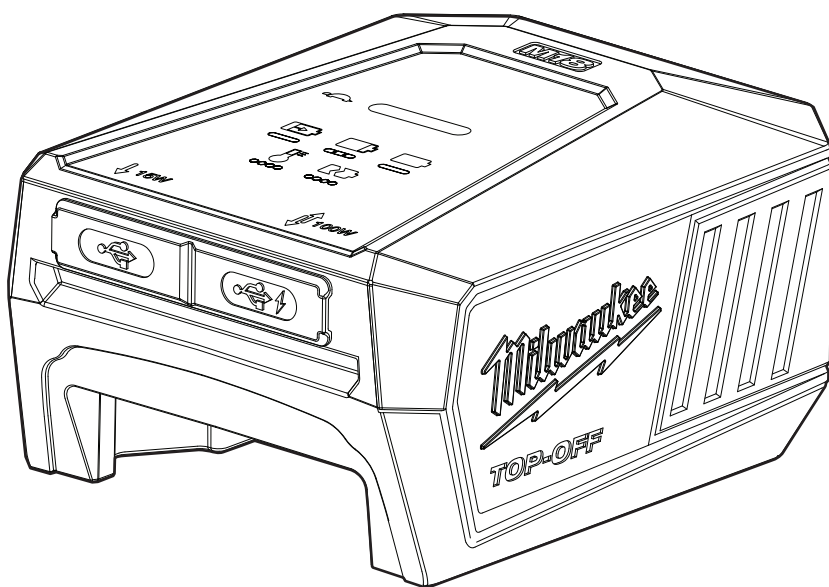




## OPERATOR'S MANUAL



Cat. No.  
**M18 BC**

### **M18™ TOP-OFF BIDIRECTIONAL CHARGER AND POWER SUPPLY**



#### **WARNING**

To reduce the risk of injury, user must read and understand operator's manual.

# IMPORTANT SAFETY INSTRUCTIONS

## - SAVE THESE INSTRUCTIONS -

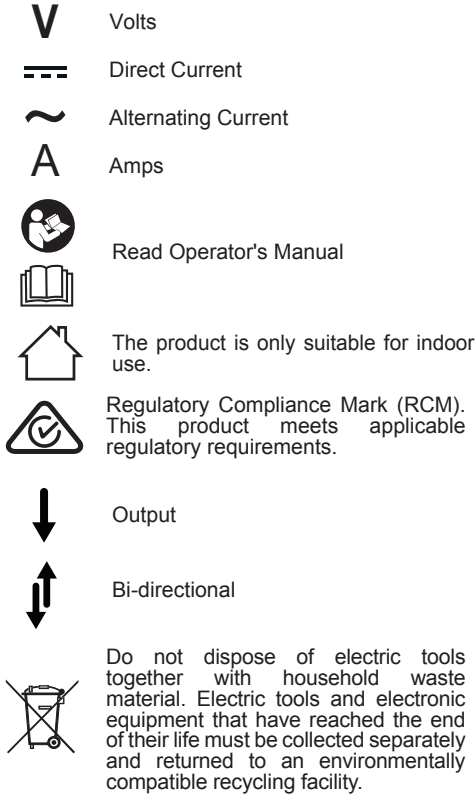
**⚠WARNING** **READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

- 1. SAVE THESE INSTRUCTIONS** – This manual contains important safety and operating instructions for the **MILWAUKEE®** Li-Ion charger and **MILWAUKEE®** Li-Ion batteries.
- 2. Before using the battery and charger, read this operator's manual, tool's operator's manual, and all labels on the battery, charger and tool.**
- 3. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**
- 4. ⚠CAUTION** Use **MILWAUKEE®** Li-Ion batteries only on recommended **MILWAUKEE®** Li-Ion products (i.e., **M18™** batteries with **M18™** charger/tools, **M12™** batteries with **M12™** charger/tools). Do not use counterfeit, aftermarket, or "knockoff" batteries or chargers. Other battery types could explode. Do not wire a battery to a power supply plug or car cigarette lighter.
- 5. Keep batteries out of the reach of children.**
- 6. Avoid dangerous environments.** Do not expose to or charge in rain, moisture, snow, damp, or wet locations. Do not use battery or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials). Sparks may be generated when inserting or removing battery, possibly causing fire.
- 7. Only charge in a well ventilated area and within the Recommended Ambient Charging Temperature range.** Do not block vents; keep them clear for proper ventilation. Do not allow smoking or open flames near a charging battery. Vented gases may explode.
- 8. Maintain charger cord.** When unplugging charger, pull plug rather than cord. Never carry charger by its cord. Keep cord from heat, oil and sharp edges. Make sure cord will not be stepped on, tripped over or subjected to damage or stress. Do not use charger with damaged cord or plug. Have a damaged charger replaced immediately.
- 9. Avoid using an extension cord when possible.** When unavoidable, use an extension cord in good electrical condition with the proper wire gauge and length for the current rating of the charger. The pin size and shape must match the pins on the charger cord.
- 10. Charger is rated FOR 220 - 240 VOLT AC ONLY.** Charger must be plugged into an appropriate receptacle.
- 11. Use only recommended attachments.**
- 12. Unplug charger and remove batteries** when not in use.
- 13. Always unplug charger before cleaning or maintenance.** Do not allow water to flow into any plug. Use a residual current device (RCD) protected supply to reduce shock hazards.
- 14. Do not burn, incinerate, or expose batteries to fire or excessive temperatures above 130°C (265°F).** Batteries may explode. Toxic fumes and materials are created when batteries are burned.
- 15. Do not crush, drop, shred, modify, or damage battery. Always securely contain batteries during transport.** Do not use a battery that has received a sharp blow, been dropped, run over, or damaged in any way (e.g., pierced with a nail, hit with a hammer, stepped on, in a vehicle accident). Do not use or charge batteries that appear damaged or swollen, or are not functioning properly. Damaged or modified batteries may exhibit unpredictable behaviour.
- 16. Do not disassemble batteries or charger.** No internal serviceable parts. Take batteries/chargers that have been damaged, broken, or need repair to a **MILWAUKEE®** service facility to ensure the safety of the product is maintained.
- 17. Battery chemicals cause serious burns.** Never allow contact with skin, eyes, or mouth. If a damaged battery leaks battery chemicals, use rubber or neoprene gloves to dispose of it. If skin is exposed to battery fluids, wash with soap and water and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention.
- 18. Do not short circuit.** A short-circuited battery pack may cause fire, personal injury, and product damage. A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not place a battery pack near anything that may cause a short circuit (e.g., coins, keys, nails, or small metal objects in a pocket, toolbox, or drawer).
- 19. Do not allow fluids to flow into battery.** Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc., can cause a short circuit. Do not use battery packs that have been exposed to these types of fluids.
- 20. Battery packs marked as Resistant** are suitable for environments where incidental contactor exposure to oils, greases, and solvents can occur. These packs are not resistant to acids or other corrosive chemicals. Never immerse or allow fluids to penetrate the battery pack.

21. **Store the battery pack and charger in a cool, dry place.** Do not store where temperatures may exceed 50°C (120°F) such as in direct sunlight, a vehicle, or metal enclosure during the summer.
22. **Remove batteries prior to relocating or transporting charger.** Do not use charger during transit.
23. **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a MILWAUKEE® service facility for a replacement.

**READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE**

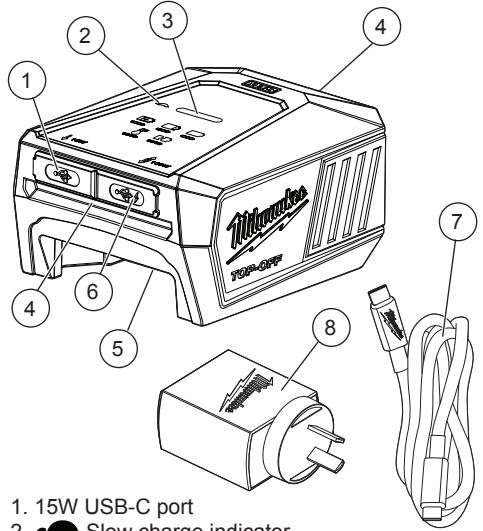
## SYMBOLLOGY



## SPECIFICATIONS

|   |                                   |
|---|-----------------------------------|
| Cat. No. ....                                     | M18 BC                            |
| M18 Input.....                                    | 18 V DC                           |
| Battery Type.....                                 | M18™                              |
| Charger Type.....                                 | M18™                              |
| USB-C In/Out 100W.....                            | 5/9/12/15 V DC, 3A<br>20 V DC, 5A |
| USB-C Output 15 W.....                            | 5 V DC, 3A                        |
| Recommended Ambient<br>Operating Temperature..... | 5°C to 40°C                       |

## FUNCTIONAL DESCRIPTION



1. 15W USB-C port
2. Slow charge indicator
3. Charge light indicator:
  - Continuous red: Charging
  - Slow flashing green: Approaching full charge
  - Continuous green: Charging is complete
  - Slow flashing red: Battery charge is pending - Charging will begin when the first pack is fully charged.
  - Fast flashing red: Battery and/or charger is too hot/cold - Charging will begin when battery and/or charger reach correct charging temperature.
  - Flashing red/green: Damaged or faulty battery pack and/or charger.
4. Vents
5. Battery contacts
6. 100W USB-C port
7. USB cable
8. Wall adaptor

## ASSEMBLY

**AWARNING** Recharge only with the charger specified for the battery. For specific charging instructions, read the operator's manual supplied with your charger and battery.

### Inserting/Removing the Battery

To **insert** the battery, slide the pack into the body of the tool. Make sure it latches securely into place.

**AWARNING** Always remove the battery pack any time the tool is not in use. **Store battery indoors.**

To **remove** the battery, push in the release buttons and pull the battery pack away from the tool.

## OPERATION

### USB Power Outlets

These outlets can be used to charge a cell phone, power a portable personal device, or another device that uses less than 3 A of DC electrical current (USB-C). The outlets will charge devices simultaneously. Always close the USB covers when not in use.

**NOTE:** The 100W USB-C port is for charging the M18 battery pack.

## CHARGER OPERATION

**⚠WARNING** Charge only **MILWAUKEE®** M18™ Li-Ion batteries in this **MILWAUKEE®** Li-Ion charger. Other types of batteries may cause personal injury and damage.

### When to Charge the Battery Pack with this MILWAUKEE® Charger

Remove the battery pack from the product for charging when convenient. **MILWAUKEE®** batteries do not develop a "memory" when charged after only a partial discharge. It is not necessary to run down the battery pack before placing it on the charger.

- Use the fuel gauge to determine when to charge the **MILWAUKEE®** Li-Ion battery pack.
- The battery pack's charge can be "Topped-Off" before starting a big job or long day of use.
- The only time it is necessary to charge the **MILWAUKEE®** Li-Ion battery pack is when the battery pack has reached the end of its charge. To signal the end of charge, power to the product will drop quickly, allowing enough power to finish the operation. Charge the battery pack as needed.
- Lightning\* to USB-C cables will drain power when there is no device connected. Remove the cable when not in use.

\*Lightning is a trademark of Apple Inc.

### How to Charge the Battery Pack

Align the battery pack with the bay and slide the battery pack into the power source as far as possible. Plug in the USB-C cable into the 100W port and a suitable wall adaptor. Plug in the wall adaptor into a wall outlet and turn on the supply to the adaptor. The red light will come on, either flashing quickly (battery pack or charger is too hot or cold), flashing slowly (communication between pack and charger) or continuous (pack is charging). If the LED is green the adaptor is fully charged.

- Charge time depends on capacity of battery pack. Heavily cycled batteries may take longer to charge completely.
- The fuel gauge lights are displayed as the pack is being charged, indicating the charge status of the pack. The fuel gauge will turn off when charging is complete.
- After charging is complete, the continuous green light will come on.
- The charger will keep the battery pack fully charged if it is left on the charger. The light indicator will be same as normal charging.
- If there is not enough power to charge the battery, the slow charge indicator white light will come on. Only one outlet will supply power to a device.
- If the light indicator flashes red and green or does not come on, check that the battery pack is fully seated into the bay. Remove the battery pack and reinsert. If the problem persists, remove pack and

unplug charger for at least 2 minutes. After 2 minutes, plug charger back in and insert pack. If the problem continues, contact a **MILWAUKEE®** service facility.

### Charging a Hot or Cold Battery Pack

The charger has advanced electronics that adjust the charge rate based on battery temperature. Hot or cold batteries may take longer to charge. When the battery pack temperature is outside the normal charging range, the red light will flash and the battery will not charge. Once the battery pack is within the acceptable range, normal charging will take place and the red light will be continuous. This optimises charge time and battery life.

| Battery Pack Temperature | Red Charger Indicator Light | Charging Status |
|--------------------------|-----------------------------|-----------------|
| Too Hot                  | Fast Flashing               | Not charging    |
| Normal Range             | Continuous                  | Normal charging |
| Too Cold                 | Fast Flashing               | Not charging    |

## POWER SUPPLY OPERATION

The Top Off Charger can be used to supply up to 100 W via the 100W USB-C outlet and 15 W via the 15W USB-C outlet.

Attach a **MILWAUKEE®** M18™ Li-Ion battery to the Top Off Bidirectional Charger.

The USB-C outlets can now be used to supply power up to the rating of the specific USB-C outlet - see Specification Table for details.

Connect a USB-C cable to the required outlet and to the device to be charged.

Ensure the device to be charged is connected as per the manufacturer's instructions.

## MAINTENANCE

**⚠WARNING** To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger or tool before performing any maintenance. Never disassemble the battery pack, charger, or tool, except as provided in these instructions. Contact a **MILWAUKEE®** service facility for all other repairs.

### Maintaining Tool

Keep this tool, battery pack and charger in good repair by adopting a regular maintenance program. Inspect the tool for issues such as undue noise, misalignment or binding of moving parts, breakage of parts, or any other condition that may affect the tool operation. Return the tool, battery pack, and charger to a **MILWAUKEE®** service facility for repair. Depending on use, periodically have an authorised service facility inspect and maintain the tool, battery, and charger to ensure proper performance.

If the tool does not start or operate at full power with a fully charged battery pack, clean the contacts on the battery pack. If the tool still does not work properly, return the tool, charger and battery pack, to a **MILWAUKEE®** service facility for repairs.

**⚠WARNING** To reduce the risk of personal injury and damage, never immerse a tool, battery pack or charger in liquid or allow a liquid to flow inside them.

## Cleaning

Clean dust and debris from vents. Keep handles clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean, since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include petrol, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.

## Repairs

For repairs, return the tool, battery pack and charger to the nearest authorised service centre.

## ACCESSORIES

**⚠WARNING** Use only recommended accessories. Others may be hazardous.

For a complete listing of accessories, go online to [milwaukeeetool.com.au](http://milwaukeeetool.com.au) / [milwaukeeetool.co.nz](http://milwaukeeetool.co.nz) or contact an authorised distributor.





## **WARRANTY - AUSTRALIA and NEW ZEALAND**

Please refer to Australian and New Zealand warranty supplied with tool. This warranty applies only to product sold by authorised dealers in Australia and New Zealand.

## **SERVICE - AUSTRALIA and NEW ZEALAND**

**MILWAUKEE®** prides itself in producing a premium quality product that is Nothing But Heavy Duty™. Your satisfaction with our products is very important to us! If you encounter any problems with the operation of this tool, please contact your authorised **MILWAUKEE®** dealer.

For a list of **MILWAUKEE®** dealers, guarantee or service agents please contact **MILWAUKEE®** Customer Service or visit our website.

(Australia Toll Free Telephone Number 1300 645 928)

(New Zealand Toll Free Telephone Number 0800 645 928)

or visit [milwaukeeetool.com.au/milwaukeeetool.co.nz](http://milwaukeeetool.com.au/milwaukeeetool.co.nz).

### **Milwaukee Electric Tool Corporation**

13135 West Lisbon Road, Brookfield, Wisconsin U.S.A. 53005

### **Milwaukee Tool (Australia)**

26 - 40 Nina Link, Dandenong South,  
Victoria, 3175, Australia

### **Milwaukee Tool (New Zealand)**

274 Church Street, Penrose,  
Auckland, 1061, New Zealand

DESIGNED BY MILWAUKEE ELECTRIC TOOL CORP.