

MHF[®] 4 Connector

Part No. 20448-001R-081, 20611-001R, 20449-001E, 20449-001E-**, 20449-001E-***

Instruction Manual

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6	S18033	January 17, 2018	M.Nomoto	S.Taguchi	K.Yotsutani
5	S17477	June 26, 2017	M.Nomoto	S.Taguchi	K.Yotsutani
4	S16117	March 1, 2016	M.Nomoto	S.Taguchi	K.Yotsutani
Rev.	ECN	Date	Prepared by	Checked by	Approved by

MHF 4 Connector Instruction Manual

弊社、MHF 4 Connector の取り扱いに際して、本コネクタを安全に御使用頂くことを目的としコネクタの挿入・抜去の手順及び注意点を記述致します。

This manual is to explain the insertion & withdrawal methods and important points in handling of MHF 4 connector PLUG with cable for the purpose of proper use.

【コネクタ型番】【Connector Parts Number】

MHF 4 PLUG 20448-001R-081, 20611-001R

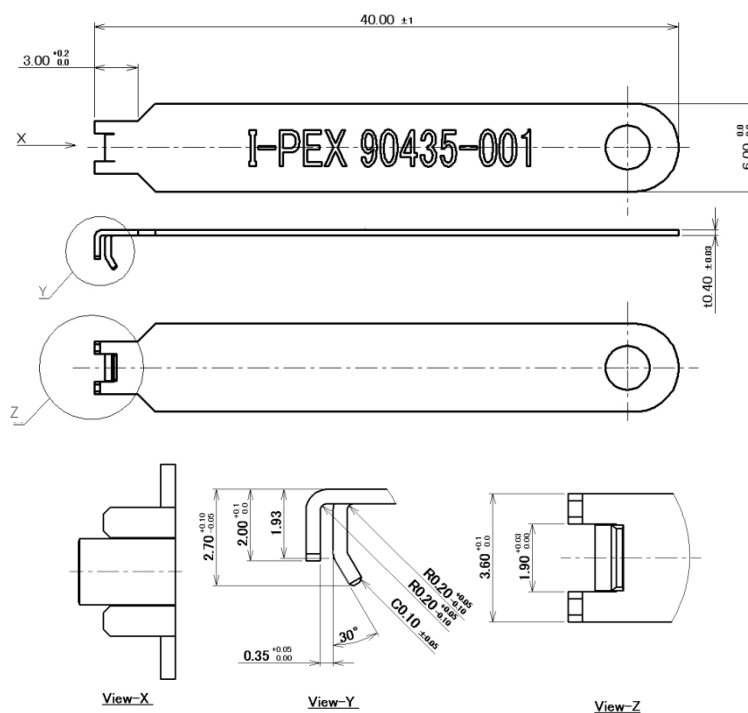
MHF 4 RECEPTACLE 20449-001E, 20449-001E-**, 20449-001E-***

【挿抜 JIG について】【Pushing & Pulling JIG】

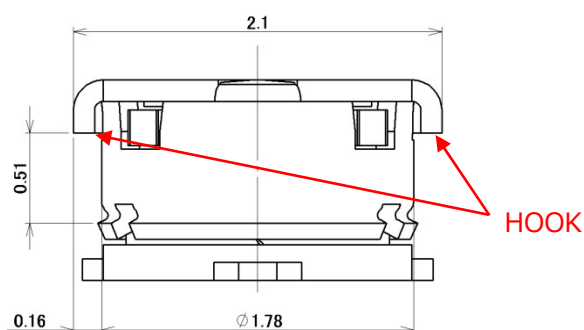
挿抜を行う際、ケーブルコネクタ首部へのストレスを避ける為、Fig. 1 の形状の様な JIG を御使用下さい。

ケーブル側コネクタには JIG 専用の引っ掛け形状が設置されています。(Fig. 2)

To avoid excessive stress to cable connection points, it is recommended to use special jig as show in Fig. 1. The cable connector has a design feature to hook this "Pushing & Pulling JIG". (See Fig. 2)



(Fig. 1) 推奨 挿抜 JIG (Recommendation: Pushing & Pulling JIG Part No. 90435-001)

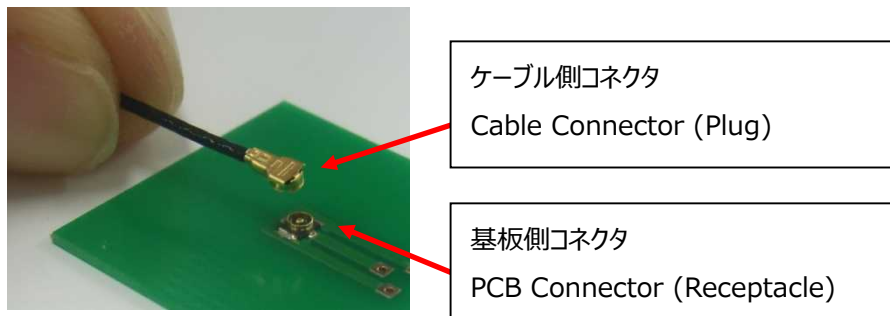


(Fig. 2) 抜去 JIG 引っ掛け形状配置図 (PLUG connector design feature to hook pull jig)

【コネクタ挿入手順】【CONNECTOR INSERTION MANUAL】**1. 手で直接嵌合する場合 (In case of mating by hand)****① ケーブル側コネクタの保持方法 (How to hold a cable connector)**

Fig. 3 のようにケーブル側コネクタのケーブルを持ちます。

Hold the cable connector as show in Fig. 3.



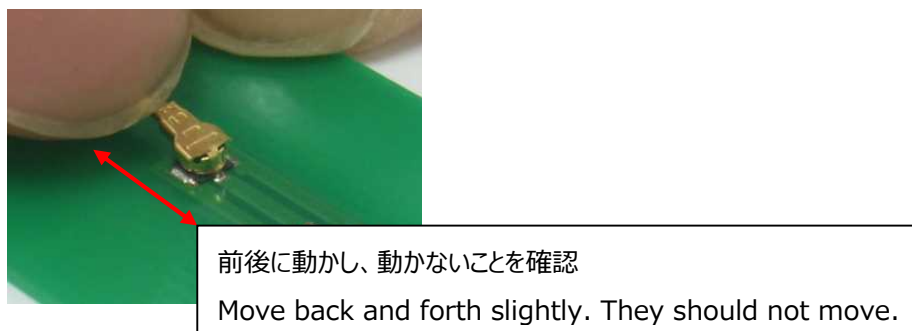
(Fig. 3) How to hold a cable connector

② ケーブル側コネクタのセット方法 (Direction to mate)

Fig. 4 のように、基板側コネクタとケーブル側コネクタをセットします。セットしたら前後に軽く動かし、動かないことを確認します。

Set connectors of the board side and of the cable side as shown in Fig. 4.

Please check they are set firmly by moving back and forth slightly.



(Fig. 4) Direction to mate

③ 嵌合方法(How to mate)

Fig. 5 のように、ケーブル側コネクタのセンターを真上から押し、カチッという音がすると嵌合完了となります。

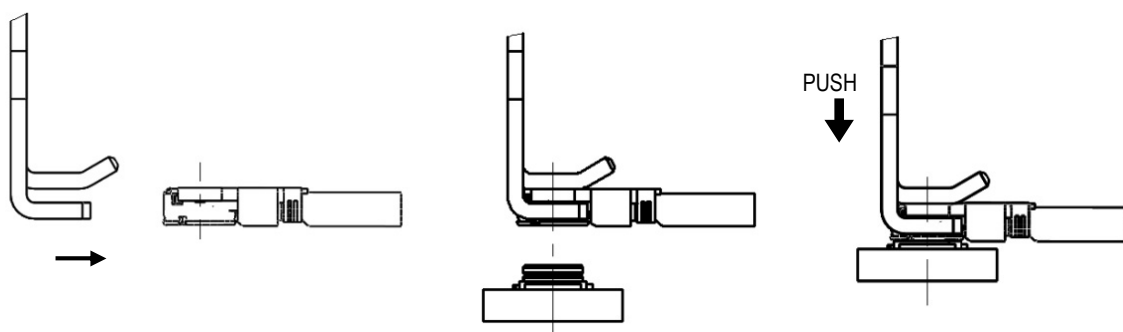
Push cable connector at its center location vertically as show in Fig. 5. When click sound can be heard, "the connector mating action is complete".



(Fig. 5) How to mate

2.挿抜 JIG で嵌合する場合 (In case of mating by Pushing & Pulling JIG)

- ① ケーブル引き出し方向から治具を基板と平行にスライドさせてコネクタへセットします。(Fig. 6-a)
Slide the "Pushing & Pulling JIG" from the direction of drawing out of a cable and attach to the cable connector. (See Fig. 6-a)
- ② ストッパーに当たるまで治具をスライドさせプラグコネクタ全体を抱えるようにします。(Fig. 6-b)
The jig must be moved until it reaches a stopper just as it holds the cable connector. (See Fig. 6-b)
- ③ 基板(基板側コネクタ)に対し垂直に治具を押し、コネクタを嵌合します。(Fig. 6-c)
Push the jig vertically to the PCB surface (PCB Connector). (See Fig. 6-c)



(Fig. 6-a) Slide the jig (Fig. 6-b) Hold the cable connector (Fig. 6-c) Push the jig

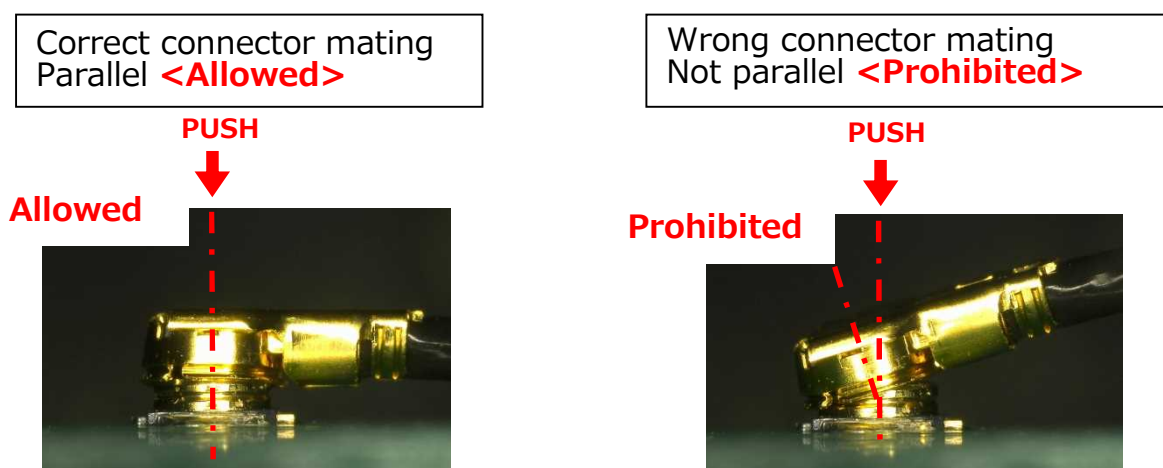
注意事項 CAUTION

必ずケーブル側コネクタが基板と平行になるようにセットしてください。

Fig. 8 のように曲がったまま嵌合するとコネクタの破損の原因となります。

Please make sure to set the cable side connector parallel to the board.

If you mate in not parallel condition as shown in Fig. 8, connector will be damaged.



(Fig. 7) Plug parallels to test board (Preferable)

(Fig. 8) Plug does not parallel to test board (Not allowed)

【コネクタ抜去手順】 (How to withdraw cable connector)**1. 手で直接抜去する場合 (In case of unmating by hand)**

コネクタ両端の引っ掛け形状を基板と垂直に引き上げて下さい。(Fig. 9)

You must lift it up vertically by holding the hook area which is located at both connector ends. (See Fig. 9)

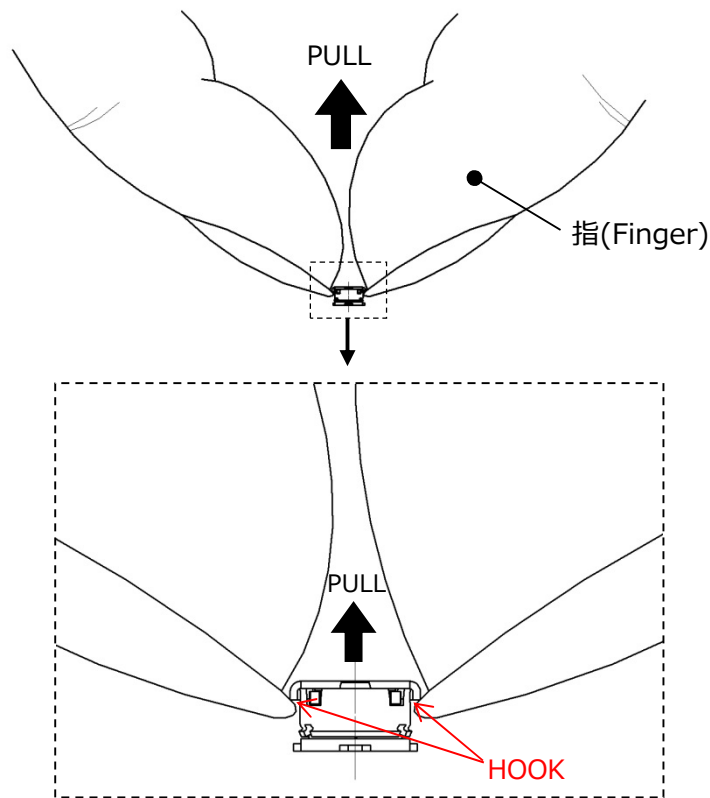
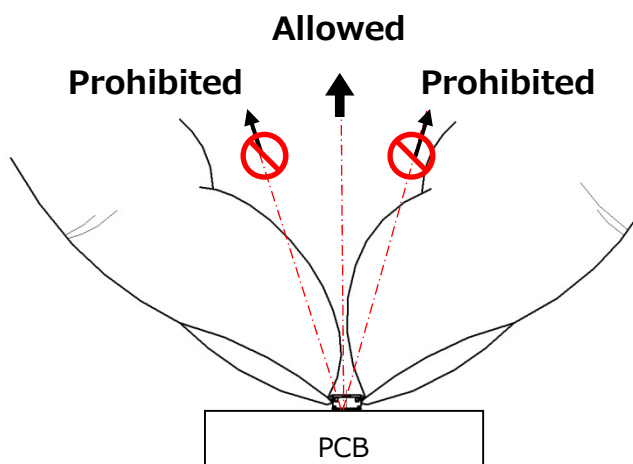


Fig. 9 How to hook and pull connector by hand

注意事項 CAUTION

コネクタは必ず基板と垂直に引き上げて下さい。(Fig. 10)

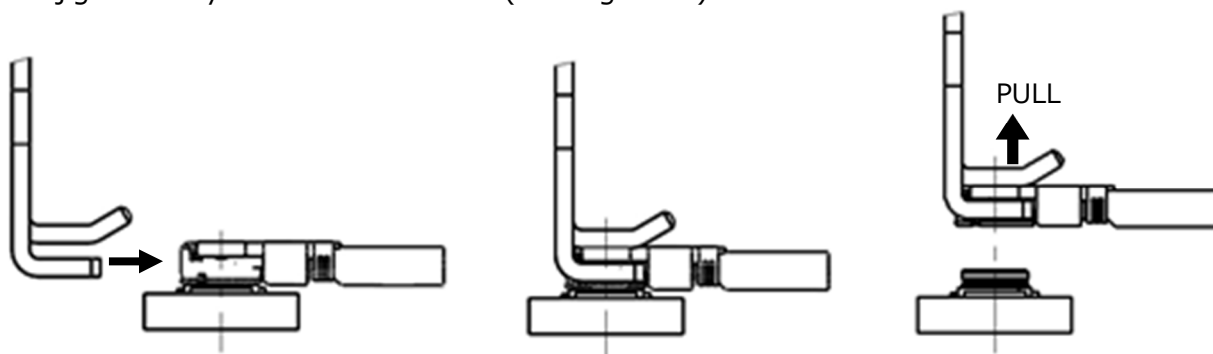
Connector must be lifted up vertically to PCB surface. (See Fig. 10)



(Fig. 10) How to lift up the connector by hand

2. 挿抜 JIG で抜去する場合 (In case of unmating by Pushing & Pulling JIG)

- ① ケーブル引き出し方向から治具を基板と平行にスライドさせてコネクタへセットします。(Fig. 11-a)
Slide the "Pushing & Pulling JIG" from the direction of drawing out of a cable and attach to the cable connector. (See Fig. 11-a)
- ② ストッパーに当たるまで治具をスライドさせプラグコネクタ全体を抱えるようにします。(Fig. 11-b)
The jig must be moved until it reach a stopper just as it hold the cable connector. (See Fig. 11-b)
- ③ 基板と垂直に治具を引き上げ、コネクタを抜去します。(Fig. 11-c)
Lift up the jig vertically to the PCB surface. (See Fig. 11-c)



(Fig. 11-a) Slide the jig

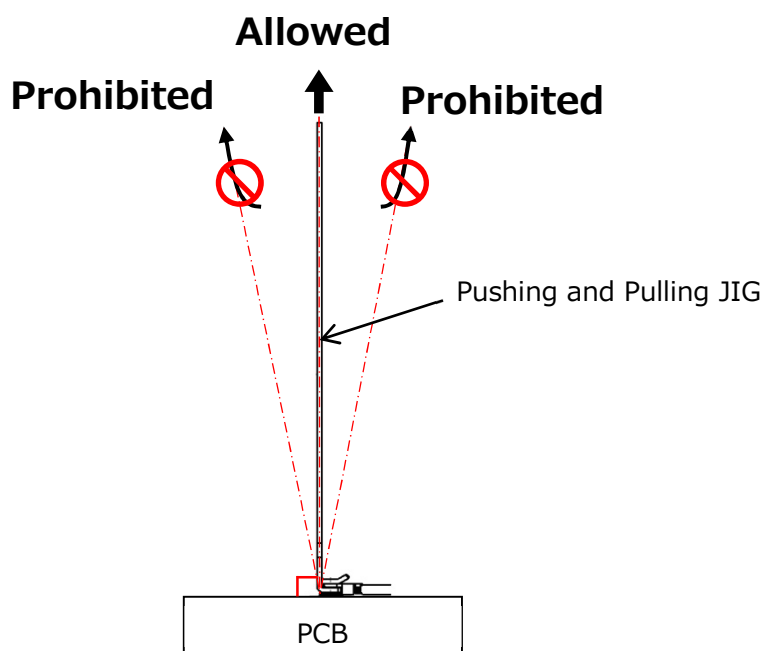
(Fig. 11-b) Hold the cable connector

(Fig. 11-c) Pull the jig

注意事項 CAUTION

治具は必ず基板と垂直に引き上げてください。(Fig. 12)

"Pushing & Pulling JIG" must be lifted up vertically to PCB surface. (See Fig. 12)

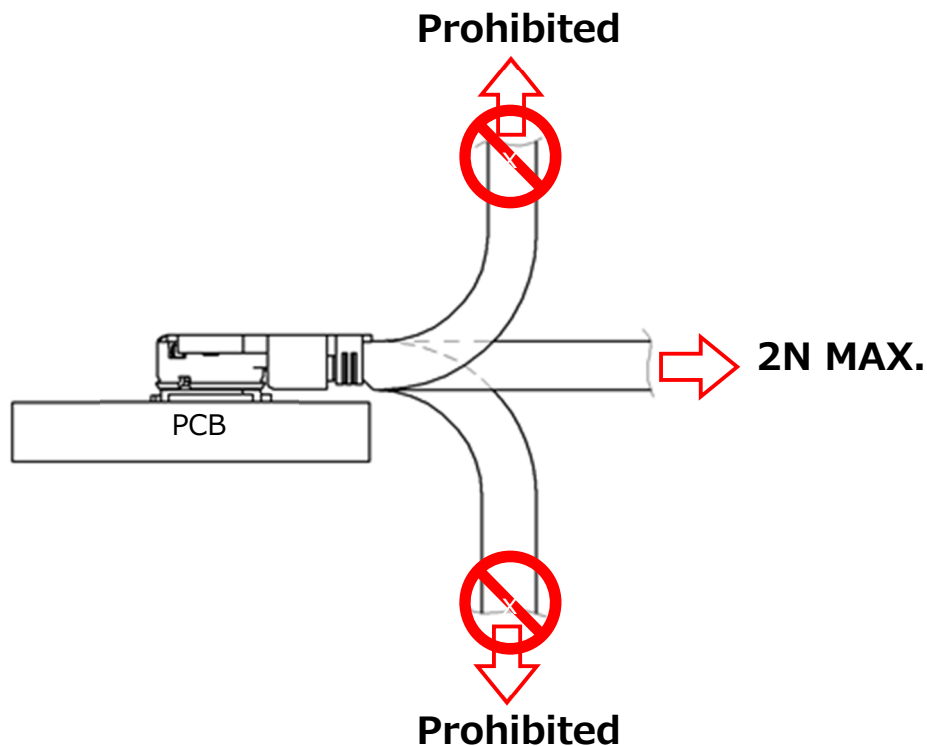


(Fig. 12) How to lift up the connector by Pushing and Pulling JIG

【コネクタ取り扱いの注意】(CAUTION IN CABLE CONNECTOR HANDLING)

Fig. 13 のように、矢印方向に常に力が加わるようなケーブルの引き回しを行うと、嵌合外れやコネクタの破損等の恐れがありますので、ご注意願います。

In the case of Fig. 13, it has possibility to damage to the housing and come off from receptacle connector. Especially when operator give continuous force to the direction(red allow), the tendency become higher. So please take care of handling of harness.



(Fig. 13) Caution in cable connector handling