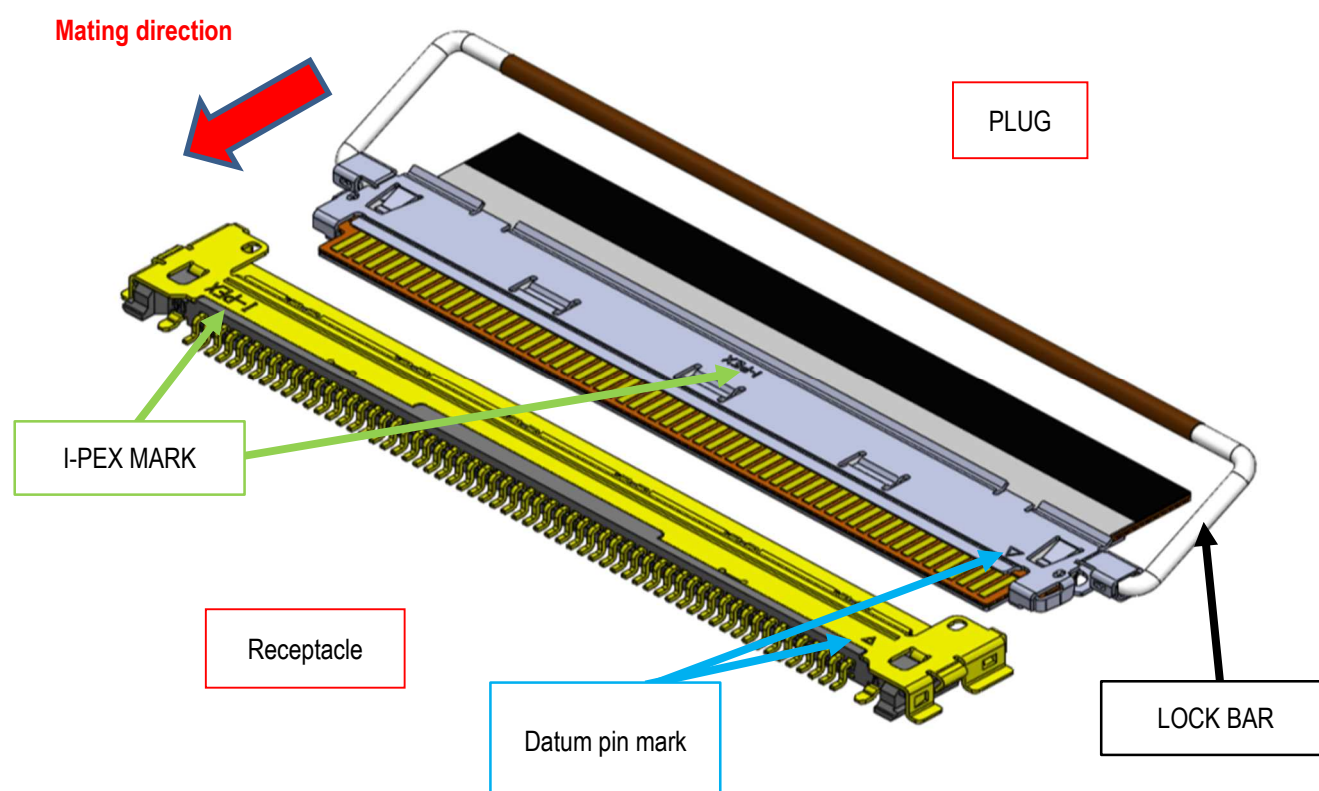


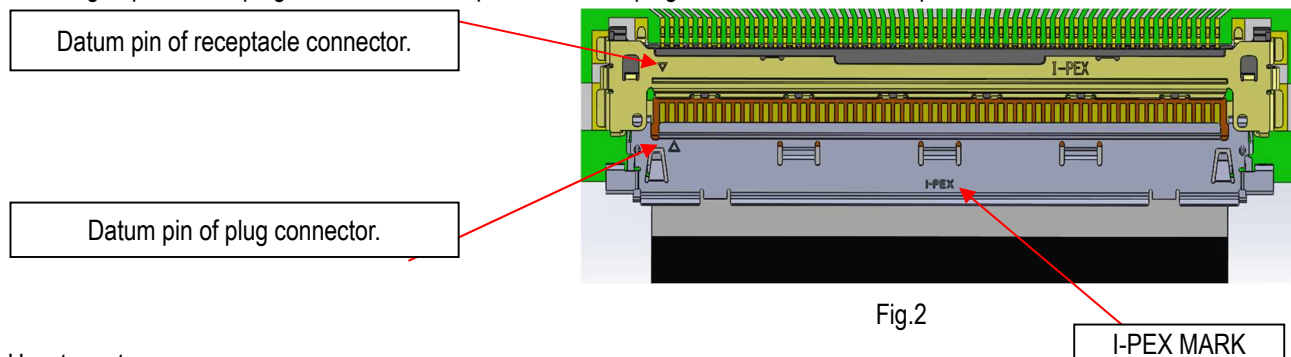
Fig. 1 Connector parts names

【How to mate connectors】

For the connector SHELL (Without LOCK BAR).

1. Direction to mate.

own in Fig.2, please set plug so that the datum pin mark of the plug connector and the receptacle connector are matched.



2. How to mate.

As shown in Fig.3, push FPC horizontally until it is locked.

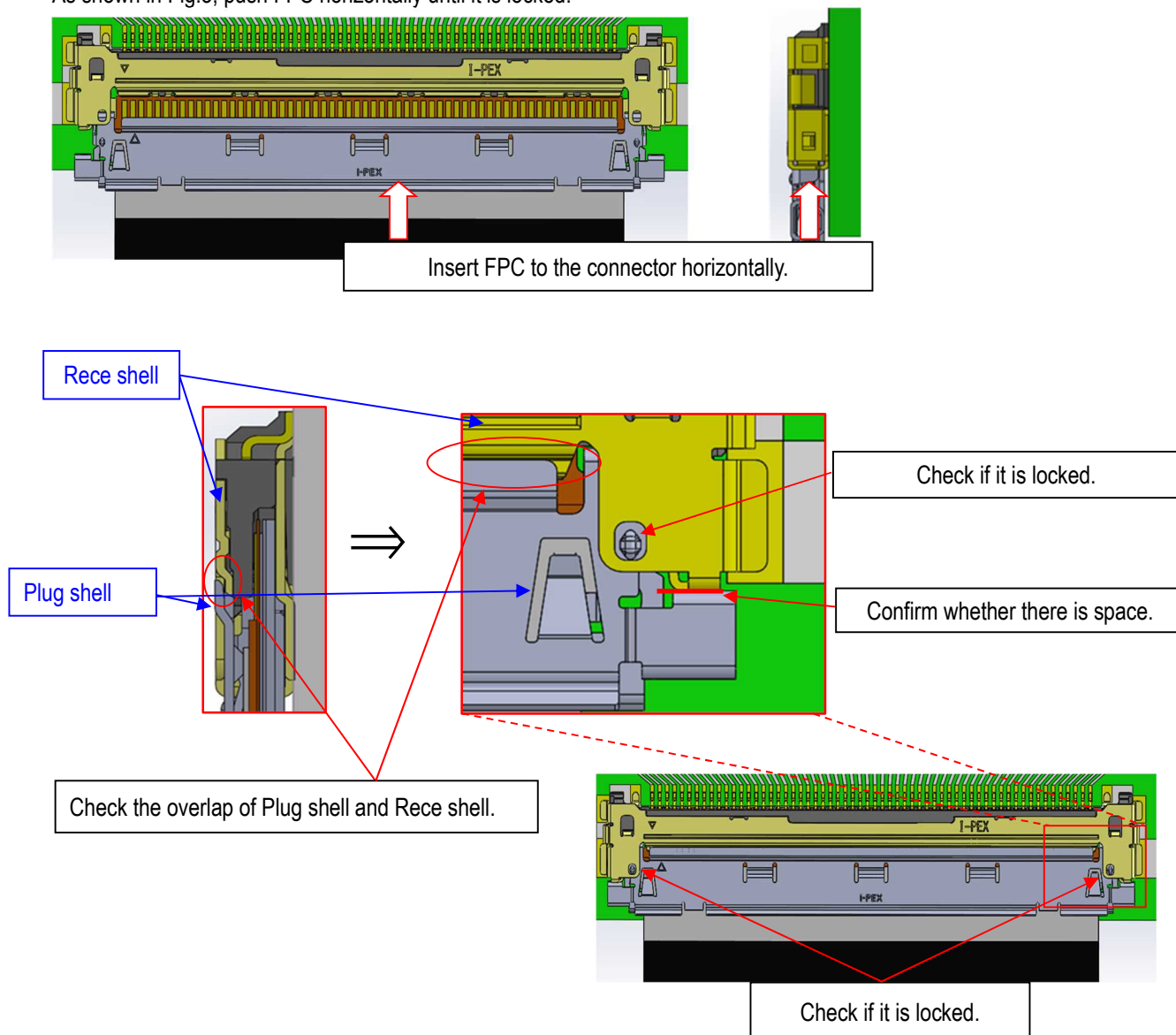


Fig.3

Cautions.

When you push one end it might cause half mating. (Fig.4)

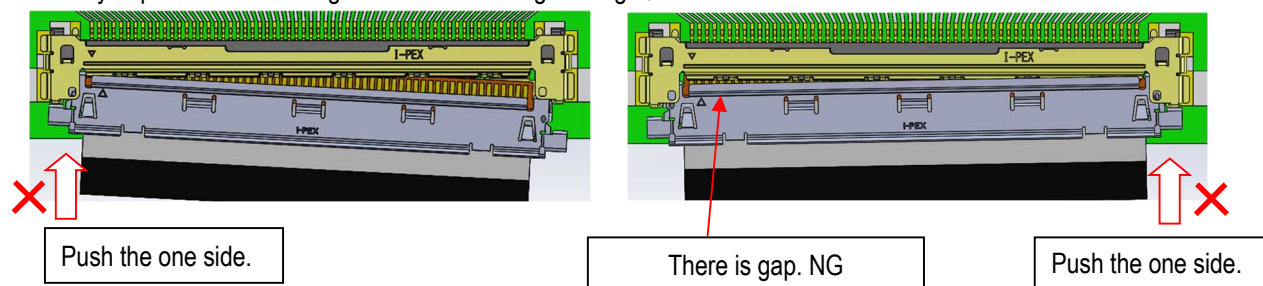


Fig.4

For the connector SHELL ASS'Y(With LOCK BAR).

1. How to place plug connector

Place the plug and receptacle so that their datum pin marks are aligned. [Fig. 5]

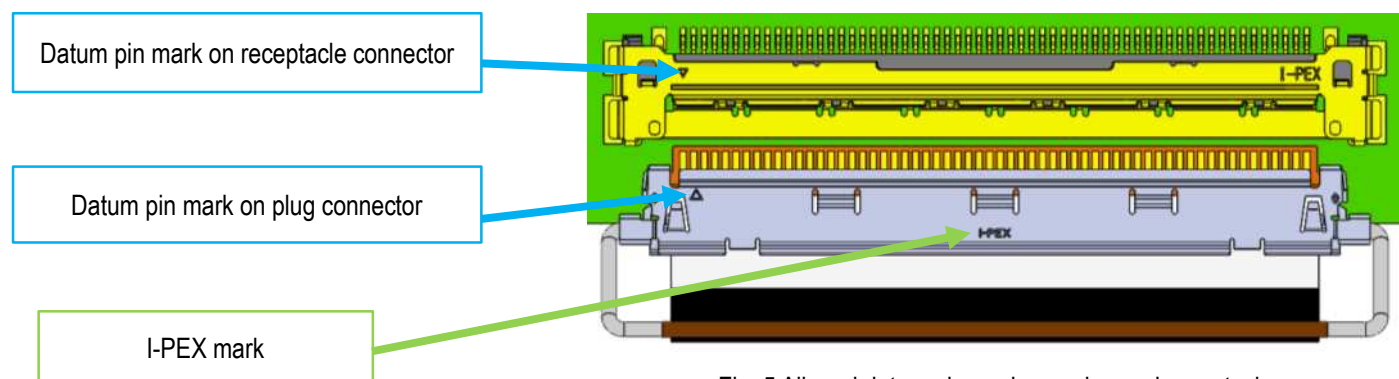


Fig. 5 Aligned datum pin marks on plug and receptacle

2. How to mate connectors.

① : Insert plug into receptacle. Slightly rotate the lock bar toward receptacle but do not lock it yet.

Push the FPC horizontally until it is fully inserted. Make sure that connectors are completely mated. [Fig. 6]

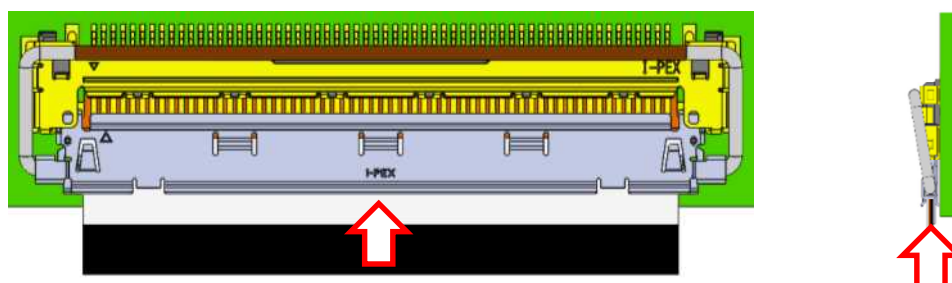


Fig. 6 Inserting FPC

② : Push down the lock bar to hook receptacle shell to lock connectors. [Fig. 7]

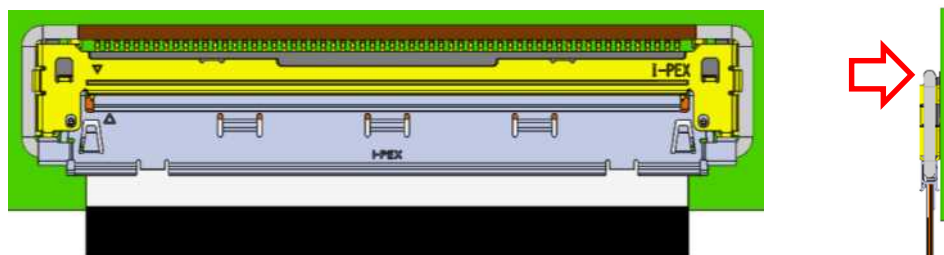


Fig. 7 Locking lock bar

※Mating check points

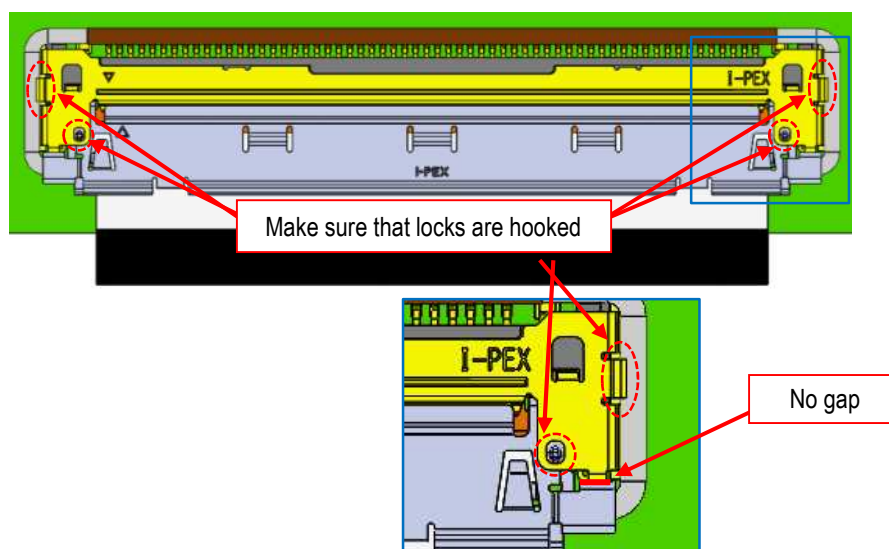


Fig. 8 Checking points of the proper mating

※Cautions

I : Do not push the lock bar while inserting connector, as this may deform the lock bar or rotation axis may fall off from the connector.
Make sure to hold FPC for proper insertion. [Fig. 9]

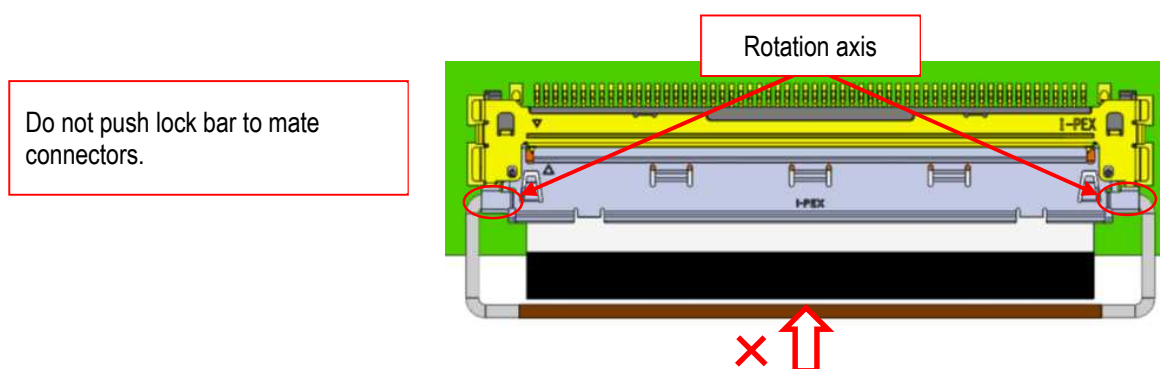


Fig.9 Do not push lock bar to mate connectors

II : Do not push one side of the plug shell or the gap may cause improper mating. [Fig. 10]

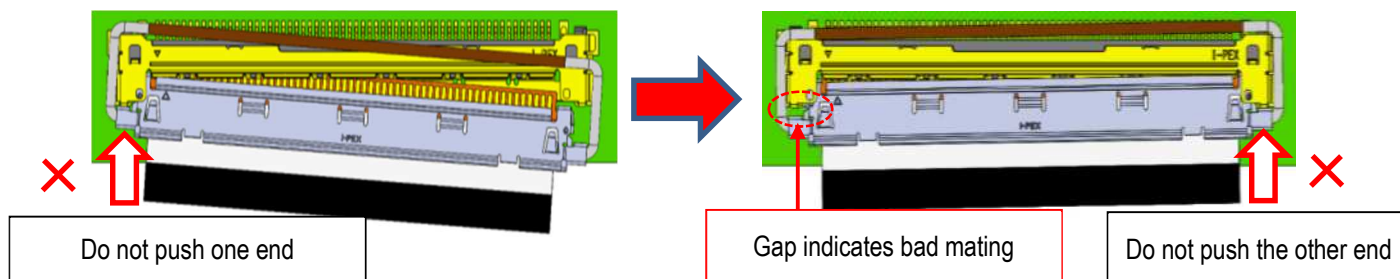


Fig. 10 Improper way to push plug shell..

III : Do not exceed 3° when inserting plug connector to use this connector safely. If one end of the connector was inserted at presetting position, maximum slanted angle will be 5° . As long as the angle is within 5° , damages will not occur. [Fig. 11]

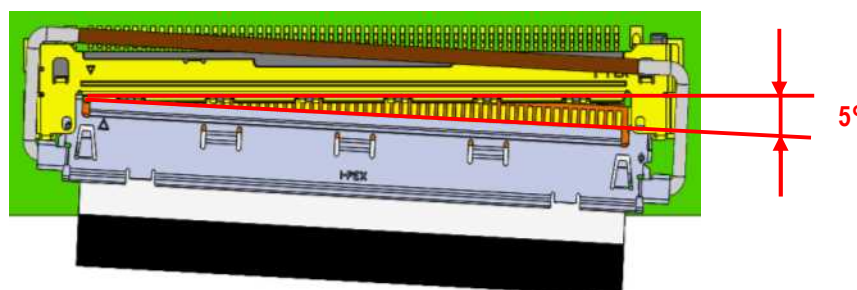


Fig. 11 Maximum mating slanted angle

IV : Do not exceed 8° when inserting plug connector. [Fig. 12]

Inserting at an angle larger than the allowable angle may cause the connector to deform. [Photo. 1]

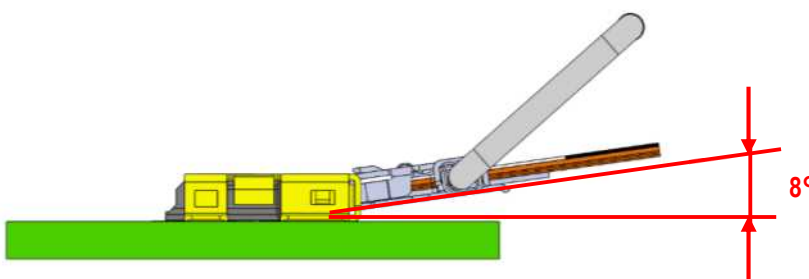


Fig.12 Maximum inserting angle

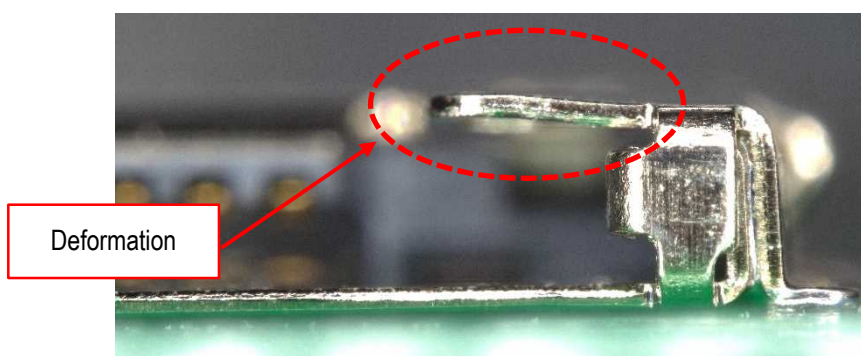


Photo.1 Deformed connector

V : Insert the plug along the insertion guards inside the receptacle shell. These guards protect from connector damages. [Fig. 13]

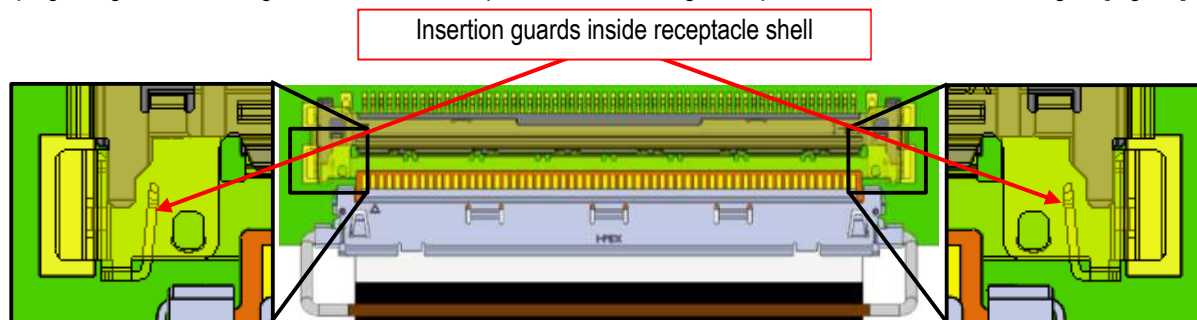


Fig. 13 Insertion guards inside receptacle shell

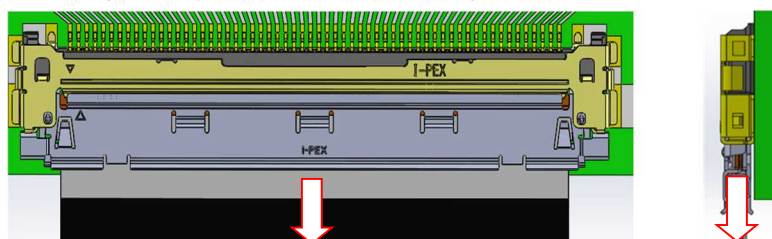
【Two ways to unmate connectors. 】

For the connector SHELL(Without LOCK BAR).

• Un-mating the connector.

As shown in Fig.14, please pull out plug connector horizontally to PCB, slanted un-mating might

If it is removed at an angle, it may deform the FPC or damage the FPC pattern.



Withdraw FPC from connector horizontally

Fig.14 Horizontal un-mating , OK condition

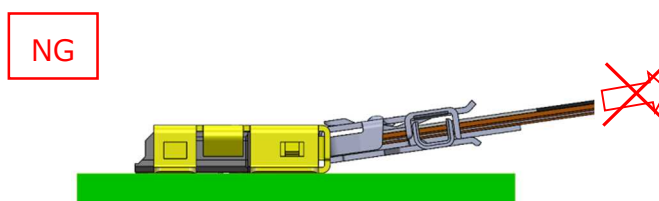
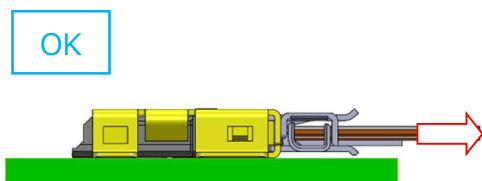
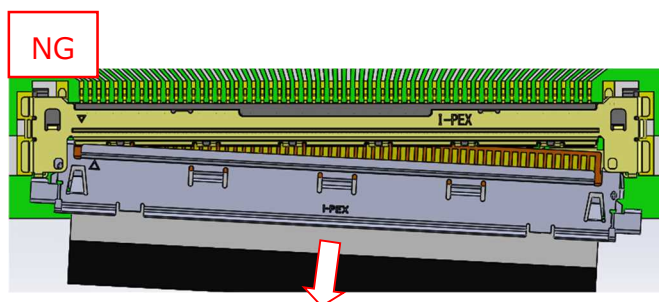
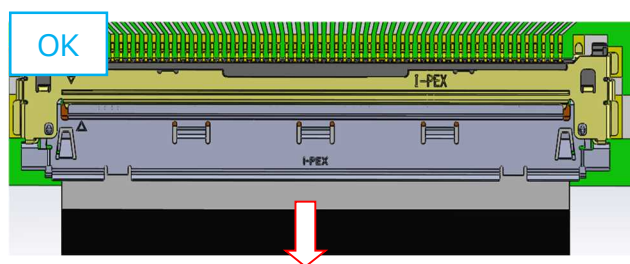


Fig. 15 Slanted un-mating NG condition

For the connector SHELL ASS'Y(With LOCK BAR).

There are two ways to unmate connectors. Select the method you prefer based on your connectors mounted position.

Method 1: By pulling FPC

Select one end of the lock bar circled in ① in figure 16. Push up the selected side of the lock bar upward as shown in ② direction to release the lock. Rotate the lock bar toward FPC, indicated as ③ direction.

Slide the FPC horizontally to remove the plug from receptacle. [Fig. 16]

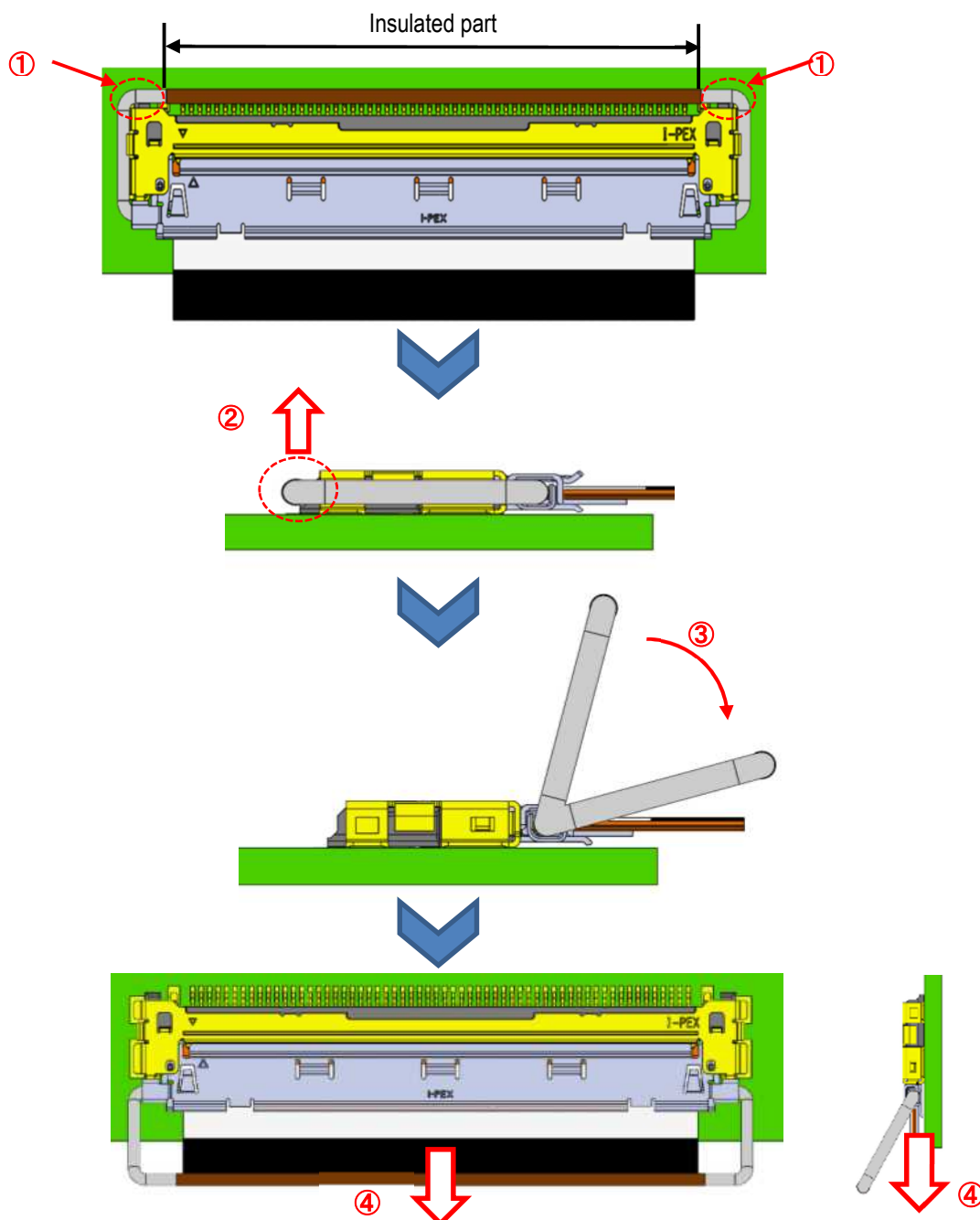


Fig. 16 Pulling FPC to unmate connectors

Method.2: By pulling lock bar

Select one end of the lock bar circled in ① in figure 17. Push up the selected side of the lock bar to release the lock. Rotate the lock bar until it is vertical. Pull the lock bar circled in ③ horizontally against PCB until the connectors are unmated. [Fig. 17]

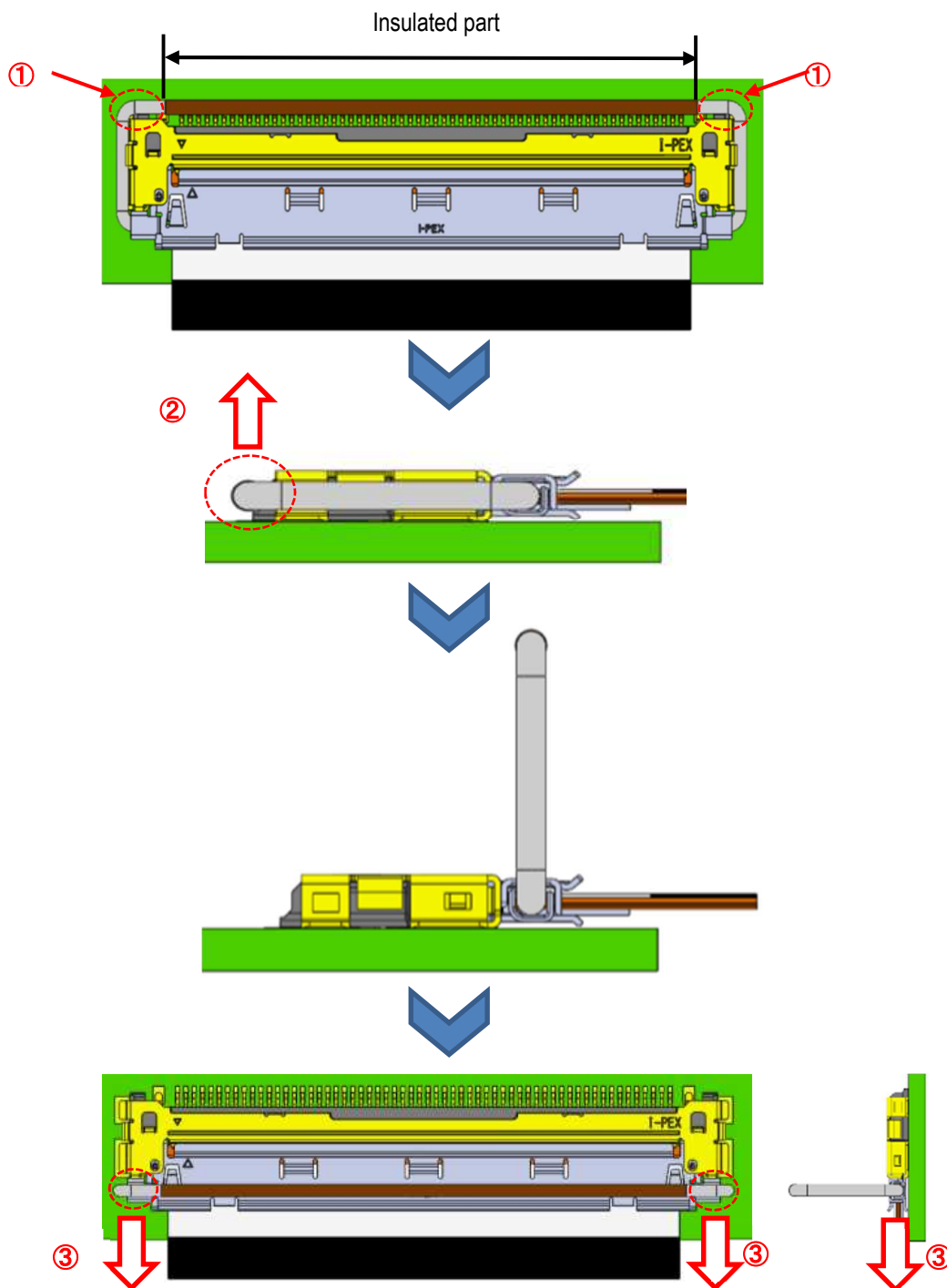


Fig. 17 Pulling lock bar to unmate connectors

※Caution

I : Only the red circled areas indicated in ① of the lock bar are allowed to touch during unmating.

Do not push up other areas of the lock bar, or it may damage the connectors.

Insulation coated part of the lock bar shall not touch metal or any other hard objects or insulation coat may peel off.

II : Do not remove the plug connector at an angle to the receptacle connector.

Pull out both ends horizontally so that the plug connector does not become slanted during removal.

It may damage the connector, deform the FPC, or damage the FPC pattern.

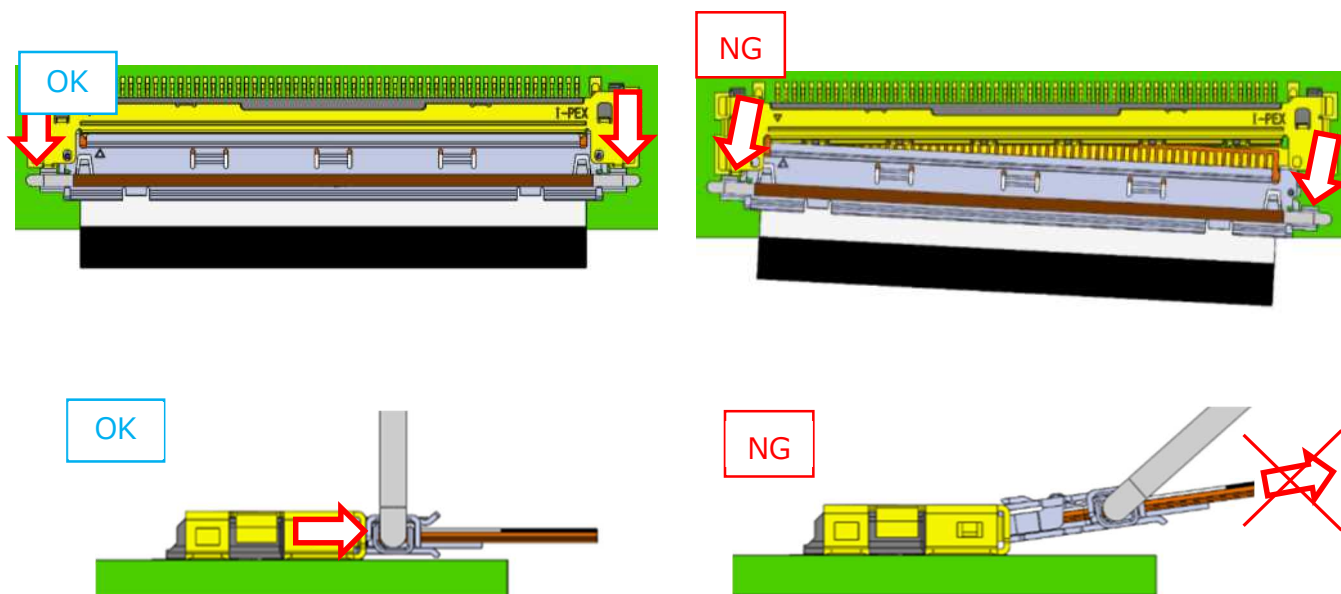


Fig 18 Maximum unmating slanted angle

【CAUTION IN CABLE CONNECTOR HANDLING.】

- I : When handling the FPC connector, make sure that no tensile force is generated on the connector other than in the horizontal direction.
Taping FPC is recommended to avoid unnecessary force to apply.

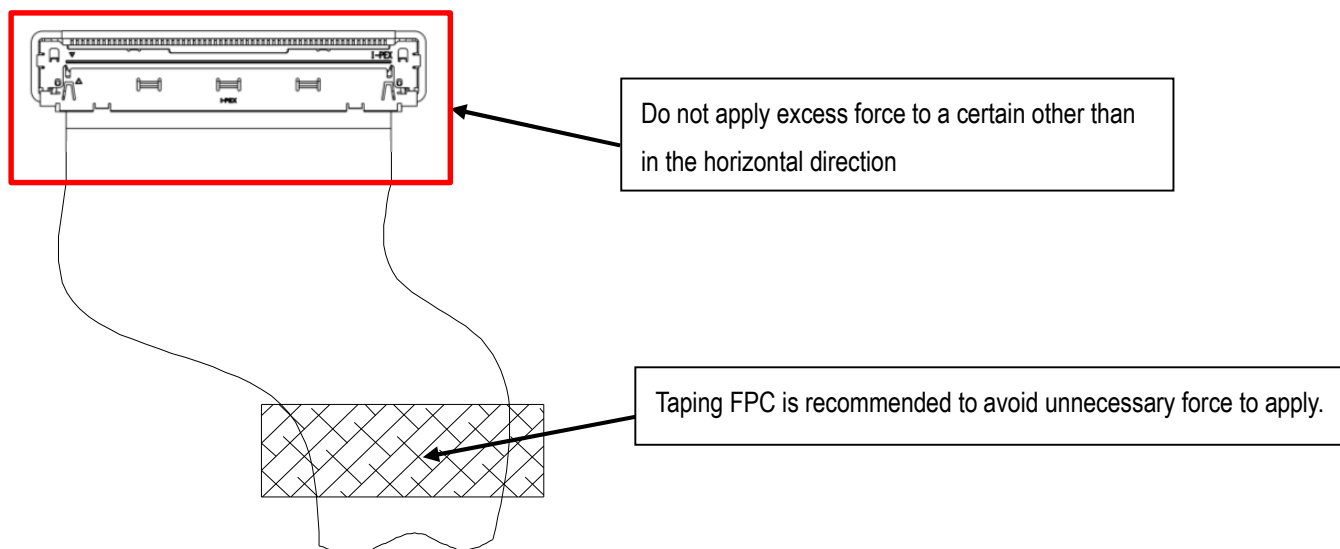


Fig.19 setting FPC cable

- II : Without taping FPC, do not position FPC as shown in figure 20, or it may cause connector damage or mating could become incomplete.
(Please see photos 2, 3 and 4)

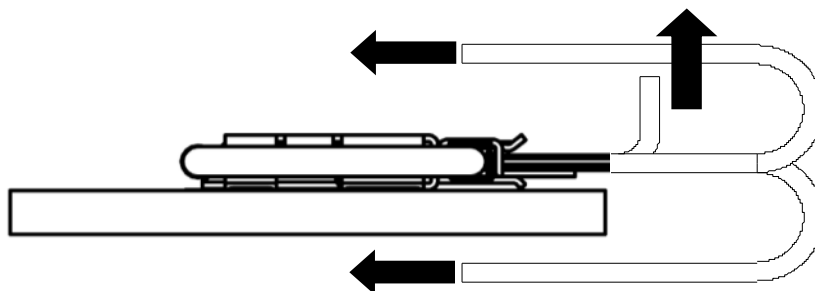


Fig.20 Without taping FPC

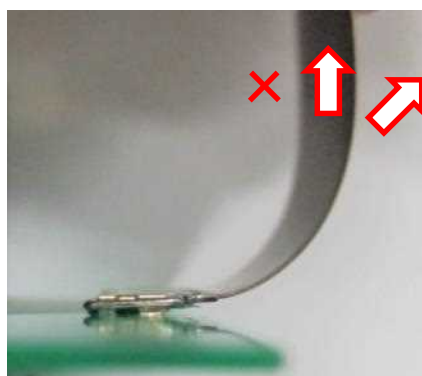


Photo. 2 Do not pull FPC upward

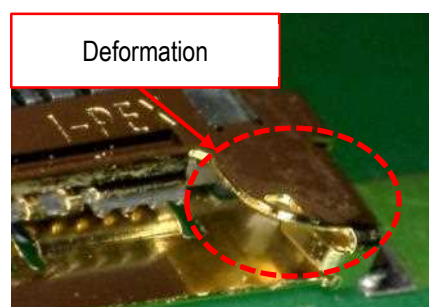


Photo. 3 Deformed connector



Photo. 4 Deformed connector

III : Do not pull lock bar vertically upward or connectors may deform as shown in photos 3 and 4.

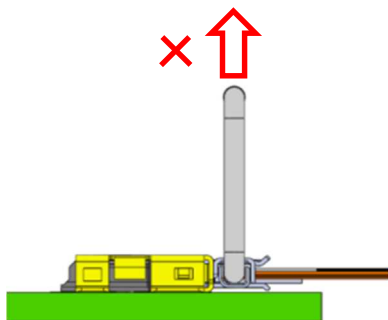


Fig.21 Do not pull lock bar vertically upward

IV : If the SHELL is not soldered, pulling the FPC in the direction of the arrow may cause the FPC to come out of the SHELL and cause damage as shown in Photo 5.

If the FPC is removed from SHELL, do not use the same FPC.



Fig.22 FPC pull direction

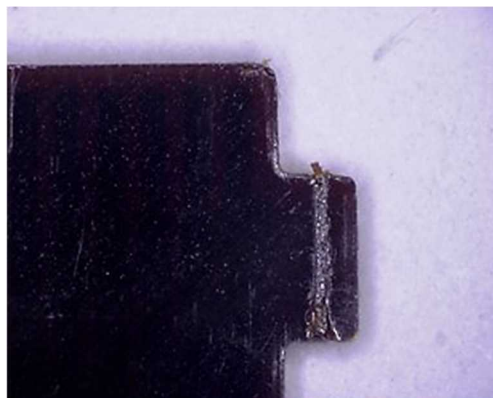


Photo. 5 Damaged FPC