

Battery Operated Hydraulic Crimping Tool Catalog Number: BPLT14BSCR



IMPORTANT: Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

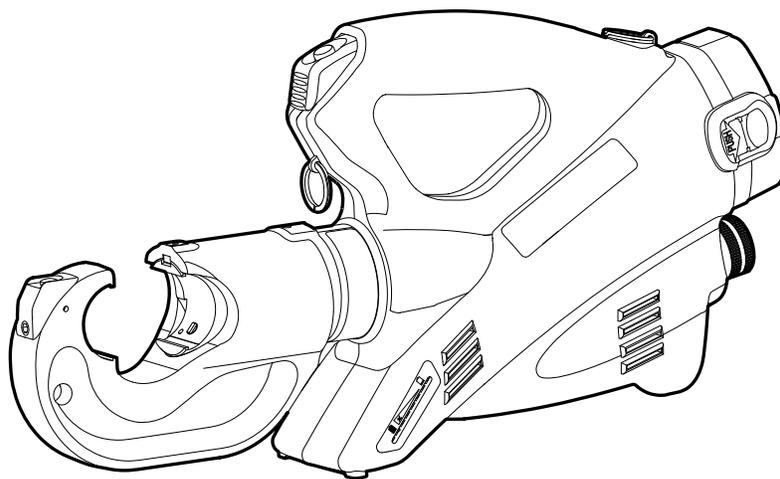


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⚠ WARNING ⚠

- BEFORE USING THE TOOL, CAREFULLY READ INSTRUCTIONS IN THIS MANUAL.
- WHEN OPERATING THE TOOL, NEVER PLACE HANDS OR OTHER BODY PARTS BETWEEN THE CRIMPING DIES.
- DO NOT USE IN WATER OR IN THE RAIN.
- DO NOT OPERATE WHEN DIES ARE NOT IN PLACE.
- DO NOT SHORT THE BATTERIES.
- ALWAYS RECYCLE THE BATTERIES.
- DO NOT DISCARD BATTERIES INTO DOMESTIC REFUSE OR WASTE DISPOSAL.
- RISK OF ELECTRICAL SHOCK. DO NOT USE ON ENERGIZED LINES.



1.1 BATTERY OPERATED HYDRAULIC CRIMPING TOOL

The "BPLT14BSCR" hydraulic tool is powered by a 14.4V Ni-MH battery. It is a balanced tool for optimum control, quiet in operation with very little vibration, with lightweight construction enabling the operator to hold the tool in one hand and to position the cable with the other hand. The operation buttons (operating/release) are mechanically interlocked, the former is integrated into the latter, so that accidental operation is prevented. A microprocessor controls the tool operation and automatically cuts out the motor on completion of the crimping operation, saving energy and extending battery life. The residual battery capacity level is automatically displayed after every cycle.

Catalog Number "BPLT14BSCR" includes the following:

- Basic tool complete with **battery** and **shoulder strap**
- **Spare battery**
- **Battery charger**
- **Plastic carrying case**

1.2 GENERAL CHARACTERISTIC

Head: "C" shaped with large jaw opening, see Figure 4 (*).

Application range: suitable for installing electric compression connectors (lugs and splices) on conductors up to900 MCM

Crimping Force: 14 ton

Rated operating pressure: 700 bar (10,000 psi)

Dimensions: length 18.9"
width 3.9"
height 10"

Weight (with battery): 19.6 lb

Motor - direct current: 14.4 V

Battery: 14.4 V – 3.0 Ah Ni-MH

External Supply: 12 V – 14.4 V DC

Recommended Oil: **AGIP ARNICA 32** or equivalent

Operating Speed: The tool has a twin speed pump that automatically switches from a rapid advancing speed of the ram, to a slower, more powerful crimping speed, as needed.

Safety: The tool is provided with a maximum pressure relief valve.

1.3 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 72,4 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 83,1 dB (A)

1.4 RISK DUE TO VIBRATION

(Directive 2006/42/EC, annexe 1, point 2.2.1.1)

Test 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 the upper limbs are exposed to for each biodynamic references axis does not exceed 2.5 m/sec².**

1.5 OVERALL VIEW

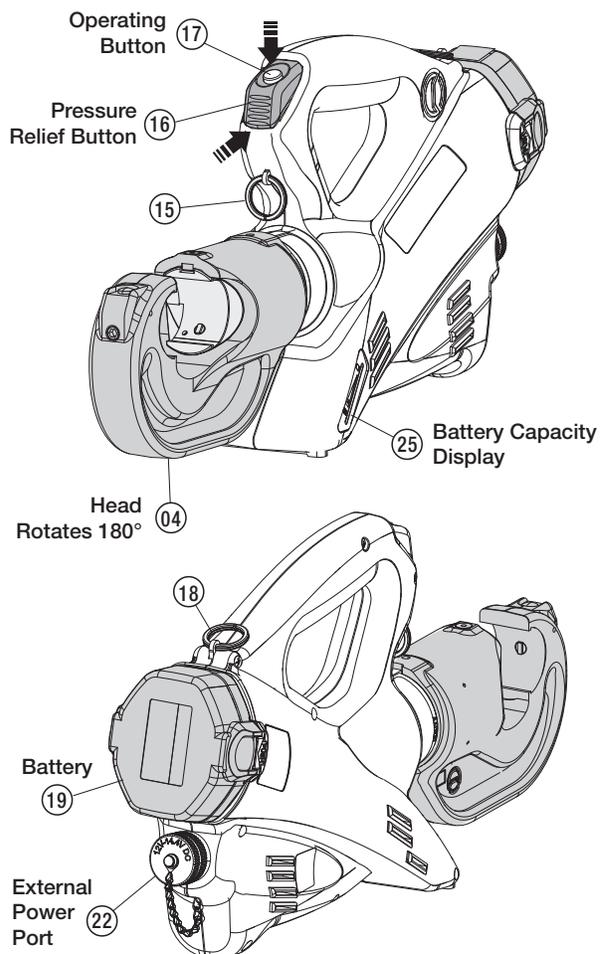


FIGURE 1

2.1

PREPARATION

The tool can be easily carried using either the handle or shoulder strap (01) attached to rings (15 and 18).

With the tool at rest, prepare the tool as follows: (see Figure 2)

- Select the appropriate die set for the connector.
- Insert the die (91) in the upper seat of the tool head (04) until it is locked by die/head retaining pin (05). To ease the die insertion, keep die/head release pin (09) depressed.
- Operate the tool (see step 2.2) to advance the ram (14) 8-10 mm (0.3 - 0.4 in.) and insert the die (90) into the seat on the ram until it is locked by die/ram retaining pin (10). To ease this operation, keep die/ram release pin (12) depressed.
- Insert the conductor in the connector.
- Position the connector between the dies and ensure the correct location of the crimp.
- For ease of operation, the tool head can rotate through 180°.

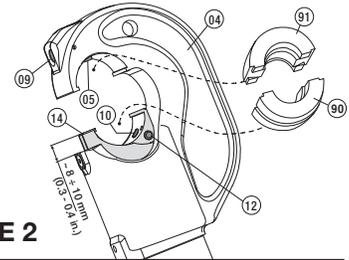


FIGURE 2

⚠ WARNING

DO NOT ATTEMPT TO TURN THE HEAD IF THE HYDRAULIC CIRCUIT IS PRESSURISED.

2.2

DIE ADVANCEMENT

- Operate push-button (17) housed inside the pressure release button (16) to activate the motor-pump for the advancement of the lower die. To halt the advancement, release the push button (17) and the motor (24) will cut out.

⚠ WARNING

Never place the tool under pressure without inserting the dies, this could cause damage to the head and the ram.

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

2.3

COMPRESSION

- By keeping push-button (17) pressed down, the motor continues to operate and the ram (14) will move forward until the two dies touch.
- Continue operating until the motor stops automatically.

2.4

RELEASE OF DIES

- Press the pressure release button (16) to retract the ram and open the dies.

2.5

DIE REPLACEMENT

To replace dies proceed as follows: (Refer to Figure 2)

- **Upper die (91)**
Take the die off its guide by pushing the die/head release pin (09).
- Insert replacement die until secured by the die retaining pin (05).
- **Lower die (90)**
Take the die off its guide by pushing the die/ram release pin (12).
- Insert replacement die until secured by the die ram retaining pin (10). To facilitate this operation an advancement of the ram by 8-10 mm (0.3 - 0.4 in.) is suggested.

2.6

EXTERNAL POWER SOURCE

The tool can operate from an external power supply (min. 20A) using the integral socket (23). Using the special connection cable type BPLT13970DC, supplied as an optional accessory, proceed as follows: (Refer to Figure 3)

- **Make sure the feed voltage is between 12 and 14,4 Volt DC.**
- Connect the end with the spring grips to the external supply making sure to comply with the polarity: the red grips to the positive pole (+), the black to the negative pole (-).
- Remove the cap (22) and connect the other end of the connection cable (93) to the socket (23) of the tool; tighten the connector (92) by turning the ring nut clockwise until it locks.
- When the work is finished, disconnect the connection cable (93) and replace the protective cap (22).

Should the poles be accidentally reversed, the tool will not be damaged but will operate using only the integral battery (19). To correct, reverse the polarity of the grips.

⚠ WARNING

When operating using power supply from an external source, never short circuit the metal contacts inside the battery housing. We advise leaving the battery (19) in its housing. It will supply power in parallel with the external source.

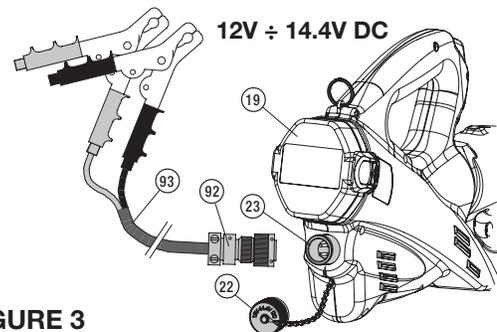


FIGURE 3

⚠ DANGER

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.

3.0

BATTERIES

This tool is supplied with batteries completely discharged; before use, fully charge the batteries using the charger supplied.

3.1 BATTERY STATUS & REPLACEMENT

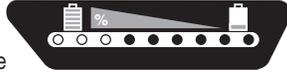
Refer to Figure 1 and 4, pages 2 and 5

After releasing the operating push-button, the residual battery display (25) automatically indicates the residual battery capacity for 5 seconds. The number of LED's illuminated indicates the residual capacity:

8 LED's illuminated: Fully Charged

4 LED's illuminated: 50% Capacity

1 LED illuminated: Minimum Charge



When replacing the battery, press the two points marked with the word "PUSH" at the same time, remove the battery from its housing and insert the new one.

3.2 BATTERY CHARGER

Carefully follow the instructions in the battery charger manual.

3.3 BATTERY USE

In order to use the batteries correctly, 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 the new battery the first 2-3 times in order to be certain of maximizing 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.

4.0

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 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 pivots and moveable parts. Protect the tool from rain and moisture. Water will damage the tool and battery.

4.2 STORAGE

- To prevent damage, when not in use, the tool should be stored and transported in the plastic case.
 - The case is suitable for storing the tool and its accessories.
 - Case Dimensions: 542x412x197 mm (21.3x16.2x7.7 in.) and weight 3,2 kg (7 lbs).

4.3 ADDING OIL

Should it be required, top up the oil as follows (Refer to Figure. 4, page 5):

- Remove the battery (19), place the tool in a vertical position and remove the filler cap (20) located inside the battery housing, fill the reservoir (21) to the top, and replace the filler cap (20).
- **Always use clean recommended oil, see step 1.2 on page 2.**
- **Do not use old or recycled oil.**
- **Do not use hydraulic brake fluid.**

IMPORTANT: Ensure that disposal of used oil is in accordance with current legislation.

5.0

PARTS LIST for Type 2

See Figure 4 for complete tool assembly.

Code N°	Item	DESCRIPTION	Qty	Code N°	Item	DESCRIPTION	Qty
6000354	01	WRIST STRAP	1	6040427	15	STRAP ANCHOR RING	1
6900211	02	M5X10 SCREW	1	6000383	16	PRESSURE RELEASE BUTTON	1
6100035	03	KEY	1	6000236	17	OPERATING PUSH-BUTTON	1
6370234	04	COMPLETE "C" HEAD	1	6040427	18	STRAP ANCHOR RING	1
6620440	05	DIE HEAD RETAINER PIN	1	8502001	19	14,4V - 3,0Ah - Ni-MH BATTERY	1
6340540	06	M10X8 GRUB SCREW	1	6800040	20	RESERVOIR CAP	1
6522006	07	SPRING	1	6720075	21	OIL RESERVOIR	1
6760160	08	∅ 3x28 ELASTIC PIN	1	6000411	22	SOCKET CAP	1
6620460	09	DIE HEAD RELEASE PIN	1	-	23	SOCKET	1
6620320	10	DIE RAM RETAINER PIN	1	6000310	24	MOTOR	1
6760040	11	∅ 3x8 ELASTIC PIN	1	6232243	25	(TG 0443) LABEL	1
6620445	12	DIE RAM RELEASE PIN	1	6232374	26	(TA 02496) TOOL LABEL	1
6522006	13	SPRING	1	6232006	28	(TG 0356) WARNING LABEL	1
6620312	14	COMPLETE RAM	1				

The warranty is void if parts used are not original Thomas & Betts parts.

When ordering spare parts always specify the following:

- Code Number of Item
- Name of Item
- Type of Tool
- Tool Serial Number

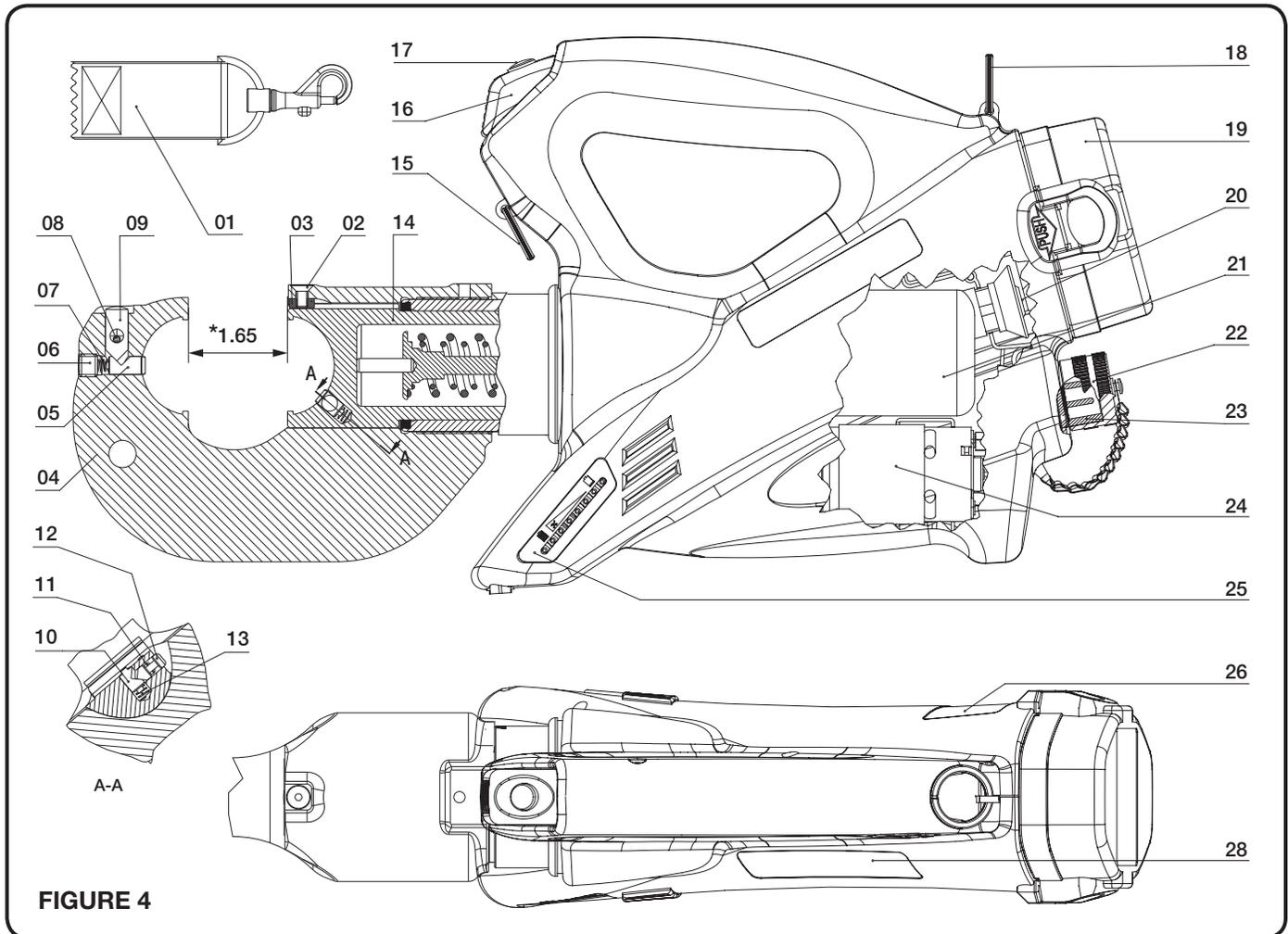


FIGURE 4

6.0

PARTS LIST for Older Models

See Figure 5 for complete tool assembly.

Code N°	Item	DESCRIPTION	Qty	Code N°	Item	DESCRIPTION	Qty
6000354	01	WRIST STRAP	1	6040427	15	STRAP ANCHOR RING	1
6900022	02	M3X8 SCREW	1	6000383	16	PRESSURE RELEASE BUTTON	1
6100038	03	KEY	1	6000236	17	OPERATING PUSH-BUTTON	1
6370217	04	"C" HEAD	1	6040427	18	STRAP ANCHOR RING	1
6620440	05	DIE HEAD RETAINING PIN	1	8502001	19	14,4V - 3,0Ah - Ni-MH BATTERY	1
6340540	06	M10X8 GRUB SCREW	1	6800040	20	RESERVOIR CAP	1
6522006	07	SPRING	1	6720075	21	OIL RESERVOIR	1
6760160	08	Ø 3X28 ELASTIC PIN	1	6000411	22	SOCKET CAP	1
6620460	09	DIE HEAD RELEASE PIN	1	-	23	SOCKET	1
6620320	10	DIE RAM RETAINER PIN	1	6000310	24	MOTOR	1
6760040	11	Ø 3X8 ELASTIC PIN	1	6232243	25	(TG. 0443) LABEL	1
6620445	12	DIE RAM RELEASE PIN	1	-	26	(TA02496) TOOL LABEL	1
6522006	13	SPRING	1	6232006	28	(TG. 0356) WARNING LABEL	1
6620316	14	RAM	1				

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- Name of Item
- Type of Tool
- Tool Serial Number

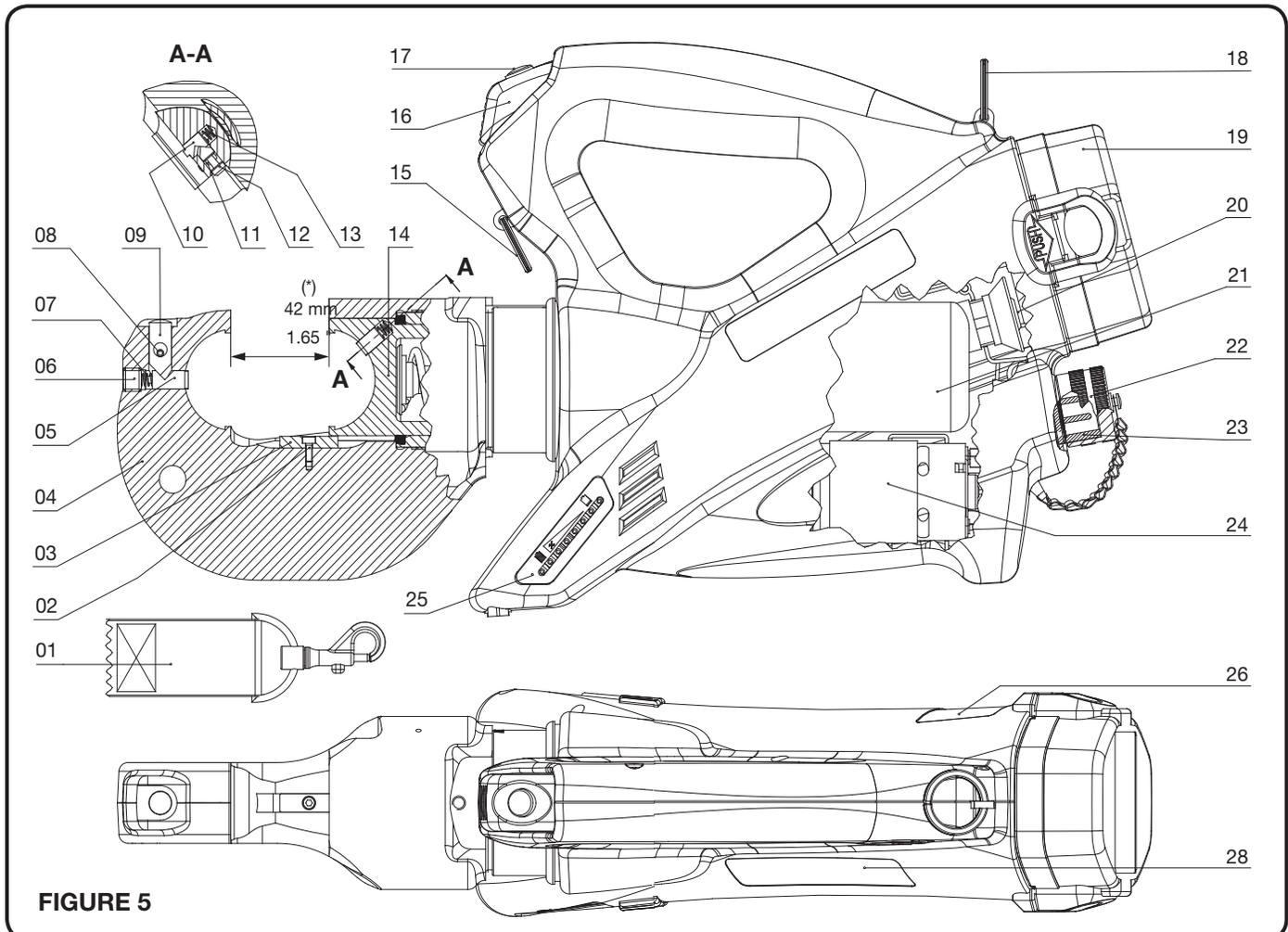


FIGURE 5

In case of a breakdown, contact the Thomas & Betts Tool Service Center at 1-800-284-TOOL (8665).

WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for its intended use. Thomas & Betts manufactures its goods and tools in a manner to be free of defects. Should any defect occur in its goods within two (2) years (or tools within time stated on warranty card) of date of purchase, Thomas & Betts, upon prompt notification, will at its option, exchange or repair the goods or tools or refund the purchase price. Proof of purchase required.

Limitations and Exclusions: THIS WARRANTY IS IN LIEU OF ALL OTHER REPRESENTATIONS AND EXPRESSED AND IMPLIED WARRANTIES (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE), AND UNDER NO CIRCUMSTANCES SHALL THOMAS & BETTS BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES OF ANY KIND.

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