

Cembre







Management System

ENGLISH

Certified Quality Management System

Certified Environmenta Management System

BATTERY OPERATED
HYDRAULIC CRIMPING TOOL



OPERATION AND MAINTENANCE MANUAL

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() Cembre_

Cembre _____ www.cembre.com

Cembre S.p.A. Via Serenissima, 9

via Serenissima, 9 25135 Brescia (Italia) Telefono: 030 36921 Telefax: 030 3365766 E-mail: sales@cembre.com www.cembre.it

Cembre España S.L.

Calle Verano, 6 y 8 - P.I. Las Monjas 28850 Torrejón de Ardoz - Madrid (España) Telefano: 91 4852580 Telefax: 91 4852581 E-mail: sales@cembre.es www.cembre.es

Cembre Ltd.

Cembre AS

Fossnes Senter

www.cembre.no

N-3160 Stokke (Norway)

Phone: (47) 33361765 Telefax: (47) 33361766

E-mail: sales@cembre.no

Dunton Park Kingsbury Road, Curdworth - Sutton Coldfield West Midlands B76 9EB (Great Britain) Tel.: 01675 470440 - Fax: 01675 470220 E-mail: sales@cembre.co.uk www.cembre.co.uk

1

Cembre GmbH
Heidemannstraße 166
80939 München (Deutschland)
Telefon: 089/3580676
Telefax: 089/35806777
E-mail: sales@cembre.de
www.cembre.de

Cembre S.a.r.I.

www.cembre.fr

22 Avenue Ferdinand de Lesseps

B.P. 37 - 91421 Morangis Cédex

Tél.: 01 60 49 11 90 - Fax: 01 60 49 29 10

91420 Morangis (France)

E-mail: info@cembre.fr

cod. 6261349

Cembre Inc.
Raritan Center Business Park
181 Fieldcrest Avenue
Edison, New Jersey 08837 (USA)
Tel: (732) 225-7415 - Fax: (732) 225-7414
E-mail: Sales, US@cembreinc.com

⚠ WARNING



Before using the tool, carefully read the instructions in this manual.



When operating the tool, keep hands away from the danger zone.



See page 9.



Do not short circuit the batteries.



Do not destroy battery by fire.



Do not expose battery to water or rain.



Always recycle the batteries.



Do not discard batteries into domestic refuse or waste disposal.

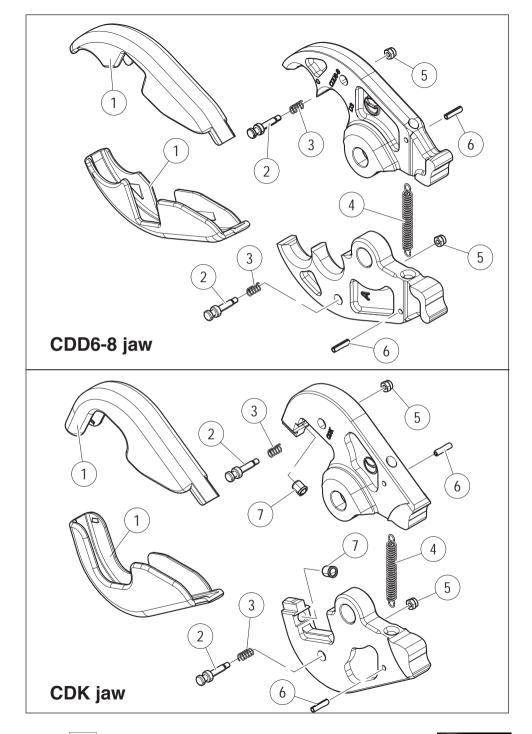
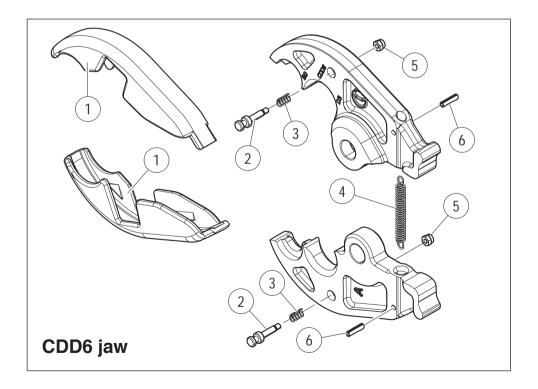




TABLE 3 (JAW)

	Code N°		Item	DESCRIPTION		
6000630	6000630	6000631	1	RUBBER COVER	2	
6600022	6600022	6600022	2	DIE RETAINER PIN	2	
6520404	6520404	6520404	3	SPRING	2	
6520630	6520630	6520630	4	SPRING	1	
6180171	6180171	6180171	5	M3 AUTOLOCK NUT	2	
6760085	6760085	6760085	6	Ø 3x12 ELASTIC PIN	2	
-	-	6240007	7	DIE RETAINER	2	
CDD6	CDD6-8	CDK				







BATTERY OPERATED HYDRAULIC CRIMPING TOOL

1. GENERAL CHARACTERISTICS

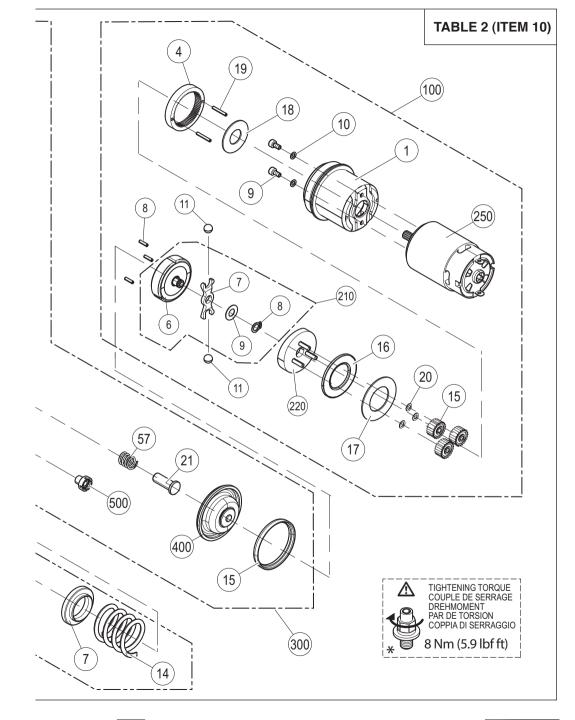
TOOL TYPE:	B54N-YD6	B54N-YD6-8	B54N-YK			
Application range:	suitable for install	ing electrical comp	ression connectors			
	for conduc	for conductors up to 150 mm ² (300 MCM)				
Crimping force kN (sh ton)	:	54 (6)				
Rated operating pressure bar (psi)	:	340 (4,900)				
Dimensions LxWxH mm (inches)	470 x 119 x 79 (18.5 x 4.7 x 3.1)					
Weight with battery kg (lbs)	:	3,2 (7)				
Motor Volt DC	:	18				
Battery (Makita BL1830) Volt / Ah	:	18 / 3.0 Li-lon				
Battery charger supply Volt / Hz	120 / 50-60					
Recommended oil:	AGIP ARNICA 22 or ESSO INVAROL EP22 or equivalent.					
Safety:	the tool is equipped with a maximum pressure valve.					
Types of jaw supplied: (see table A page 9 for compatibility)	CDD 6 with D3 groove to accept all "W" style crimping dies + "BG" fixed groove	CDD 6-8 with D3 groove to accept all "W" style crimping dies + "O" fixed groove	CDK with groove to ac- cept all "O" style Kearny crimping dies			
Acoustic Noise (Directive 2006/42/EC, annexe 1, point 1.7.4.2 letter u) Tests carried out in compliance with the indications contained in UNI FN ISO 3744 and UNI FN ISO 11202						

Tests carried out in compliance with the indications contained in UNI EN ISO 3744 and UNI EN ISO 11202

- The weighted continuous acoustic pressure level equivalent

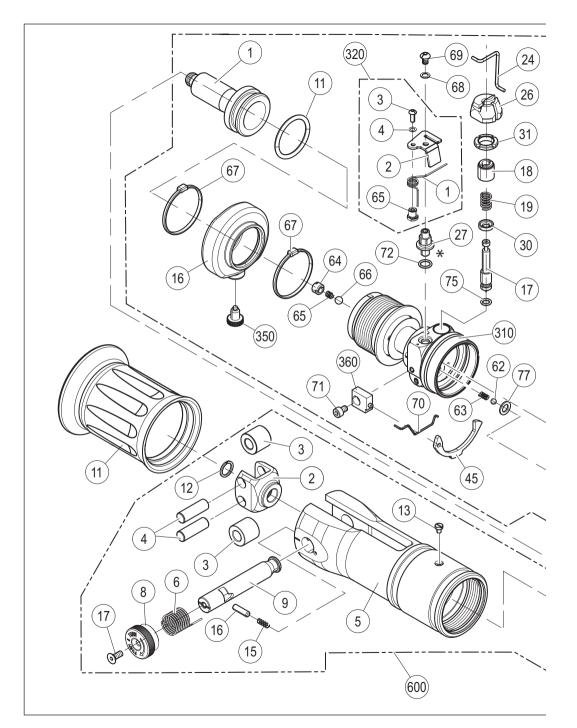
Risks due to vibration (Directive 2006/42/EC, annexe 1, point 2.2.1.1)

Tests carried out in compliance with the indications contained in UNI 5349-1/2 and UNI EN 28662 part 1st Standards, and under operating conditions much more severe than those normally found, certify that the weighted root mean square in frequency of the acceleration the upper limbs are exposed to for each biodynamic reference axis does not exceed 2.5 m/sec².









2. INSTRUCTIONS FOR USE

The tool is equipped with automatic return of the dies once the crimping operation is completed.

The interchangeable crimping jaws have thermoplastic rubber covers on outside edges. Residual battery capacity level is automatically displayed after every cycle.

The part reference "B54..." includes the following:

- Basic tool complete with battery
- Spare battery
- Battery charger
- Canvas bag.

2.1) Preparation

With the tool in the rest position (the ram fully retracted) proceed as follows:

- Select the appropriate groove or die set for the connector to be crimped.

- Insert the dies into the jaws of the tool (see § 2.8).

Insert the conductor into the connector.

2.2) Die advancement (Ref. to Fig. 1) Grip the tool firmly and comfortably.

- Position the connector in the die groove and ensure the correct location of the crimp.
- Press operating button (3) to activate the motor-pump group for the advancement of the ram. To halt the advancement, release the operating button and the motor will cut out.

Make sure the dies are exactly positioned on the desired crimp point otherwise re-open dies following instructions as per § 2.5 and reposition the connector.





2.3) Compression

Insert the conductor in the connector and press the operating button (3): the ram will gradually move forward until the two dies touch. It is recommended to keep operating until the maximum pressure valve is activated and a "click" is heard, after which the dies will automatically re-open until the ram is fully retracted. It is always possible to interrupt automatic retraction of the ram by a short push on the operating button (3).

2.4) Head rotation

For ease of operation the tool head can rotate through 180°, allowing the operator to work in the most comfortable position.

FIG. 2

Warning: do not attempt to rotate the head when the hydraulic circuit is pressurised.

2.5) Release of dies (Ref. to Fig. 1)

Press the pressure release button (8), the ram will retract and open the dies.

2.6) Battery status (Ref. to Fig. 2)

Inserting the battery into the tool or releasing the operating button causes the residual battery capacity to be automatically displayed for 5 seconds on the indicator.

The number of LEDs illuminated indicates the residual capacity.

6 LEDs illuminated: fully charged

3 LEDs illuminated: 50 % capacity

1 LED illuminated: minimum charge





2.7) Insertion/replacement of battery

To insert the battery, slide it into its seat until it locks (Ref. to Fig. 3).

To replace an exhausted battery, press the, button and slide it forward.





TABLE 2 (ITEM 10 IN TABLE 1)

Code N°	ľ	tem		DESCRIPTION	Qty
6520200	300	65		SPRING	1
6740120	300	66		7/32" BALL	1
3041735	300	67		TIE	2
6640205	300	68		D. 4 SCHNORR WASHER	1
6900052	300	69		M4x6 SCREW	1
6000602	300	70		LEVER SPRING	1
6900054	300	71		M4x6 SCREW	1
6360022	300	72		O-RING	1
6360125	300	75		O-RING	1
6641020	300	77		Ø 6 CU WASHER	1
6160081	300	310		BODY	1
6000697	300	320		RELEASE GROUP	1
6520240	300	320	1	SPRING	1
6000318	300	320	2	SPRING GUIDE	1
6900021	300	320	3	SCREW	1
6000849	300	320	4	D. 3 SCHNORR WASHER	1
6000608	300	320	65	SPRING SUPPORT	1
6000153	300	350		RESERVOIR CAP	1
6000588	300	360		COMPLETE LEVER SUPPORT	1
6000601	300	400		COMPLETE MEMBRANE	1
6900602	300	500		COMPLETE SUCTION SCREW	1
6000620	600			COMPLETE JAW SUPPORT	1
6000621	600	2		SUPPORT	1
6000632	600	3		ROLL	2
6560200	600	4		PIN ROLL	2
6000622	600	5		JAWS SUPPORT	1
6000623	600	6		SPRING	1
6040564	600	7		RAM GUIDE RING	1
6000624	600	8		PIN GRIP	1
6000633	600	9		JAW LOCKING PIN	1
6700051	600	12		Ø 10 CIRCLIP	1
6900013	600	13		M3x4 SCREW	1
6520030	600	14		RAM RETURN SPRING	1
6520601	600	15		SPRING	1
6760420	600	16		CYLINDRICAL PIN	1
6900180	600	17		M4x10 SCREW	1



TABLE 2 (ITEM 10 IN TABLE 1)

Code N°	ŀ	tem		DESCRIPTION	Qt	y
6000625	11			RUBBER GRIP	1	
6000199	100			ACTUATING MECHANICAL GROUP	1	
6000357	100	1		HOUSING	1	
6000358	100	4		GEAR	1	
6760004	100	8		Ø 2X8 CYLINDRICAL PIN	3	
6900008	100	9		M3x6 SCREW	2	
6000849	100	10		Ø 3 SCHNORR WASHER	2	
6740020	100	11		1/4" BALL	2	
6000363	100	15		GEAR	3	
6402009	100	16		BEARING	1	
6402006	100	17		WASHER	1	
6000328	100	18		WASHER	1	
6760012	100	19		CYLINDRICAL PIN	2	
6000315	100	20		SPACER	3	
6000231	100	210		COMPLETE DISC	1	
6000229	100		6	DISC	1	
6000227	100		7	BALLS SUPPORT	1	
6700080	100		8	Ø 6 CIRCLIP	1	
6650136	100		9	WASHER	1	
6000232	100	220		COMPLETE CAM	1	
6000198	100	250		COMPLETE MOTOR	1	
6000152	300			COMPLETE HYDRAULIC GROUP	1	
6620122	300	1		RAM	1	
6362098	300	11		SEAL	1	
6000560	300	15		MEMBRANE RING	1	
6720072	300	16		OIL RESERVOIR	1	
6300027	300	17		VALVE PISTON	1	
6000561	300	18		GRUB SCREW	1	
6520232	300	19		VALVE SPRING	1	
6620378	300	21		PUMPING RAM	1	
6000563	300	24		VALVE ROD	1	
6000575	300	26		SPRING SUPPORT	1	
6000565	300	27		TEST PRESSURE CAP	1	
6641027	300	30		WASHER	1	
6000567	300	31		SETTING VALVE LOCKNUT	1	
6000603	300	45		PRESSURE RELEASE LEVER	1	
6000570	300	57		PUMPING RAM RETURN SPRING	1	
6740100	300	62		5/32" BALL	1	
6520160	300	63		SPRING	1	
6340590	300	64		GRUB SCREW	1	

2.8) Crimping die assembles

2.8.1) Use of "W" style crimping dies (B54N-YD6, B54N-YD6-8 tools)

- Press pins (2) and insert "W" dies into their seats (see Fig. 4A).
- To disassemble them simply press the pins and slip them from the jaws.

2.8.2) Use of "O" style Kearney crimping dies (B54N-YK tool)

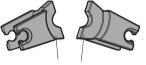
- Insert "O" dies into their seats, the two dies will be held by the retainers (7) (see Fig. 4B).
- To disassemble them simply slip them from the jaws.

Note: it is possible to use "W" style crimping dies with B54N-YK by means of the AU55-B adapter, available as an accessory.



It is recommended to use the tool only with dies inserted.

"W" style crimping dies



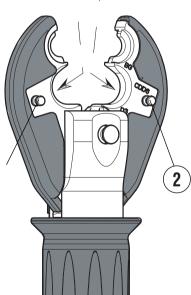


FIG. 4A B54N-YD6, B54N-YD6-8 tools

"O" style crimping dies

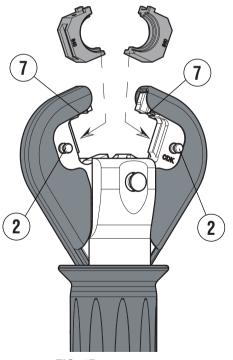
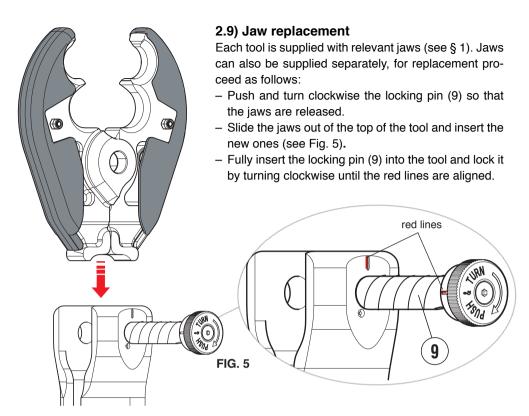


FIG. 4B B54N-YK tool







3. WARNING

Before starting work on electrical equipment, please ensure that either there are no live parts in the immediate working area or that precautions are taken for working near live parts in accordance with EN50110-1.



⚠ DO NOT USE THIS TOOL ON OR NEAR ENERGISED CONDUCTORS WITHOUT PROPER PERSONAL PROTECTIVE EQUIPMENT. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN SEVERE INJURY OR DEATH.



THE TOOL IS UNSUITABLE FOR CONTINUOUS USE AND SHOULD BE ALLOWED TO COOL DOWN FOLLOWING UNINTERRUPTED, SUCCESSIVE CRIMPING OPERATIONS; FOR INSTANCE, HAVING EXHAUSTED A FULLY CHARGED BATTERY IN ONE SESSION, DELAY BATTERY REPLACEMENT FOR A FEW MINUTES.

OBSERVE RECOMMENDED REST PERIODS ALSO WHEN USING AN EXTERNAL POWER SUPPLY.



PROTECT THE TOOL FROM RAIN AND MOISTURE. WATER WILL DAMAGE THE TOOL AND BATTERY. ELECTRO-HYDRAULIC TOOLS SHOULD NOT BE OPERATED IN POURING RAIN OR UNDER WATER

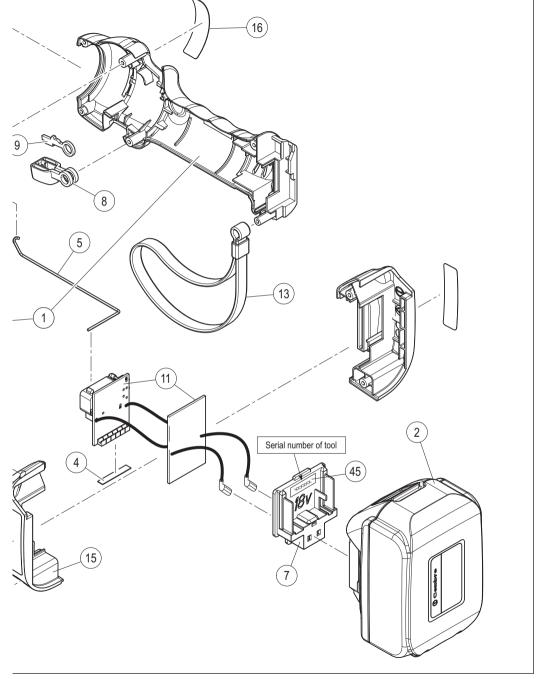






TABLE 1 See TABLE 2

3.1) Using the battery charger

Carefully follow the instructions in the battery charger manual.

3.2) General information on how to use batteries

In order to maximise battery life, please follow these rules:

- Use the battery until the automatic residual energy display still has 1-2 LEDs showing: this
 means the battery is almost completely discharged and no loss in the life of the battery has
 been caused.
- Be particularly careful when charging a new battery the first 2-3 times in order to be certain
 of maximising the available energy level.
- Allow the battery to cool down to ambient temperature prior to recharging.
- Rest the battery charger for at least 15 minutes between charges.

4. MAINTENANCE

The tool is robust, completely sealed and requires very little daily maintenance.

Compliance with the following points should help to maintain the optimum performance of the tool:

4.1) Thorough cleaning

Dust, sand and dirt are a danger for any hydraulic device.

Every day, after use, the tool must be wiped with a clean cloth taking care to remove any residue, especially close to moveable parts.

4.2) Storage

When not in use, the tool and accesories should be stored and transported in the relevant canvas bag to prevent damage.







TABLE A

INTERCHANGEABLE CRIMPING JAWS						
JAW TYPE	GROOVES CRIMPING DIE COMPATIBILI					
	"D3" TO ACCEPT ALL "W" STYLE	FCI Burndy	W, X Series			
CDD6	CRIMPING DIES + "BG" FIXED GROOVE	Greenlee	KD6 Series			
		Ilsco	ND Series			
CDD6-8	"D3" TO ACCEPT ALL "W" STYLE CRIMPING DIES + "O" FIXED	Huskie	HT-58 Series			
CDD0-8	GROOVE	Panduit	CD-2001 series			
		FCI Burndy	W, X Series			
		Greenlee	KD6 Series			
	GROOVE TO ACCEPT ALL "O" STYLE KEARNEY CRIMPING DIES	Ilsco	ND Series			
CDK	AU55-B ADAPTER TO ACCEPT	Huskie	HT-58 Series			
	ALL "W" STYLE CRIMPING DIES AVAILABLE AS AN ACCESSORY	Panduit	CD-2001 Series			
		Kearney	O Series			
		Blackburn	6 tons			

- Following information applies in member states of the European Union:



USER INFORMATION in accordance with "Directives 2002/95/EC and 2002/96/EC regarding the reduction of hazardous substances in electrical and electronic equipment, including the disposal of waste".

The 'Not in the bin' symbol above when shown on equipment or packaging means that the equipment must, at the end of its life, be disposed of separately from other waste.

The separate waste collection of such equipment is organised and managed by the manufacturer.

Users wishing to dispose of such equipment must contact the manufacturer and follow the prescribed guidelines for its separate collection.

Appropriate waste separation, collection, environmentally compatible treatment and disposal is intended to reduce harmful environmental effects and promote the reuse and recycling of materials contained in the equipment. Unlawful disposal of such equipment will be subject to the application of administrative sanctions provided by current legislation.

5. RETURN TO Cembre FOR OVERHAUL

In the case of a breakdown contact our Area Agent who will advise you on the problem and give you the necessary instructions on how to dispatch the tool to our nearest service Centre; if possible, attach a copy of the Test Certificate supplied by Cembre together with the tool or, if no other references are available, indicate the approximate purchase date and the tool serial number.

SPARE PARTS LIST

The guarantee is void if parts used are not Cembre original spares.

When ordering spare parts always specify the following:

- code number of item
- name of item
- type of tool
- serial number of tool

TABLE 1

Code N°	N° Item		DESCRIPTION	Qty
6000577	1		RIGHT + LEFT SHELL	1
8502002	2		BL1830 BATTERY	1
6000217	3		OPERATING BUTTON	1
6000584	4		PROTECTION	1
6000591	5		ROD	1
6000593	6		SPRING	1
6000203	7		CONTACT SUPPORT	1
6000218	8		PRESSURE RELEASE BUTTON	1
6000582	9		BUTTON REINFORCEMENT	1
6000200	10		MECHANICAL GROUP (see table 2)	1
6000202	11		COMPLETE ELECTRICAL CIRCUIT	1
6900650	12		3,5X16 SCREW	8
6000589	13		WRIST STRAP	1
6506654	15		RIGHT + LEFT ADAPTOR	1
6232675	16		TG.0918 LABEL	1
6232500	17		TG.0704 LABEL	1
6232676	18		TG.0919 LABEL	2
6232654	45		TG.0891 LABEL	1



