

Operating Instructions

FOR TBM6UCR-LI
HYDRAULIC COMPRESSION TOOL

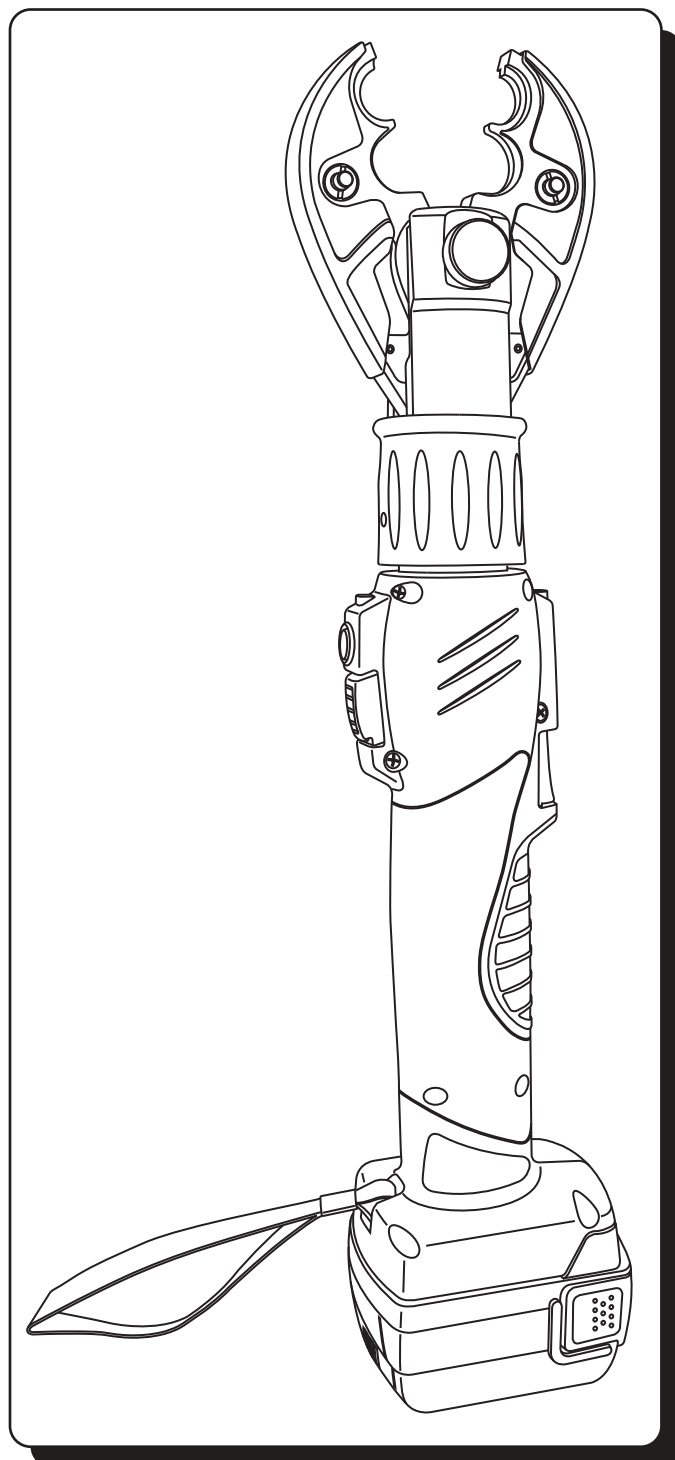


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IMPORTANT: Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

1.0

GENERAL INFORMATION

1.1 SAFETY RULES

1. BE FAMILIAR WITH YOUR TOOL.

Read the instruction manual. Become aware of its proper usage as well as the potential hazards.

2. KEEP WORK AREA CLEAN AND WELL LIGHTED.

Poor lighting and cluttered areas invite accidents.

3. USE SAFETY GLASSES.

4. MAINTAIN TOOL WITH CARE.

Keep tool in good condition at all times. Keep it clean for best and safest performance.

5. DON'T OVER-REACH.

Keep proper footing and balance at all times.

6. NEVER ATTEMPT TO MAKE A COMPRESSION ON A "HOT" LINE.

Never assume the power is OFF! Determine beforehand if any electrical hazards could exist when making a connection to a line or wire.

7. KEEP FINGERS AND OTHER BODY PARTS AWAY FROM COMPRESSION DIES & MOVING PARTS.



⚠ WARNING ⚠

Tools are **NOT** insulated for use on or near energized conductors. Use of these tools near energized conductors may lead to electrical shock, causing severe injury or death. **DO NOT** use these tools near energized conductors without adequately insulating operator and surroundings.



⚠ WARNING ⚠

Pinch point hazard. Compression Dies at high force can cause severe personal injury. Keep all body parts away from moving parts of the tool during operation.

1.2 FEATURES

- Fully automatic, self-contained power tool.
- Removable battery cartridge - simply change the cartridge for continuous use.
- One handed operation - control ram advancement and retraction with one hand.
- Accepts Burndy "W" Dies.
- Fully enclosed weather resistant housing.
- LED work lights.

1.3 SPECIFICATIONS

HYDRAULIC COMPRESSION TOOL:

TBM6UCR-LI

Drive Unit:	14.4V DC Motor
Dimensions:	22"L x 3.5"W x 4.5"H
Weight:	8.75 lbs. with battery
Capacities:	#8-300 kcmil CU or #8-4/0 kcmil Aluminum
Output:	6 Tons

BATTERY:

144-BAT-LI

Battery Type:	Sealed Lithium Ion
Voltage:	14.4V DC
Dimensions:	4.2"L x 3.3W x 2.6H
Capacities:	3.0Ah
Weight:	1.2 lbs.
Charging time:	25 min. 80% Capacity 45 min. 100% Capacity

CHARGER:

144-CHR-LI

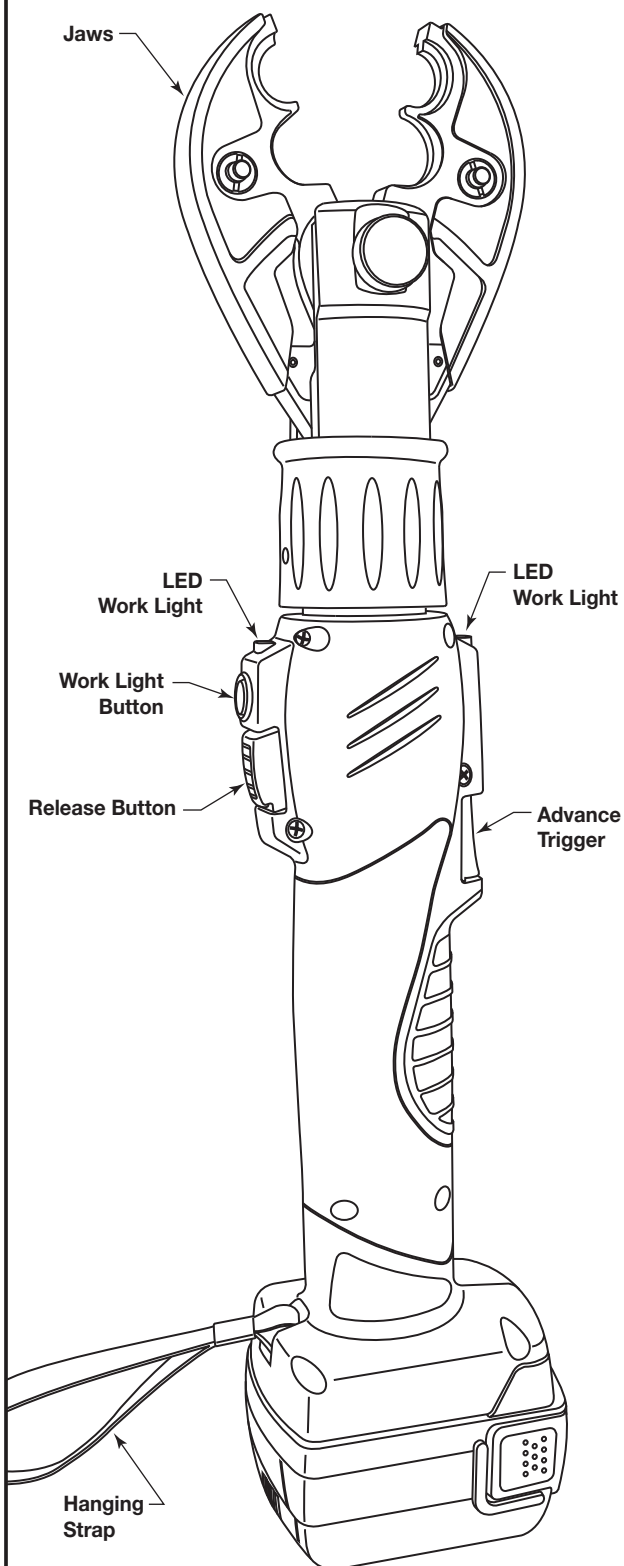
Input Voltage:	120 - 240 V AC Single Phase
Dimensions:	9"L x 5.7W x 3.2H
Weight:	3.5 lbs.

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 the user's intended application. Thomas & Betts warrants that this product will be free from defects in materials and workmanship for the period stated on the enclosed warranty card. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of Thomas & Betts products immediately voids all warranties.

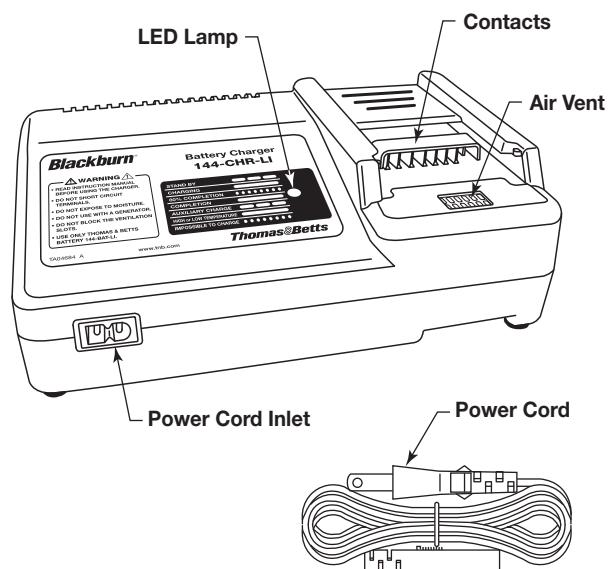
Limitations and Exclusions: THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL THOMAS & BETTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

2.1 HYDRAULIC COMPRESSION TOOL

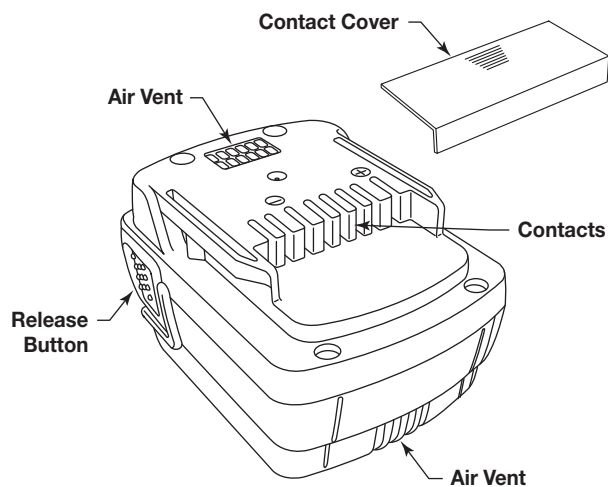
(TBM6UCR-LI)



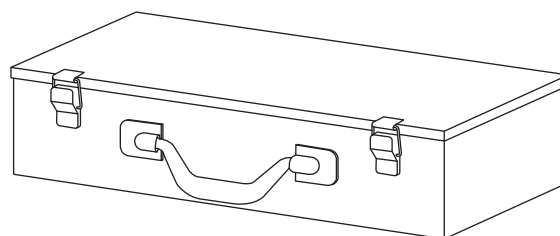
2.3 CHARGER (144-CHR-LI)



2.2 BATTERY (144-BAT-LI)



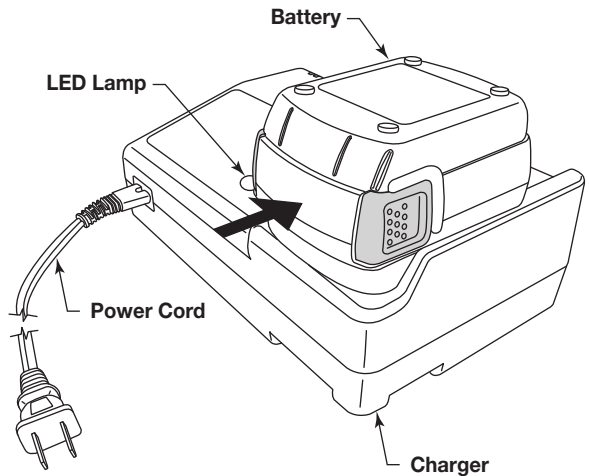
2.4 CARRYING CASE



3.1

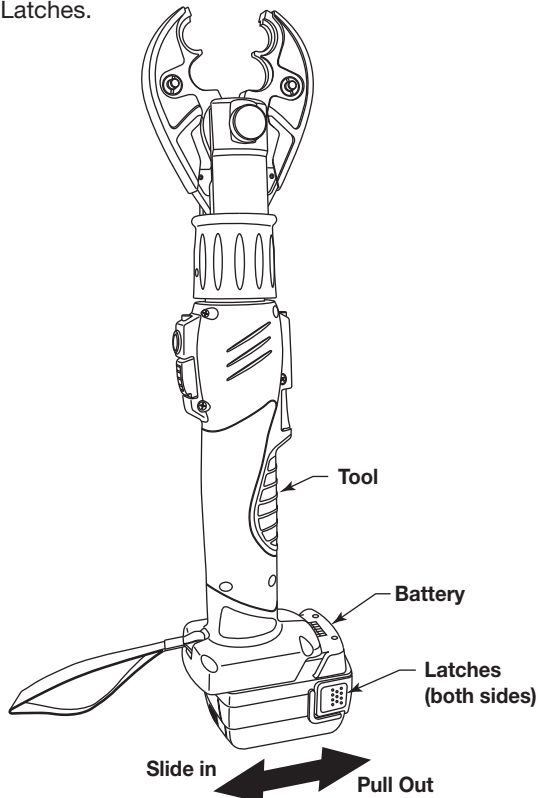
CHARGING THE BATTERY

1. Connect the power cord to the Charger 144-CHR-LI and to an AC outlet. The LED Lamp blinks in Red [STAND BY]
NOTE: The rated input voltage for this unit is 100V-240V. Use of voltages over 260V will result in damage to the charger.
2. Insert the Battery firmly into the charger.
The LED Lamp lights in green [CHARGING].
NOTE: Do not short-circuit the Charger by placing foreign materials in the contacts on Charger, as this will damage the Charger.
3. Charging takes approximately 25 minutes (80% capacity) and 45 minutes (100% capacity).
When charging is finished, the LED Lamp lights in orange [COMPLETION].
NOTE: If the LED Lamp displays solid red [HIGH TEMPERATURE], remove the Battery from the Charger and allow it to cool down before trying to charge it again.
4. When the battery will no longer charge or hold a charge, the LED Lamp blinks quickly in red [IMPOSSIBLE TO CHARGE].
5. When the charger is out of order, the LED Lamp does not light up even if AC power is supplied.
NOTE: Do not power the Charger with a portable generator.



3.2 ATTACHING & DETACHING THE BATTERY PACK

1. To attach the Battery, slide it into the base of the Tool until it stops and the Latches engage.
2. After inserting the Battery, check that it is securely in place by pulling it gently without pressing the Latches.
3. To detach the Battery, pull out the Battery while pressing the Latches.



3.3

COMPRESSION CYCLES

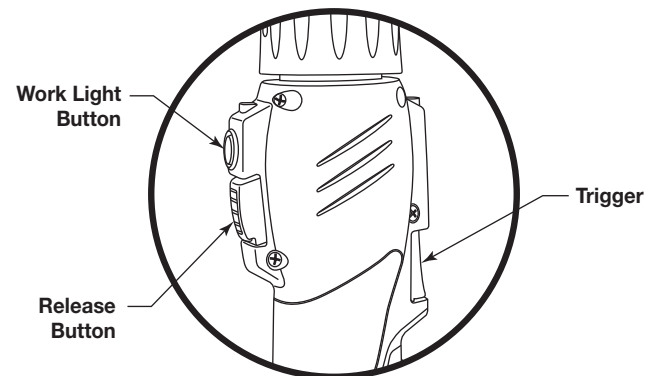
This guide indicates the number of compression cycles that the TBM6UNICR-LI can be expected to perform when the battery is fully charged. These figures are approximate and will vary according to the charging and other operating conditions, such as temperature, humidity, and battery condition.

CONDUCTOR	AVERAGE COMPRESSIONS PER CHARGE BAT-144-LI
#6 Cu / Al	250
1/0 Cu /Al	170
4/0 Cu /Al	125

3.4

SWITCH OPERATIONS

1. The jaws close when the Trigger is depressed and stop when the Trigger is released.
2. To open the jaws, depress the Release Button. The jaws continue to open while the Release Button is depressed.



1. Open the Jaws fully by pressing the release button (see Step 3.4).
2. Select the appropriate nest for the connector being used (Figure 1).
3. The tool also accepts Burndy "W" type dies. To use Burndy "W" dies, install over the D Nests and secure in place by the spring loaded pins (Figure 2).
4. Place connector between the nest or dies. Press the trigger and close the jaws (Step 3.4) so the connector is held lightly. Do not deform the connector.
5. Insert the conductor into the connector.
6. Press the trigger until the compression is complete. A series of clicks will be heard followed by a release in the pressure when compression is complete.
7. Press the release button (Step 3.4) to open the jaws. The jaws continue to open while the release button is pressed and will stop when they are fully open.
8. Remove the compressed connector from the tool.

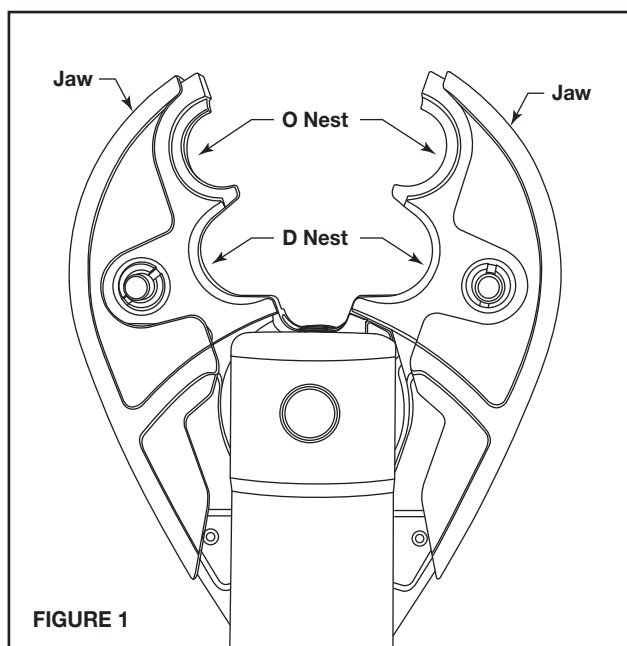
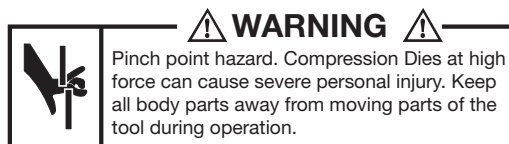


FIGURE 1

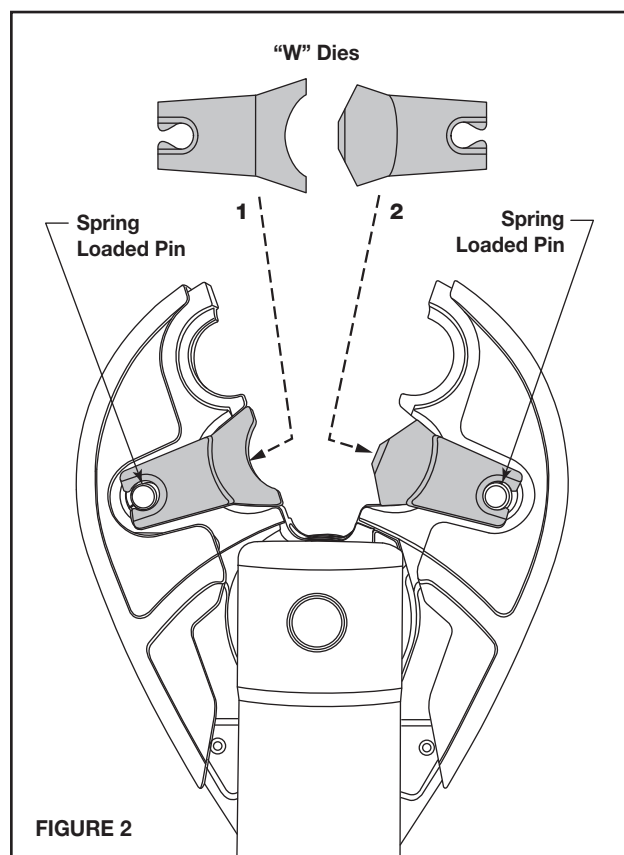


FIGURE 2

1. Very little maintenance is required to ensure that the tool is kept in good working condition.
2. To ensure smooth operation and prevent rust, store the tool in a cool dry area. Ensure that moving parts are lubricated regularly.
3. When the plastic housing becomes dirty, clean it with a soft soaped cloth.
4. Dust, sand, and dirt are a danger for any hydraulic device. After each use, the tool should be wiped with a clean cloth taking care to remove any residue, especially close to the movable parts.
5. If the tool is maintained regularly, it should provide you with trouble free service.

NOTE: Always remove the battery pack from the unit before replacing parts or maintenance.

3.7**TROUBLE SHOOTING**

Problem	Cause	Solution
Charger LED lamp indicates stand by while battery is inserted.	There is dust or foreign objects lodged at the battery contacts.	Remove foreign objects.
The charger LED lamp indicates high or low temperatures.	The battery is too hot or cold.	Allow the cartridge to reach room temperature before continuing.
The motor does not operate at all.	The battery is not charged or defective.	Charge or replace the battery.
	There is dust or foreign objects lodged at the battery contacts.	Remove foreign objects.
	The switch is misaligned.	Check to see if switch is aligned with trigger, consult tool service 1- 800-284 TOOL (8665).
The motor runs but jaws will not close, or jaws close but will not build pressure.	Insufficient hydraulic oil.	Consult tool service 1- 800-284 TOOL (8665).
	Air in hydraulic system.	Hold the tool with head towards the floor to allow air to rise towards top of oil bladder.
	Defective hydraulic circuit.	Consult tool service 1- 800-284 TOOL (8665).
The jaws will not open	Tool did not complete a full cycle and bypass.	Depress trigger and allow tool to reach full pressure and bypass, then depress release button to open the jaws.
	The connector is jammed in compression dies.	Depress and hold release button while prying compression dies apart.
	The release button is bent or misaligned.	Consult tool service 1- 800-284 TOOL (8665).

4.0**IMPORTANT OPERATING PRECAUTIONS****4.1 PRECAUTIONS FOR COMPRESSION TOOL**

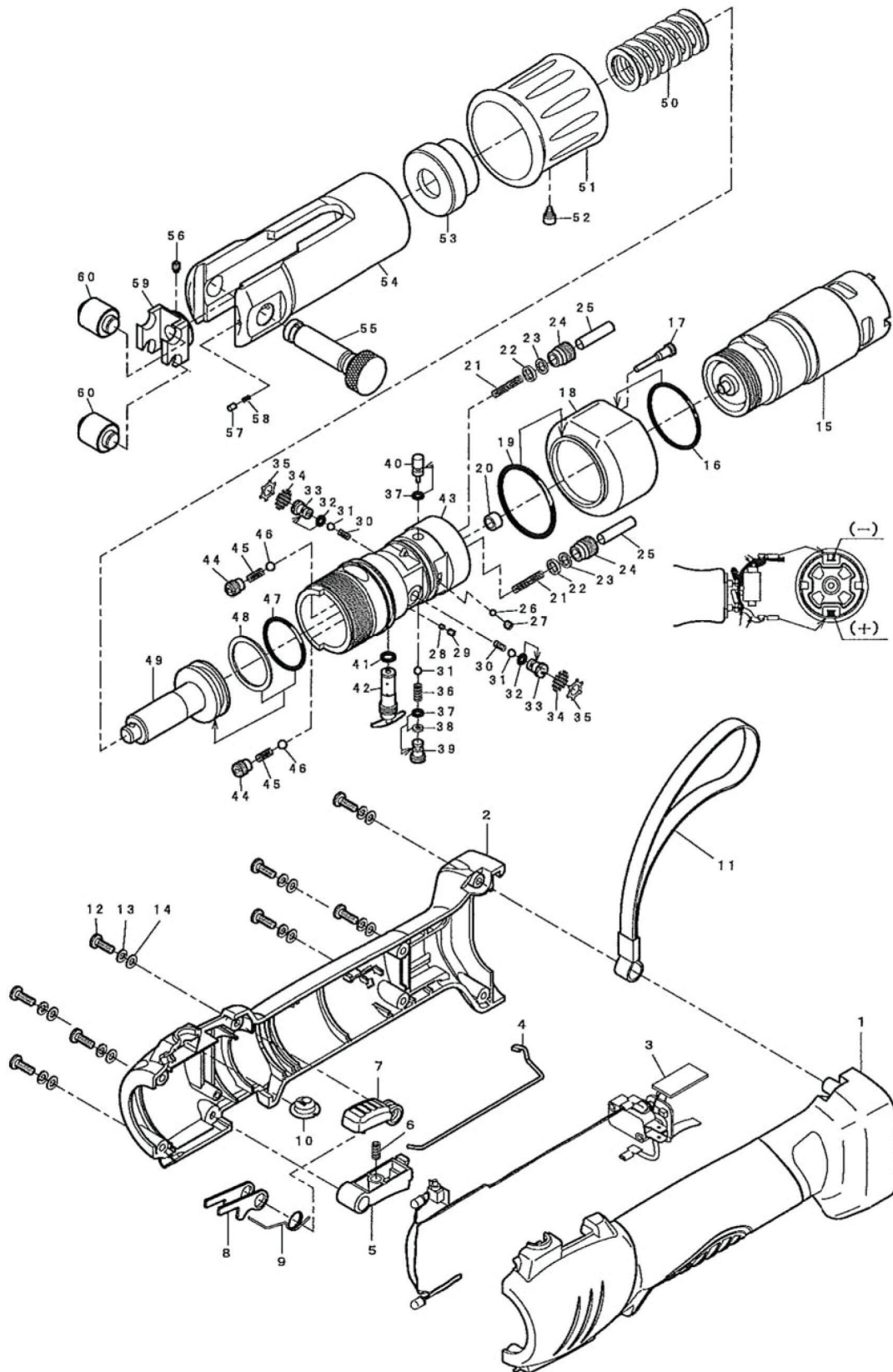
1. Select the appropriate nest or dies for the connector and conductor to be compressed. Incorrect combinations result in inferior connections of the conductors.
2. Never operate the tool without dies installed.
3. Always point the tool away from other people.
4. If the tool is stored for an extended period at a temperature of less than 25° F (-5° C), the tool should be allowed to return to room temperature to ensure smooth operation. Use the tool only after it has been at room temperature for 1 hour.
5. Do not drop the tool. Dropping the tool may damage the hydraulic circuit and cause malfunctions.
6. Keep the head and jaws clean and free of debris. Solvents can be used to clean the head but should not be used on the plastic body. Use soap & water to clean the body.

4.2 PRECAUTIONS FOR THE BATTERY PACK

1. Do not short circuit the contacts or expose the battery to water, oil or solvents.
2. Do not disassemble or attempt to repair the battery or dispose of in a fire.
3. Do not drop or otherwise abuse the battery.
4. Do not leave the battery in locations where it will be exposed to a temperature greater than 104 degrees F (40 degrees C) for an extended period.
5. The battery has a limited life. When the crimping capacity becomes about 1/2 that of the original capacity, the battery should be replaced.
6. If the battery is stored without being charged, natural drainage will cause the power to be reduced. The battery should be charged every 3 months if not in use regularly.

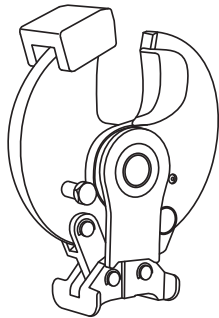
4.3**PRECAUTIONS FOR THE CHARGER**

1. The LED lamp lights up green and remains lit when the unit starts charging a battery. The indicator turns orange when charging is completed.
2. This unit is for charging battery 144-BAT-LI only. Do not use the charger for any other devices.
3. Allow battery cartridges to cool before charging. Allow at least 15 minutes between charges when charging several batteries in succession.
4. Charge batteries at an ambient temperature of 50-95 degrees F (10-35 degrees C). Charging time is approximately 25 minutes for 80% capacity and 45 minutes for 100% capacity.
5. Never short circuit the output contacts.
6. Do not expose the charger to water, oil or solvents.
7. Do not disassemble, modify, drop or otherwise abuse the charger.

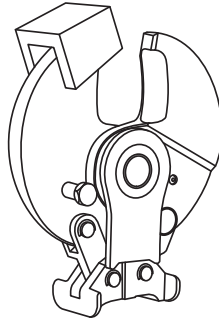


NO.	DESCRIPTION	CODE	QTY
1	Housing (L)		1
2	Housing (R)		1
3	Switch Unit	SLND-04	1
4	Switch Rod	SLND-05	1
5	Switch Knob	SLND-06	1
6	Spring (187)	40U-10	1
7	Release Lever	SLND-07	1
8	Lever Support	SLND-08	2
9	Spring (701)	SLND-09	1
10	Led Switch Rubber	SLND-10	1
11	Strap	558-07	1
12	M4 X 10 Screw	ROB-159	8
13	M4 Lock Washer	EZ-37	8
14	M4 Flat Washer	EZ-36	8
15	Power Unit	SLND-11	1
16	S-32 O-Ring	EZ-10	1
17	Plug	SLND-12	1
18	Oil Reservoir	SLND-13	1
19	S-36 O-Ring	EZ-12	1
20	Bush	R14A-19	1
21	Spring (552)	EZ-16	2
22	PS-6 Pent Seal	EZ-14	2
23	P-6 Back-Up Ring	UC-28	2
24	Cylinder Insert	EZ-13	2
25	Pump Piston	EZ-15	2
26	1/8" Ball	40-20	1
27	M4 X 4 Screw (F.P.)	85-47	1
28	Retainer	SLND-14	1
29	M3 X 4 Scew (F.P.)	RCP-35	1
30	Spring (5688)	EZ-22	2
31	5/32" Ball	22-21	3
32	P-3 O-Ring (U801)	EZ-21	2
33	Suction Valve	EZ-20	2
34	Filter Screen	R14A-22	2
35	SI-12.7 Ring	R14A-23	2
36	Spring (689)	EZ-23	1
37	P-3 O-Ring (U801)	16-36	2
38	P-3 Back-Up Ring	9H-38	1
39	Release Plug	EZ-24	1
40	Release Valve Stem	EZ-17	1
41	P-5 O-Ring	5N-35	1
42	Valve Cartridge	EZ-25A	1
43	Body	SLND-15	1
44	Valve Screw	EZ-27	2
45	Spring (686)	EZ-26	2
46	3/16" Ball	16-49	2
47	P-28 O-Ring	EZ-29	1
48	P-28 Back-Up Ring (B.C.)	55D-03	1

[illegible]



6UNICR-CHCU/AL
Cu — 500 MCM
Al — 1" O.D.



6UNICR-CHASCR
ACSR — 336 MCM
Cu /Al — 350 MCM



ATTACHING THE CUTTING JAW:

The above Cutting Jaws are for use on
**TBM6UCR-LI and TBM6UNICR-LI Hydraulic
Compression Tools ONLY!**

1. Retract the Ram by pressing on the Release Button on the hydraulic tool (see Figure 3).
2. Pull the Slide Pin out disengaging the Compression Jaw from the tool Body Head. **NOTE:** Slide Pin stays permanently attached to Body Head.
3. Remove Compression Jaw and position the Cutting Jaw in line with Body Head (see Figure 3).
4. Slide Cutting Jaw into the Body Head (see Figure 3 & 4).
5. Once Cutting Jaw is aligned with the Slide Pin, push the Slide Pin in locking the Cutting Jaw with the Body Head (see Figure 4).
6. The hydraulic tool is ready for operation.

For Part or Service, contact the Tool Service Center at
1- 800-284 TOOL (8665).

