

# **CABLINE®-CAF**

Part No. 20858-0\*\*T-01

# **Assembly Manual**

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Confidential C			I-PEX Inc.		QKE-DFFDE09-04 REV.8

#### 1. Purpose

This manual explains how to assemble FPC to CABLINE-CAF connector.

# 2. Applicable Connector

Name: CABLINE-CAF plug shell assembly

Parts Number: 20858-0\*\*T-01

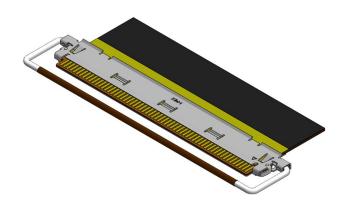


Fig. 1 Shell Assembly with FPC

# 3. Connector Delivery Package Carrier cut shell assemblies are delivered in a tray.

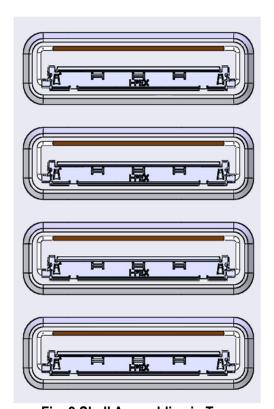


Fig. 2 Shell Assemblies in Tray

- 4. How to Assemble the FPC into the Shell Assembly
  - 4-1. Position the FPC with its signal conductive side facing upward and horizontally insert into the shell.

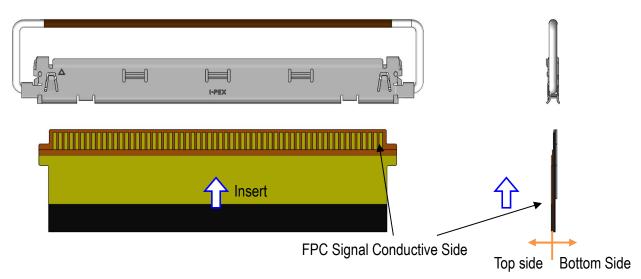


Fig. 3 FPC Assembly Positions

#### Caution 1

Do not insert the FPC with the no conductive side facing upward.

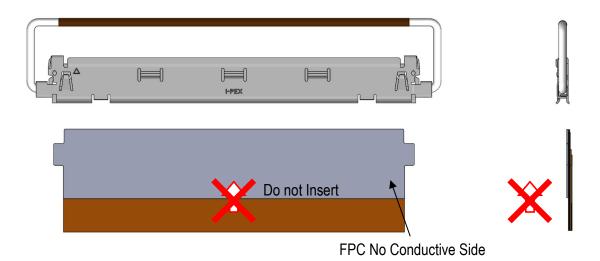


Fig. 4 Incorrect FPC Orientation

4-2. Pre-insert the FPC until its tabs contact the shell locks to ensure the correct insert position, then insert the FPC horizontally along the bottom side of the shell.

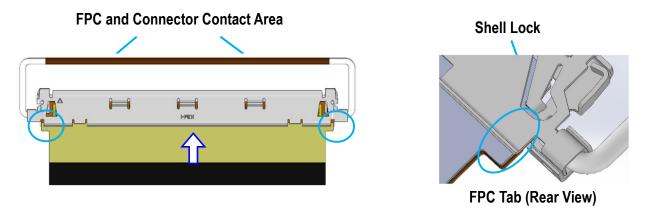
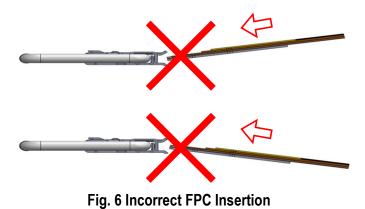


Fig. 5 FPC Insertion

#### Caution 2

Do not insert the FPC at an angle as it may result in the FPC deformation or damage.



4-3. After inserting the FPC, ensure that the shell spring is correctly positioned as indicated below.

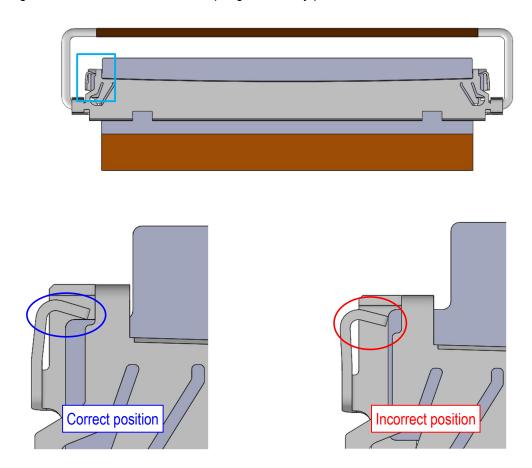


Fig. 7 Shell Spring Position

4-4. Ensure that both shell locks are locking FPC properly.

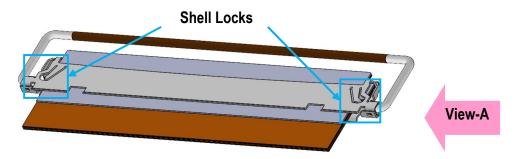
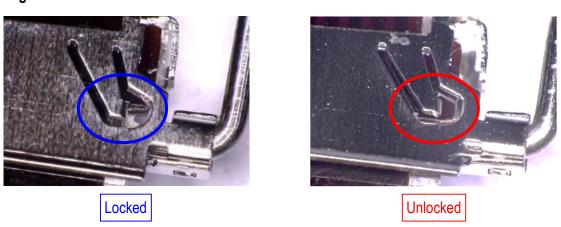


Fig. 8 Shell Locks

# **Enlarged View of Shell Lock**



#### View-A



**Photo. 1 Shell Lock Details** 

# 5. Soldering FPC

#### **FPC Preparation**

Ensure that the solderable areas on the top surface of the FPC is ready for soldering.

Refer to the product drawing for FPC details.

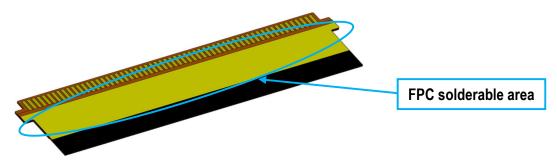
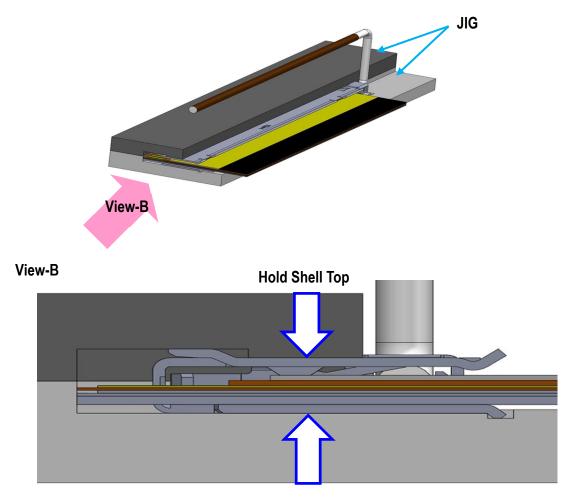


Fig. 9 FPC Soldering Area

# Holding Jig Setup

Prepare a holding jig to secure the connector shell's top and bottom surfaces during soldering to prevent warping.



**Hold Shell Bottom** 

Fig. 10 JIG Example

# 5-1. Solder the FPC and the shell.

I-PEX recommends soldering at two places on the top surface.

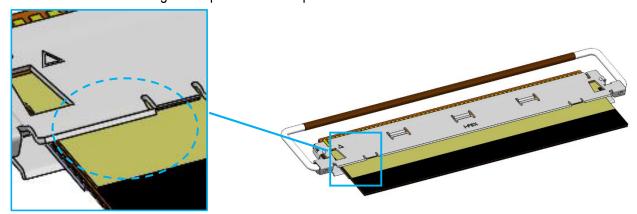


Fig. 11 FPC Soldering Area

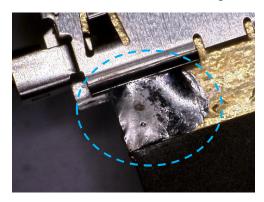


Photo. 2 FPC Soldering Example

5-2. Solder the area indicated by the red line with the appropriate amount of solder to connect the FPC to the shell.

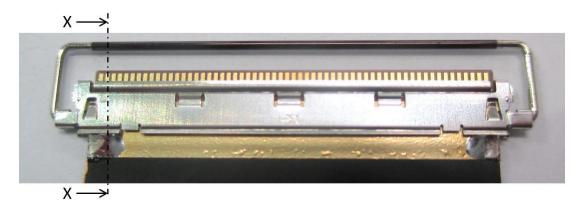
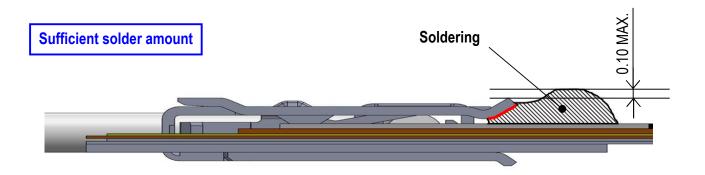
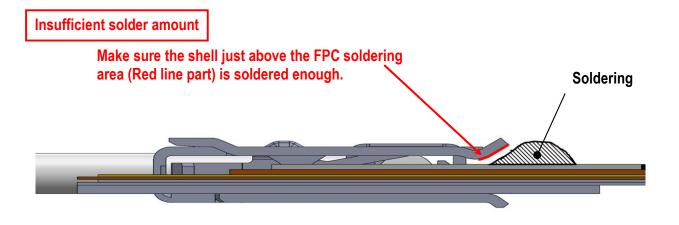


Photo. 3 Soldering of Shell and FPC



# **SECT X-X**



SECT X-X Fig. 12 Solder Amount

# Caution 3

Do not open the lock bar sideways or push it toward the shell. Doing so may cause the lock bar to detach.

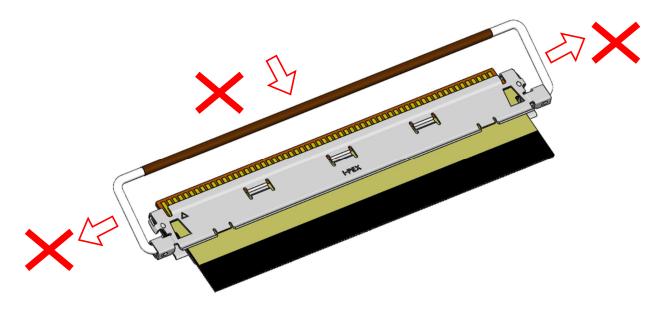


Fig. 13 Incorrect lock bar handling

#### Caution 4

Do not reinstall or use the lock bar once it has detached.

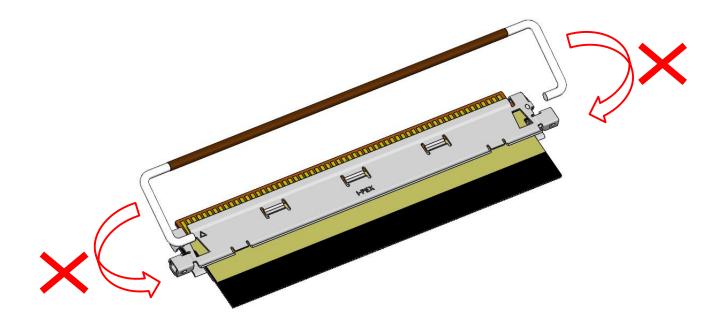


Fig. 14 Prohibition to reinstall lock bar