

THE NEW VALUE FRONTIER



Instructions Manual
HAND CRIMPING TOOLS

This manual shows the appropriate crimping process by using the proprietary tools and quality control standards. Since the applicable range of tools and product specifications of connectors may not be met with each other, please contact us when using.

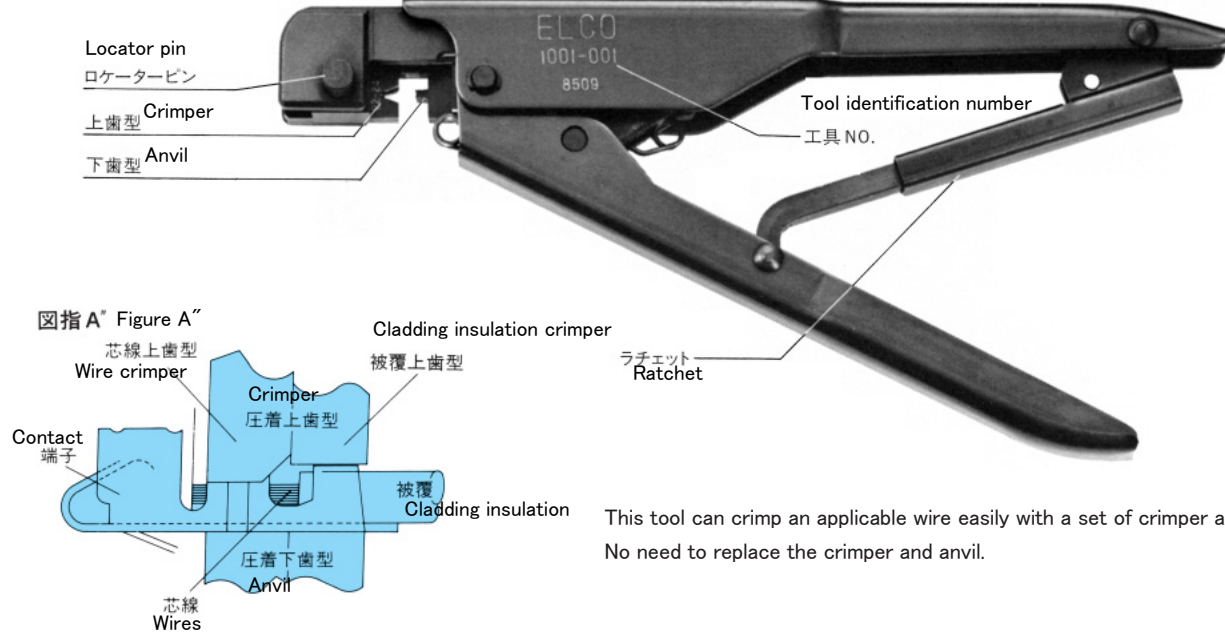


KYOCERA ELCO Corporation

HAND CRIMPING TOOLS

Type A

Structure of the Tool and Part Names



This tool can crimp an applicable wire easily with a set of crimper and anvil.
No need to replace the crimper and anvil.

Example of Failure

Failure Item	Failure Description	Cause
1) Malformation of the crimped area (Wire barrel)	Pull strength is out of specification.	The wire size is out of the specification, or abrasion of the tool
2) Deformation of the terminal 1. Bend 2. Twist 3. Deformation of the barrel		The terminal is not set in position against the crimper and anvil.
3) Variation in crimp height	The crimping height of the tool is not fixed.	Occurred when grips are incompletely tightened (tightened half way) but in the position where they can be open due to the abrasion or deformation of the ratchet.

Selecting the appropriate crimper

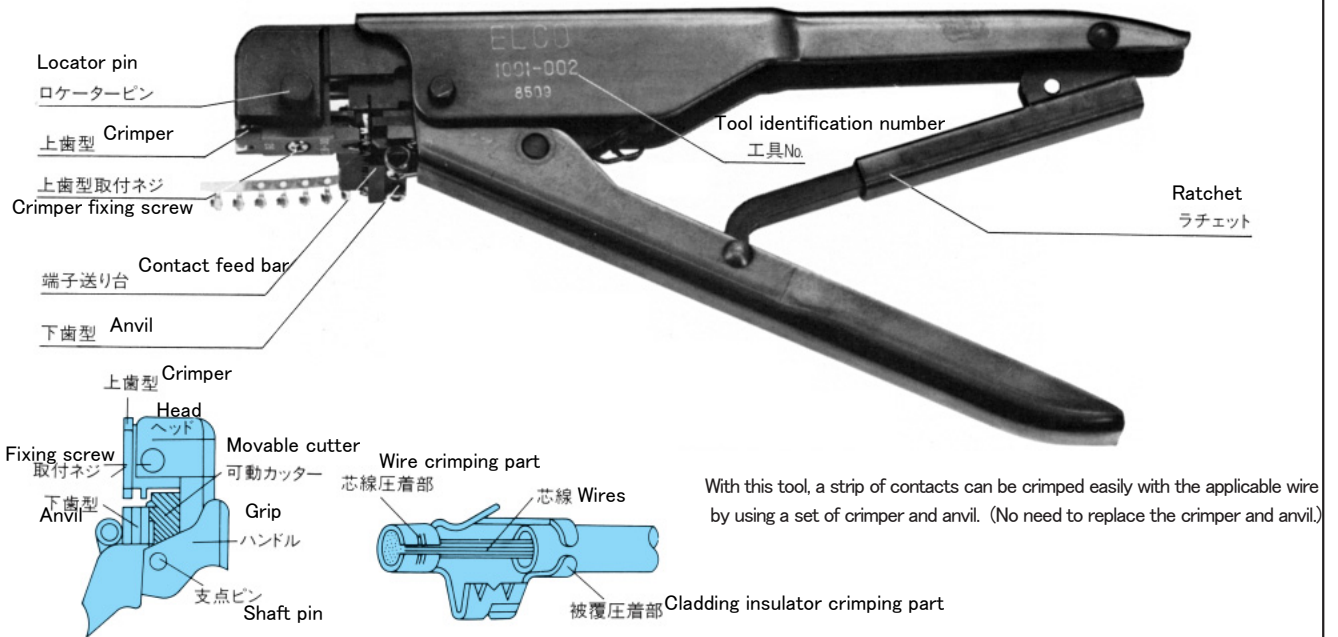
1. Requisite blades are attached on top and bottom of the crimper.
2. Combine blades for the crimper so that chamfered planes are faced.
3. Select the crimper to the size of the wire.
4. The number of applicable size of the wire is engraved on the crimper.
5. When replacing the crimper, pull out the locator pin.
(The locator pin can be pulled out with fingers easily.)
6. Install the appropriate crimper and fix it with the locator pin.

Procedures

1. Make sure that the tool number and the wire size are met.
2. Open the grips fully.
3. Set the contact appropriately as shown in Figure A".
Note: The cladding insulation is placed at the side on which the engraved indications are shown.
4. Insert the stripped wire as shown in Figure A".
5. Close the grips fully until the ratchet is released.
6. Open the grips to pick up the contact.
7. Make sure that the crimped work is free from defect.

Type B

Structure of the Tool and Part Names



With this tool, a strip of contacts can be crimped easily with the applicable wire by using a set of crimper and anvil. (No need to replace the crimper and anvil.)

Example of Failure

Failure Item	Failure Description	Cause
1) Malformation of the crimped area (Wire barrel)	Pull strength is out of specification.	The wire size is out of the specification, or abrasion of the tool
2) Deformation of the terminal 1. Bend 2. Twist 3. Deformation of the barrel		The terminal is not set in position against the crimper and anvil.
3) Variation in crimp height	The crimping height of the tool is not fixed.	Occurred when grips are incompletely tightened (tightened half way) but in the position where they can be open due to the abrasion or deformation of the ratchet.

Selecting the appropriate crimper

1. Requisite blades are attached on top and bottom of the crimper.
2. The number of applicable size of the wire is engraved on the crimper.
3. Select the crimper to the size of the wire.
4. When replacing the crimper, pull out the locator pin.
(The locator pin can be pulled out with fingers easily.)
5. Install the appropriate crimper and fix it with the locator pin.

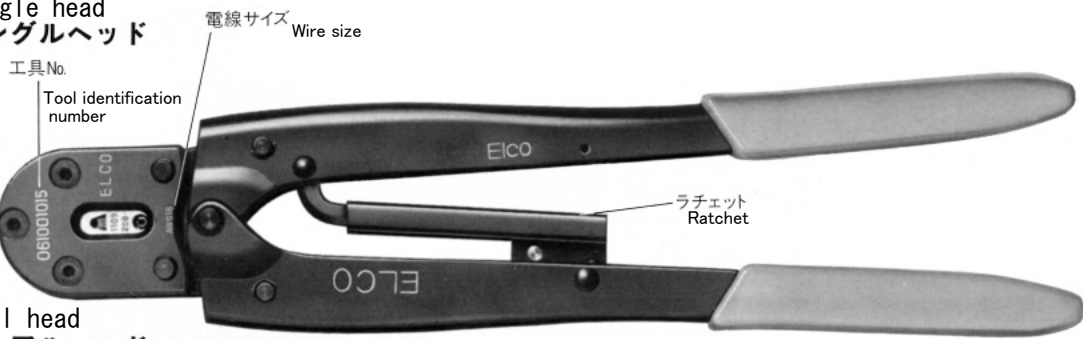
Procedures

1. Make sure that the tool number and the wire size are met.
2. Cut the strip of contacts in 20cm.
3. Insert the cut strip of contacts into the contact feed bar.
4. Feed the contacts to the proper position.
5. Strip the wire and insert the contact appropriately.
6. Close the grips until the latch is released.
7. Open the grips to pick up the contact.
8. Feed the contact with stripped wire to the proper position.
9. Make sure that the shape of the crimped work is appropriate.

Type C

Structure of the Tool and Part Names

① シングルヘッド Single head



② デュアルヘッド Dual head



Example of Failure

Failure Item	Failure Description	Cause	Procedures
1) Malformation of the crimped area (Wire barrel)	Pull strength is out of specification.	The wire size is out of the specification, or abrasion of the tool	1. Make sure that the tool number and the wire size are met.
2) Deformation of the terminal	<p>1. Bend 2. Twist 3. Deformation of the barrel</p> <p>バレル不完全クrimp Incomplete crimping of the barrel</p>	Due to the displacement in position or uneven planes of the wire crimping part and cladding insulation crimping part of the tool. To make sure easily, insert the contact into the insulator housing to check that no floating of the contact exists.	2. Open the grips fully. 3. Insert the contact fully into the nest. 4. Strip the wire and insert it to the contact until the end of it hits against the nest. 5. Close the grips fully until the ratchet is released. 6. Open the grips to pick up the contact crimped with wire. 7. Make sure that the shape of the crimped work is appropriate.
3) Variation in crimp height	The crimping height of the tool is not fixed.	The crimper is cracked.	
		Occurred when grips were incompletely tightened (tightened half way) but in the position where they can be open due to the abrasion or deformation of the ratchet.	

■ List of Hand Tools

Part number	Series No.	Applicable contact	Applicable wire size	Outer diameter of the cladding insulator (mm)	Strip length	Type
06 1001 001	8455	60 8455 0310 00 861	AWG # 22~28	1.2~1.7	2.5~3.2	A
	8263	60 8263 0513 00 808				
06 1001 002	8283	60 8283 0513 30 808	AWG # 24~30	0.7~1.3	3.0~3.8	B
06 1001 003	9073	60 9073 0212 00 808	AWG # 24~30	0.7~1.3	2.5~3.2	A
06 1001 004	9073	60 9073 0222 30 808	AWG # 24~30	0.7~1.3	2.5~3.2	B
06 1001 005	9021	60 9021 0313 00 ***	AWG # 22~28	1.0~1.7	2.2~2.8	C-①
06 1001 006	9021	60 9021 0527 00 392	AWG # 22~28	1.0~1.7	2.2~2.8	C-①
06 1001 007	8216	60 8216 0313 00 339	AWG # 24~30	1.0~1.5	2.2~2.8	C-①
06 1001 035	8216	60 8216 0313 00 339	AWG # 22~30	1.0~1.7	2.2~2.8	A
06 1001 008	9090	60 9090 0*3* 00 ***	AWG # 18~24	1.5~2.54	4.6~5.0	A
06 1001 009	9090	60 9090 0*2* 00 ***	AWG # 14~20	1.9~3.31	4.6~5.0	A
06 1001 010	9090	60 9090 0*1* 00 ***	AWG # 14~18	3.3~5.08	4.6~5.0	A
06 1001 011	8263	60 8263 0617 00 808	AWG # 22~28	1.2~1.7	2.5~3.2	A
06 1001 012	8263	60 8263 2523 00 ***	AWG # 20~24	1.5~1.87	2.5~3.2	A
06 1001 013	8025	60 8025 0213 00 339	AWG # 14~16 AWG # 18	2.8~3.6 2.2~3.0	2.7~3.0	C-②
06 1001 014	8025	60 8025 0213 00 339	AWG # 14~16	2.8~3.6	2.7~3.0	C-①
06 1001 015	8017	70 8014 000 000 858	AWG # 18	1.3~2.3	2.5~2.8	C-①
06 1001 016			AWG # 20~22	1.2~2.2	2.5~2.8	C-①
06 1001 017	8014	60 8017 0313 00 339	AWG # 24~26	1.0~1.8	2.5~2.8	C-①
06 9215 5 0001 0000	9215	70 9215 999 00* 825	AWG # 20 (AVS0.5)	1.8~2.0	2.5~3.0	C-①
06 1001 018	9043	60 9043 0517 00 ***	AWG # 20~24	1.4~2.0	2.2~2.8	C-①
06 1001 019	9043		AWG # 26~28	1.0~1.5	2.2~2.8	C-①
06 1001 039	8283	60 8283 3513 30 ***	AWG # 22~26	1.0~1.3	3.0~3.8	B
06 1001 040	9220	71 9220 000 000 869	AWG # 16	2.5~3.3	4.2~4.7	C-②
		72 9220 000 000 869	AWG # 18~20			
06 1001 047A	8387	72 8387 999 100 800	AWG # 26~30	0.85~1.15	1.4~1.8	B
06 1001 047B	8387		AWG # 24~26			B
06 1001 049	5090	60 5090 0210 00 808	AWG # 10~12	3.3~5.3	5.5~6.5	C
06 1001 050	9515	71 9515 999 010 808	AWG # 20~22 (AVS0.3,CAVS0.5)	1.5~1.8	2.2~3.0	A
		72 9515 999 020 808				

■ Pull out strength after crimped

Applicable wire	Pull out strength (kg)
AWG14	22.5 and more
AWG16	20.5 and more
AWG18	13.5 and more
AWG20	6.5 and more
AWG22	4 and more
AWG24	3 and more
AWG26	2 and more
AWG28	1 and more
AWG30	0.5 and more

After crimped with appropriate combination of the hand crimping tool, contact, and wire size, it is usable when the pull out strength listed on the left is satisfied and no abnormality is observed in appearance.