

## INTRODUCTION

Thank you for purchasing a manual crimping tool FD13-TB2630HC for DF13-2630SCF terminals.

This tool is used to crimp DF13-2630SCF terminals.

Please read this manual to fully understand and to use the tool properly.

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## NOTES

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- (1) Do not reprint any part of the manual without permission.
- (2) The descriptions in the manual are subject to change without prior notice.
- (3) The manual has been produced with extra precautions. In case of finding any doubt, error or omission in the manual, please contact us.
- (4) Hirose shall have no liability for any damage or loss of any kind due to the operation of this product regardless of Item (3) above.
- (5) Hirose shall have no liability for any damage of any kind due to causes that the product was inappropriately used, was used without conforming to the manual, or was repaired or modified by a third party other than Hirose.
- (6) Hirose shall not maintain or repair this product overseas.

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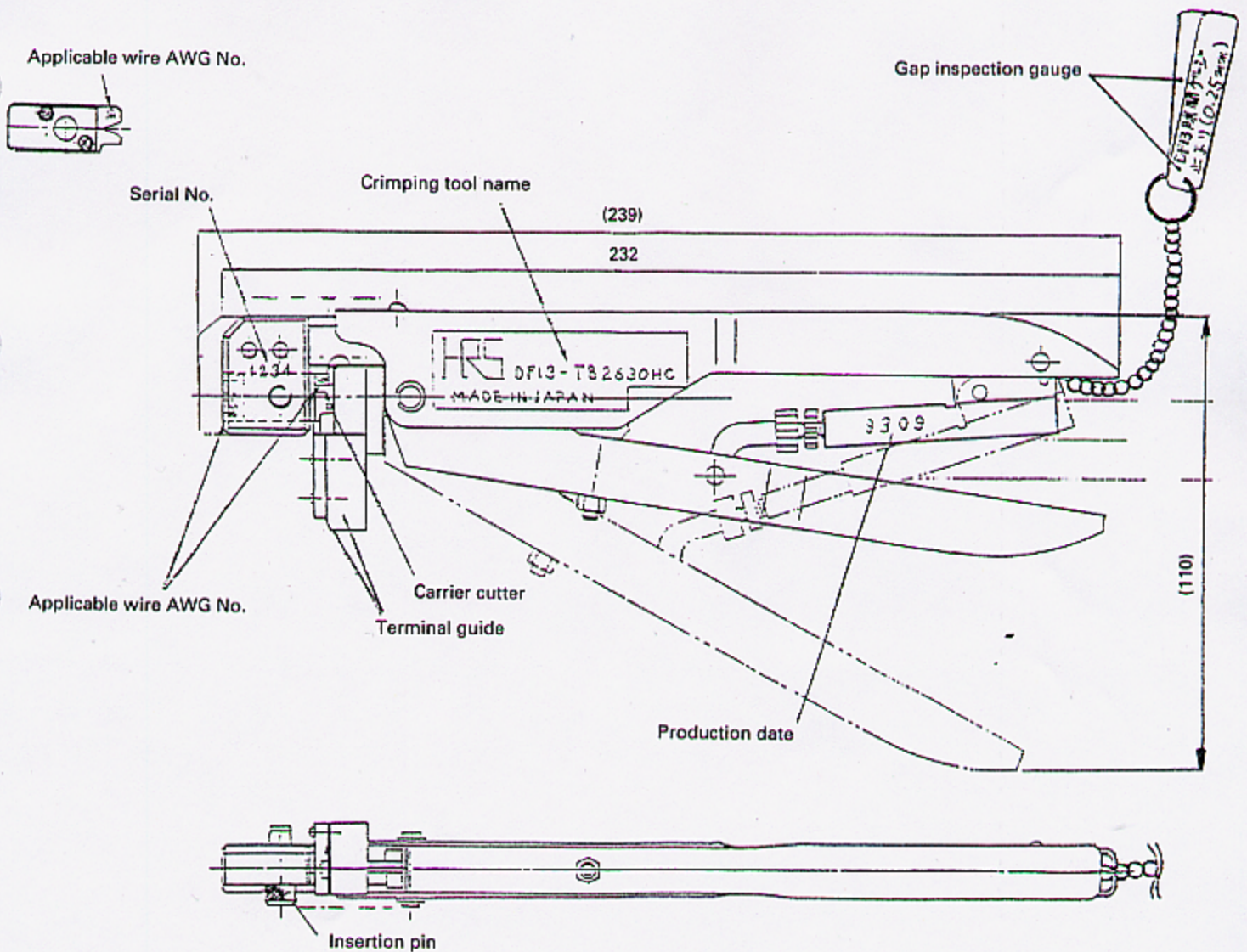
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## Chapter 1 Specifications and Structure

### 1-1 Applicable terminals and cables

Applicable terminal	Applicable cable			
	UL STYLE No.	AWG No.	Conductor structure	Covered outer diameter
DF13-2630SDCF	1571	26	7 wires/ $\phi$ 0.16	$\phi$ 1.0
		28	7 wires/ $\phi$ 0.127	$\phi$ 0.9
		30	7 wires/ $\phi$ 0.1	$\phi$ 0.7

### 1-2 Tool shape and names of parts Supplied item (Crimper for applicable wire AWG30)

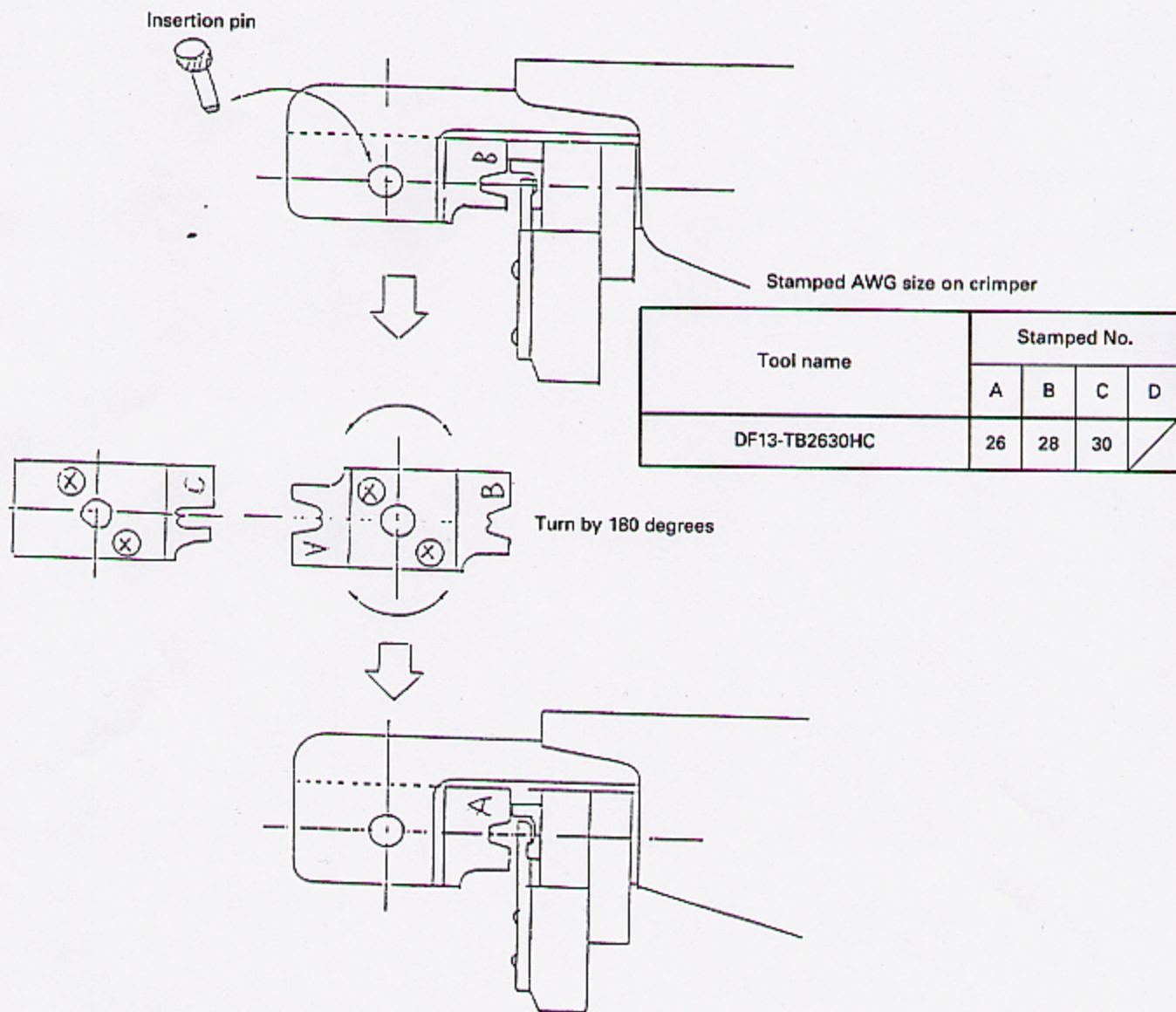


### 1-3 Matching of crimper and cable size

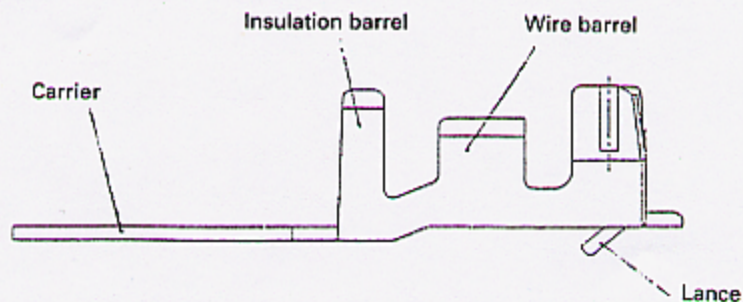
This tool is provided with three types of crimpers which are changed in accordance with a cable size (anvil is commonly used).

How to change:

- ① Remove the insertion pin which is used to fix the crimper at the head of the crimping tool.
- ② Position the crimper, so the stamped AWG size No. of the used cable is visible, and insert the insertion pin.



### 1-4 Terminal shape and names of parts

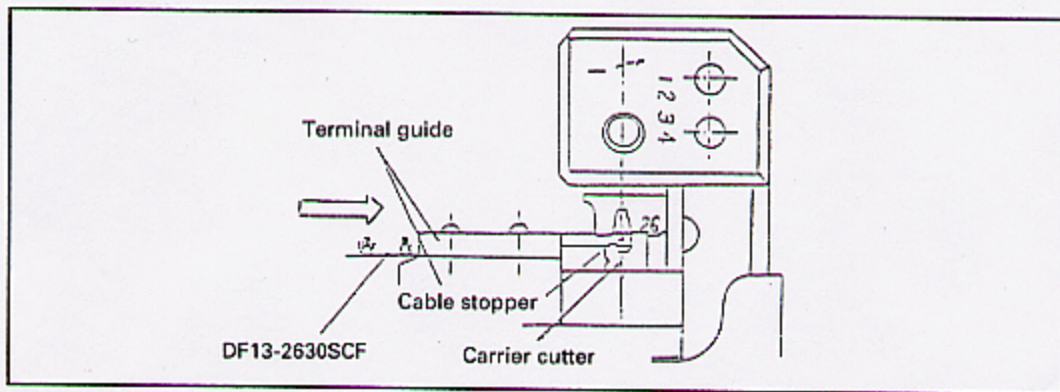


## Chapter 2 Operation Procedures

### 2-1 Operation procedures

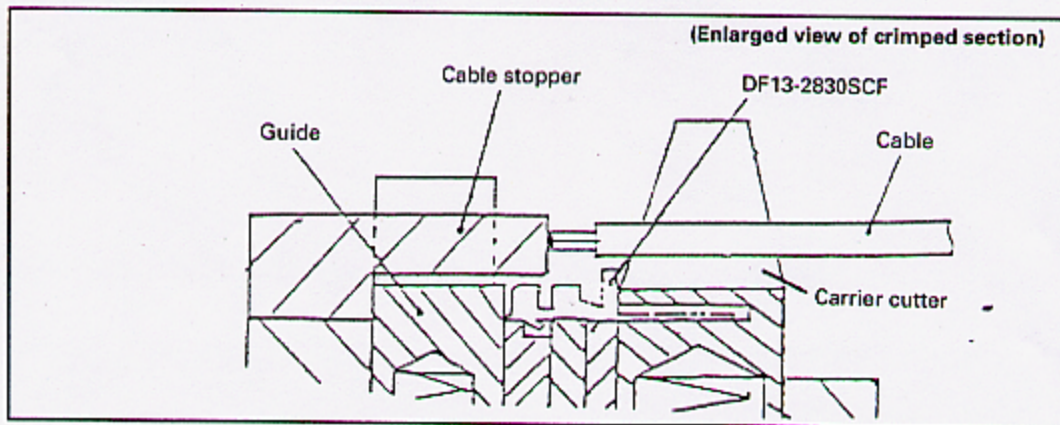
- ① Hold the tool with its HRS mark side upside.
- ② Release the ratchet and fully open the handle. (The ratchet is released when the handle is fully squeezed.)
- ③ Cut the terminal to a length of about 10 cm from the reel, and pass through the terminal guide of the tool.

Note: Do not use a deformed terminal because it does not pass through. When passed through, you will feel a tactile feedback, which indicates the crimped position that the terminal is positioned on the anvil.



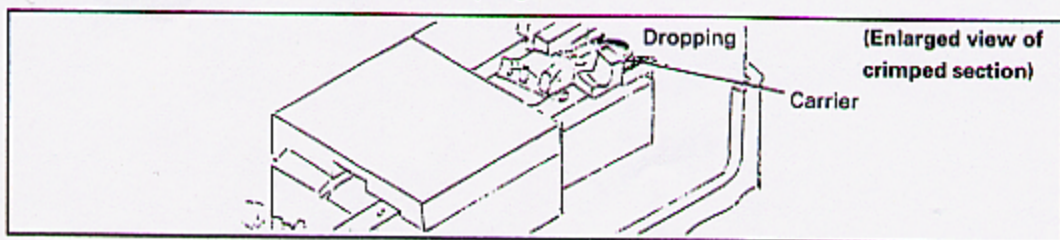
- ④ Push the cable with its cover removed to a given length as far as to contact the cable stopper with attention paid not to untwist the conductors. (For the cable end treating size, refer to Item J of Crimping quality standard on pages 5 and 6.)

Note: Do not push the terminal directly with the cable because a crimping failure may take place.  
(Enlarged view of crimped section)



- ⑤ Squeeze the handle to release the ratchet.

Note: Crimping is done and the carrier is cut at the same time. Pay attention to the cut carrier so that it does not enter the tool. Use of the tool with a foreign matter such as the carrier in it may break the tool or cause a crimping failure.



⑥ Open the handle.

⑦ Hold the cable to remove the crimped terminal from the holder.

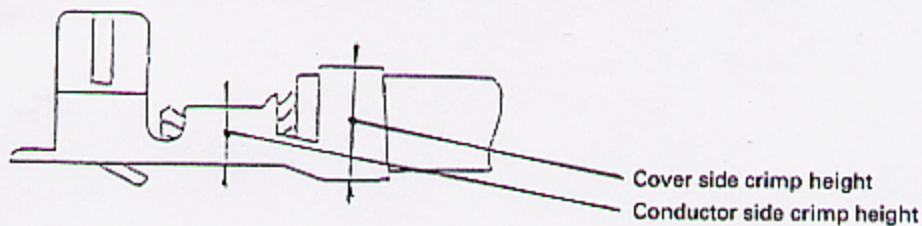
Note: Pay attention not to hit the terminal against the cable stopper to prevent the terminal from being deformed.

⑧ Check that crimping was done properly. (See Crimping conditions and Crimping quality standard on pages 5 and 6.)

## 2-2 Crimping conditions

Check the terminal crimped with the tool that its crimp height and tensile strength meet the following specifications.

Applicable wire				Conductor side crimp height	Cover side crimp height	Tensile strength
UL No.	AWG No.	Conductor structure	Covered outer diameter			
1571	26	7/0.16	φ 1.0	0.55-0.59	1.20-1.40	20N or more
	28	7/0.127	φ 0.9	0.51-0.56	1.20-1.40	10N or more
	30	7/0.1	φ 1.0	0.48-0.53	1.00-1.20	6N or more



## 2-3 Crimping quality standard

Check that the shape of the terminal crimped with the tool meets the following specifications.

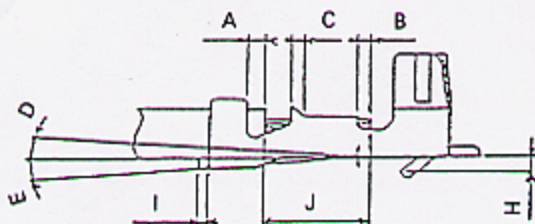


Fig. 1

Cross section of crimped part

Cross section of covered part

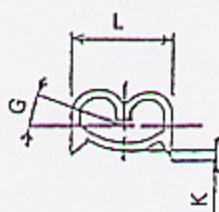


Fig. 3



Fig. 4

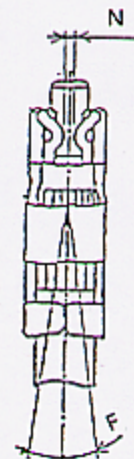
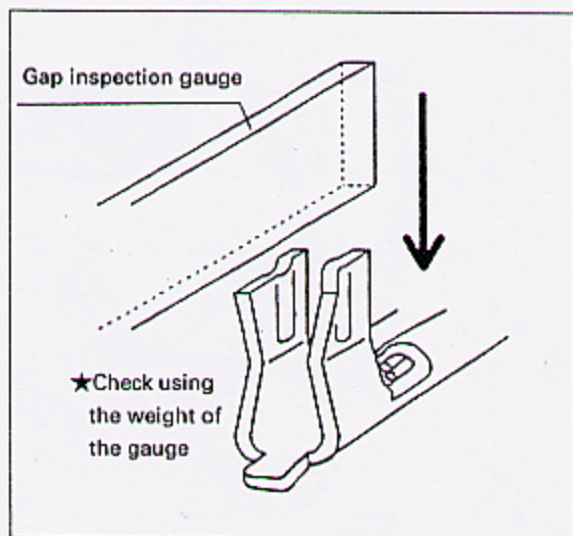


Fig. 2

Item	Position	Size (mm)	Remarks	
Covered position	A	0.1~0.5	Fig. 1	
Conductor tip position	B	0.2~0.5		
Bell-mouth	C	0.1~0.2		
Vent-up	D	2 degrees or below		
Vent-down	E	2 degrees or below		
Twist	F	± 2 degrees or below	Fig. 2	
Rolling	G	± 5 degrees or below	Fig. 3	
Lance height	H	0.15~0.20	Fig. 1	
Cut-off tub	I	0.1 or below		
Strip length	J	1.2~1.9		
Crimped burr height	K	0.1 or below	Fig. 3	
Width	Conductor part	L	0.91~0.96	Fig. 3
	Covered part	M	0.92~1.02	Fig. 4
Gap size	N	0.12~0.25	Fig. 2	

Note : Perform a gap inspection with the crimping tool and attached " **Pass** **Stop** " type thickness gauge for inspecting the gap of DF13". Inspection method is as follows:



**Pass Gauge** (Thickness.....0.11mm)

This gauge is used to inspect whether the gap is too narrow.

If the gauge passes through.....the test result is a **pass**.

If the gauge doesn't pass through... the test result is a **failure**.

**Stop Gauge** (Thickness.....0.25mm)

This gauge is used to inspect whether the gap is too wide.

If the gauge stops.....the test result is a **pass**.

If the gauge doesn't stop.....the test result is a **failure**.

1) Note 1. Conduct a pass/stop check using the weight of the gauge. Adding more force than necessary may have the effect of ruining the contact gap.

2) Note 2. In Case of a Failure.

If a failure occurs, it is possible that there may be an adjustment deficiency of the crimping tool and so the tool should be adjusted again.

Please contact us if there are any unclear points.

## 2-4 Notes in use

### (1) Notes in using the tool

- ① Avoid a shock to the tool by hitting it or dropping from a high position.
- ② Do not crimp any terminal or cable other than the applicable terminals and cables specified in the manual.
- ③ The handle can not be opened until the ratchet is released. Do not open the handle with force to avoid its failure.
- ④ If the tool fails, do not disassemble it and contact us with the description of the failure indicated.

## **Chapter 3 Maintenance and Inspection**

### 3-1 Daily maintenance

- ① Following the completion of the work, clean dirt and foreign substances with soft cloth, close the handle to prevent any foreign substance from entering the crimper or anvil, and keep in a dry place.
- ② When opening or closing the handle, check that the anvil slides smoothly without any gall.