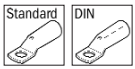
Hydraulic terminal crimping tool

Art. 21 57 55 / 21 57 60

DIN EN ISO 9001 ZERTIFIKAT



haupa®

...convincing solutions

1. TECHNICAL CHARACTERISTICS

Field of Application:	Ideal for crimping electrical connectors, suitable for copper conductors up to 240 mm^2 and aluminium conductors up to 150 mm^2
Force developed:	55 kN
Rated working pressure:	450 bar
Oil type:	ISO Grade, viscosity 15. VERKOL VESTAL HLP-15
Safety:	The tool is equipped with a factory-set safety valve.
Construction:	The 215755 model features a built-in drive pump whilst model 215760 must be driven by an independent hydraulic pump with an operating pressure of 700 bar. Both models are equipped with a 180º rotating head for easy tool positioning. Model 215755 has neoprene handles to help protect against accidental electrical contacts, however it is not designed to protect the operator in hot line work.

2. OPERATING RANGE

Pressure:		55 kN
Crimping range:	DIN cable lugs	185 mm^2
	standard copper	240 mm^2
	aluminium	150 mm^2
Dimension 215755:		350 x 120 mm
Dimension 215760:		185 x 75 mm
Weight 215755:		2,4 kg
Weight 215760:		1,5 kg
Weight Set 215755:		4,6 kg

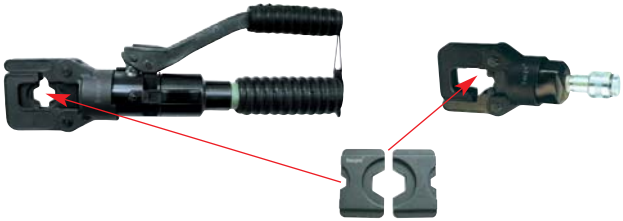
3. INSTRUCTIONS FOR USE

Ensure that the dies correspond exactly to the area to be crimped and that the dies are perfectly positioned in their corresponding holders.
All the dies used in these models are rectangular. Both die parts have identical outside dimensions and can therefore be mounted indistinctly on either the piston or the head or rotating jaw.

3.1 Preparation:
With the tool in the idle position, proceed as follows

- Select the correct die for the connection to be made

- Insert the dies in their respective holders



- Insert the conductor in the connector
- Place the connector between the two dies, aligning the area to be crimped with the die marks.

3.2. Die approach

- Grip the tool and actuate the movable arm, the piston will rapidly advance until the dies are in contact with the connector to be crimped.
- For the Art. 215760 model, follow the procedure given in the specific instruction manual for the hydraulic pump model used. Different types of hydraulic pump models can be coupled to this crimper.

  Ensure that the dies correspond exactly to the area to be crimped, if this is not so then open the tool, following the instructions given in point 3.5.

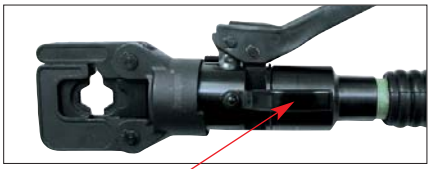
3.3. Crimping:

- We would advise you to pump until the audible sound of the pressure limiter is heard, or, where applicable, until the two dies meet.

3.4. Die release (piston retract)

- For the Art. 215755 model, press the lever located on the tool side to cause the piston to retract and allow the head to be opened to remove both the terminal and dies, if necessary.
- For the Art. 215760 model, simply press the corresponding pump release pedal.

HAUPA® GmbH & Co. KG, Königstraße 165-169, D-42853 Remscheid,
Phone: +49 (2191) 8418-0. Fax: +49 (2191) 8418840, E-Mail: sales@haupa.com.



Release lever

3.5. Use on copper cable connectors (hexagonal crimping)

- Die assembly:
  - Open the head, by simply pushing the grooved part of the head. The two moveable parts separate to allow the die set to be inserted.
  - Insert the dies indistinctly on the piston or head so that, when the head is re-closed, the two parts will mate.
  - To remove the dies, open the head as indicated in the first point of this paragraph and take them out.
- Making the connections:
  - Follow the instructions given in point 3.1

4. FAULT DIAGNOSTICS

Im folgenden werden zwei mögliche Gründe für Fehlfunktionen erläutert, außerdem die Möglichkeiten, um sie zu beheben.

1. EFFECT Each time the lever is pressed, the piston advances and then retracts to its original position.
   CAUSE Air in the hydraulic circuit.
   REMEDY Purge the circuit following the procedure detailed in the section on Oil level control.
2. EFFECT The compression piston advances correctly, but does not completely finish the crimping process.
   1st CAUSE Insufficient oil.
   REMEDYTop up the oil reservoir as explained in the section on Oil level control.
   2nd CAUSE The pressure release valve is letting oil escape due to some foreign body located on the punch seal.
   REMEDY Pressing down on the release handle, energetically actuate the drive handle some 10 successive times. This should displace any impurities located on the safety valve and enable the pump to work correctly again.

If despite the above, the tool still does not work correctly, return it to factory for repair and fine-tuning by specialised personnel.
Do not send any accessories, as this is not necessary.

5. CARE AND MAINTENANCE

5.1. Cleaning

If the tool is adequately cleaned after use, particularly the mobile parts, this will help to lengthen its useful life.

Particular care should be taken when cleaning both the pump drive piston and the crimping piston since any impurities could scratch the cylinder walls and damage the leaktight seals. To clean the pistons correctly, in this case, we would recommend advancing the piston and then cleaning it with a high quality non-corrosive solvent.

5.2. Checking the oil level

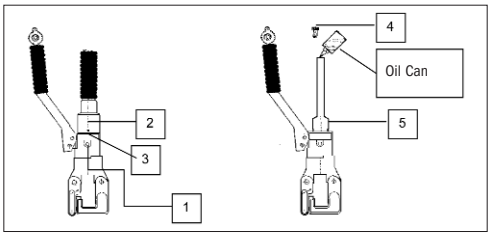
Periodically and particularly after extended use, it is advisable to check the oil reservoir level and top up with oil whenever necessary. This operation should preferably be performed in a workshop, in order to prevent impurities from getting into the oil.

Proceed as detailed below (SEE DIAGRAMS).

VERY IMPORTANT:
ALWAYS ENSURE THAT THE OIL TO BE USED IS CLEAN, BY FILTERING IT FIRST. THE CONTAINERS USED SHOULD ALSO BE CLEAN.
ONLY USE HYDRAULIC OIL WITH AN ISO GRADE VISCOSITY OF 15.

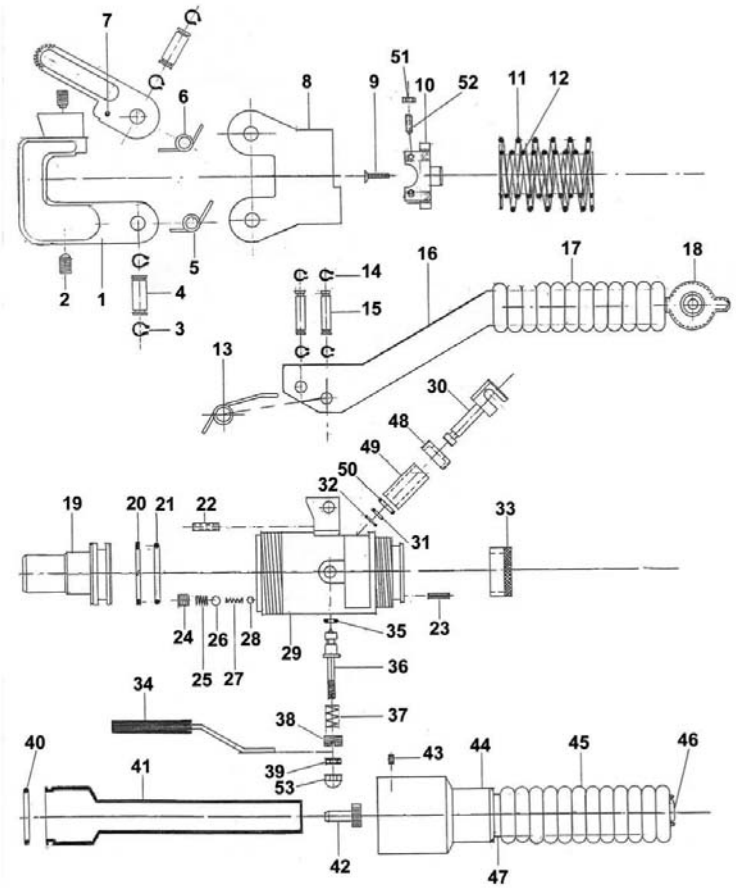
5.3. Oil filling procedure

- Completely retract the piston by pressing release valve (1) until the piston has retracted completely.
- Remove the ALLEN type stop screw (3)
- Unscrew and remove the fixed arm (2).
- Hold the upper part of reservoir (5) with one hand and remove the plug (4) with the other. Fill the reservoir completely and re-insert the plug, allowing the oil to overflow out of the reservoir, thereby removing any air from inside the circuit.
- Move the piston forwards, using the operating lever and check that it is operating correctly. If the piston does not remain in position after each actuation, remove the reservoir again and actuate the lever repeatedly both forwards and backwards in order to completely purge any air from the hydraulic circuit. Top up with oil if necessary.
- Use a cloth for cleaning and drying, and then re-assemble following the steps in reverse order.



haupa®
...convincing solutions

EXPLODED VIEW DRAWING Art. 21 57 55



Code-No.	No.	Description	Qty.	Code-No.	Nr.	Description	Qty.
2150001	01	ROTATING JAW	1	0000011	28	Ø 3 BALL	1
0000001	02	M5 BALL POSITIONER	2	2150029	29	BODY	1
0000002	03	CIRCLIP	1	2150030	30	DRIVE PISTON	1
2150004	04	BODY PIN	2	2150031	31	ANTI-EXTRUSION RING	1
2150005	05	ROTATING JAW SPRING	1	0000012	32	O-RING	1
2150006	06	TRIGGER SPRING	1	2150033	33	FILTER	1
2150007	07	TRIGGER	1	2150034	34	RELEASE KEY	1
2150008	08	HEAD BODY	1	0000013	35	SAFETY VALVE NEEDLE ORING	1
0000003	09	M4 X 20 SCREW TO SECURE PUNCH SUPPORT	1	2150036	36	SAFETY VALVE NEEDLE	1
2150010	10	DIE SUPPORT	1	2150037	37	SAFETY VALVE SPRING	1
2150011	11	LARGE PISTON SPRING	1	1490052	38	SAFETY VALVE SPRING STOP	1
2150012	12	SMALL PISTON SPRING	1	0000014	39	M4 SAFETY VALVE LOCKNUT	1
2150013	13	LEVER SPRING	1	0000015	40	RESERVOIR	1
0000004	14	CIRCLIP	2	2150041	41	RESERVOIR PLUG	1
2150015	15	LEVER PIN	2	2150042	42	DIN M4 X 5 STUD BOLT	1
2150016	16	LEVER	1	0000016	43	FIXED HANDLE	1
2150017	17	SMALL HANDLE	1	2150044	44	LARGE HANDLE	1
0000005	18	RIVET SEAL	1	2150045	45	RIVET SEAL	1
2150019	19	CRIMPING PISTON	1	0000017	46	HANDLE FIBRE	1
0000006	20	HARD RING	1	2150047	47	BUSHING NUT	1
0000007	21	O-RING	1	2150050	48	BUSHING	1
0000008	22	M5 X 20 STUD BOLT	1	0000018	49	COPPER WASHER	1
0000009	23	ELASTIC PIN	1	0000019	50	M4 NUT	1
2150024	24	RELEASE VALVE SPRING SUPPORT	1	0000020	51	M4 BALL POSITIONER	2
2150025	25	RELEASE VALVE SPRING	1	0000021	52	M4 PLUG NUT	2
0000010	26	Ø 6 BALL	1	0000022	53		1
2150027	27	INLET VALVE SPRING	1				

WHEN ORDERING SPARES, ALWAYS PROVIDE THE FOLLOWING INFORMATION.

1. Item code number.
2. Item description.
3. Instruction manual reference and/or date.
4. Tool type.
5. Tool serial number.

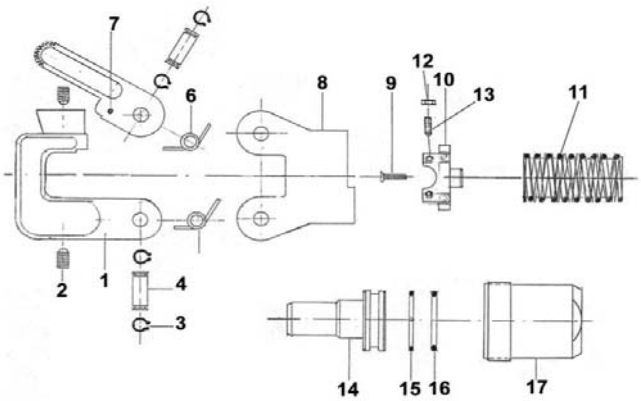
The guarantee will become void if spares other than the HAUPA original spares are used.

haupa®

...convincing solutions

HAUPA® GmbH & Co. KG, Königstraße 165-169, D-42853 Remscheid,
Phone +49 (2191) 8418-0. Fax: +49 (2191) 8418840, E-Mail: sales@haupa.com.

EXPLODED VIEW DRAWING Art. 21 57 60



Code-No.	No.	Description	Qty.	Code-No.	Nr.	Description	Qty.
2150001	01	ROTATING JAW	1	2150010	10	DIE SUPPORT	1
0000001	02	M5 BALL POSITIONER	2	2150012	11	SMALL PISTON SPRING	1
0000002	03	CIRCLIP	1	0000020	12	M4 NUT	1
2150004	04	BODY PIN	2	0000021	13	M4 BALL POSITIONER	1
2150005	05	ROTATING JAW SPRING	1	216001	14	CRIMPING PISTON	1
2150006	06	TRIGGER SPRING	1	0000080	15	HARD RING	1
2150007	07	TRIGGER	1	0000081	16	O-RING	1
2150008	08	HEAD BODY	1	2160002	17	CYLINDER HEAD	1
0000003	09	M4 X 20 SCREW TO SECURE PUNCH SUPPORT	1				

WHEN ORDERING SPARES, ALWAYS PROVIDE THE FOLLOWING INFORMATION.

1. Item code number.
2. Item description.
3. Instruction manual reference and/or date.
4. Tool type.
5. Tool serial number.

The guarantee will become void if spares other than the HAUPA original spares are used.