ProMeister

User Guide

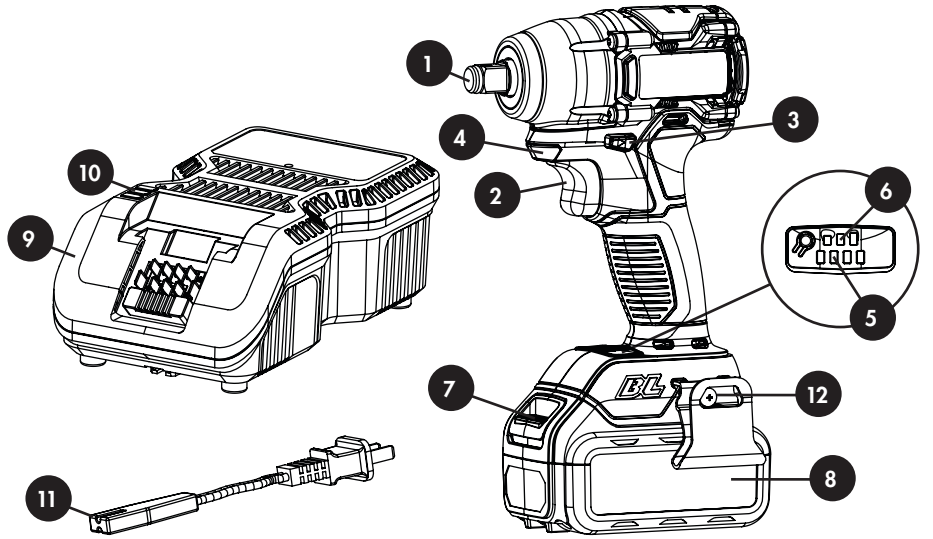
18V Li-ion Brushless Impact Wrench

Drehschlagschrauber
Slagnøgle
Mutterdragare
Akkuiskumutterinväännin
Muttertrekker

Art. Nr: PT7102

RVNR-01

Diagram



1. 1/2" Square "O" Ring	2. Trigger Switch	3. Forward and Reverse Lever
4. LED Worklight	5. Remaining Power Indicator	6. Speed Selector
7. Battery Release Button	8. Rechargeable Battery Pack	9. Charger
10. Charging Indicator	11. Detachable Cable and Plug	12. Removable Metal Belt Clip

Description of Symbols

V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of Current
⎓	Direct Current	Type or a characteristics of current
⧈	Class II Construction	Double-insulated construction
	Before charging, read the instructions	To reduce the risk of injury, user must read and understand the user guide before using this product.
CE	Safety Certification	Conformance to use the CE mark and complies with relevant standards.
⚠	Safety Alert	Precautions that involve your safety
⌂	For Indoors Use Only	To reduce the risk of electric shock, only using the charger indoor.
	The Green Dot	license symbol of a European network of industry-funded systems for recycling the packaging materials of consumer goods.
	Don't Throw in Trash	To be collected separately and disposed of in an environmentally correct manner.

Specifications

1. Art. Nr: PT7102
2. Variable Speed: 0-700/0-1600/0-2500 RPM
3. Impact Rate: 0-1200/0-2000/0-3200 BPM
4. Max. Torque: 220Nm
5. Work Light: LED

NOISE AND VIBRATION INFORMATION (measured values determined according to EN 62841)

- **Noise emission**
  A-weighted sound pressure level LPA: 99.6dB(A)
  Uncertainty KpA: 3dB(A)
  A-weighted sound power level LWA: 110.6dB(A)
  Uncertainty KpA: 3dB(A)

- Vibration emission
  ah=15.4m/s2 K=1.5m/s2

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another;
- The declared vibration total value may also be used in a preliminary assessment of exposure;
- The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used;
- Of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Battery

- Art. Nr: PT7802 Max 20V DC, 4.0Ah

Charger

- Art. Nr: PT7804
- Input: 100-240V AC, 50/60Hz
- Consumption: 110W
- Output: 12-20V, 4.0A
- Charging time:
  35min (2.0Ah)
  75min (4.0Ah)
- Optimum Charging Temperature: 4°-40°C

General Power Tool Safety Warning

WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.** The term "power tool" in the warnings refer to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work Area Safety

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical Safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3) Personal Safety

- **Stay alert at all times when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection that meets OSHA and ANSI Z87.1 standards.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

General Power Tool Safety Warning

4) Power Tool Use and Care

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) Battery Tool Use and Care

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a BATTERY pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, EXPLOSION or risk of injury.
- **Do not expose a BATTERY pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
- **Follow all charging instructions and do not charge the BATTERY pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the BATTERY and increase the risk of fire.

6) Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- **Never service damaged BATTERY packs.** Service of BATTERY packs should only be performed by the manufacturer or authorized service providers.

Safety Warnings for Impact Wrench

- **Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Safety Instructions for Battery Pack

a) Do not dismantle, open or shred secondary cells or battery pack.

b) Do not expose cells or battery pack to heat or fire. Avoid storage in direct sunlight.

c) Do not short-circuit a cell or a battery pack. Do not store cells or battery pack haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.

d) Do not remove a cell or battery from its original battery pack enclosure required for use.

e) Do not subject cells or battery pack to mechanical shock.

f) In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.

g) Do not use any charger other than that specifically provided for use with the equipment.

h) Observe the plus (+) and minus (–) marks on the cell, battery and equipment and ensure correct use.

i) Do not use any cell or battery pack which is not designed for use with the equipment.

j) Do not mix cells of different manufacture, capacity, size or type within a device.

k) Keep cells and battery pack out of the reach of children.

l) Seek medical advice immediately if a cell or a battery pack has been swallowed.

m) Always purchase the correct cell or battery for the equipment.

n) Keep cells and battery pack clean and dry.

o) Wipe the cell or battery pack terminals with a clean dry cloth if they become dirty.

p) Secondary cells and battery pack need to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.

q) Do not leave a battery pack on prolonged charge when not in use.

r) After extended periods of storage, it may be necessary to charge and discharge the cells or battery pack several times to obtain maximum performance.

s) Secondary cells and battery pack give their best performance when they are operated at normal room temperature (20 °C ± 5 °C).

t) Retain the original product literature for future reference.

u) Use only the cell or battery pack in the application for which it was intended.

v) When possible, remove the battery pack from the equipment when not in use. Dispose of properly.

Additional Instructions for Work with the Charger

- Before using the charger, read all the instructions and cautionary markings on the charger and battery pack as well as the instructions on using the battery pack.
- Only charge your batteries indoors as the charger is designed for indoor use only.

WARNING: If the battery pack is cracked or damaged in any other way, do not insert it in the charger. There is a danger of electric shock.

WARNING: Do not allow any liquid to come into contact with the charger. There is a danger of electric shock.

Additional Instructions for Work with the Battery Pack

WARNING: If the battery pack is cracked or damaged in any other way, do not insert it in the charger. There is a danger of electric shock.

Fitting and Removing the Battery Pack

To remove the battery from the machine, press the battery release buttons (7) and take the battery out of the tool.

WARNING: Always set the forward/reverse switch (3) in central position before any work on the machine e.g. fitting and removing a battery, changing the bit, transport, maintenance and storage.

To install the battery: Insert the charged battery into the opening at the base of the power tool until the battery is securely latched with a click.

BATTERY CHARGING

- Insert the plug of the charger in the socket. The LED on the charging indicator (10) will start to glow thus indicating that the charger is in standby state.
- Insert the battery (8) in the charger socket considering the polarity.
- A new battery will work properly after five cycles of charging and discharging. Charge and discharge a battery, which is not used for a long time, for two to three times to function well.
- When the battery working time is remarkably short despite full charging, the life of the battery may be over. Replace the battery immediately.

WARNING: The battery will be fully charged after approximately 75 minutes, remove it from the charger after this time.

CHARGING INDICATION

1. Connect the plug cable to the charger, and then plug into an appropriate outlet before inserting battery pack. All three charging lights will be on for two seconds and then off.
2. Insert the battery pack into the charger, making sure the pack is fully seated in the charger. During the charging process, the charging lights will indicate the charging status as follows:
   - Less than 30% charged: all three charging lights will blink in sequence.
   - Less than 60% charged: one light will stay on, while the other two lights will blink in sequence.
   - Over 60% charged: two lights will stay on, while the remaining light will blink continuously.
   - Fully charged: all three lights will remain on continuously.
3. The charging process will last approximately 75 minutes and continuous lighting of all three charging lights will indicate charging is complete.

LED Indicator	Remaining Power Status
1	0-25%
2	25-50%
3	50-75%
4	75-100%

Know and Operate Your Impact Wrench

Before using the power tool, familiarize yourself with all operating features and safety requirements. Use the tool and accessories only for the applications intended. All other applications are expressly ruled out.

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1) ON/OFF Trigger Switch

- To turn the tool on, squeeze the trigger switch. To turn the tool off release the trigger switch.

2) Variable Speed

- The variable speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

3) Speed Selector

- The tool is equipped with a speed selector, which allows you to select one of three speeds.
- Select the speed based on the application by pressing the "Ʊ" button and control the speed of the tool using the trigger switch. The wrench in preset to highest speed mode setting when shipped from the manufacturer.

4) LED Work Area Light

- When the unit is switched on, the LED worklight also comes on to ensure better vision and to make working in dark areas safer. The worklight turns off 15 seconds after the trigger switch is released.

5) Forward and Reversing

- The extreme position of lever to the right (viewed from the rear) is equivalent to anti-clockwise rotation, the extreme position to the left is to clockwise rotation. When the ON/OFF switch is depressed, lever can not be actuated.
- Forward is performed with lever in extreme position to the left.
- Reversing is performed with lever in extreme position to the right.
- Position the forward/reverse selector in the centre will lock the switch trigger to help reduce the possibility of accidental starting when not in use.

6) Installing and Removing a Socket

- Always use the correct size socket for bolts and nuts.
- An incorrect size socket will result in inaccurate and inconsistent fastening torque and/or damage to the bolt or nut.
- To install the socket, push it onto the anvil of the tool until it locks into place (Fig. E). To remove the socket, simply pull it off.

7) Belt Hook

- The belt hook is used to hang the tool from your waist belt while working. Install the belt hook securely in the groove of the wrench and tighten the screw to fix the hook firmly (Fig. F).

8) Temperature Cut Out

- When used as intended, the driver cannot be subject to overload. But running continuously at full load for a long time will cause the battery pack to overheat. If the allowable battery temperature range of 32°-158°F (0°-70°C) is exceeded, the battery pack will automatically stop operating and will not restart until it has cooled to a safe level.

9) Low-Voltage Cut-Out

- The battery pack used on this tool is fitted with a low-voltage cut-out feature within the circuitry.
- The low-voltage cut-out feature operates when the voltage drops below a preset value. This feature automatically stops the tool from operating. When this condition occurs, you will need to either insert another battery pack into the tool or recharge the existing battery pack.

Fig. E

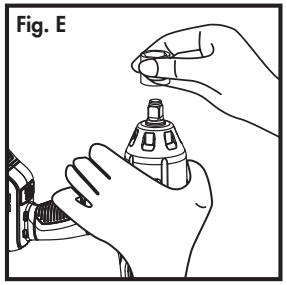
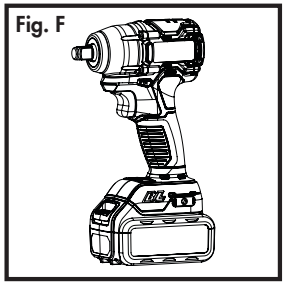


Fig. F



Safety Warnings for Impact Wrench

10) Tightening Fasteners

- Before starting your job, always perform a test operation to determine the proper fastening time for your bolt or nut.
- Install the socket on the anvil. Then, set the forward and reverse lever for the suitable setting (forward or reverse).
- Hold the tool firmly and place the socket in line with the bolt or nut.
- Press the trigger switch to turn on the impact wrench. The variable speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.
- Fasten the bolt or nut to the proper torque.
- To turn the impact wrench off, release the trigger switch.
- After fastening, always check the torque with a torque wrench. Practice with various fasteners, noting the length of time required to reach the desired torque. Check the tightness with a torque wrench. If the fasteners are too tight, reduce the impacting time. If they are not tight enough, increase the impacting time. The fastening torque is affected by a wide variety of factors, including the following:
- Socket. Failure to use the correct size socket will cause a reduction in the fastening torque. A worn socket (wear on the hex end or square end) will cause a reduction in the fastening torque.
- Bolt. The proper fastening torque will differ according to the diameter of the bolt, the torque coefficient, the bolt length and the class of bolt.
- The use of a universal joint or an extension bar (both available separately) will reduce the fastening force of the impact wrench somewhat. Compensate by fastening for a longer period of time.
- The manner of holding the tool or the material to be fastened will affect the torque.

11) Loosening Fasteners

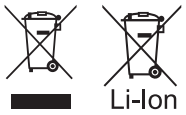
- With the proper impact socket securely mounted to the cordless impact wrench, slide the impact socket on to the bolt beat.
- Verify that the rotational direction is “reverse”.
- Hold the tool securely with both hands and squeeze the trigger switch. The tool will start to impact immediately.
- Once the fastener has “broken loose” it will start to unthread. Be careful that you do not allow a fastener to spin freely once it is no longer engaged with the other threaded part, as it may be thrown out of the socket.

Maintenance

Storing the machine, operating instructions and where necessary the accessories in the original packaging. In this way, you will always have all the information and parts ready to hand. All devices are maintenance-free to a large extent, you only need a damp cloth to clean the housing. Do not drop electrical machines into water.

Environmental Protection

- The machine, rechargeable batteries, accessories and packaging should be sorted for environmental-friendly recycling.
- Do not dispose of power tools and batteries/rechargeable batteries into household waste!



According to the European Guideline 2012/19/EC for Waste Electrical and Electronic Equipment and its implementation into national right, power tools that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

ATTENTION! Batteries must be removed from battery-powered tools and disposed of separately in accordance with 2013/56/EC. Batteries must never be disposed of with domestic waste!

Collection and disposal of packaging materials separately by types complying with local rules and regulations. For details, please contact your municipal authority concerned.

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