



Certified Quality
Management System



Certified Environmental
Management System



Certified Occupational
Health & Safety
Management System

ENGLISH

BATTERY OPERATED HYDRAULIC CRIMPING TOOL

**B55
B55-YB
B55-YC
B55-YK**



**B55-KV
B55-YB-KV
B55-YC-KV
B55-YK-KV**

**OPERATION AND MAINTENANCE
MANUAL**

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cod. 6261271



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WARNING



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



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



Do not short circuit the batteries.



Always recycle the batteries in accordance with local regulations.



Do not discard batteries into domestic refuse or waste disposal.



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.

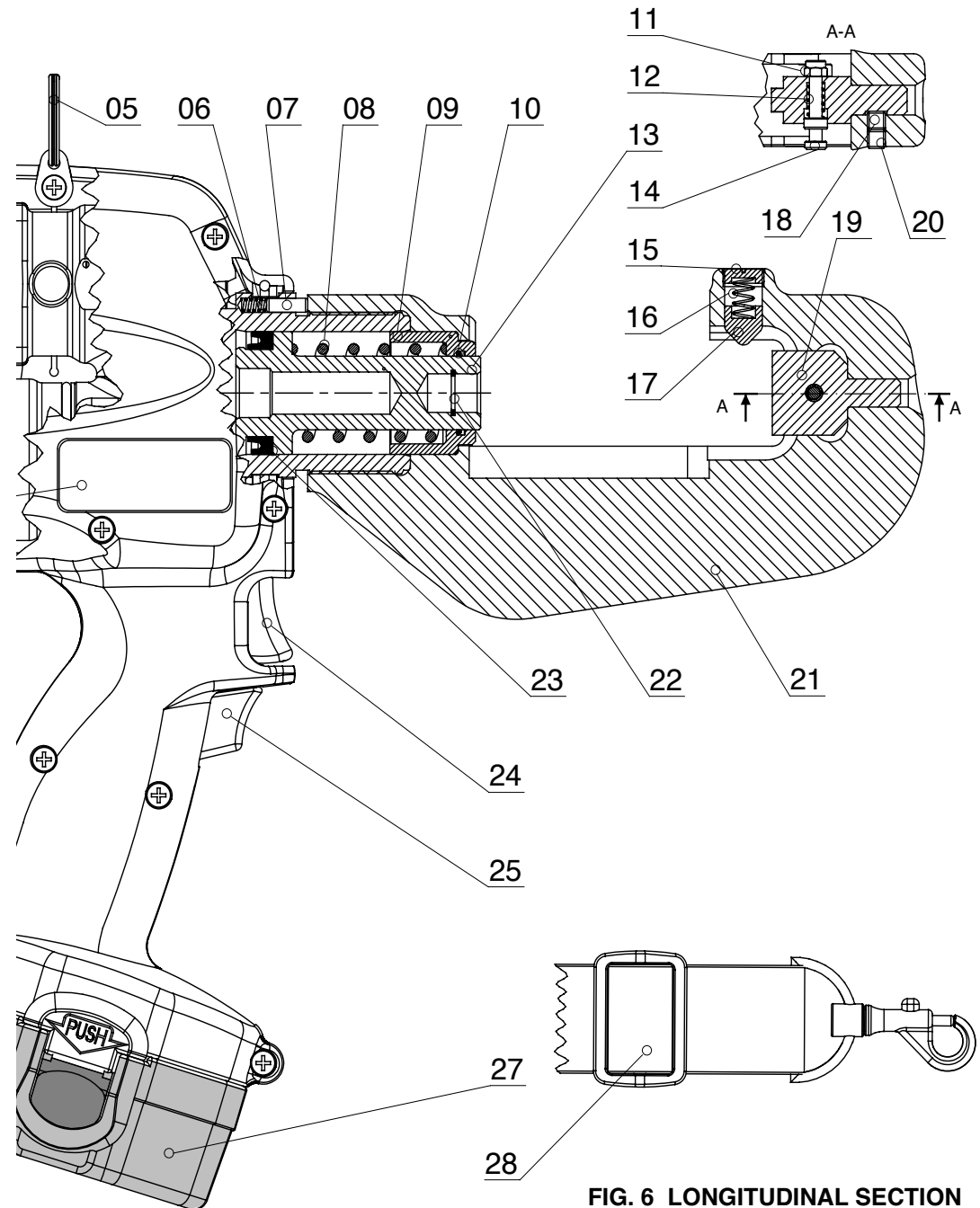
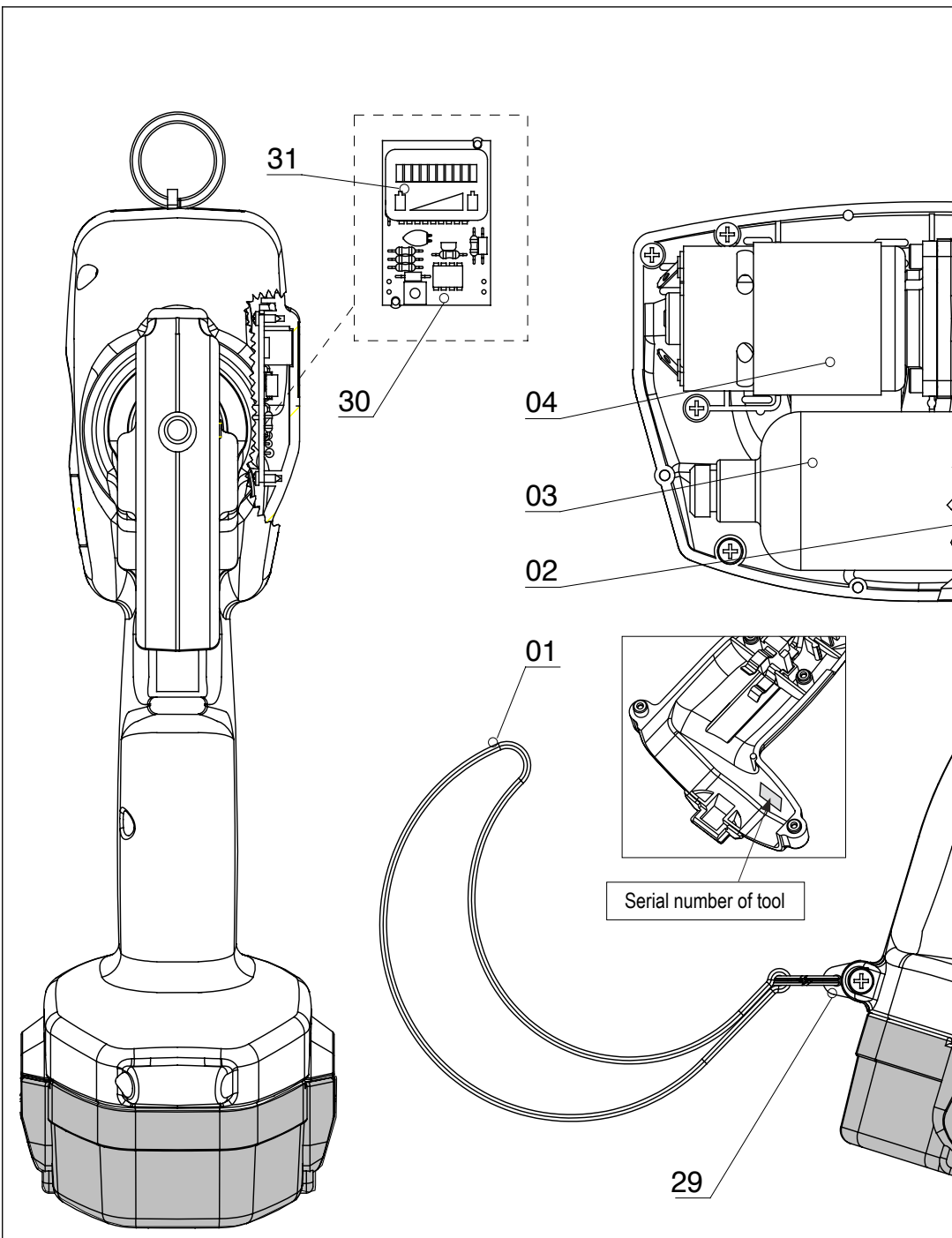


FIG. 6 LONGITUDINAL SECTION



IMPORTANT INFORMATION FOR WORKING IN THE PROXIMITY OF ENERGISED CONDUCTORS

- **CERTAIN KV VERSIONS OF Cembre TOOLS ARE PROVIDED WITH ADDITIONAL COATINGS TO PROTECT THE OPERATOR AND TOOL AGAINST ACCIDENTAL BRUSH CONTACT WITH ENERGISED CONDUCTORS.**
- **PROPER TRAINING TECHNIQUES AND PRACTICES SHOULD ALWAYS BE ADHRED TO WHEN WORKING AROUND ENERGISED CONDUCTORS.**
- **ALWAYS CONSULT YOUR COMPANY'S WORK RULES AND METHODS TO SELECT SUITABLE TOOLING, RUBBER INSULATED GLOVES, SHROUDING AND OTHER PROTECTIVE EQUIPMENT.**
- **UNDER NO CIRCUMSTANCES SHOULD OPERATIVES RELY SOLELY ON THE INSULATING PROPERTIES OF THE TOOLS ALONE WHEN WORKING AROUND ENERGISED CONDUCTORS.**
- **PRIOR TO USE PLEASE ENSURE THE TOOL AND SPECIFICALLY THE INSULATING PROTECTION HAVE NOT BE DAMAGED.**

This hydraulic tool is powered by a **14.4V** battery.

The tool is quiet in operation with minimal vibration and has a lightweight construction enabling it to be held in one hand while positioning the connector with the other. Microprocessor control automatically stops the motor at the end of the crimp cycle, saving energy and extending the life of the battery, whose residual energy level is automatically displayed after each operation.

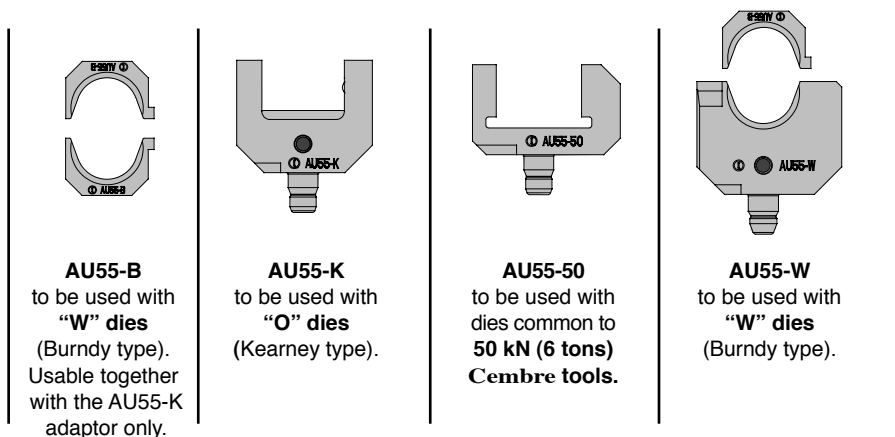
The part code "**B55...**" includes the following:

- Basic tool complete with adaptors for dies, **battery** and **shoulder strap**.
- **Spare battery.**
- **Battery charger.**
- **Plastic carrying case "VAL P9".**
- **Canvas bag "013" for storing the set of dies.**

1. GENERAL CHARACTERISTICS

TOOL TYPE:	B55 B55-KV	B55-YB B55-YB-KV	B55-YC B55-YC-KV	B55-YK B55-YK-KV
Application range:	suitable for installing electrical compression connectors for conductors up to 240 mm ² (500 MCM)			
Crimping force kN (sh ton):	55 (6.4)			
Rated operating pressure bar (psi):	600 (8,700)			
Dimensions LxWxH mm (inches):	358 x 94 x 302 (14 x 3.7 x 11.9)			
Weight with battery kg (lbs):	4,7 (10.3)	5 (11)		
Motor Volt DC:	14.4			
Battery Volt / Ah:	14.4 / 3.0 Li-Ion	14.4 / 3.0 Ni-MH		
Battery charger supply Volt / Hz:	220-240 / 50-60	120 / 50 - 60		
Recommended oil:	AGIP ARNICA 32 or SHELL TELLUS TX 32 or equivalent			
Recommended oil for “KV” versions:	AGIP ITE 360 or ESSO TRANSFORMER P60 or equivalent			
Operating speed:	the tool has a twin speed operation and automatically switches from a rapid advancing speed of the ram to a slower more powerful crimping speed.			
Safety:	the tool is equipped with a maximum pressure valve.			
AU55-B adaptor		●		
AU55-K adaptor		●		●
AU55-50 adaptor	●		●	
AU55-W adaptor	●			

Each tool is supplied with relevant adaptors (see table above).
Adaptors can also be supplied separately:



6. PARTS LIST (Ref. to Fig. 6)

Code N°	Item	DESCRIPTION	Qty	Code N°	Item	DESCRIPTION	Qty
6000447	01	WRIST STRAP	1	6520342	16	SPRING	1
-	02	TOOL LABEL	1	6620439	17	DIE RETAINING PIN	1
6720073	03	RESERVOIR	1	6340035	18	M5x5 GRUB SCREW	1
6000310	04	MOTOR	1	6580034	19	COMPLETE PLATE	1
6040427	05	STRAP ANCHOR RING	1	★	20	GRUB SCREW	1
6520601	06	SPRING	1	★	21	COMPLETE HEAD	1
6760230	07	Ø 4x12 PIN	1	6700051	22	CIRCLIP	1
6520304	08	RAM RETURN SPRING	1	6362098	23	SEAL	1 k
6040552	09	RAM GUIDE RING	1	6000326	24	OPERATING BUTTON	1
6360175	10	O-RING	1 k	6440117	25	PRESSURE RELEASE BUTTON	1
6180171	11	AUTO-LOCK NUT M3	1	-	27	BATTERY	1
6520404	12	SPRING	1	6000354	28	SHOULDER STRAP	1
6620117	13	RAM	1	6000304	29	FIXING RING	2
6600022	14	PIN	1	-	30	ELECTRONIC CARD	1
6371019	15	RING	1	6232095	31	TG.0295 BATTERY LABEL	1

Spare parts kit code no. 6000057 includes the spares for the hydraulic unit, available on request.
The items marked with "K" are those Cembre recommend replacing if the head is disassembled.

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

When ordering spare parts always specify the following:

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

★ Code N°		
Item	B55 B55-YB B55-YC B55-YK	B55-KV B55-YB-KV B55-YC-KV B55-YK-KV
20	6340035	6340040
21	6860142	6860143

Acoustic Noise (Directive 2006/42/EC, annexe 1, point 1.7.4.2 letter u)

- The weighted continuous acoustic pressure level equivalent
A at the work place L_{pA} is equal to 75 dB (A)
- The maximum value of the weighted acoustic displacement
pressure C at the work place L_{pCPeak} is < 130 dB (C)
- The acoustic power level emitted by the machine
 L_{WA} is equal to 85,3 dB (A)

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 ENV 25349 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 of the upper limbs are exposed to for each biodynamic reference axis does not exceed 2.5 m/sec².**

7. 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.

4. WARNING

⚠ DO NOT USE THIS TOOL ON OR NEAR ENERGIZED 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.

4.1) Using the battery charger

Carefully follow the instructions in the battery charger manual.

4.2) General information on how to use the batteries

In order to use the batteries correctly, please follow these rules:

- Use the battery until the automatic residual power 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 obtain maximum available power.
- Allow the battery to cool down to ambient temperature prior to recharging.
- Rest the battery charger for at least 15 minutes between charges.

5. MAINTENANCE

The tool is robust, completely sealed, and requires very little daily maintenance. Compliance with the following points, should help to maintain its optimum performance:



5.1) Thorough cleaning

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

Every day, after use, the tool must be cleaned with a clean cloth, taking care to remove any residual particles, especially close to pivots and moveable parts.

5.2) Storage (Ref. to Fig. 4)

When not in use, the tool should be stored and transported in the plastic case, to prevent damage.

The case is suitable for storing the tool and the accessories.

Plastic case: **VAL P9**, size 543x412x130 mm (21.4x16.2x5.1 inches), weighs 2,2kg (4.8 lbs.).

Canvas bag "013" for storing the set of dies

FIG. 4

2. INSTRUCTIONS FOR USE (Ref. to Figs. 2, 3 and 4)

2.1) Preparation

The tool can be easily carried using either the handle or the shoulder strap (29) attached to the rings (05). With the tool in the rest position proceed as follows:

- Select the appropriate die set for the connector to be crimped.
- Insert the dies into the head tool (see paragraph 3).

2.2) Operation (Ref. to Fig. 1)

- Insert the conductor into the connector.
- Position the connector between the dies and ensure the correct location of the crimp.
- Press operating-button (24) to activate the motor-pump group for the advancement of the lower die. To halt the advancement, release the operating-button and the motor will cut out.

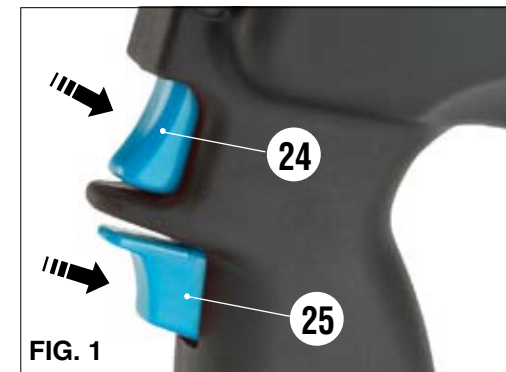


FIG. 1

Make sure the dies are exactly positioned on the desired crimp point, otherwise re-open dies following instructions as per § 2.4 and reposition the connector.

2.3) Compression

- By keeping operating-button (24) pressed down the motor continues to operate: the ram will gradually move forward until the two dies touch.
- It is recommended to continue pumping until the maximum pressure valve is activated and a "click" is heard.
- The motor will continue to operate after the maximum pressure relief valve has activated. No further crimping force is applied, the oil is bypassed and returned to the reservoir.

2.4) Release of dies

- By pressing the pressure release button (25) (Ref. to Fig. 1) positioned below operating-button (24), the ram will retract and the dies open.

2.5) Head rotation

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

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

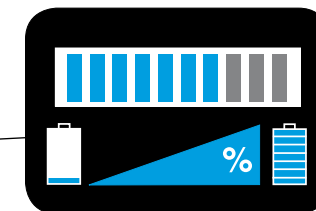
2.6) Battery status (Ref. to Fig. 2)

- After releasing the operating-button (24), the residual battery capacity is automatically displayed for 5 seconds on the indicator (31).

The number of LEDs illuminated indicates the residual capacity:

- 10 LEDs illuminated: fully charged
- 5 LEDs illuminated: 50 % capacity
- 1 LED illuminated: minimum charge

FIG. 2



3. DIE AND ADAPTOR ASSEMBLES

Make sure that the ram (13) of the tool is fully retracted.
Depending on the dies to be used, please proceed as follows:

3.1) Use of "W" dies Burndy type with AU55-B adaptor

- Insert half of the adaptor AU55-B in the upper seat of the head (1) and the second half into the adaptor AU55-K (2); the two halves of the adaptor will be held by pins (17 and 91).
- Insert the adaptor AU55-K into the seat of the ram (3) (see Fig. 3a).
- Press pins (14 and 92) and insert one "W" die into the upper adaptor AU55-B and the other into the lower adaptor AU55-B (4) (see Fig. 3b); to disassemble them it will be sufficient to press the pins and to slip them from the head.

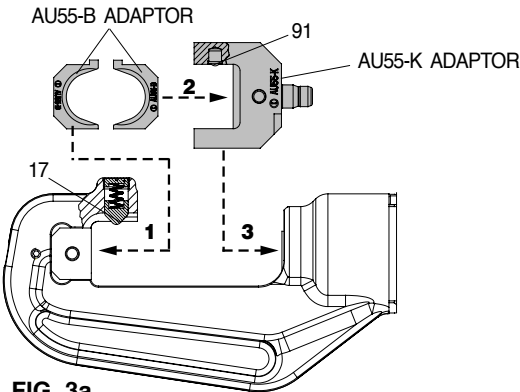


FIG. 3a

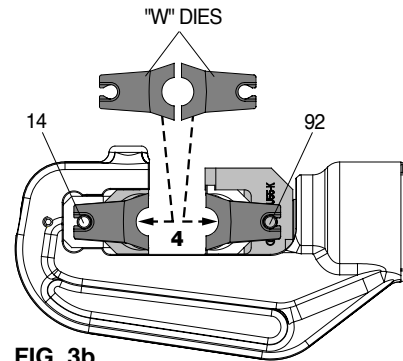


FIG. 3b

3.2) Use of "W" dies Burndy type with AU55-W adaptor (*)

- Insert the upper adaptor AU55-B in the upper seat of the head (1); it will be held by pin (17) (see Fig. 3c).
- Insert the lower adaptor AU55-W into the seat of the ram (2) (see Fig. 3c).
- Press pins (14 and 94) and insert one "W" die into the upper adaptor AU55-B and the other into the lower adaptor AU55-W (3) (see Fig. 3d); to disassemble them it will be sufficient to press the pins and to slip them from the head.

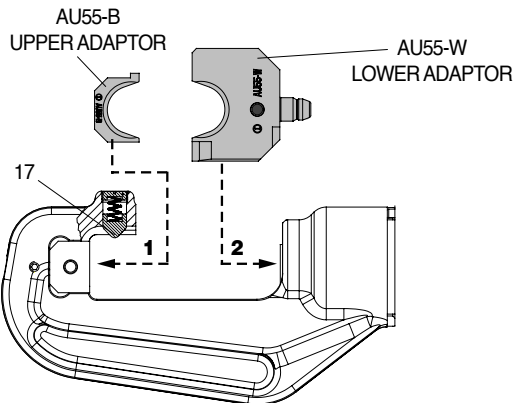


FIG. 3c

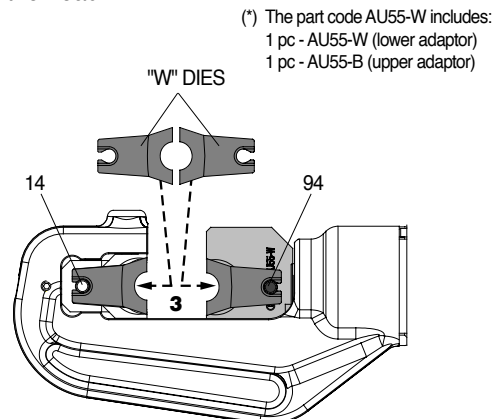


FIG. 3d

3.3) Use of "O" dies Kearney type

- Insert one "O" type die in the upper seat of the head (1) and the other die into the adaptor AU55-K (2), the two dies will be held by pins (17 and 93) (see Fig. 3e).
- Insert the adaptor AU55-K into the seat of the ram (3).
- To disassemble them it will be sufficient to slip them from the head (see Fig. 3f).

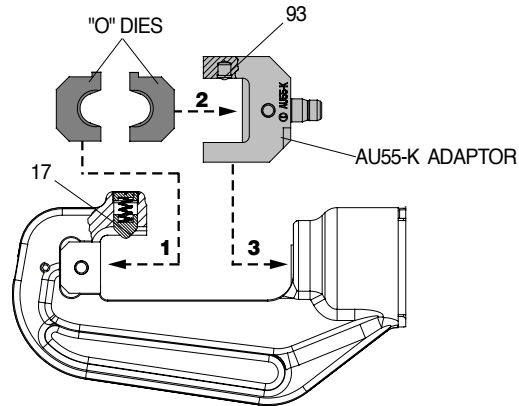


FIG. 3e

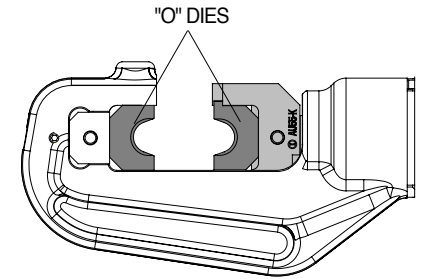


FIG. 3f

3.4) Use of dies common to 50 kN (6 tons) Cembre tools

- Insert the AU55-50 adaptor into the seat of the ram (1) (see Fig. 3g).
- Insert one M...-50 type die into the adaptor AU55-50 (2) and one into the upper part of the head (3); the two dies will be held by pins (17 and 90).
- To disassemble them it will be sufficient to slip them from the head (see Fig. 3h).

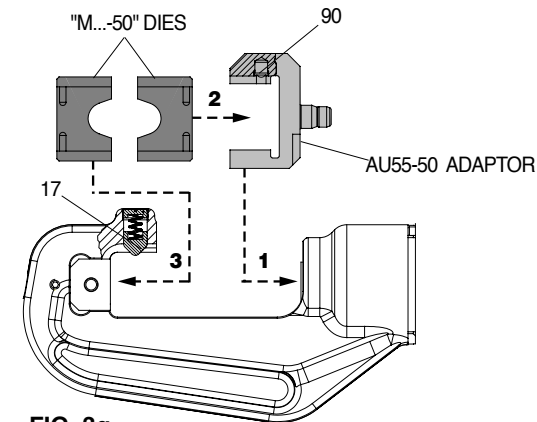


FIG. 3g

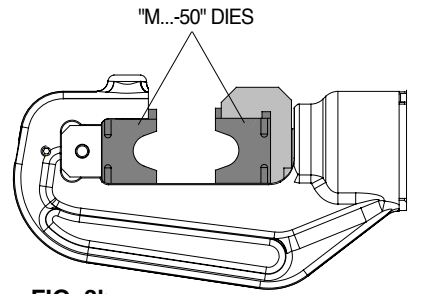


FIG. 3h