

Crimping tool

Tools

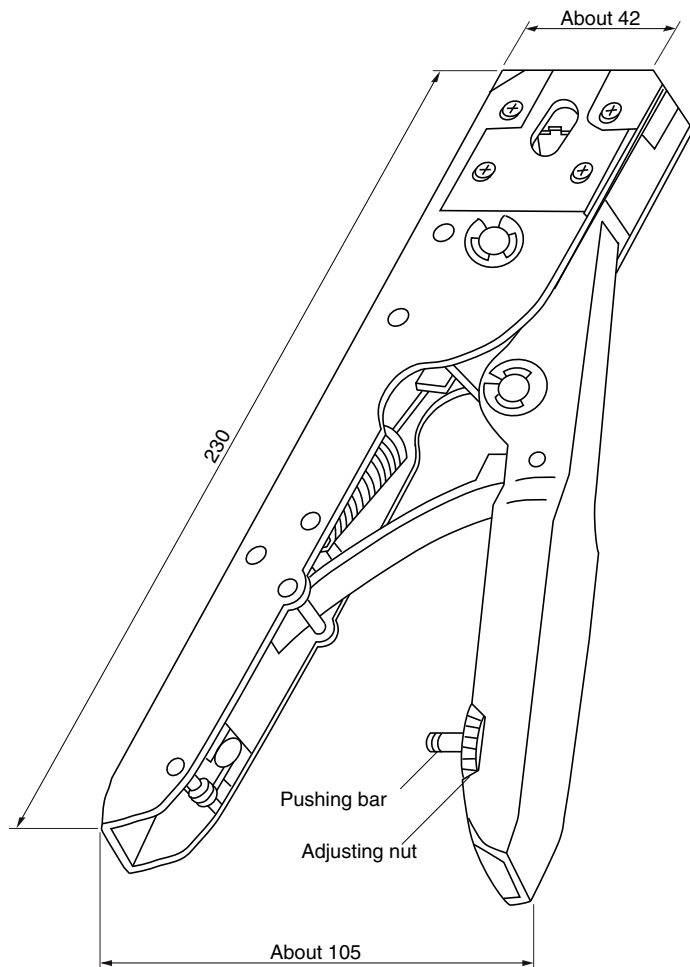
Crimping

This manual describes how to properly handle the crimping tool manufactured by HONDA TSUSHIN KOGYO CO., LTD.

1. Characteristics

1. Compact light-weight crimping tool.
2. The crimping tool is easy to use because the gap between the fully opened handles is small for operator comfort.
3. Eccentric force movement from the handle to the anvil enables anyone to easily crimp wires and terminals.
4. Additional force is not required when the ratchet is released.
5. The attached cable stopper ensures proper crimping.
6. The adjustable crimp height ensures appropriate crimping. (*1)

(*1. The crimp height has been adjusted at the factory. However, it may change due to long-term use. When changed, correct the crimp height by using the pushing bar and adjusting nut. (The longer pushing bar increases the crimp height, and the shorter pushing bar decreases it.)

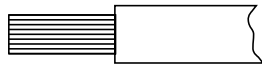


2. Notes on Use

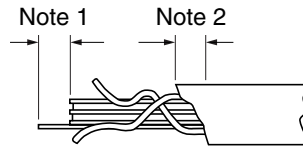
1. Verify that the crimping tool matches the size of the terminal or wire to be crimped before using the tool. (All the tools have similar appearances. However, a tool can only be used for the applicable terminals.)
2. Check the validity of the crimp height after the wire is crimped.
3. Do not remove the screws from the tool and do not disassemble the tool. Otherwise, a failure may occur. (Repair of the tool with any parts manufactured by another company may also cause a failure.)
4. Do not abuse the tool.
5. If you want to use a special wire, please contact a sales person or the Engineering Department.

Tools
Crimping

3. Condition of Stripped Wire



Properly stripped wire



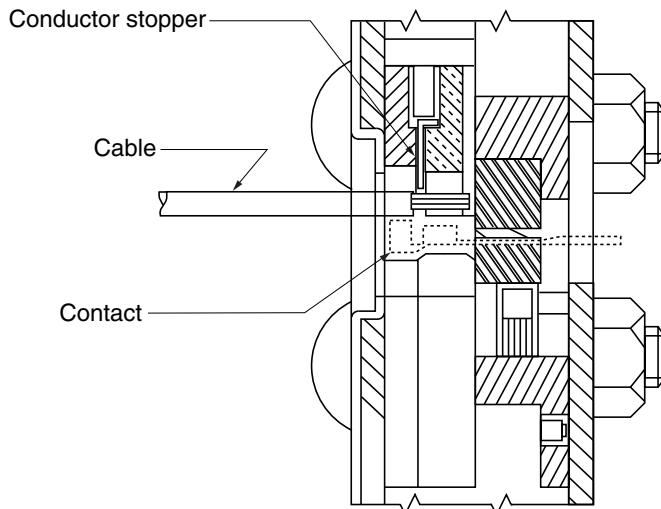
Note1: Do not use wire whose strands are cut or irregular.
 Note2: Do not use wire which is not neatly stripped, strip the wire correctly before using.

4. Use of Manual Crimping Tool

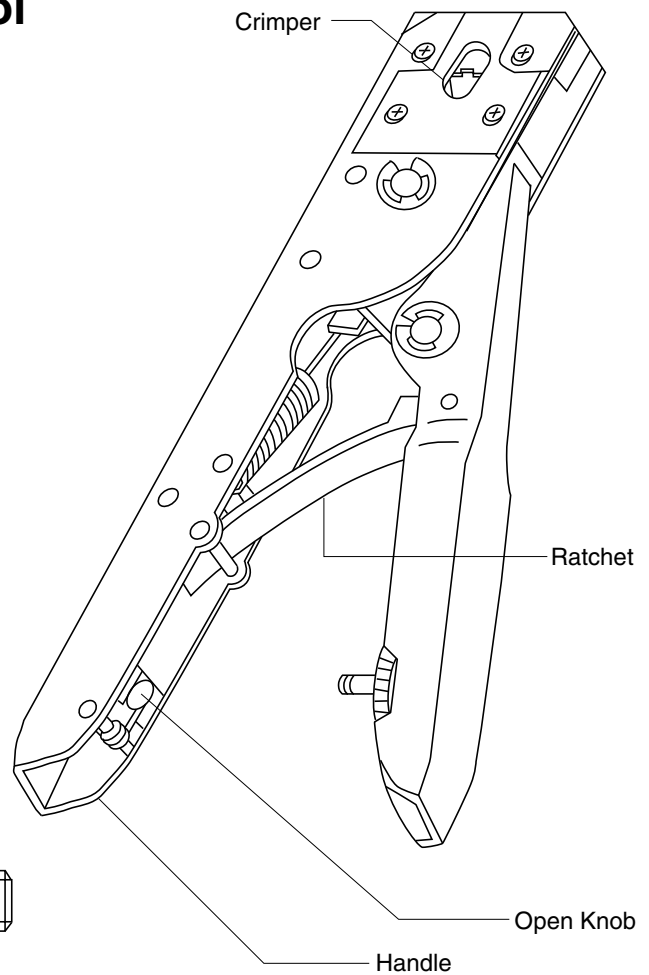
1. Open the handle, then insert a contact into the crimper according to the detailed diagram of the crimper.
2. Close the handle so far as the terminal and barrel are not deformed. Insert the cable to the conductor stopper, then close the handle until the ratchet is released.
3. When reopening the handle, the crimped contact can easily be removed.
4. If the handle is required to be opened during crimping, press the open knob.

Maintenance

1. Regularly lubricate the driving part in order to reduce the abrasion on that part.
 Note: Do not lubricate the crimping part.
2. Remove the excess from wire stripping and scrap metal from the cable stopper. This scrap material may cause operation problems.

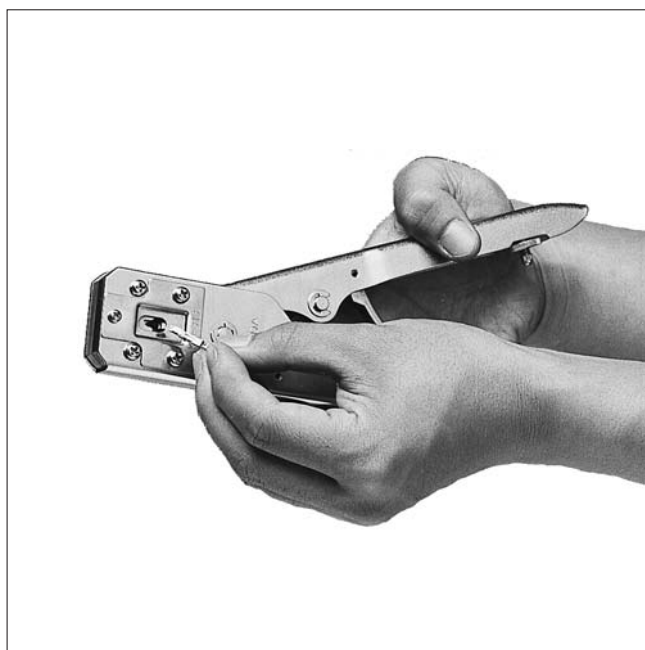


Detailed diagram of crimper

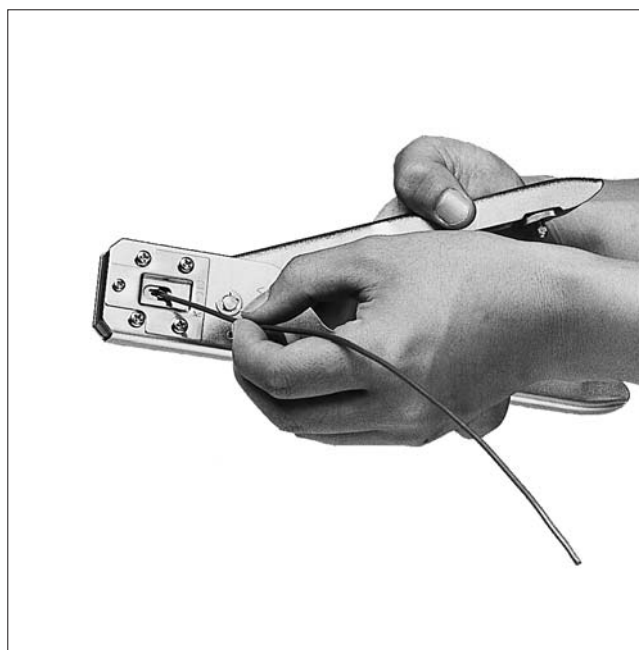


5. Crimping

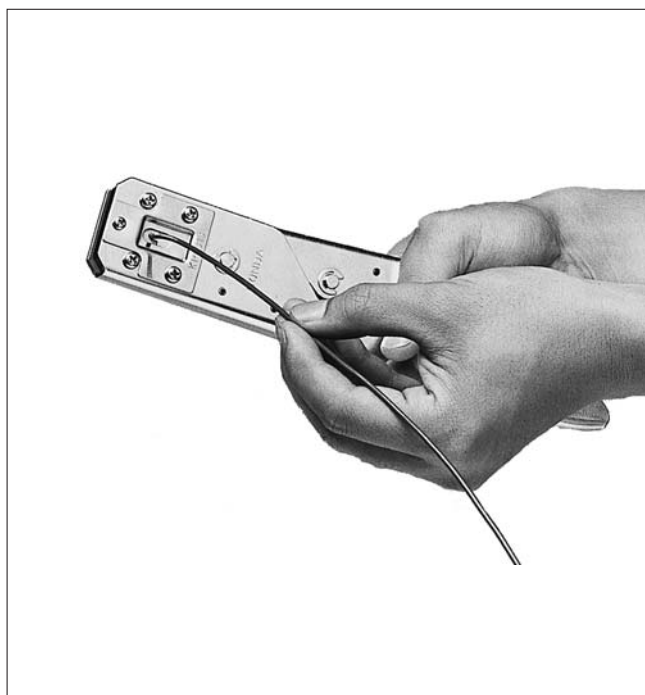
1. Inserting a contact



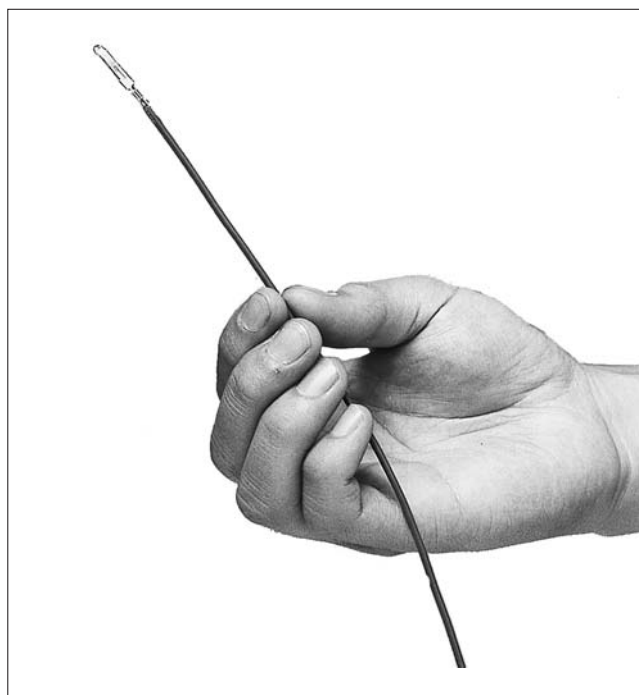
2. Inserting a cable



3. Crimping

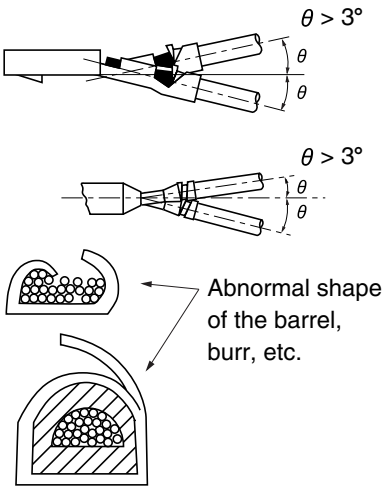
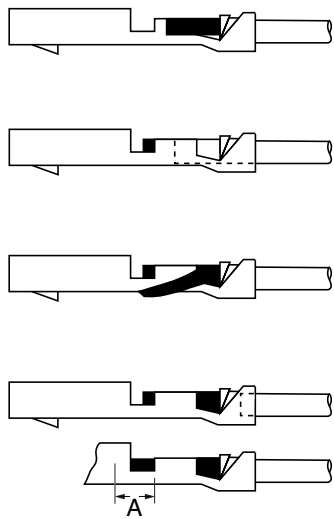


4. Crimped contact



Tools
Crimping

6. Examples of Improper Crimping

Item	Condition	Cause
1. Incorrect crimp height at the wire barrel section	The crimp height measured according to the diagram of crimp height measurement indicates the value outside the standard range.	Abrasion or looseness in the tool (The crimping tool must be properly adjusted.), or use of a non-standard wire.
2. Improper crimping of the insulation	There is a space between the outside diameter of the insulation and barrel, and the wire is not secured in position.	Abrasion or looseness in the tool, or use of a non-standard wire.
3. Deformation on the contact 3.1 Deflection 3.2 Twisting 3.3 Deformation of the barrel	 <p>$\theta > 3^\circ$</p> <p>$\theta > 3^\circ$</p> <p>Abnormal shape of the barrel, burr, etc.</p>	Chip, abrasion or deformation of the knife edge (crimper and anvil)
4. Improper crimping 4.1 Incomplete insertion 4.2 Insertion of covered wire 4.3 Conductor forced out of the wire barrel 4.4 Overstripping	 <p>A</p>	<p>The conductor is not completely inserted into the wire barrel.</p> <p>The length of the stripped wire is shorter than the standard length. Or, the wire covering is digging into the wire barrel because too long a wire has been inserted.</p> <p>The conductor is being forced out of the wire barrel.</p> <p>The covered part of the wire is crimped only on one side because the stripped part is longer than the standard length.</p> <p>The covered part of the wire has the standard length, however, the dimensions A is 1.5mm or more.</p>
5. Dispersion of the crimp heights.	The crimping position of the tool is unstable.	Even if the handle is not completely closed the ratchet releases because of abrasion and deformation.
6. Abnormal state of the crimping tool.	The ratchet cannot be released even if the handle is completely closed.	The ratchet is deformed or several springs are broken.

Note: When the above improper crimping occurs, contact a sales person or the Engineering Department.

IDC tool
LPC series, HKP series

Tools
IDC

Series name		LPC series			HKP series
Name of crimping tool		KP-339S	KP-339N	KP-339L	KP-309
Part number		LPC-F113S-50R LPC-F113S-500R LPC-F114S-50R LPC-F114S-500R	LPC-F113N-50R LPC-F113N-500R LPC-F114N-50R LPC-F114N-500R	LPC-F113L-50R LPC-F113L-500R LPC-F114L-50R LPC-F114L-500R	HKP-F113 HKP-F413
For use with wire size		AWG #32	AWG #28 ∩ AWG #32	AWG #22 ∩ AWG #26	AWG #24 ∩ AWG #28
Max outside diameter		ø0.6	ø1.0	ø1.1	ø1.5
Extraction tool		LPC-RF			HKP-KF
Strip length		1.8 ^{±0.2}			4.0 ^{±0.3}
Tensile strength		#32 4.4N MIN.	#32 4.4N MIN. #30 4.9N MIN. #28 12.7N MIN.	#26 21.6N MIN. #24 35.3N MIN. #22 52.9N MIN.	#24 35.3N MIN. #26 21.6N MIN. #28 12.7N MIN.
Crimp height	AWG #14				
	AWG #16				
	AWG #18				
	AWG #20				
	AWG #22			0.79mm ∩ 0.83mm	
	AWG #24			0.77mm ∩ 0.81mm	0.76mm ∩ 0.82mm
	AWG #26			0.75mm ∩ 0.79mm	0.74mm ∩ 0.80mm
	AWG #28		0.61mm ∩ 0.65mm		0.71mm ∩ 0.77mm
	AWG #30		0.58mm ∩ 0.62mm		
	AWG #32	0.56mm ∩ 0.60mm	0.56mm ∩ 0.60mm		

IDC tool
HKP series, MRP series

Tools
IDC

Series name	HKP series (Thin cable)	Mini HKP series	Mini HKP series (Thin cable)	MRP series	
Name of crimping tool	KP-309D	KP-325	KP-325D	KP-308	
Part number	HKP-F213A HKP-F313A	HKP-F513B HKP-F613B	HKP-F713B	MRP-F112 MRP-F113	MRP-M112 MRP-M113
For use with wire size	AWG #28 ∩ AWG #32	AWG #24 ∩ AWG #28	AWG #28 ∩ AWG #32	AWG#24 ∩ AWG#28	
Max outside diameter	∅0.8	∅1.5	∅0.8	∅1.5	
Extraction tool	HKP-KF	HKP-RF		MRP-MF	
Strip length	4.0 ^{±0.3}	4.5 ^{±0.3}		3.7 ^{±0.3}	
Tensile strength	#28 12.7N MIN. #30 5.9N MIN. #32 4.4N MIN.	#24 35.3N MIN. #26 21.6N MIN. #28 12.7N MIN.	#28 12.7N MIN. #30 5.9N MIN. #32 4.4N MIN.	#24 35.3N MIN. #26 21.6N MIN. #28 12.7N MIN.	
Crimp height	AWG #14				
	AWG #16				
	AWG #18				
	AWG #20				
	AWG #22				
	AWG #24		0.81mm ∩ 0.87mm		0.85mm ∩ 0.91mm
	AWG #26		0.77mm ∩ 0.83mm		0.81mm ∩ 0.87mm
	AWG #28	0.67mm ∩ 0.72mm	0.74mm ∩ 0.80mm	0.68mm ∩ 0.74mm	0.78mm ∩ 0.84mm
	AWG #30	0.65mm ∩ 0.69mm		0.66mm ∩ 0.72mm	
	AWG #32	0.63mm ∩ 0.67mm		0.64mm ∩ 0.70mm	

**IDC tool
PCL series**

Tools
IDC

Series name		PCL series			
Name of crimping tool		KP-PCL-346MEN	KP-PCL-346FAN	KP-PCL-346FBN	KP-PCL-346FCN
Part number		PCL-A-M313 PCL-A-M313A	PCL-A-F413	PCL-A-F413	PCL-A-F413
For use with wire size		AWG#24 ∩ AWG#26	AWG#18	AWG#16	AWG#14
Max outside diameter		∅1.22 ^{±0.1} ~∅1.45 ^{±0.1}	∅3.7		
Extraction tool		PCL-AM1	AMQ-RT2		
Strip length		3.7	5.0		
Tensile strength		#26 21.6N MIN. #24 35.3N MIN.	#18 110.7N MIN.	#16 133.3N MIN.	#14 155.8N MIN.
Crimp height	AWG #14				1.65mm ∩ 1.75mm
	AWG #16			1.45mm ∩ 1.55mm	
	AWG #18		1.31mm ∩ 1.41mm		
	AWG #20				
	AWG #22				
	AWG #24	0.85mm ∩ 0.91mm			
	AWG #26	0.81mm ∩ 0.87mm			
	AWG #28				
	AWG #30				
	AWG #32				

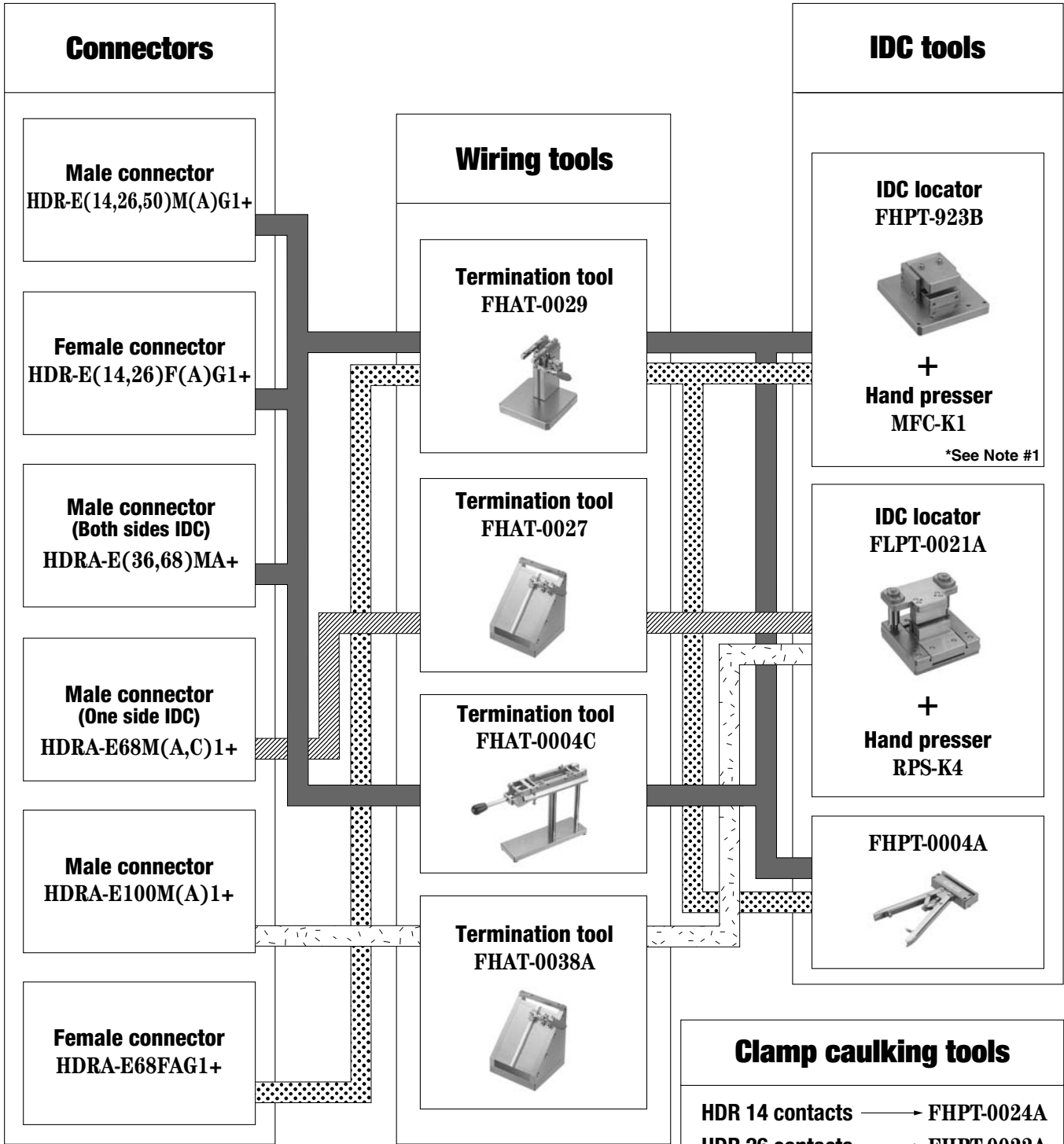
**IDC tool
PCL series**

Tools
IDC

Series name		PCL series			
Name of crimping tool		KP-PCL-346MAN	KP-PCL-346MBN	KP-PCL-346MCN	KP-PCL-346MDN
Part number		PCL-A-M413	PCL-A-M413A	PCL-A-M413B	PCL-A-M313 PCL-A-M313A
For use with wire size		AWG#18	AWG#16	AWG#14	AWG#26 ∩ AWG#28
Max outside diameter		ø3.7			ø1.22 ^{±0.1} ~ø1.45 ^{±0.1}
Extraction tool		PCL-AM1			
Strip length		5.0			3.7
Tensile strength		#18 110.7N MIN.	#16 133.3N MIN.	#14 155.8N MIN.	#28 12.7N MIN. #26 21.6N MIN.
Crimp height	AWG #14			1.65mm ∩ 1.75mm	
	AWG #16		1.45mm ∩ 1.55mm		
	AWG #18	1.31mm ∩ 1.41mm			
	AWG #20				
	AWG #22				
	AWG #24				
	AWG #26				0.81mm ∩ 0.87mm
	AWG #28				0.75mm ∩ 0.79mm
	AWG #30				
	AWG #32				

IDC tool
HDR series, HDRA series

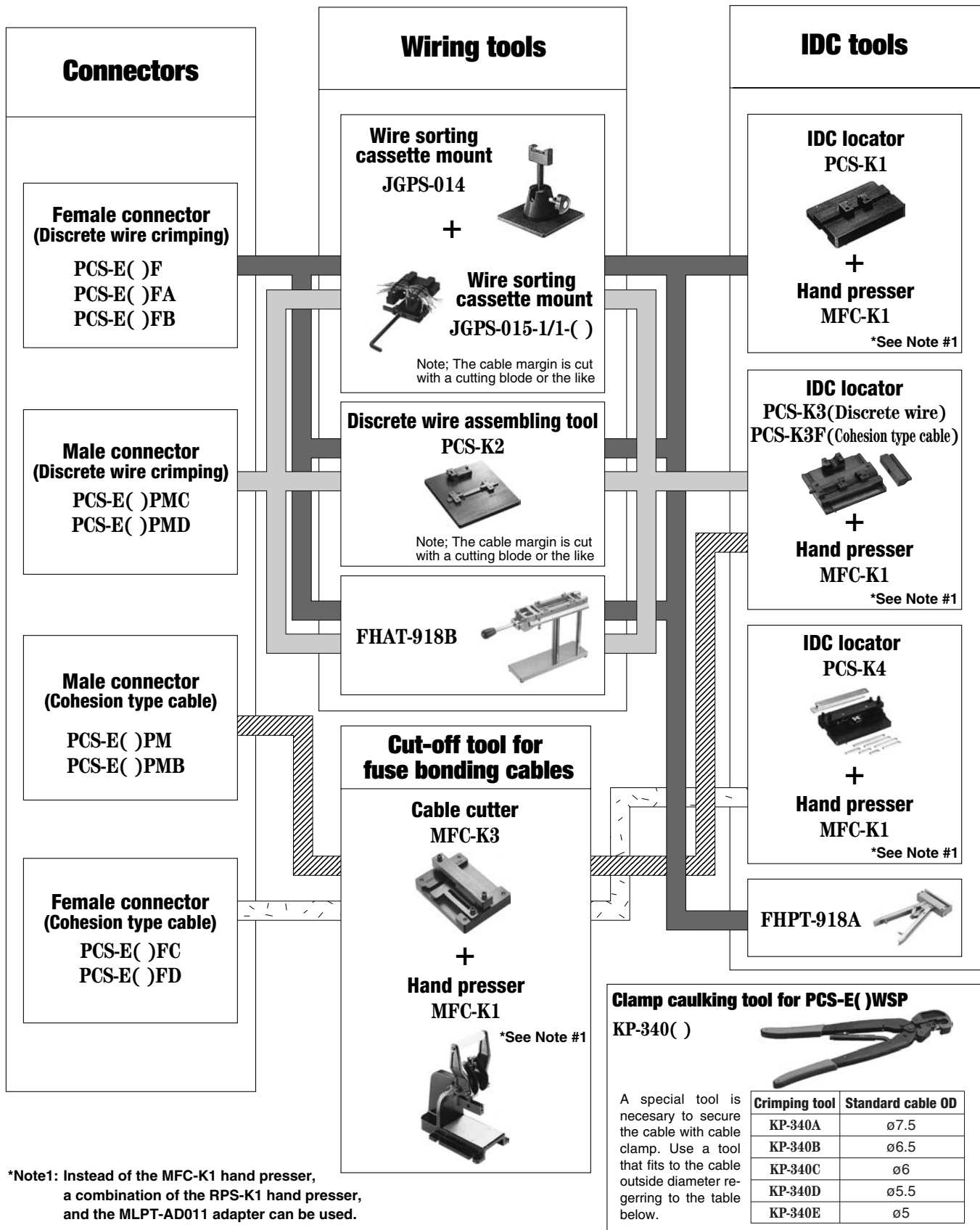
Tools
IDC



*Note1: Instead of the MFC-K1 hand presser, a combination of the RPS-K1 hand presser, and the MLPT-AD011 adapter can be used.

**IDC tool
PCS series**

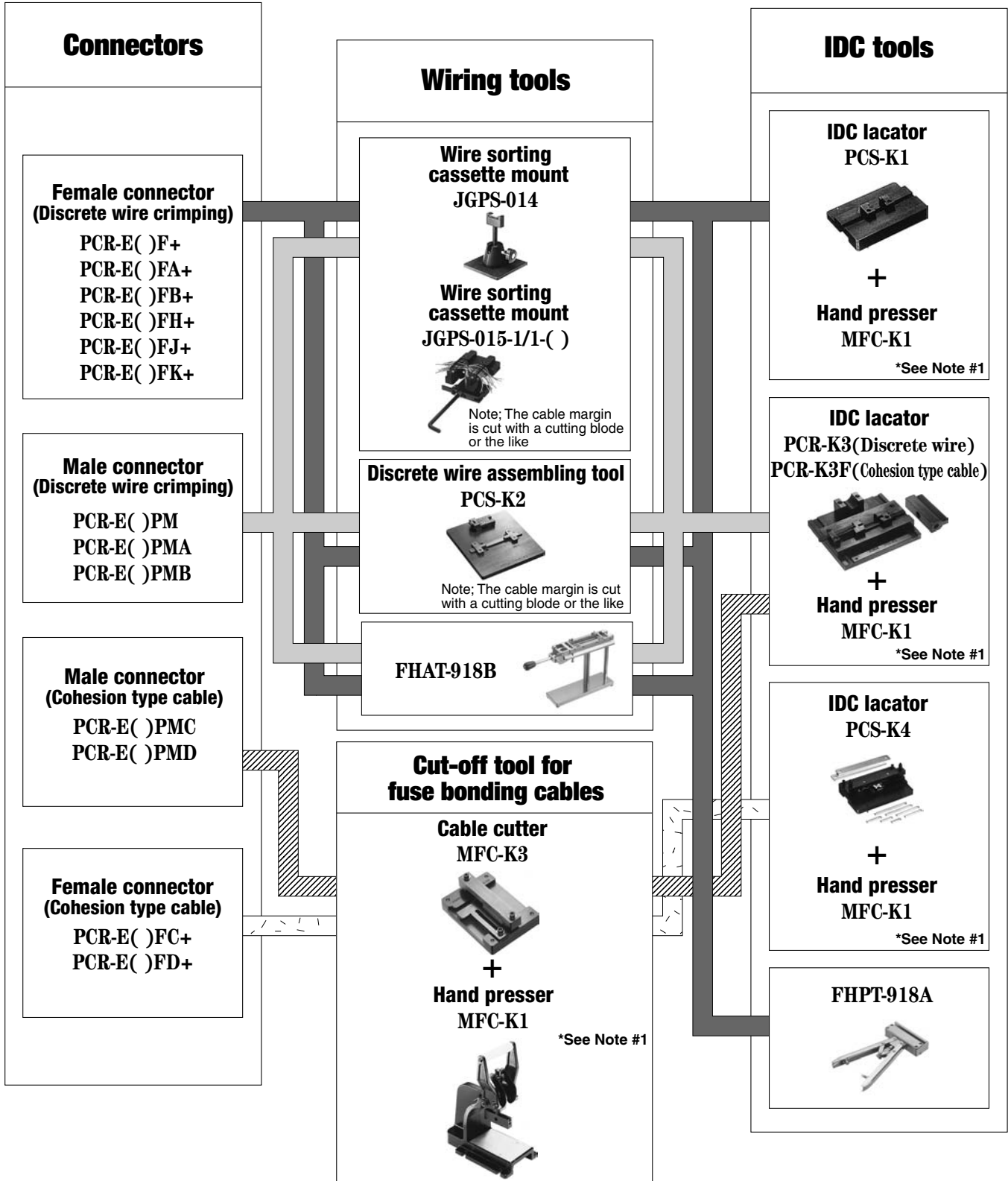
Tools
IDC



*Note1: Instead of the MFC-K1 hand presser, a combination of the RPS-K1 hand presser, and the MLPT-AD011 adapter can be used.

**IDC tool
PCR series**

Tools
IDC



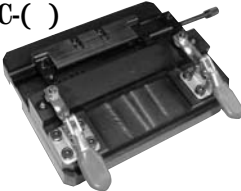
*Note1: Instead of the MFC-K1 hand presser, a combination of the RPS-K1 hand presser, and the MLPT-AD011 adapter can be used.

Tools
IDC

● For 1.27mm pitch flat cable

Cable side socket connector RPS-()FK+

**IDC lacator
FLPT-0003C-()**



**+ Hand presser
MFC-K1**

**See Note #1*


Part No.	Content
FLPT-0003C-()	Locator
	Pressure block
	Dummy key
FLPT-0003C-R	Locator
RPS-K1-()	Dummy key
FLPT-0003C-P	Pressure block

● For 0.635mm pitch flat cable

with Cable relief
Cable side
Through type
Socket connector
RPS-D()RF()+

Cable side
Through type
Socket connector
RPS-D()F()+

**IDC lacator
FLPT-0001A**



**+ Hand presser
RPS-K4**

Part No.	Content
FLPT-0001A	Locator
	Guide
	Pressure block
FLPT-0001ARP	Locator, Pressure block
FLPT-0001AR	Locator
FLPT-0001AG	Guide
FLPT-0001A-()	Pressure block

with Cable relief
Cable side
Close end type
Socket connector
RPS-D()RFC()+

Cable side
Close end type
Socket connector
RPS-D()FC()+

**IDC lacator
FLPT-0002A**



**+ Hand presser
RPS-K4**

Part No.	Content
FLPT-0002A	Locator
	Guide
	Pressure block
FLPT-0002ARP	Locator, Pressure block
FLPT-0002AR	Locator
FLPT-0002AG	Guide
FLPT-0002A-()	Pressure block

***Note1:** Instead of the MFC-K1 hand presser, a combination of the RPS-K1 hand presser, and the MLPT-AD011 adapter can be used.

**IDC tool
LPC-B series**

Tools

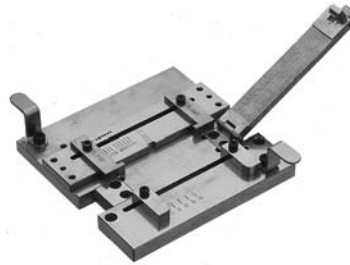
IDC

Female connector (Flat Cable)

LPC-B()FA()
LPC-B()RFA()

Pressure block
LPC-K3

IDC locator
LPC-K1



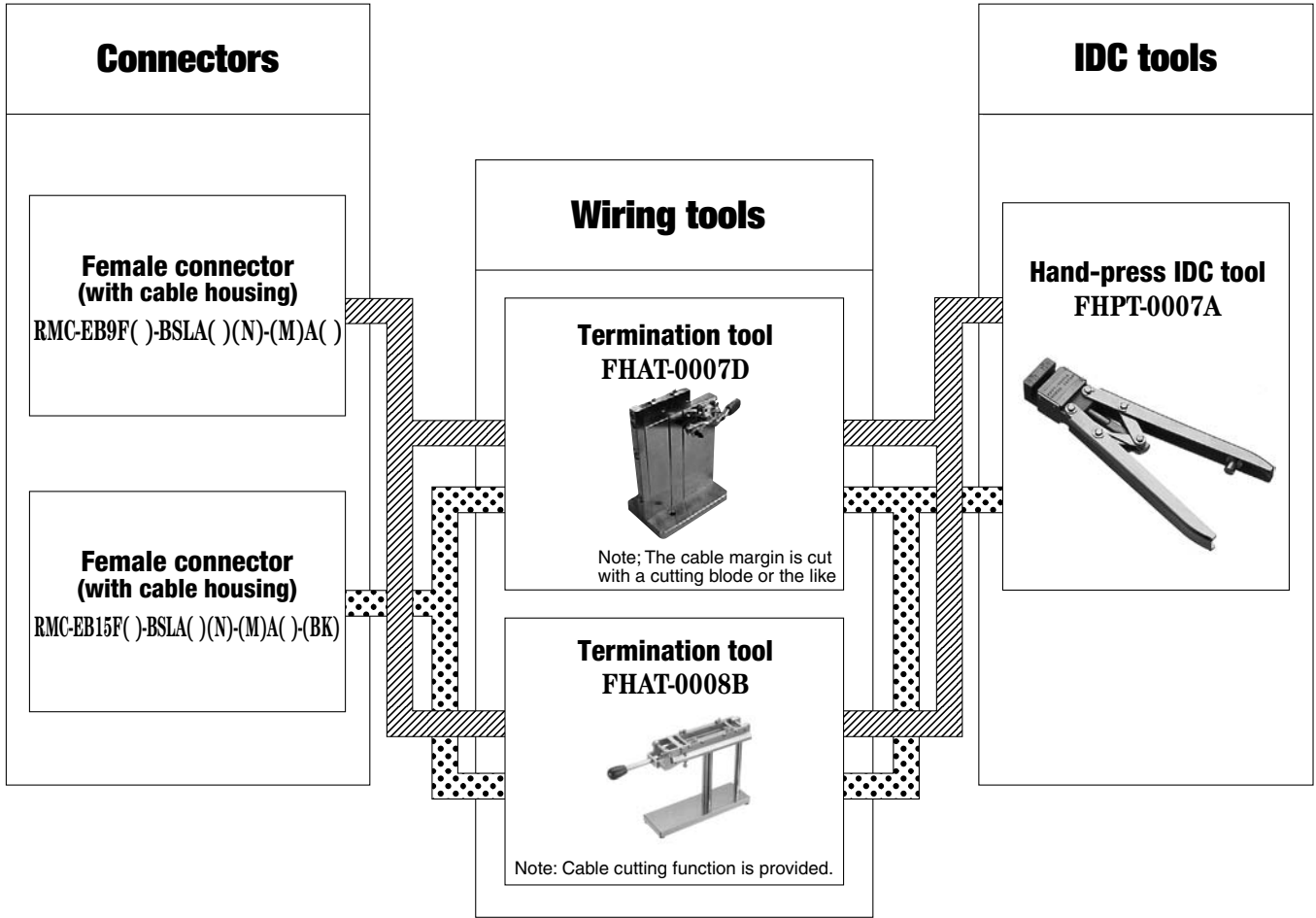
Hand presser
RPS-K4




Base plate
MLPT-0013A-LPC

IDC tool
RMC series

Tools
IDC

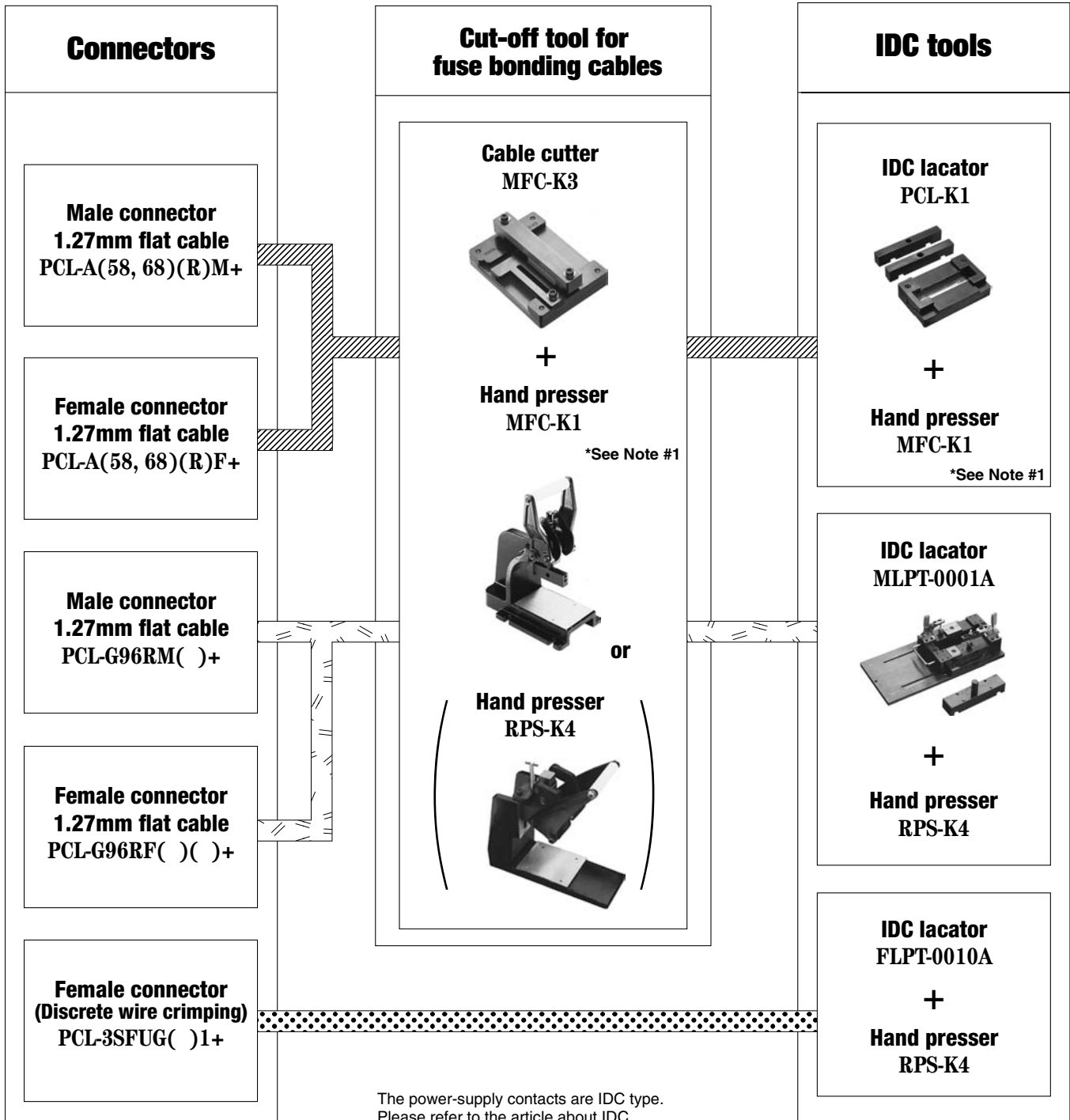


Clamp caulking tools

RMC 9 contacts	→	FHPT-0006B-A	
RMC 15 contacts	→	FHPT-0001C-B	

IDC tool
PCL series

Tools
IDC



*Note1: Instead of the MFC-K1 hand presser, a combination of the RPS-K1 hand presser, and the MLPT-AD011 adapter can be used.