How to Crimp Wire Bullet Terminals

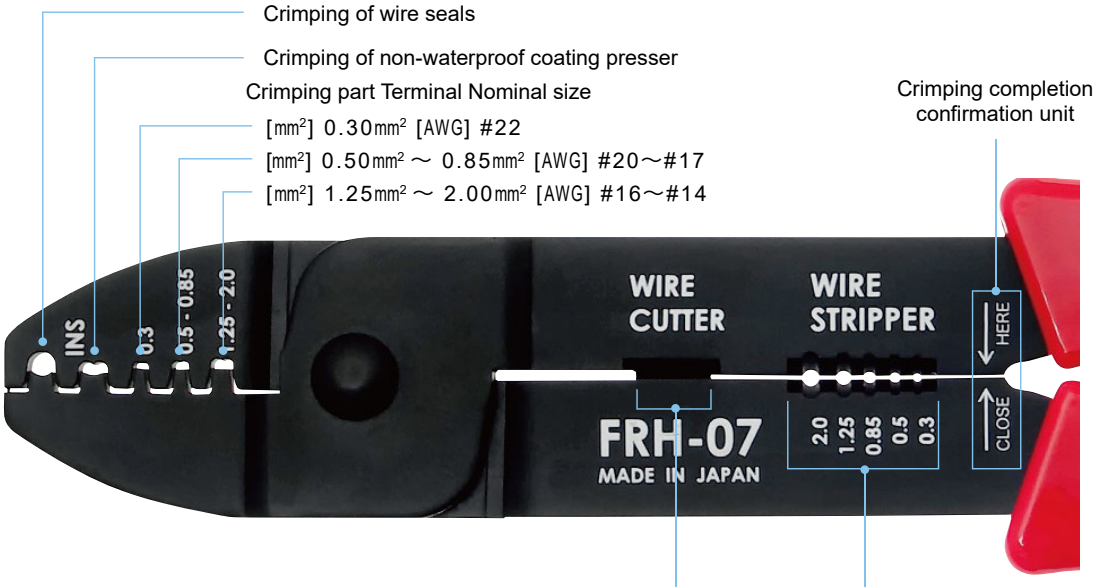
How to Crimp Wire Bullet Terminals in an Easy-to-Understand Way

In the past, wire bullet terminals and crimping tools were for professional use, but nowadays they are increasingly being used by the general public.
Crimping a wire bullet terminal requires proper knowledge and skills.
Incomplete crimping can lead to poor contact and broken wires.
That's why Hero Electric has prepared this manual with the concept of "making it easy for anyone to understand".
This time, the male bullet terminal (Part No. B-1) is used as an example.

Step 1 Preparing the product

There are two types of Hero Electric crimping tools that can crimp bullet terminals: FRH-07 and B-14.
The FRH-07 is used here.

FRH-07



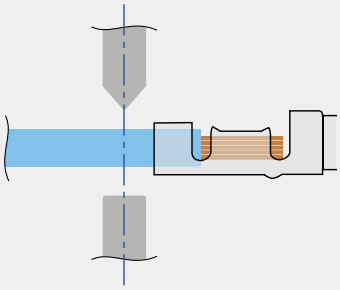
- Crimping range: [mm²] 0.30mm²～2.00mm² [AWG] #22～#14
- Weight: 0.25kg
- Overall: 235mm

Step 2

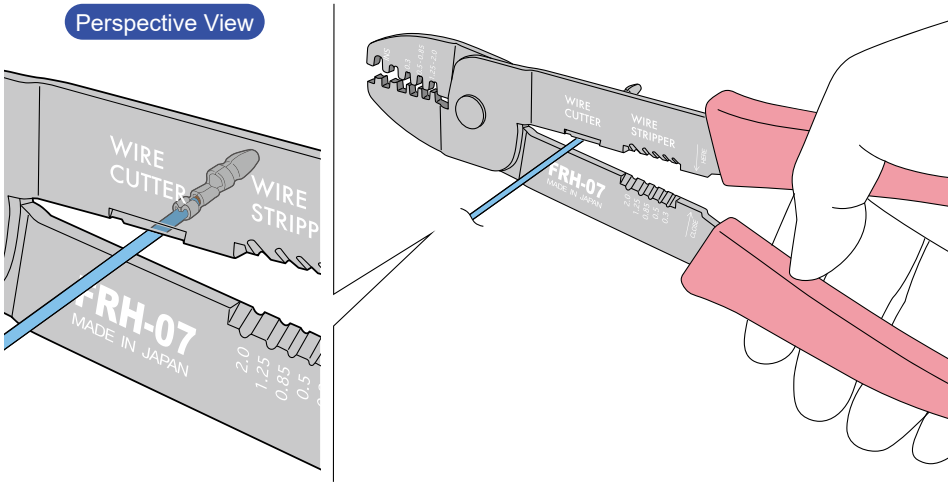
Cutting wire when old terminal is still attached

The crimping tool is equipped with a cutter to cut the wire, so you can work without nippers or other tools.

Cross-Sectional view



Perspective View

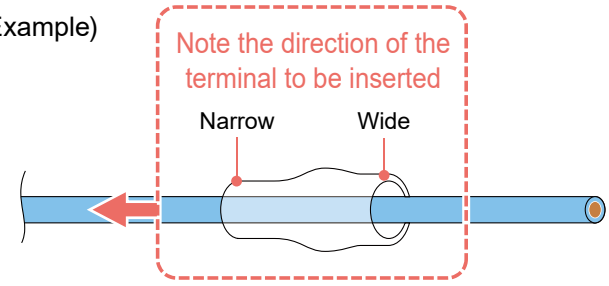


Step 3

Pass the insulation sleeve through the electric wire.

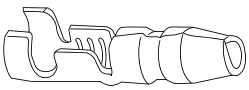
If the terminal is attached first, the sleeve will not be able to pass through, so the insulation sleeve should be passed through first. (In this manual, the male terminal is crimped at first, but you may crimp the female terminal first.)

(Example)



insulation sleeve for male bullet terminal
(Part No. B-3)

Mounting Side of
Wire Bullet Terminal



Male bullet terminal
(Part No. B-1)

[Note] When crimping the terminal, the male bullet terminal will be exposed, and it should be used for negative side. If it is used for the positive side, it may cause a short circuit.

Male terminal is exposed

Negative

Female terminal is protected

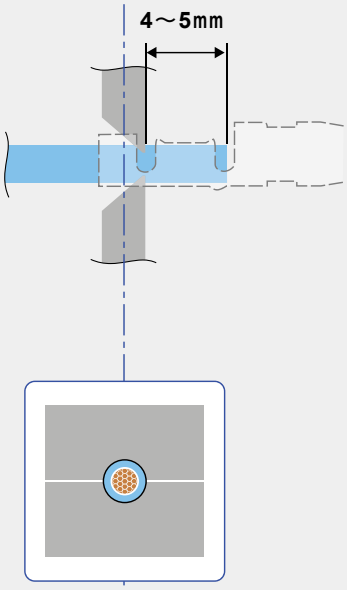
Positive

Step 4

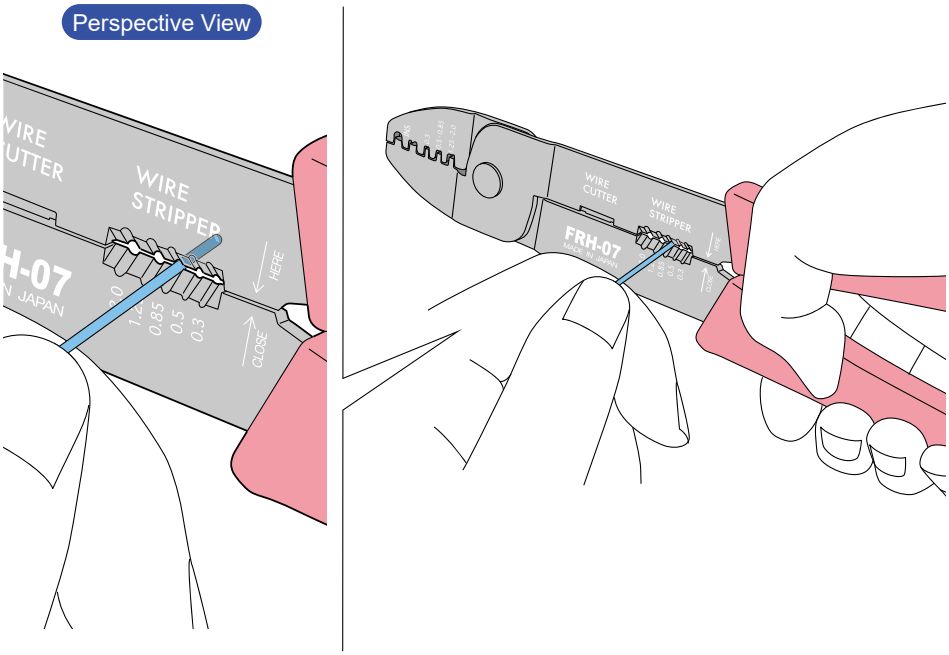
Peeling off the INS (wire insulation)

Select the teeth according to the thickness of the core wire. The length of the INS (wire insulation) to strip should be about 1 mm longer (4-5 mm) than the crimped part of the terminal.

Cross-Sectional view

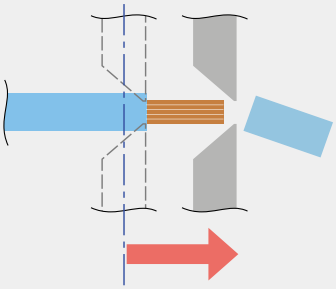


Perspective View

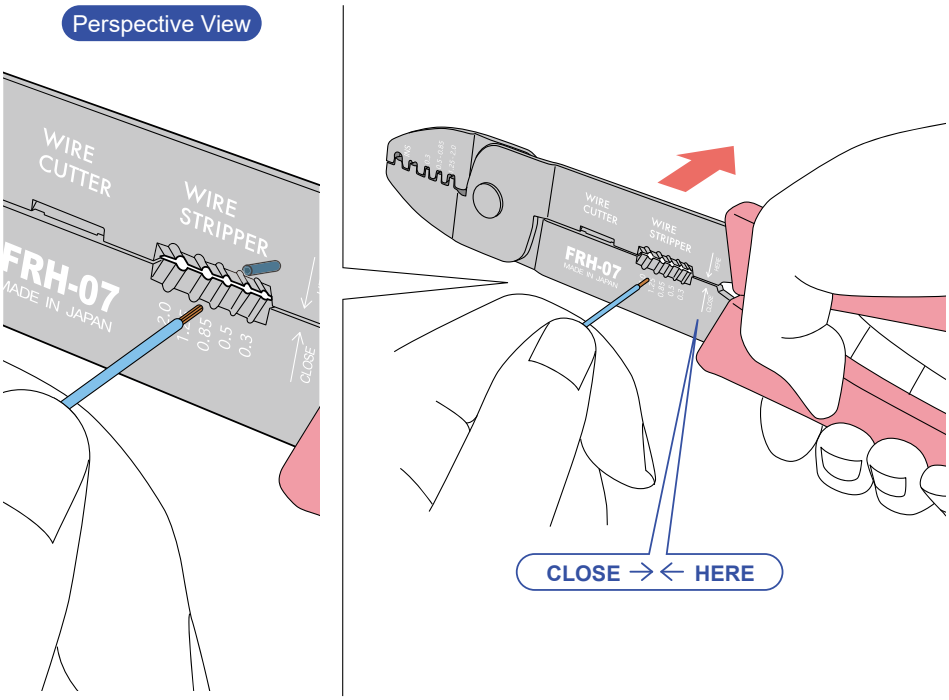


Grip the tool until the "CLOSE→←HERE" indications closes, and then pull it in the direction of the arrow to remove the INS (wire insulation).

Cross-Sectional view



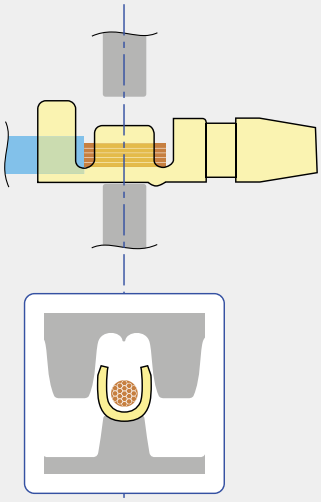
Perspective View



Step 5

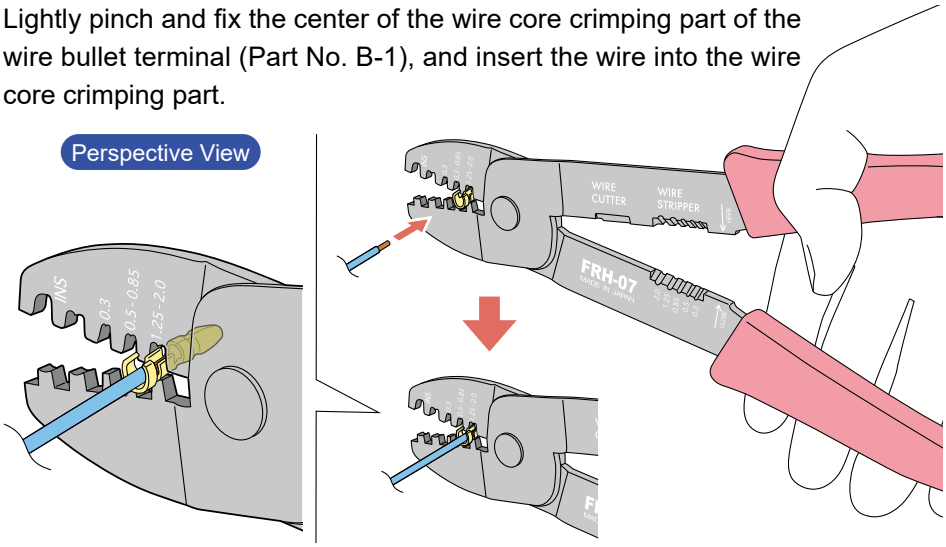
Crimping the core wire of the electric wire (1)

Cross-Sectional view



Lightly pinch and fix the center of the wire core crimping part of the wire bullet terminal (Part No. B-1), and insert the wire into the wire core crimping part.

Perspective View

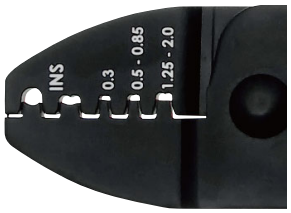


How to hold the tool

The tool has a front side and a back side. The way to hold the tool varies depending on the situation, but always hold the tool so that the "M-shaped" tooth is on the upper side.

Face

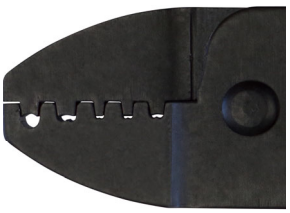
With printing



M-Shaped Tooth [Top]

back

Without printing



M-Shaped Tooth [Bottom]

Correct core wiring processing

Twisting or bending the core wire may cause a core wire cutoff (poor crimping) due to excessive crimping, and touching it with bare hands can lead to corrosion.
If the crimping process is done correctly, the electric wire will not be taken out of the bullet terminal with normal handling.

good

Do nothing
Never touch with bare hands

bad

Twist or bend the core

▼

Causes of core wire cutoff (poor crimping)

bad

Touch the core wire with bare hands

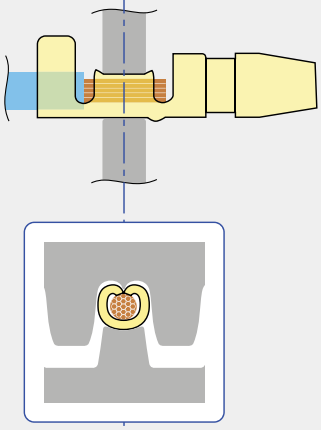
▼

Causes of corrosion

Step 6

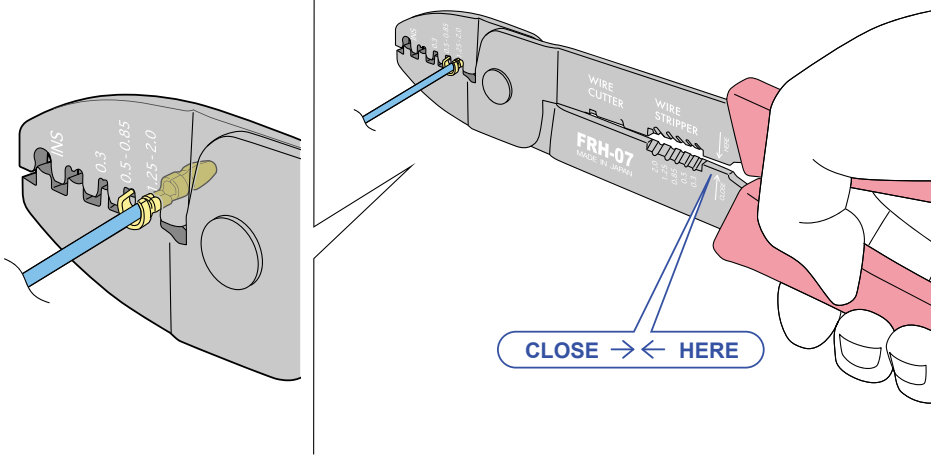
Crimping the core wire of the electric wire (2)

Cross-Sectional view



Crimp the core wire by grasping the tool tightly until "CLOSE→←HERE" is closed.

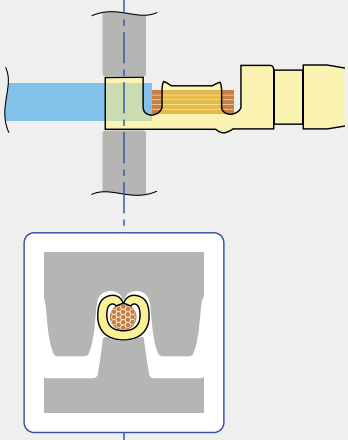
Perspective View



Step 7

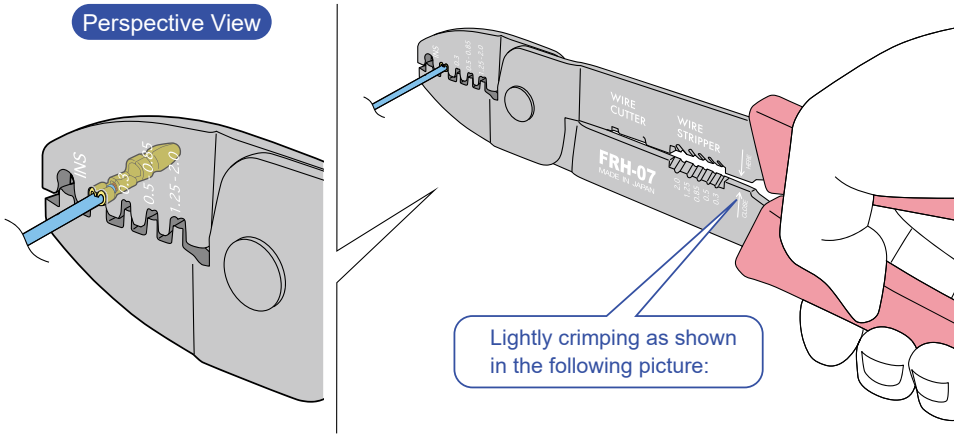
Crimping the INS (wire insulation)

Cross-Sectional view

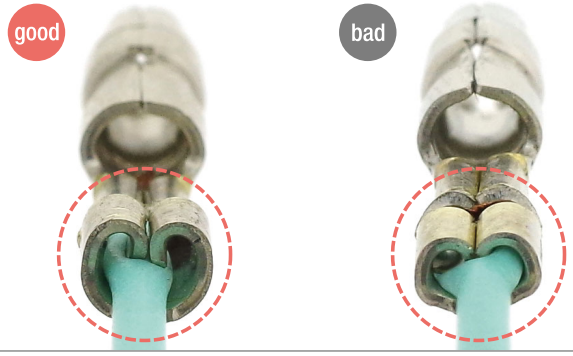


Crimp the INS (wire insulation) by placing it between the crimping teeth.

Perspective View

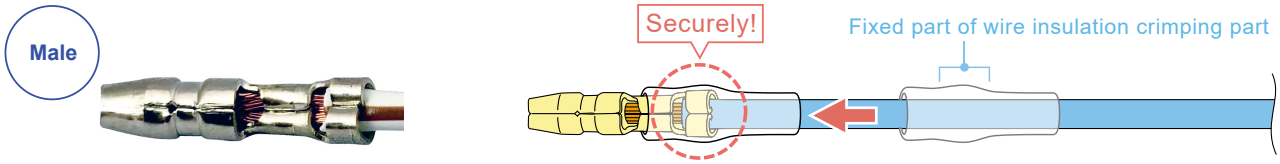


[Note] When crimping the wire insulation, hold the wire lightly. If it is crimped too hard, the wire insulation will be damaged and the core wire will be cut off.

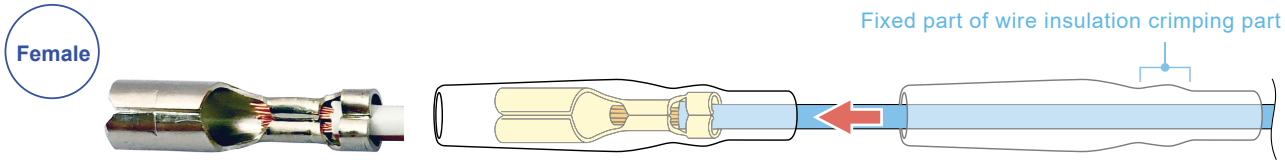


Step 8 Checking the finish and placing the insulatinon sleeve in a position

Insert the insulation sleeve into the terminal side. Make sure that the wire insulation crimped part of the terminal has been placed in the specified position for the insulation sleeve as shown in the following figure:



The installation procedure for the female terminal is the same as Steps 3 to 8 of the male terminal.



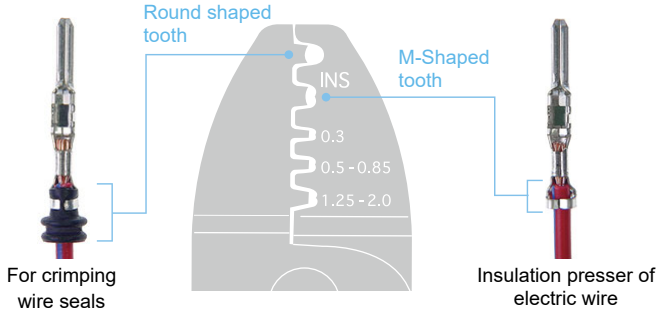
finalization

Male

Female

Crimping Tool "FRH-07": Two Types of Tooth shapes in the Wire Insulation Part

When crimping the insulation presser of the terminal onto the wire insulation, use the "M-shaped" tooth profile for the insulating part.
When crimping a waterproof rubber plug (wire seal), use the "round-type" tooth profile for the insulating part.



To ensure safety use, please read this manual before use.
Work should be done at your own risk. We are not liable for any damage to the vehicle caused by the work.

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