

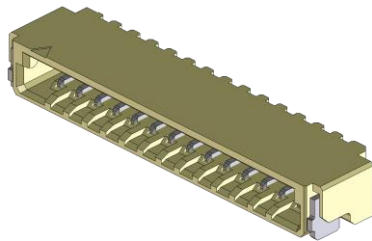
## 1. Scope

This document specifies the procedures of mating/unmating operation of DF53 series.

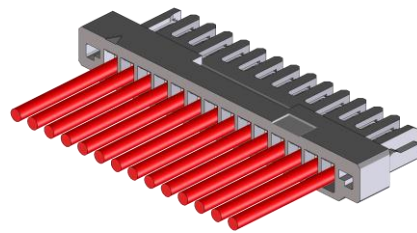
This document contains general guideline and operating suggestions to use this product safely. If this product is used another way from being written in this document, unexpected trouble such as connector breakage could happen. Please read through this document and understand proper operation before using.

## 2. Connectors

Part No.	Classification	Description
DF53-*S-0.6H	Receptacle (PCB side connector)	Receptacle
DF53-*P-0.6C	Plug (Cable side connector)	Crimp case
DF53-32PCF		Crimp contact



【Receptacle】  
DF53-\*S-0.6H



【Plug】  
DF53-\*P-0.6C  
+DF53-32PCF(Cables attached)

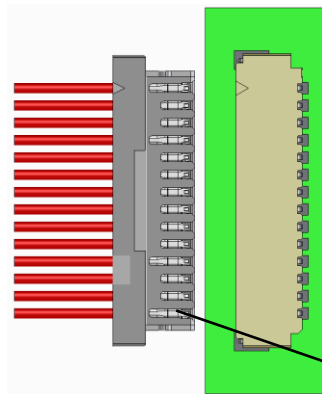
## 3. Operation procedure

### 3-1. Insertion

3-1-a. Confirmation of insertion orientation:

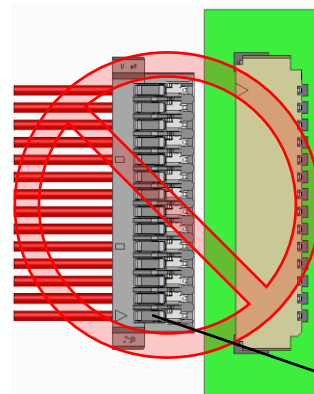
Set the plug as shown in the figure 1.

The correct orientation of the plug is such that the slit on housing is on the top.



Slit on Housing

Fig.1 Correct plug orientation



Housing lance

Fig.2 Reversed plug

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0					
TITLE			<b>HS</b> HIROSE ELECTRIC CO.,LTD.		
DF53 Series Mating/Unmating Operation Instruction Manual			APPROVED	HS.OKAWA	20200403
			CHECKED	ST.WADA	20200403
			DESIGNED	TH.SATO	20200403
			WRITTEN	TH.SATO	20200403
TECHNICAL SPECIFICATION			ETAD-H0996-00	△0	1 / 4

## 3-1-b. Alignment to insertion:

Hold all cables evenly and align the plug with light force as shown in the figure 3.  
In this state contacts are partially exposed.

After alignment, push the plug straight to the end, and the insertion is completed when exposed contacts become invisible.

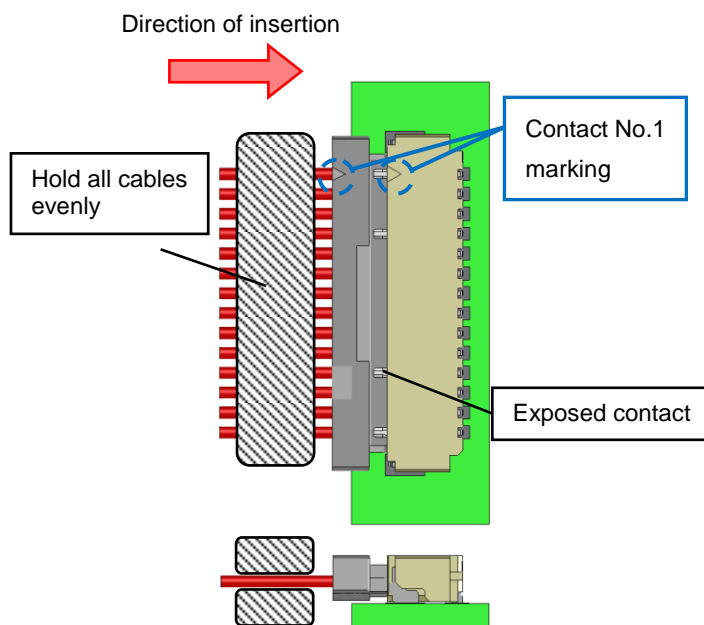


Fig.3 Alignment for insertion

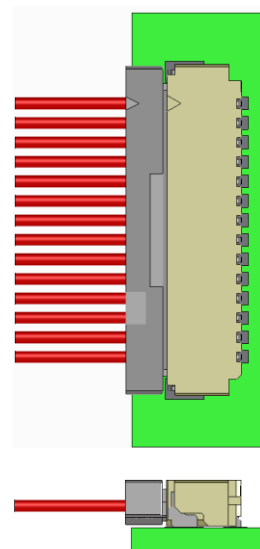


Fig.4 Insertion completed

Insertion in an obliquely angled state (Fig. 5, 6) may lead to breakage of the connector, so please insert it straight.

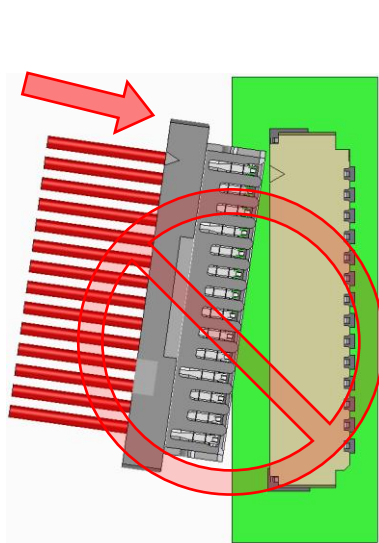


Fig.5 Prohibited insertion①

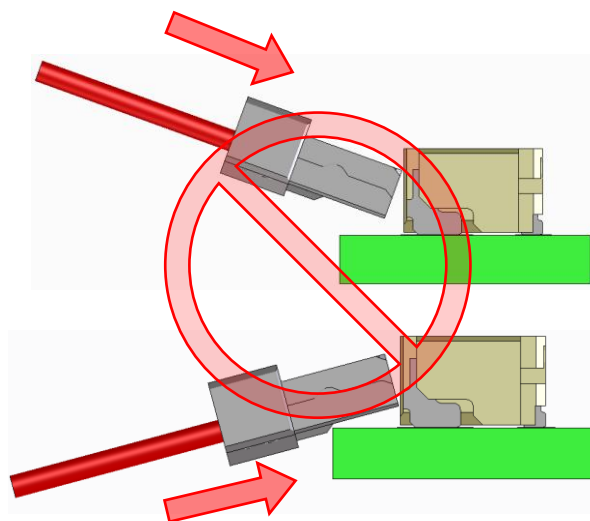


Fig.6 Prohibited insertion②

When some contacts are exposed as shown in the figure 7, it is incomplete mating state. Push a plug again, and complete insertion.

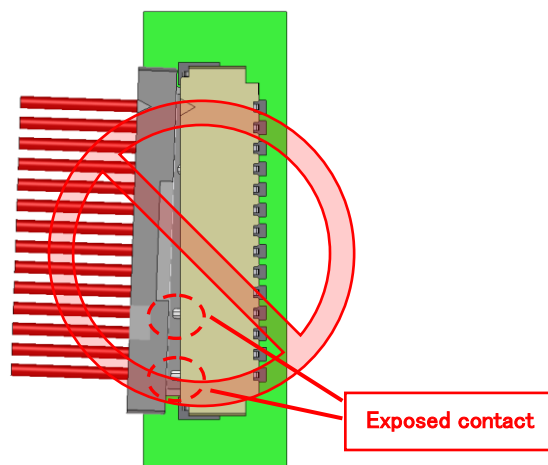


Fig.7 Incomplete mating

### 3-2. Removal

Hold the cables evenly and pull them in a horizontal direction.

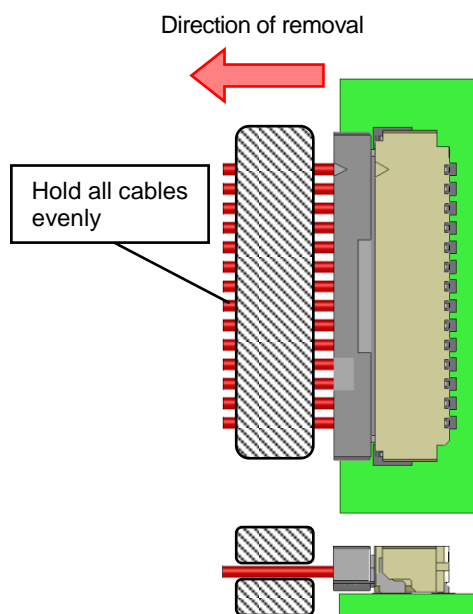


Fig.8 Removal

Removal in a state where the angle is obliquely (Figs. 9 and 10) may cause breakage of the connector, so please pull it out straight.

To avoid degraded quality, do not tilt the socket for removal as shown in the figure above.

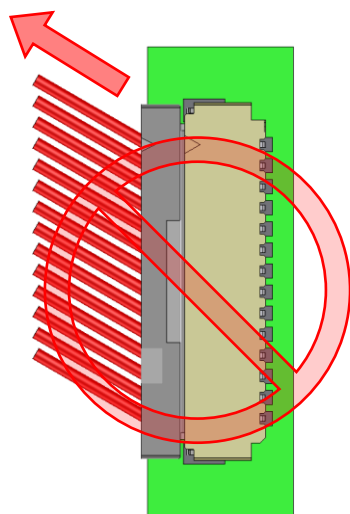


Fig.9 Prohibited removal①

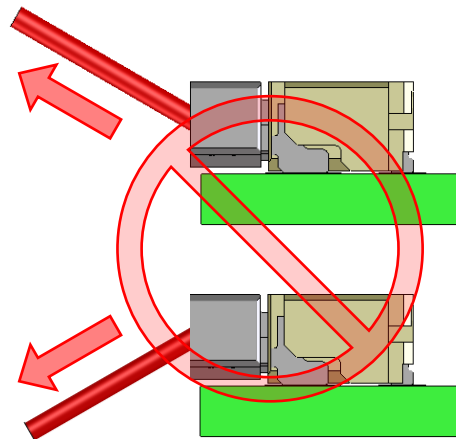


Fig.10 Prohibited removal②

#### **4. Precautions for handling**

- Do not insert or remove the plug and header while electrifying.
- Excessive external force applied to connectors could cause fault or damage.  
Therefore, avoid forced insertion or removal, impacts given by falling, or forced pulling of cables.
- forcible wiring such as bending the cable near the connector and straining the cable, could cause contact failure  
During cable wiring inside the machine, keep sufficient cable length for slack to avoid direct stress is applied to the connector. (Fig. 11)

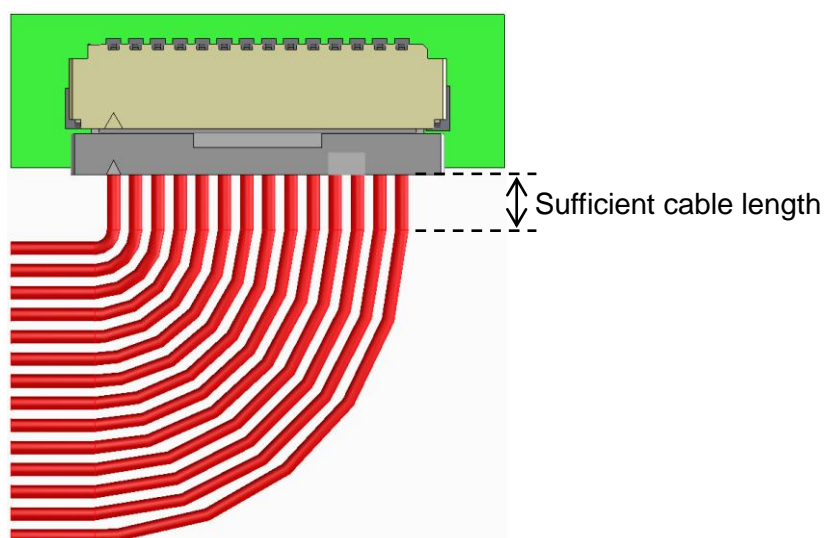


Fig.11 No cable tension is applied.