GEDORE
KLANN / EXPERIENCE

KL-0080-1 K / -10 K / -104 K
Wiring Harness Repair Kit

www.gedore-automotive.com

Worldwide GEDORE service centers and offices are listed on the Internet at: **www.gedore.com**

1. PRODUCT DESCRIPTION

2.1 KL-0080-1 K - Wiring harness repair kit with contact assortment

Universally suitable for standard wire/terminal connections on passenger cars, commercial vehicles, vans, buses, construction machinery, agricultural machinery, trailers, and semi-trailers.

Especially for wire/terminal connections with and without single conductor seal (ELA), such as MCP-2.8, JPT, MQS, DTM/DT-twisted, SuperSeal-1.5, as well as for conventional crimp connections such as wire lugs, flat spade wire terminals, female flat spade wire terminals, butt connectors, etc.

UNLOCKING, **STRIPPING,** and **CRIMPING**, all stored within easy reach in a clear case system, designed for fast, organised, and efficient repairs in the daily workshop life.

Defective, oxidised, or provisionally repaired wire/terminal connections can lead to serious system failures on the vehicle. For this purpose, the repair kit for professionals in particular offers a comprehensive and robust assortment for the quick and professional repair of almost all common wire/terminal connections on the vehicle.

Due to the unique and compact basic tool/changeable insert system, this can also be expanded as required in the future. The scope of delivery already includes a generous assortment of the most common contacts and seals.

ⓘ **ELA** = **single conductor seal**

2.2 Safety instructions and regulations

▰ **Before using** the special tool, read and understand **all** safety instructions and **follow** themfor **safe use**!

▰ Use the special tool **as intended** and **always** carry out maintenance and repairs in compliance with the regulations on occupational safety and accident prevention as well as the vehicle manufacturer's instructions!

▰ All work with the special tool must only be carried out on de-energised lines or wires in the low-voltage range on passenger cars, commercial vehicles, vans, buses, construction machinery, agricultural machinery, trailers, and semi-trailers!

▰ **Before each use**, check the special tool **carefully** for damage, loose parts, or unauthorised modifications. **Never** use it if you notice any such deficiencies!

▰ Always wear your personal protective equipment *(for example safety goggles, protective gloves, safety shoes)* when working!

2.3 Specifications

Unlocking inserts:... 7 pcs

Stripping inserts: ....2 pairs

Crimping inserts: .... 11 pcs

MCP-2.8:.................................0.2 - 1.0mm^2 diameter

JPT:..0.2 - 2.5mm^2 diameter

MQS:..0.08 - 0.75mm^2 diameter

DTM/DT twisted:...........................0.5 - 2.1mm^2 diameter

SuperSeal-1.5:...........................0.35 - 2.5mm^2 diameter

Pinch connections:...........0.35 - 6mm^2 diameter / AWG 10 - 22

Stripping:.....................................0.03 to 16mm^2 diameter

0080-1K_EN220709.indd

KL-0080-10 K
Wiring harness repair kit

KL-0080-1 K
Wiring harness repair kit with contact assortment

KL-0080-104 K
Contact assortment case

KL-0080-1090-5
GEDORE i-BOXX Rack

2.4 Scope of delivery / single part overview

Item	Part no.	Description	Qty.
A	KL-0080-101	Crimping tool	1
A1	KL-0080-1011	Handle	1
A2	KL-0080-1012-1	Crimping attachment SuperSeal 1.5	1
A3	KL-0080-1012-2	Crimping attachment JPT	1
A4	KL-0080-1012-3	Crimping attachment JPT ELA	1
A5	KL-0080-1012-4	Crimping attachment MQS	1
A6	KL-0080-1012-5	Crimping attachment MQS ELA	1
A7	KL-0080-1012-6	Crimping attachment MCP 2.8	1
A8	KL-0080-1012-7	Crimping attachment MCP 2.8 ELA	1
A9	KL-0080-1012-8	Crimping attachment DTM/DT, twisted	1
A10	KL-0080-1012-9	Universal crimping attachment	1
A11	KL-0080-1012-10	Crimping attachment 4 - 6mm^2	1
A12	KL-0080-1012-11	Crimping attachment 0.35 - 2.5mm^2	1
B	KL-0080-102	Wire stripper	1
B1	KL-0080-1021	Wire stripper, self-adjusting	1
B2	KL-0080-1022	Supplementary blade set, V-shaped	1
C	KL-0080-103	Ejection tool	1
C1	KL-0080-1031	Handle	1
C2	KL-0080-1032-1	Superseal ejector blade + female flat spade wire terminals, etc.	1
C3	KL-0080-1032-2	Superseal ejector blade + Deutsch DTM/DT (secondary lock)	1
C4	KL-0080-1032-3	Ejector blade MCP2.8 + JPT + SPT + female flat spade wire terminals 2.8	1
C5	KL-0080-1032-4	Ejector blade MQS / FC1+3 / CPC	1
C6	KL-0080-1032-5	Ejector blade, half-round Deutsch DTM series (Size 20)	1
C7	KL-0080-1032-6	Ejector blade 4mm diameter, Deutsch DT series	1
C8	KL-0080-1032-7	Ejector blade 5mm diameter, Deutsch DT series	1
-	KL-0080-104 K	Contacts assortment case	1
-	KL-0080-1041	Socket contact MCP 2.8 ELA 0.35mm^2	25
-	KL-0080-1042	Socket contact MCP 2.8 ELA 0.5-1.0mm^2	25
-	KL-0080-1043	Sealing MCP 2.8 ELA blue / 5.2mm / 0.35-1.0mm^2	25
-	KL-0080-1044	Socket contact MCP 2.8 0.2-0.35mm^2	25
-	KL-0080-1045	Socket contact MCP 2.8 0.5-1.0mm^2	25
-	KL-0080-1046	Socket contact JPT ELA 0.2-0.35mm^2	25
-	KL-0080-1047	Socket contact JPT ELA 1.5-2.5mm^2	25
-	KL-0080-1048	Socket contact JPT ELA 0.5-1.0mm^2	25
-	KL-0080-1049	Sealing JPT ELA white / 5.2 mm / 1.5-2.5mm^2	25
-	KL-0080-1050	Socket contact JPT 0.2-0.35mm^2	25
-	KL-0080-1051	Socket contact JPT 1.5-2.5mm^2	25
-	KL-0080-1052	Socket contact JPT 0.5-1.0mm^2	25

Item	Part no.	Description	Qty.
-	KL-0080-1053	Socket contact MQS ELA 0.5-0.75mm^2	25
-	KL-0080-1054	Pin contact MQS ELA 0.5-0.75mm^2	25
-	KL-0080-1055	Socket contact MQS ELA 0.25-0.5mm^2	25
-	KL-0080-1056	Pin contact MQS ELA 0.25-0.5mm^2	25
-	KL-0080-1057	Sealing MQS / green / 3.45 mm / 0.5-0.75mm^2	25
-	KL-0080-1058	Sealing MQS / black / 4 mm / 0.5-0.75mm^2	25
-	KL-0080-1059	Sealing MQS / yellow / 3.45 mm / 0.2-0.35mm^2	25
-	KL-0080-1060	Sealing MQS / green / 4 mm / 0.2-0.35mm^2	25
-	KL-0080-1061	Pin contact MQS 0.08-0.22mm^2	25
-	KL-0080-1062	Socket contact MQS 0.08-0.22mm^2	25
-	KL-0080-1063	Socket contact MQS 0.5-0.75mm^2	25
-	KL-0080-1064	Pin contact MQS 0.5-0.75mm^2	25
-	KL-0080-1065	Socket contact MQS 0.25-0.5mm^2	25
-	KL-0080-1066	Pin contact MQS 0.25-0.5mm^2	25
-	KL-0080-1067	Socket contact SuperSeal 1.5 ELA 0.35-0.5mm^2	25
-	KL-0080-1068	Pin contact 1.5 ELA 0.35-0.5mm^2	25
-	KL-0080-1069	Socket contact SuperSeal 1.5 ELA 1.5-2.5mm^2	25
-	KL-0080-1070	Pin contact 1.5 ELA 1.5-2.5mm^2	25
-	KL-0080-1071	Socket contact SuperSeal 1.5 ELA 0.75-1.5mm^2	25
-	KL-0080-1072	Pin contact 1.5 ELA 0.75-1.5mm^2	25
-	KL-0080-1073	Sealing SuperSeal 1.5 ELA green / 5.5mm / 0.35-0.5mm^2	25
-	KL-0080-1074	Sealing SuperSeal 1.5 ELA red / 5.5mm / 2.0-2.5mm^2	25
-	KL-0080-1075	Sealing SuperSeal 1.5 ELA yellow / 5.5mm / 0.75-1.5mm^2	25
-	KL-0080-1076	Pin contact DTM 0.5mm^2	25
-	KL-0080-1077	Socket contact DTM 0.5mm^2	25
-	KL-0080-1078	Pin contact DT 1.3-2.1mm^2	25
-	KL-0080-1079	Socket contact DT 1.3-2.1mm^2	25
-	KL-0080-1080	Pin contact DT 0.5-1.3mm^2	25
-	KL-0080-1081	Socket contact DT 0.5-1.3mm^2	25
D	KL-0080-1082	Plastic tweezers	1
-	KL-0080-1090-3	Foam insert	1
-	KL-0080-1090-4	Lid insert hard foam	1
-	1101 L	GEDORE i-BOXX 72 small parts case	1
-	KL-0080-1090	Contact assortment in case	1
-	KL-0080-1090-1	Foam insert	1
-	KL-0080-1090-2	Foam insert	1
-	KL-0080-1090-5	GEDORE i-BOXX Rack	1
-	1100 L	GEDORE L-BOXX 136	1

0080-1K_EN220709.indd

Scope of supply / Single part overview

KL-0080-101 - Crimping tool

A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12

A

KL-0080-102 - Wire stripper

B2 B1

B

KL-0080-103 - Ejector tool

C2 C3 C4 C5 C6 C7 C8 C1

C

KL-0080-104 K Contact assortment case

KL-0080-1041	KL-0080-1042	KL-0080-1043	KL-0080-1044	KL-0080-1045	KL-0080-1046	KL-0080-1047	KL-0080-1048
KL-0080-1056	KL-0080-1055	KL-0080-1054	KL-0080-1053	KL-0080-1052	KL-0080-1051	KL-0080-1050	KL-0080-1049
KL-0080-1057	KL-0080-1058	KL-0080-1059	KL-0080-1060	KL-0080-1061	KL-0080-1062	KL-0080-1063	KL-0080-1064
KL-0080-1072	KL-0080-1071	KL-0080-1070	KL-0080-1069	KL-0080-1068	KL-0080-1067	KL-0080-1066	KL-0080-1065
KL-0080-1073	KL-0080-1074	KL-0080-1075	KL-0080-1076	KL-0080-1077			
KL-0080-1078	KL-0080-1079	KL-0080-1080	KL-0080-1081				

D

2.5 Contact range overview

This overview lists basic designations and information about the contact assortment case - **KL-0080-104 K**

EN

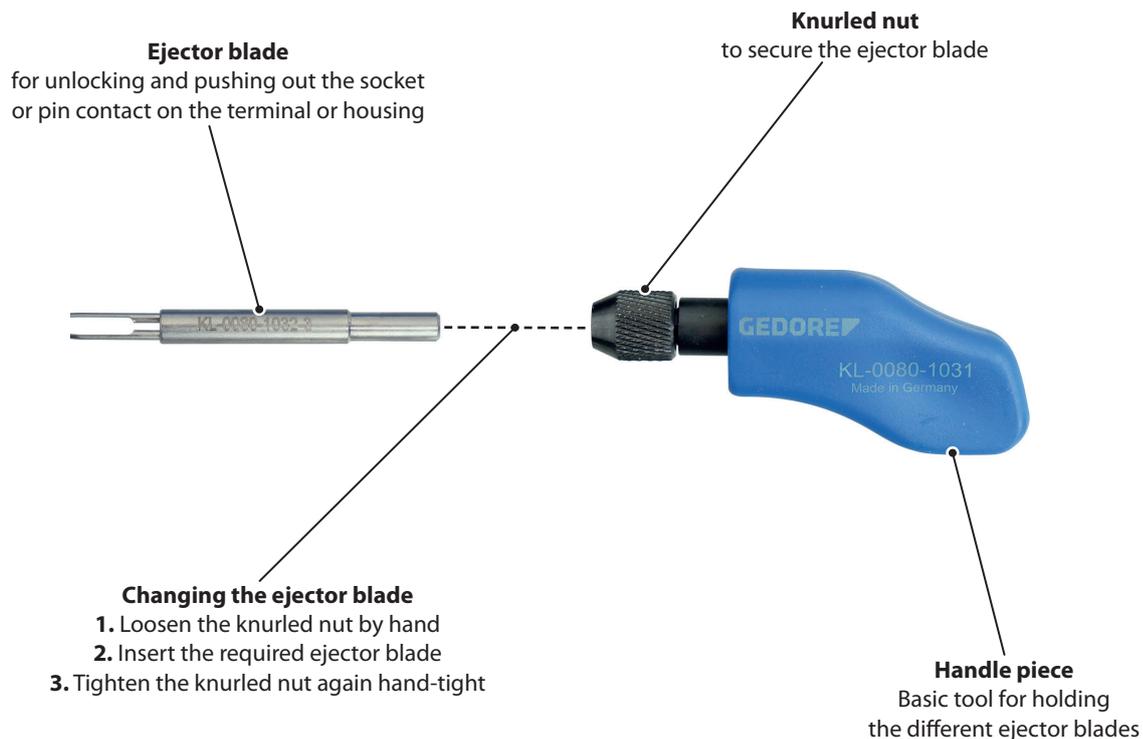|			
JPT ELA 0.5 - 1.0 mm² KL-0080-1048	JPT ELA 5.2 mm / 1.5 - 2.5 mm² KL-0080-1049	MQS 0.5 - 0.75 mm² KL-0080-1064	MQS 0.25 - 0.5 mm² KL-0080-1065
JPT ELA 1.5 - 2.5 mm² KL-0080-1047	JPT 0.2 - 0.35 mm² KL-0080-1050	MQS 0.5 - 0.75 mm² KL-0080-1063	MQS 0.25 - 0.5 mm² KL-0080-1066
JPT ELA 0.2 - 0.35 mm² KL-0080-1046	JPT 1.5 - 2.5 mm² KL-0080-1051	MQS 0.08 - 0.22 mm² KL-0080-1062	SuperSeal 1.5 ELA 0.35 - 0.5 mm² KL-0080-1067
MCP 2.8 0.5 - 1.0 mm² KL-0080-1045	JPT 0.5 - 1.0 mm² KL-0080-1052	MQS 0.08 - 0.22 mm² KL-0080-1061	SuperSeal 1.5 ELA 0.35 - 0.5 mm² KL-0080-1068	DTM 0.5 mm² KL-0080-1077
MCP 2.8 0.2 - 0.35 mm² KL-0080-1044	MQS ELA 0.5 - 0.75 mm² KL-0080-1053	MQS ELA 4 mm / 0.2 - 0.35 mm² KL-0080-1060	SuperSeal 1.5 ELA 1.5 - 2.5 mm² KL-0080-1069	DTM 0.5 mm² KL-0080-1076	DT 0.5 - 1.3 mm² KL-0080-1081
MCP 2.8 + JPT ELA 5.2 mm / 0.35 - 1.0 mm² KL-0080-1043	MQS ELA 0.5 - 0.75 mm² KL-0080-1054	MQS ELA 3.45 mm / 0.2 - 0.35 mm² KL-0080-1059	SuperSeal 1.5 ELA 1.5 - 2.5 mm² KL-0080-1070	SuperSeal 1.5 ELA 5.5 mm / 0.75 - 1.5 mm² KL-0080-1075	DT 0.5 - 1.3 mm² KL-0080-1080
MCP 2.8 ELA 0.5 - 1.0 mm² KL-0080-1042	MQS ELA 0.25 - 0.5 mm² KL-0080-1055	MQS ELA 4 mm / 0.5 - 0.75 mm² KL-0080-1058	SuperSeal 1.5 ELA 0.75 - 1.5 mm² KL-0080-1071	SuperSeal 1.5 ELA 5.5 mm / 2.0 - 2.5 mm² KL-0080-1074	DT 1.32 - 2.1 mm² KL-0080-1079
MCP 2.8 ELA 0.2 - 0.35 mm² KL-0080-1041	MQS ELA 0.25 - 0.5 mm² KL-0080-1056	MQS ELA 3.45 mm / 0.5 - 0.75 mm² KL-0080-1057	SuperSeal 1.5 ELA 0.75 - 1.5 mm² KL-0080-1072	SuperSeal 1.5 ELA 5.5 mm / 0.35 - 0.5 mm² KL-0080-1073	DT 1.32 - 2.1 mm² KL-0080-1078

0080-1K_EN220709.indd

2.6 Component overview

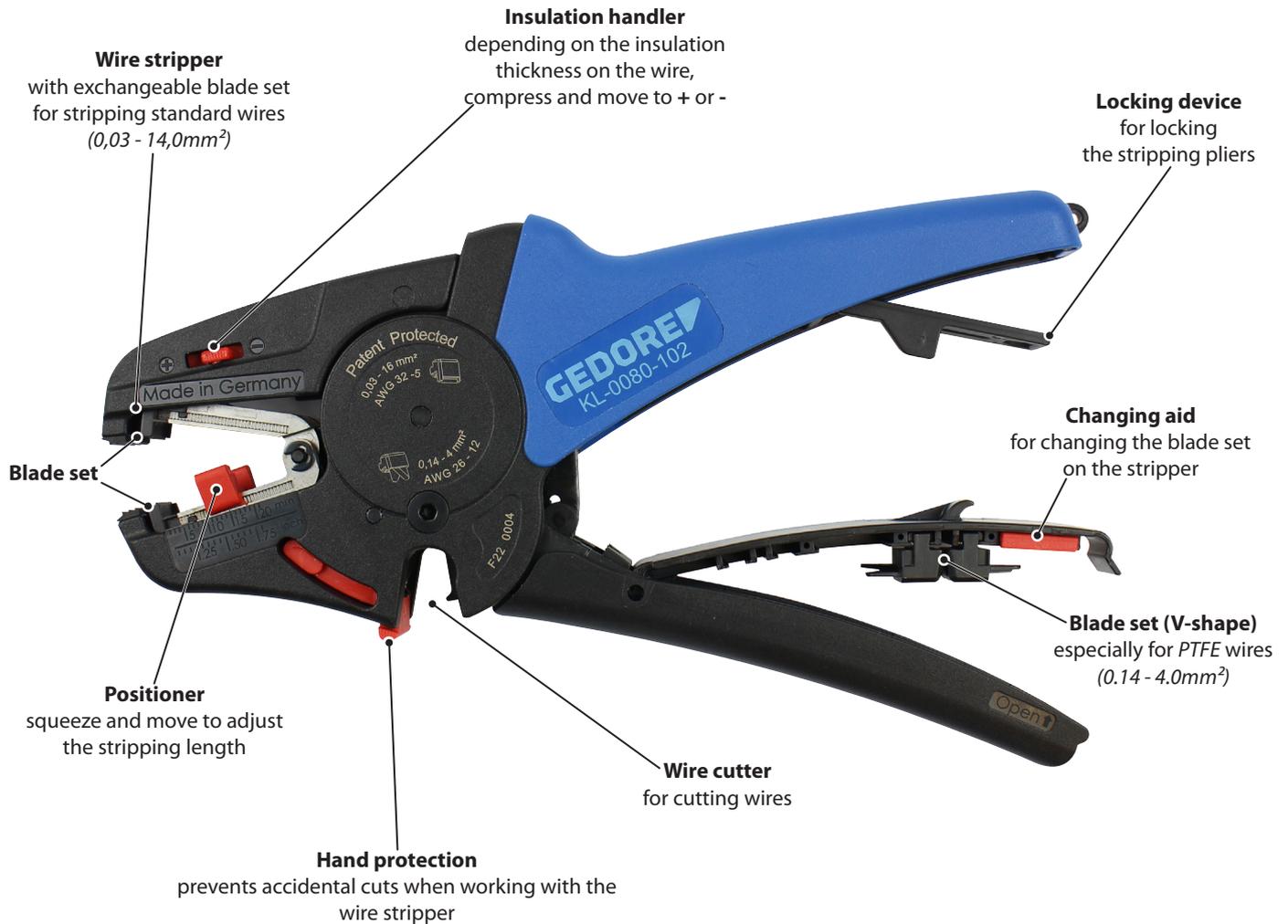This overview shows basic components, designations, and information on the tool.

Plug connection

Inner conductor

Insulation

Cable

Plug or housing

Socket or pin contact

Wire crimp

ELA sealing
Only for socket and pin contacts:
**MCP ELA, JPT ELA, MQS ELA,
Superseal 1.5 ELA**
(ELA = single conductor seal)

Insulation crimp

Primary lock

Secondary lock

Ejection tool

Ejector blade
for unlocking and pushing out the socket
or pin contact on the terminal or housing

Knurled nut
to secure the ejector blade

KL-0080-1032-1

GEDORE
KL-0080-1031
Made in Germany

Changing the ejector blade
1. Loosen the knurled nut by hand
2. Insert the required ejector blade
3. Tighten the knurled nut again hand-tight

Handle piece
Basic tool for holding
the different ejector blades

GEDORE
KLANN EXPERIENCE

Wire stripper

Wire stripper
with exchangeable blade set
for stripping standard wires
(0,03 - 14,0mm²)

Insulation handler
depending on the insulation
thickness on the wire,
compress and move to **+** or **-**

Locking device
for locking
the stripping pliers

Changing aid
for changing the blade set
on the stripper

Blade set

Blade set (V-shape)
especially for *PTFE* wires
(0.14 - 4.0mm²)

Positioner
squeeze and move to adjust
the stripping length

Wire cutter
for cutting wires

Hand protection
prevents accidental cuts when working with the
wire stripper

Changing the blade set
1. Insert the **changing aid** in the correct position on the **stripper**
2. Firmly squeeze the stripping pliers at the **handle piece**
3. Now take the **1st blade** out laterally and replace it
4. Relieve the stripper, remove changing aid
5. Repeat this process for the **2nd blade**

Changing aid

1. Blade

2. Blade

Changing aid

0080-1K_EN220709.indd
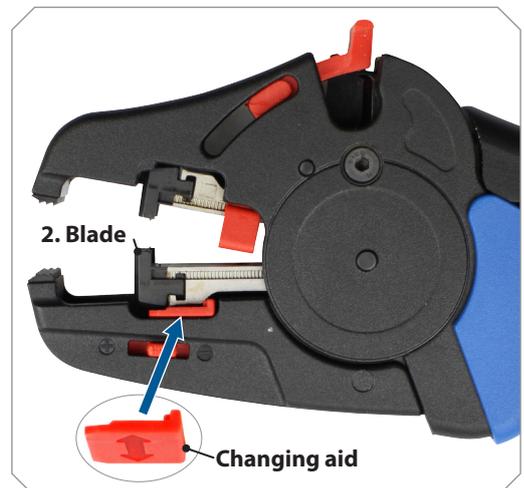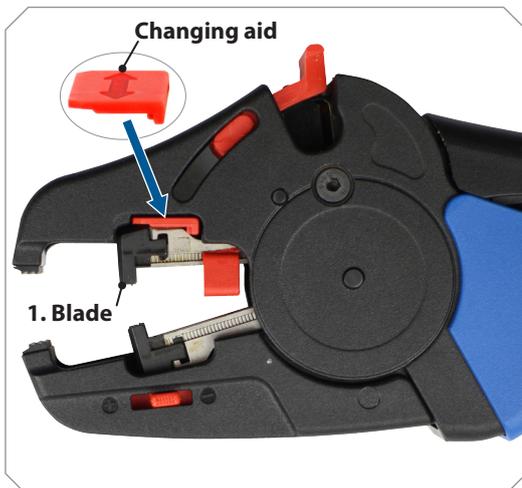
Crimping tool
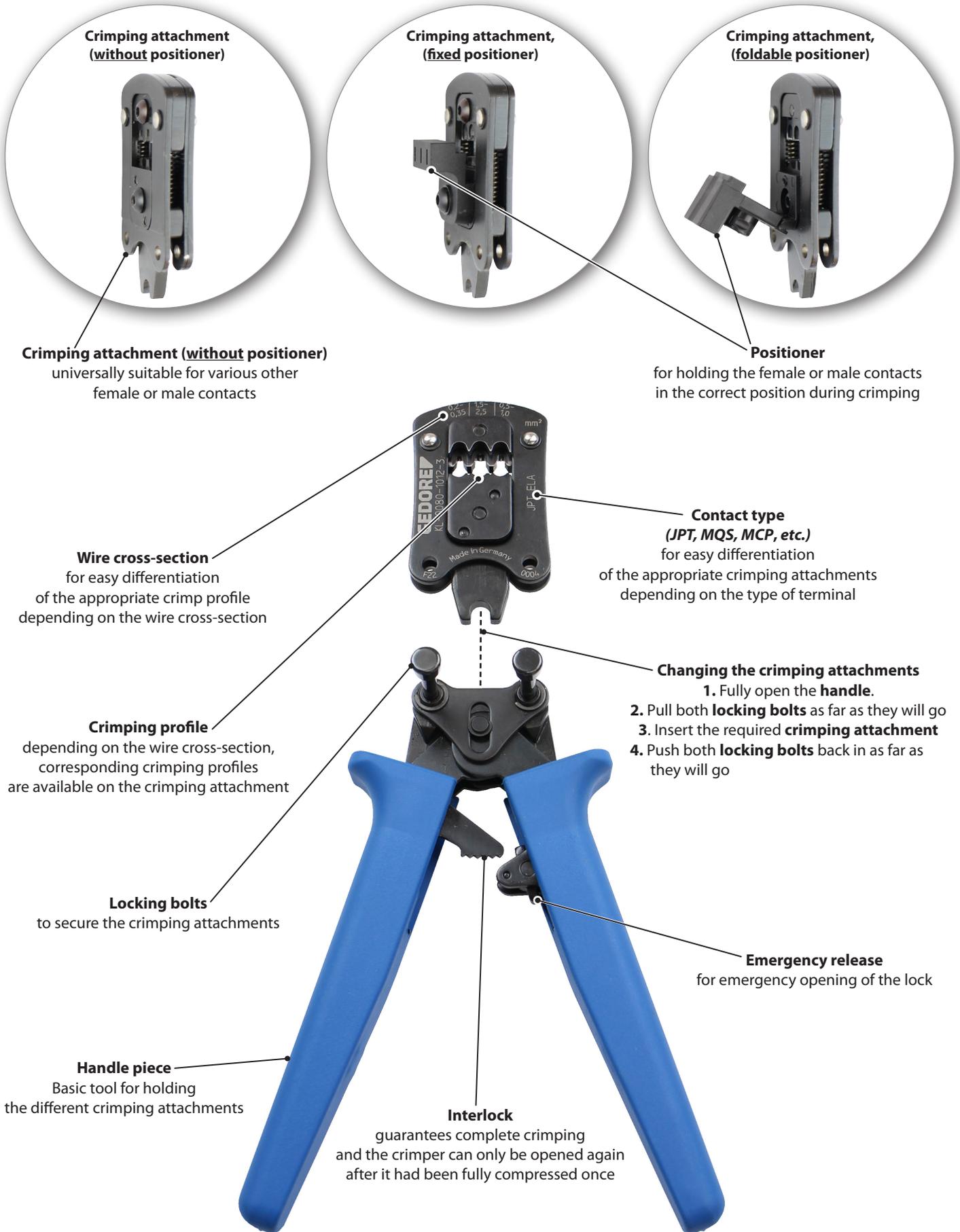
Crimping attachment (without positioner)

Crimping attachment, (fixed positioner)

Crimping attachment, (foldable positioner)

Crimping attachment (without positioner)
universally suitable for various other
female or male contacts

Positioner
for holding the female or male contacts
in the correct position during crimping

Wire cross-section
for easy differentiation
of the appropriate crimp profile
depending on the wire cross-section

Contact type
(JPT, MQS, MCP, etc.)
for easy differentiation
of the appropriate crimping attachments
depending on the type of terminal

Crimping profile
depending on the wire cross-section,
corresponding crimping profiles
are available on the crimping attachment

Changing the crimping attachments
1. Fully open the **handle**.
2. Pull both **locking bolts** as far as they will go
3. Insert the required **crimping attachment**
4. Push both **locking bolts** back in as far as
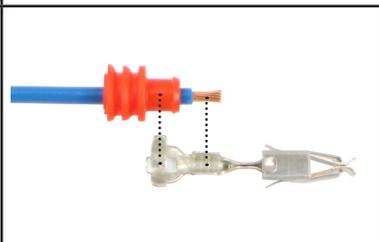 they will go

**Locking bolts**
to secure the crimping attachments

Emergency release
for emergency opening of the lock

Handle piece
Basic tool for holding
the different crimping attachments

Interlock
guarantees complete crimping
and the crimper can only be opened again
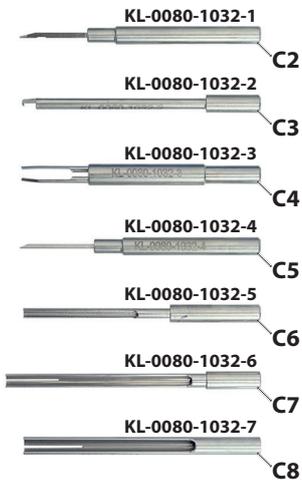after it had been fully compressed once

3. SHORT APPLICATION OVERVIEW

This overview <u>briefly</u> shows the individual work steps; the comprehensive application example can be found in **chapter 4**.

Work step		Result on the wire
Unlock the female or male contact with the **ejection tool** and remove it from the terminal or housing.		
Cut the wire properly and straight with the **wire stripper**.		
<u>For sealed</u> connections, first fit a suitable **seal (ELA)** to the wire.		
Strip the wire with the **stripping pliers** to match the female or male contact.		
Insert the female or male contact on the **crimping attachment** in the correct position. Align the **seal (ELA)** accordingly to the wire.		
Properly insert the wire at the female or male contact and crimp with the **crimping tool**.		
Re-insert and lock the female or male contact on the wire terminal or housing.		
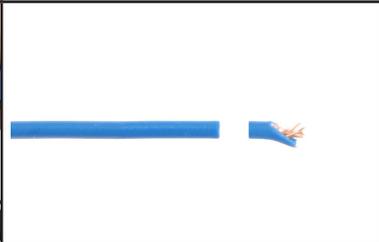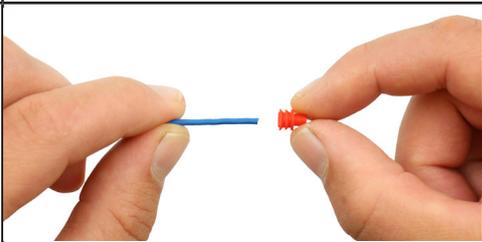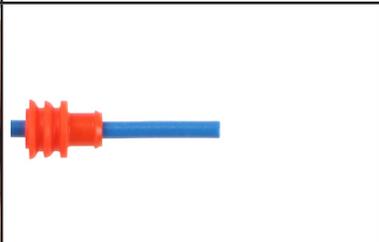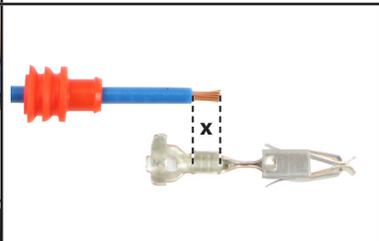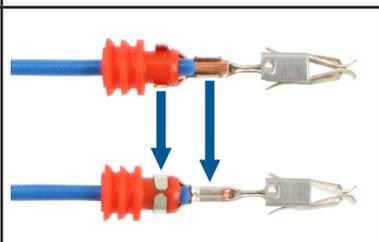
EN
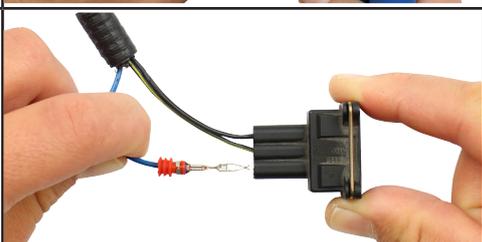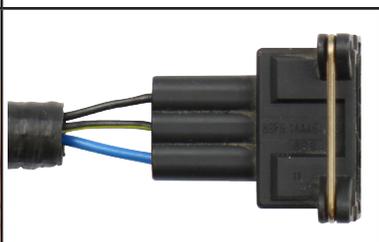
4. TYPICAL APPLICATION

This typical application describes the repair of a **JPT ELA** female or male contact on a **low-voltage** wire-terminal connection, for example, on cars, commercial vehicles, vans, buses, construction machinery, agricultural machinery, trailers, and semi-trailers.

📷1: Assemble the ejection tool **[C]** accordingly according to the terminal.

KL-0080-1032-1 — C2
KL-0080-1032-2 — C3
KL-0080-1032-3 — C4
KL-0080-1032-4 — C5
KL-0080-1032-5 — C6
KL-0080-1032-6 — C7
KL-0080-1032-7 — C8

C1

1. Depending on the terminal such as **MCP, JPT, MQS, DTM, DT, AWG,** or **Superseal**, insert a suitable ejector blade **[C2 - C8]** onto the handle **[C1]** and secure it hand-tight with the **knurled nut**.

C2 = Superseal + female flat spade wire terminals
C3 = Superseal + German DTM/DT *(suitable for secondary locks)*
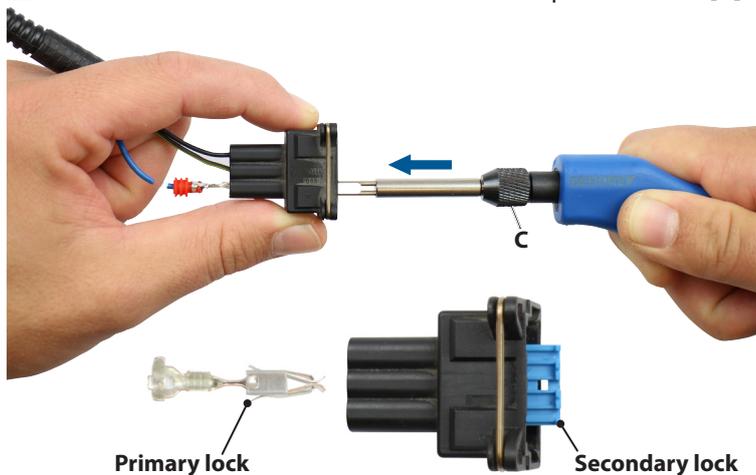**C4 =** MCP 2.8 + JPT + SPT + female flat spade wire terminals 2.8 + TE Junior Power Timer
C5 = MQS / FC1+3 / CPC
C6 = Deutsch DTM
C7 = Deutsch DT
C8 = Deutsch DT

📷2: Unlock the female or male contact with the push-out tool **[C]** and remove it.

C

2. First unlock any **secondary locks** on the wire terminal or housing, for example, by using the ejection tool **[C]**.

Unlock the **primary locks** as follows on the female or male contact, and remove it.

Result on the wire

Primary lock   **Secondary lock**

📷3: Use the wire stripper **[B]** and cut the wire properly and straightly.
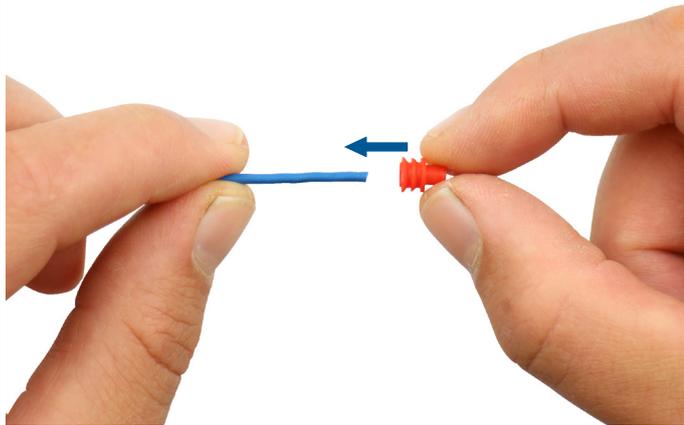
3. Use the **cutter** and cut the wire at the wire stripper **[B]** properly and straightly.

Result on the wire

B

📷 **4:** For <u>sealed</u> terminals, fit an additional suitable **connector seal (ELA)** to the wire.

4. For <u>sealed plug connections,</u> fit a suitable **connector seal (ELA)** in the correct position on the wire.
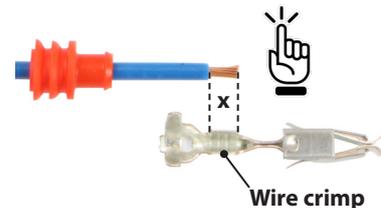
ⓘ **ELA** = **single conductor seal**

Result on the wire

EN

📷 **5:** Adjust the stripping length (**x** mm) on the **positioner** of the stripping pliers **[B]** .

5. Press the **positioner** on the wire stripper **[B]** and adjust it by moving it so that the required stripping length **(x** mm) on the cable matches the wire crimp on the female or male contact.

Wire crimp

B

📷 **6:** Remove the wire insulation with the wire stripper **[B]**.

6. Strip the insulation from the wire using the wire stripper **[B]**. Insert the wire on the **stripper** until it is in contact with the **positioner**.

Result on the wire

B

0080-1K_EN220709.indd

📷 **7:** Select the appropriate crimping attachment **[A2 - A12]** according to the terminal.

Superseal 1.5 ELA	JPT	JPT ELA	MQS	MQS ELA	MCP 2.8	MCP 2.8 ELA
A2	A3	A4	A5	A6	A7	A8

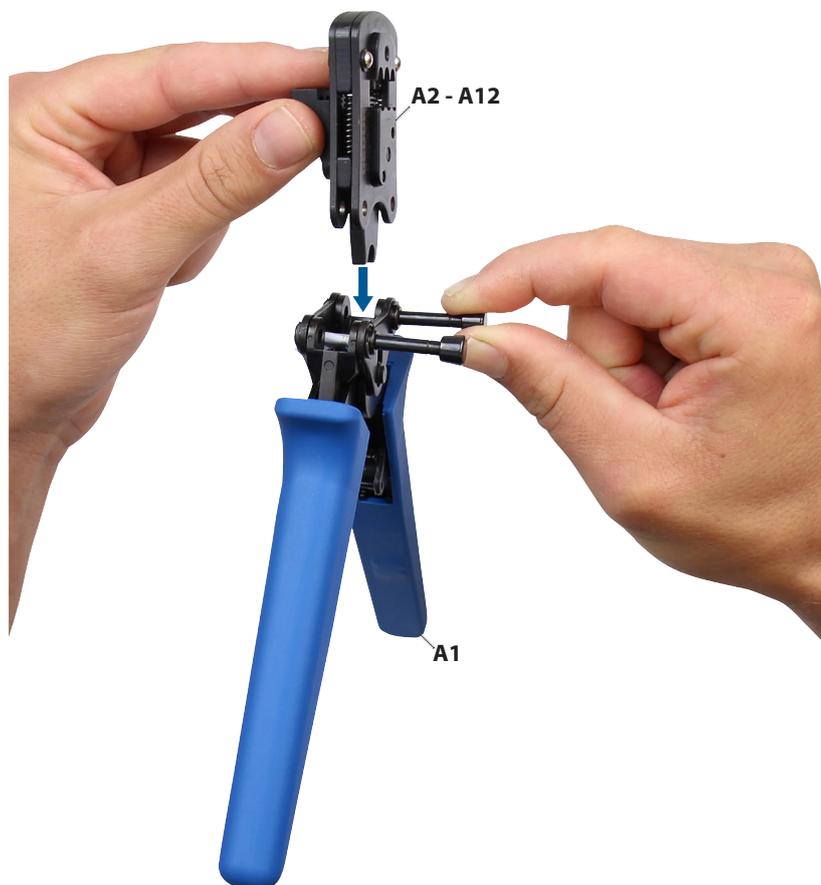|	DTM/DT series, twisted	Universal	AWG 10-12	AWG 14-22
A1	A9	A10	A11	A12

7. Depending on the terminal, for example **MCP, JPT, MQS, DTM, DT, AWG, Superseal**, etc., select a suitable crimping attachment **[A2 - A12]**.

ⓘ For <u>sealed</u> terminals, always use a suitably marked **ELA crimping attachment**.

ⓘ **ELA** = **single conductor seal**

📷 **8:** Insert the selected crimping attachment **[A2 - A12]** onto handle **[A1]** and fix it.

A2 - A12

A1

8. Insert the selected crimping attachment **[A2 - A12]** in the correct position on the handle **[A1]** .

Close the handle **[A1]** once completely and open it as far as it will go.

Then pull out both **locking bolts**, insert the matching stripping attachment **[A2 - A12]** and secure it with the two **locking bolts**.

ⓘ If necessary, the handle **[A1]** can also be opened with the **emergency release**. *(See Chapter 2.6)*

📷9: Insert the female or male contact in the correct position on the **positioner** or crimping attachment **[A2 - A12]**.

A2 - A12

A1

EN

Typical application: Deutsch DTM/DT twisted + Universal

**Typical application: AWG 10-12 + AWG 14-22**

9. Insert the female or male contact in the correct position on the **positioner** or crimping attachment **[A2 - A12]**.

ⓘ Use the correct **crimping profile** on the crimping attachment **[A2 - A12]**, depending on the wire cross-section (**mm²**).

ⓘ Folding **positioners** facilitate the insertion of particularly small female or male contacts.

Typical application: MQS, MCP, JPT, Superseal *(with and without ELA)*

0080-1K_EN220709.indd
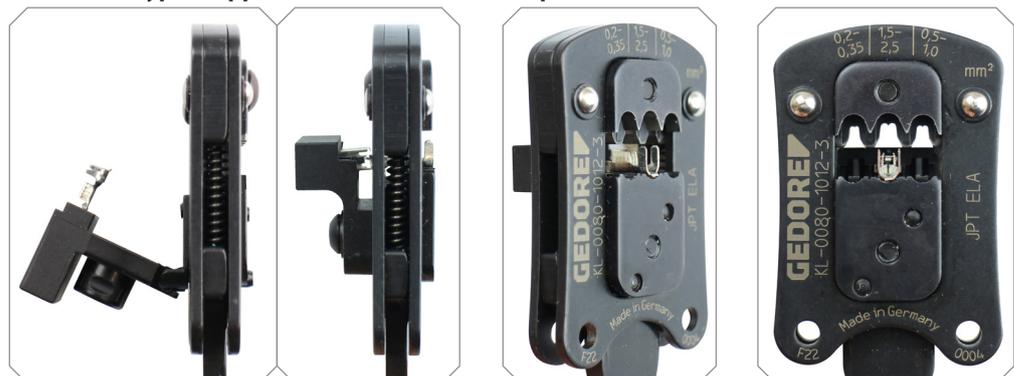
📷 **10:** Properly insert the wire at the female or male contact and fully crimp it.
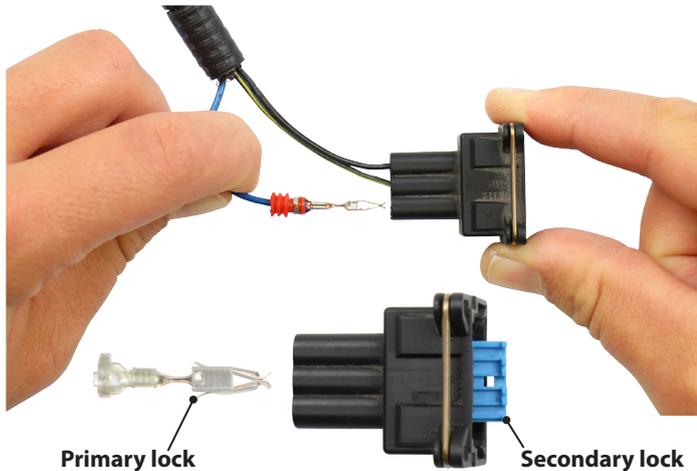
10. Insert the wire in the correct position at the **wire crimp** of the female or male contact.

ⓘ For sealed terminals, ensure that the **seal (ELA)** is correctly positioned towards the **insulation crimp**.

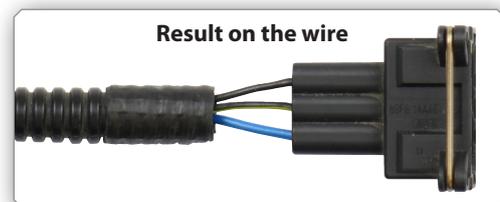**Insulation crimp**   **Wire crimp**

Result on the wire

📷 **11:** Re-insert and lock the female or male contact on the wire terminal or housing.

11. Insert the female or male contact in the correct position on the terminal or housing until the **primary lock** engages.

Lock any possible **secondary locks** on the terminal or housing.

Result on the wire

Primary lock   **Secondary lock**

5. CARE / STORAGE

CAUTION

Improper care and storage can damage the special tool. Therefore, **never** immerse the special tool in water, solvents, or other cleaning liquids. After use, clean all parts **only** with a dry and clean cleaning cloth. To protect against corrosion, rub all metal parts with a tool care oil or wax. Store the special tool and the operating instructions at a dry and clean place.

6. ENVIRONMENTALLY COMPLIANT DISPOSAL

Dispose of the special tool and its packaging material in an environmentally compatible way in accordance with the legal requirements. If necessary, ask your local authorities about environmentally friendly disposal options.

GEDORE-Werkzeugfabrik GmbH & Co. KG

Remscheider Straße 149
42899 - Remscheid
Postfach 120361
47873 Remscheid
GERMANY

Vertrieb DEUTSCHLAND
☎ +49 (0) 2191 / 596-0
🖨 +49 (0) 2191 / 596-230
✉ info@gedore.com
🌐 www.gedore.com

Sales INTERNATIONAL
☎ +49 (0) 2191 / 596-910
🖨 +49 (0) 2191 / 596-911
✉ info@gedore.com
🌐 www.gedore.com

GEDORE TOOLS, INC.

Only for USA, Canada & Mexico
Sólo para EE.UU., Canadá y México
Seulement pour les USA, le Canada et le Mexique
7187 Bryhawke Circle, Suite 700, North Charleston, SC 29418, USA

☎ +1-843 / 225 50 15
🖨 +1-843 / 225 50 20
✉ info@gedoretools.com
🌐 www.gedoretools.com

Worldwide GEDORE service centers and offices are listed on the Internet at: www.gedore.com

GEDORE Automotive GmbH

Breslauer Straße 41
78166 - Donaueschingen
Postfach 1329
78154 Donaueschingen
GERMANY

Vertrieb DEUTSCHLAND
☎ +49 (0) 771 / 8 32 23-0
🖨 +49 (0) 771 / 8 32 23-90
✉ info.gam@gedore.com
🌐 gedore-automotive.com

www.gedore-automotive.com