

New batteries must be charged before first use. The battery is shipped in sleep mode.

Cat. No.  
MXF C, MXF CP203, MXF XC406

**! WARNING**

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





# IMPORTANT SAFETY INSTRUCTIONS



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

## SAVE THESE INSTRUCTIONS

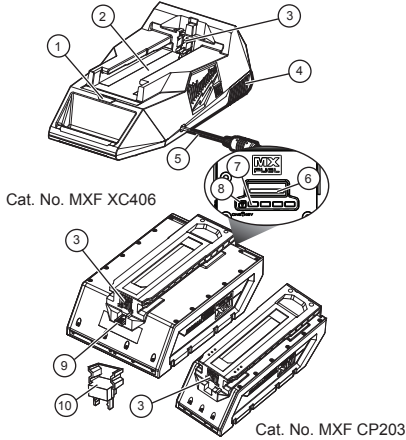
- 1. SAVE THESE INSTRUCTIONS-THESE INSTRUCTIONS-THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS FOR THE MILWAUKEE® LI-ION CHARGER CAT. NO. MXFC AND MILWAUKEE® MX FUEL™ LI-ION BATTERIES.**
- 2. BEFORE USING THE BATTERY PACK AND CHARGER, READ THIS OPERATOR'S MANUAL, YOUR TOOL OPERATOR'S MANUAL, AND ALL LABELS ON THE BATTERY PACK, 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 and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.** Children should be supervised to ensure that they do not play with the appliance.
- 4. Do not recharge non-rechargeable batteries in this charger.**
- 5. CAUTION TO REDUCE THE RISK OF INJURY, CHARGE MILWAUKEE® MX FUEL™ RECHARGEABLE LI-ION BATTERIES ONLY IN MILWAUKEE® MX FUEL™ LI-ION CHARGERS.** Other types of batteries may burst causing personal injury and damage. Do not wire a battery pack to a power supply plug or car cigarette lighter. Batteries will be permanently disabled or damaged.
- 6. USE MILWAUKEE® LI-ION PACKS ONLY ON COMPATIBLE MILWAUKEE® LI-ION TOOLS.** Battery pack and charger are not compatible with other systems. Use with other tools may result in a risk of fire, electric shock or personal injury.
- 7. AVOID DANGEROUS ENVIRONMENTS.** Do not charge battery pack in rain, snow, damp or wet locations. Do not use battery pack or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) because sparks may be generated when inserting or removing battery pack, possibly causing fire.
- 8. CHARGE IN A WELL VENTILATED AREA.** Do not block charger vents. Keep them clear to allow proper ventilation. Do not allow smoking or open flames near a charging battery pack. Vented gases may explode.
- 9. MAINTAIN CHARGER CORD.** When unplugging charger, pull plug rather than cord to reduce the risk of damage to the electrical plug and 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.
- 10. DO NOT USE AN EXTENSION CORD UNLESS IT IS ABSOLUTELY NECESSARY.** Using the wrong, damaged or improperly wired extension cord could result in the risk of fire and electrical shock. Make sure that the extension cord is in good electrical condition.
- 11. CHARGER IS RATED FOR 220-240 VOLT AC ONLY.** Charger must be plugged into an appropriate outlet.
- 12. USE ONLY RECOMMENDED ATTACHMENTS.** Use of an attachment not recommended or sold by the battery charger or battery pack manufacturer may result in a risk of fire, electric shock or personal injury.
- 13. UNPLUG CHARGER** when not in use. Remove battery packs from unplugged chargers.
- 14. TO REDUCE THE RISK OF ELECTRIC SHOCK,** always unplug charger before cleaning or maintenance.
- 15. DO NOT BURN OR INCINERATE BATTERY PACKS.** Battery packs may explode, causing personal injury or damage. Toxic fumes and materials are created when battery packs are burned.
- 16. DO NOT CRUSH, DROP, OR DAMAGE** battery pack. Do not use a battery pack or charger 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).
- 17. DO NOT DISASSEMBLE.** Incorrect reassembly may result in the risk of electric shock, fire or exposure to battery chemicals. If it is damaged, take it to a MILWAUKEE® service facility.
- 18. BATTERY CHEMICALS CAUSE SERIOUS BURNS.** Never allow contact with skin, eyes, or mouth. If a damaged battery pack 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. Remove and dispose of contaminated clothing.
- 19. 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, such as coins, keys or nails in your pocket.
- 20. DO NOT ALLOW FLUIDS TO FLOW INTO BATTERY PACK.** Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.
- 21. STORE YOUR BATTERY PACK AND CHARGER** in a cool, dry place. Do not store battery pack where temperatures may exceed 50°C (120°F) such as in direct sunlight, a vehicle or metal building during the summer.
- 22. ALWAYS SHIP LI-ION BATTERIES IN ACCORDANCE WITH THE CURRENT REGULATIONS GOVERNING THE CHOSEN MODE OF TRANSPORT (E.G. GROUND, AIR, SEA).** When in doubt, contact MILWAUKEE®, the carrier or other trained Dangerous Goods professional to determine applicable regulations.

## ADDITIONAL BATTERY SAFETY RULES

**⚠ WARNING** To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc., can cause a short circuit.

**⚠ WARNING** Do not charge non-rechargeable batteries.

## FUNCTIONAL DESCRIPTION



### 1. Charger light indicators:

- Continuous red: Charging
- Slow flashing green: Approaching full charge
- Continuous green: Charging is complete
- Fast flashing red: Battery and/or charger is too hot/cold – charging will begin when battery and or charger reach correct charging temperature.
- Slow flashing red: Battery charge is pending-Charging will begin momentarily.
- Flashing red/green: Damaged or faulty battery pack and/or charger.

- 2. Bay
- 3. Battery contacts
- 4. Vents
- 5. Cord
- 6. Fuel gauge button
- 7. Fuel gauge
- 8. ONE-KEY™
- 9. Shipping switch
- 10. Shipping cap

## SYMBOLOLOGY

- Safety Alert Symbol
- Volts
- Direct Current
- Alternating Current
- Double Insulated
- Properly Recycle Batteries
- Backfeed Protected
- Hertz
- Amps
- ⚠ CAUTION** Risk of Electric Shock
- Read Operator's Manual
- Indoor use
- Regulatory Compliance Mark (RCM). This product meets applicable regulatory requirements.

Do not dispose of electric tools together with household waste material. Electric tools and electronic equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

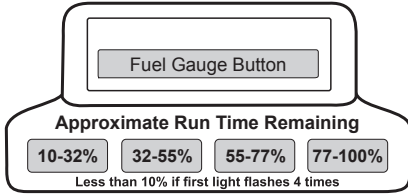
## SPECIFICATIONS

|   |                             |
|---|-----------------------------|
| Charger Cat. No. ....                         | <b>MXF C</b>                |
| Input Volts.....                              | 220-240V AC                 |
| Max Input Power.....                          | 550 W                       |
| Output Volts.....                             | 72V DC                      |
| Max Output Amps.....                          | 4.5A DC                     |
| Recommended Ambient Charging Temperature..... | 5°C to 40°C (40°F to 105°F) |
| <b>Battery Pack Cat. No. ....</b>             | <b>MXF CP203</b>            |
| Watt Hours.....                               | 216                         |
| <b>Battery Pack Cat. No. ....</b>             | <b>MXF XC406</b>            |
| Watt Hours.....                               | 432                         |

# MX FUEL™ LI-ION BATTERY PACKS

## Fuel Gauge

The battery packs are shipped in "sleep" mode and must be charged before first use.



Use the Fuel Gauge to determine the battery pack's remaining run time. Press the Fuel Gauge button to display the lights. The Fuel Gauge will light up for 2-3 seconds. When less than 10% of charge is left, 1 light on the fuel gauge will flash 4 times. When the battery reaches 0% charge, 1 light on the fuel gauge will flash 8 times. Charge the battery pack.

An alternating blinking pattern indicates that an error or overtemperature state was encountered. Allow the battery pack to cool and reinsert. If the pattern continues, contact a MILWAUKEE® service facility.

The fuel gauge will not work when the Shipping Switch is pulled out on the MXFXC406.

If the fuel gauge doesn't appear to be working, place the battery pack on the charger and charge as needed.

Immediately after using the battery pack, the Fuel Gauge may display a lower charge than it will if checked a few minutes later. The battery cells "recover" some of their charge after resting.

Under extreme circumstances, the internal temperature of the battery could become too high. If this happens, the fuel gauge lights will flash in an alternating pattern and the product will not run. Allow the battery to cool down.

| Fuel Gauge Lights                        | Diagnosis                    | Solution   |
|--|------------------------------|--|
| Lights 1 - 4 Solid                       | Remaining run time           | Continue working   |
| 1 Light, flashing slowly                 | Less than 10% run time left  | Prepare to charge pack   |
| 1 Light, flashing quickly                | End of discharge             | Charge pack  |
| Lights 1-4, flashing quickly             | Current draw too high        | Release trigger. Once fuel gauge has stopped flashing, restart and reduce pressure |
| Lights 1&3 / 2&4, flashing alternatingly | Battery temperature too high | Release trigger and allow battery to cool  |
| Lights 1&4 / 2&3, flashing alternatingly | Communication error          | Remove the battery. Press the Fuel Gauge button to clear. Reinsert the battery.†   |

† If the problem persists, take the product, charger, and battery pack to a MILWAUKEE® service facility.

## Battery Pack Protection

To protect itself from damage and extend its life, the battery pack's intelligent circuit monitors current draw and temperature. In extremely high torque, binding, stalling, and short circuit situations, the battery pack will turn OFF the product if the current draw becomes too high. The fuel gauge will flash. Release the trigger, wait for the fuel gauge to stop flashing, and then restart.

## Cold Weather Operation

MILWAUKEE® Li-Ion battery packs are designed to operate in temperatures below freezing. When the battery pack is too cold, it may need to warm up before normal use. Put the battery on a product and use the product in a light application.

**AWARNING** To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your product, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.

## Maintenance and Storage

Do not expose your battery pack or cordless products water or rain, or allow them to get wet. This could damage the product and battery pack. Do not use oil or solvents to clean or lubricate your battery pack. The plastic casing will become brittle and crack, causing a risk of injury.

Store battery packs at room temperature away from moisture. Do not store in damp locations where corrosion of terminals may occur. As with other battery pack types, permanent capacity loss can result if the pack is stored for long periods of time at high temperatures (over 50°C (120°F)). MILWAUKEE® Li-Ion battery packs maintain their charge during storage longer than other battery pack types. After about 6 months of storage, charge the pack as normal.

**AWARNING** To reduce the risk of injury or explosion, never burn or incinerate a battery pack even if it is damaged, dead or completely discharged. When burned, toxic fumes and materials are created.

## Disposing of MILWAUKEE® Li-Ion Battery Packs

MILWAUKEE® Li-Ion battery packs are more environmentally friendly than some other types of battery packs (e.g., nickel-cadmium). Always dispose of your battery pack according to federal, state and local regulations. Contact a recycling agency in your area for recycling locations. Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion.

# MX FUEL™ LI-ION CHARGER

**WARNING** Charge only **MILWAUKEE® MX FUEL™** 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 for you and your job. **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 your **MILWAUKEE®** Li-Ion battery pack.
- You can "Top-Off" your battery pack's charge 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 you just enough power to finish the operation. Charge the battery pack as needed.

## How to Charge the Battery Pack

Align the battery pack with the bay and slide the battery pack into the charger as far as possible. 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).

- A fully discharged battery pack with an internal temperature in the normal range will charge in about 45 to 90 minutes, depending on the battery pack and internal temperature of the charger.
- Heavily cycled batteries may take longer to charge completely.
- The fuel gauge lights are displayed as the pack is being charged, indicating how fully charged the pack is. 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 the light indicator flashes red and green, check that the battery pack is fully seated into the bay. Remove the battery pack and reinsert. If the light continues to flash red and green, remove pack(s) and unplug charger for at least 2 minutes. After 2 minutes, plug charger back in and insert pack. If the problem persists, contact a **MILWAUKEE®** service facility.
- If the light indicator does not come on, check that the battery pack is fully seated into the bay. Remove the battery pack and reinsert. If the light indicator still does not come on, remove pack(s) and unplug charger for at least 2 minutes. After 2 minutes, plug charger back in and insert pack. If after these attempts the light indicator still does not come on, contact a **MILWAUKEE®** service facility.

## Charging a Hot or Cold Battery Pack

The fast Red Flashing Indicator light on the charger indicates that the battery pack or charger temperature is outside the charging range. Once the battery pack or charger is within the acceptable range, normal charging will take place and the red light will be continuous. Hot or cold batteries may take longer to charge.

### Li-Ion Charging Status

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

## Maintenance and Storage

Store your charger in a cool, dry place.

As a general practice, it is best to unplug battery chargers and remove batteries when not in use. No battery pack damage will occur, however, if the charger and battery pack are left plugged in.

## Repairs

The charger has no serviceable parts.

**WARNING** To reduce the risk of injury, always unplug the charger and remove the battery from the charger before performing any maintenance. Never disassemble the battery or charger. Contact a **MILWAUKEE®** service facility for ALL repairs.

To reduce the risk of injury and damage, never immerse your battery or charger in liquid or allow a liquid to flow inside them.

Clean out dust and debris from charger vents and electrical contacts by blowing with compressed air. Use only mild soap and a damp cloth to clean the battery pack and charger, keeping away from all electrical contacts. Certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around batteries, charger, or products.



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

Please refer to Australian and New Zealand warranty supplied with tool. This warranty applies only to product sold 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 [milwaukeetool.com.au/milwaukeetool.co.nz](http://milwaukeetool.com.au/milwaukeetool.co.nz).

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