

# **CABLINE®-CA IIP PLUS Harness**

Part No. 82065-\*00B-0#

# Instruction Manual

0	S24470	November 13, 2024	T.Onishi	M.Muro	T.Masunaga
Rev.	ECN	Date	Prepared by	Checked by	Approved by
Confidential C		I-PEX Inc.			QKE-DFFDE09-03 REV.8

This manual is to explain the insertion and removal methods and important points in handling of CABLINE-CA IIP PLUS Harness for the purpose of proper use.

- 1. Product Names and Part Numbers
  - Plug Connector
    Product Name: CABLINE-CA IIP PLUS Harness
    Part Number: 82065-\*00B-0#
    Cable Length
    Cable Specification

Fig. 1 Plug Cover Opened Harness

Receptacle Connector

Product Name: CABLINE-CA II PLUS receptacle Part Number: 20790-060E-0# 1: With Boss 2: Without Boss



Fig. 2 Plug Cover Closed Harness

2. Names of the Connector Parts

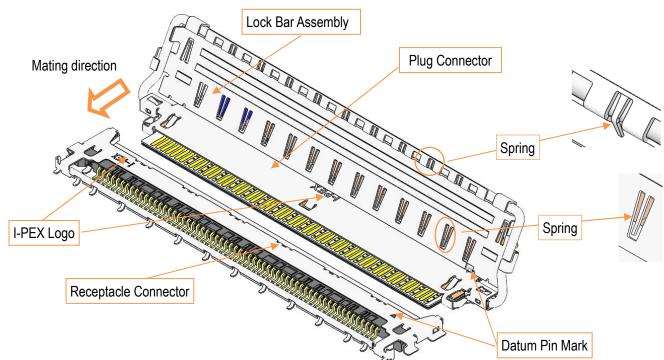


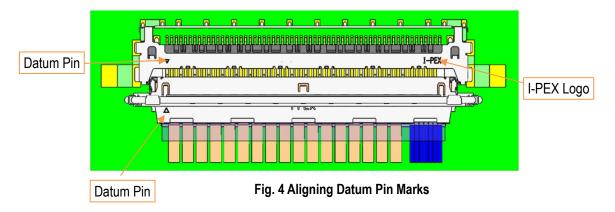
Fig. 3 Names of the Connector Parts





# 3. Connector Insertion Methods

3.1 Align the datum pin marks of the plug connector and the receptacle connector.



3.2 Pre-insert the plug connector to the receptacle connector. Do not apply excessive load while pre-insertion.

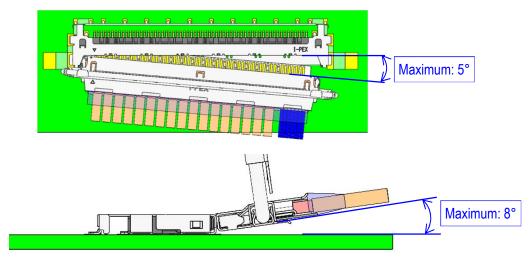
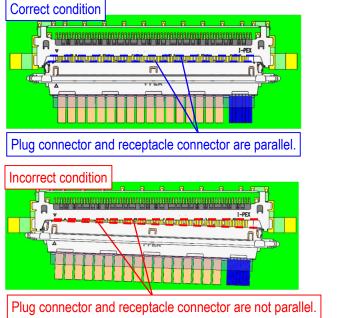
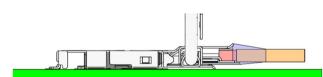


Fig. 5 Maximum Horizontal / Vertical Insertion Angle





# Fig. 6 After Pre-insertion Condition

I-PEX

3.3 Push ends of the plug connector horizontally along the guide after the pre-insertion. Ensure that the gap is undetected after the insertion.

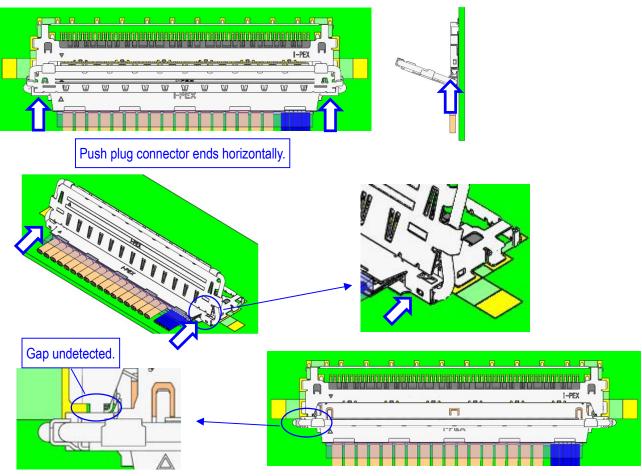


Fig. 7 Correct Insertion Method

#### Caution 1

Confidential C

Do not push one side of the plug connector alternately, as it may result in the incomplete insertion.

\*Gap indicates incomplete insertion.

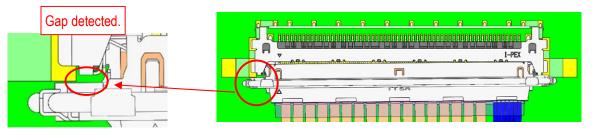
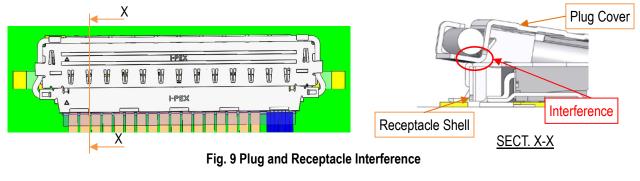


Fig. 8 Incorrect Insertion Check

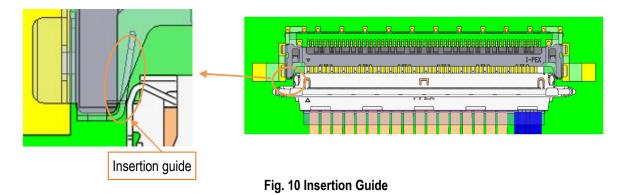
Do not close the plug connector cover if a gap is detected, as it may cause interference and deformation.



I-PFX

#### Caution 2

Ensure that the plug connector is inserted along the guide, as it may result in deformation.



#### Caution 3

Do not exceed 5° horizontal insertion angle during pre-insertion, as it may result in the damage or deformation.

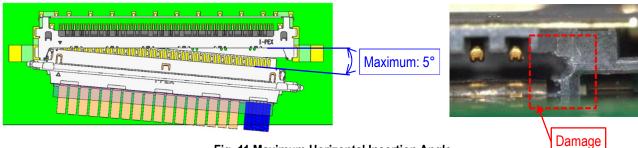


Fig. 11 Maximum Horizontal Insertion Angle

## Caution 4

The lock bar assembly will stop upon contacting the plug shell. Do not push the lock bar assembly beyond the stop position, as it may result in plug shell deformation.

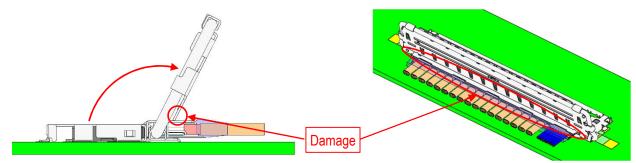


Fig. 12 The Lock Bar Opening Limitation

#### Caution 5

Do not exceed 8° vertical insertion angle during pre-insertion, as it may result in the damage or deformation.

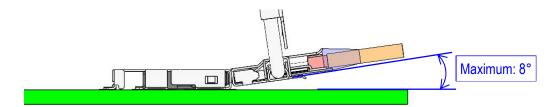


Fig. 13 Maximum Vertical Insertion Angle at Pre-insertion

#### Caution 6

Do not insert the plug connector by pushing or pulling the lock bar assembly, as it may result in connector damage and the lock bar assembly deformation.

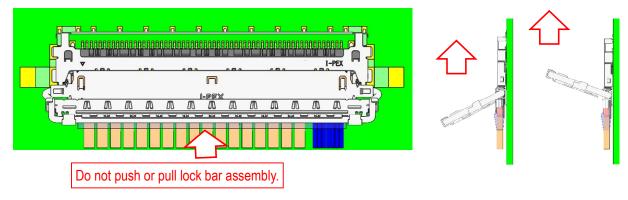
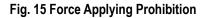


Fig. 14 Incorrect Insertion Method

#### Caution 7

Do not apply the force to the plug connector toward the PCB, as it may damage the PCB and result in the disconnection or short circuit.





I-PF

3.4 Push the circled areas of the lock bar assembly toward the PCB to lock the receptacle shell and the lock bar assembly.

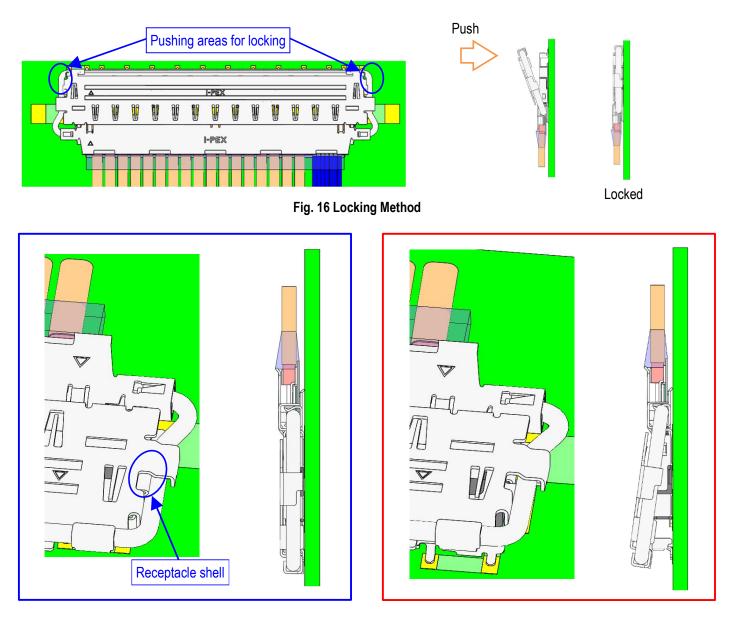


Fig. 17 Correctly Locked

Fig. 18 Incorrectly Locked



## 4. Connector Removal Method

4.1 Lift up the circled area of the lock bar assembly and rotate it to release the lock from the receptacle connector.

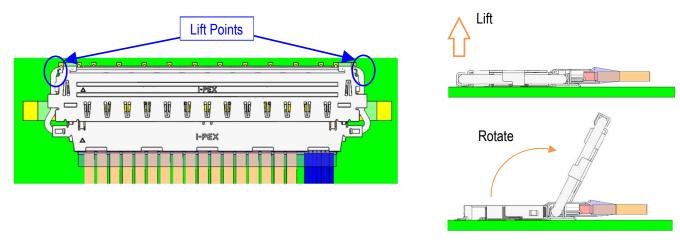


Fig. 19 Lock Release Method

#### Caution 8

Do not lift circled area of the lock bar assembly during removal, as it may result in the deformation.

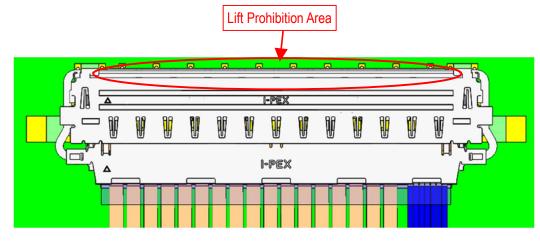


Fig. 20 Lift Prohibition Area

4.2 Hold the lock bar ends indicated by arrows below and pull horizontally, keeping the ends parallel.

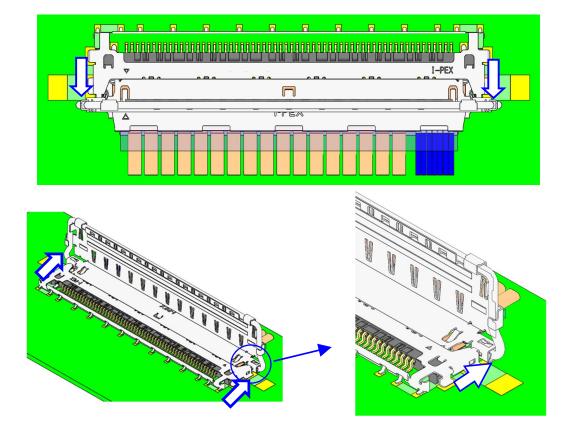


Fig. 21 Correct Removal Method

#### Caution 9

Do not exceed 5° horizontal removal angle during removal, as it may result in the damage or deformation.

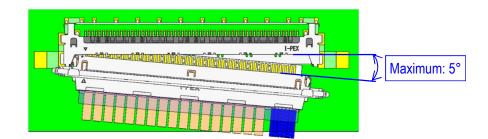


Fig. 22 Maximum Horizontal Removal Angle

#### Caution 10

Do not push or pull circled area of the lock bar assembly during removal, as it may result in the damage or deformation.

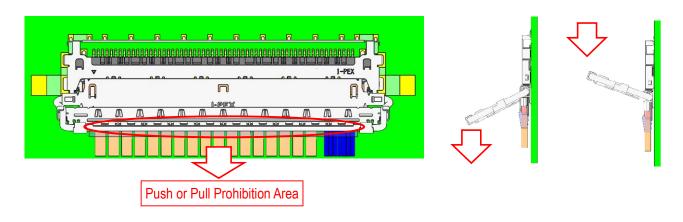


Fig. 23 Incorrect Removal Method

#### Caution 11

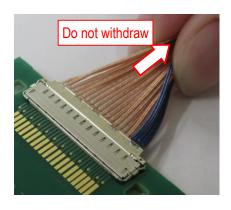
Do not apply the force to the plug connector toward the PCB during removal, as it may damage the PCB and result in the disconnection or short.

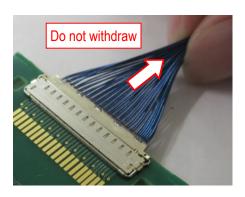


Fig. 24 Force Applying Prohibition

#### Caution 12

Do not apply withdraw the plug connector by pulling the cable, it may result in the disconnection by cable breakage.







I-PEX

#### 5. Cautions in handling the harness

5.1 Do not pull up the cable or the lock bar assembly upward, as it may result in the deformation of the receptacle connector.

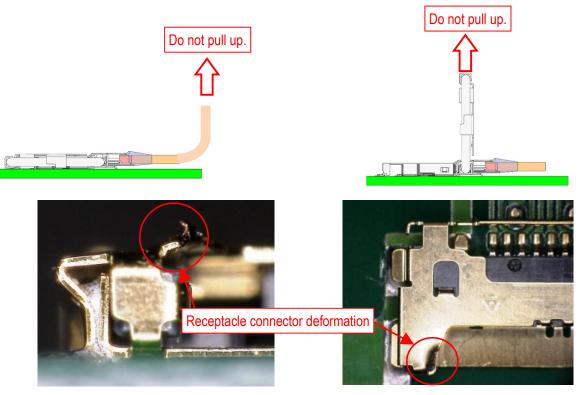


Fig. 25 Prohibition of Harness and Lock Bar Assembly Handling

5.2 Do not apply the continuous stress or excessive load to the cable, as it may result in the mating failure, the receptacle connector deformation, or the cable breakage. When bending cable, ensure that stress or excessive load is not applied to the connectors.

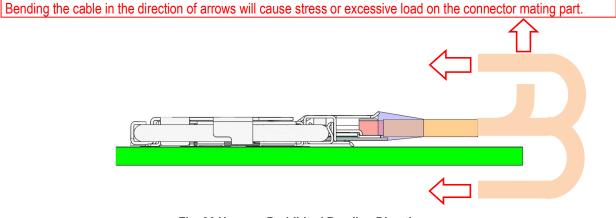


Fig. 26 Harness Prohibited Bending Direction

I-PEX