

# MX FUEL<sup>™</sup> LI-ION BATTERY PACKS

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

## IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS -

AWARNING 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 These instructions contain important safety and operating instructions for the *MILWAUKEE*<sup>®</sup> Li-lon charger and *MILWAUKEE*<sup>®</sup> Li-lon battery packs.
- 2. Before using the battery pack and charger, read this operator's manual, tool's operator's manual, and all labels on the battery pack, charger, and tool.
- 3. **CAUTION** Use *MILWAUKEE*<sup>®</sup> Li-lon battery packs only on recommended *MILWAUKEE*<sup>®</sup> Li-lon products. Do not use counterfeit, aftermarket, or "knockoff" batteries or chargers. Do not wire a battery pack to a power supply plug or car cigarette lighter.
- 4. 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.
- 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.
- Do not burn or incinerate battery packs. Batteries may explode. Toxic fumes and materials are created when batteries are burned.
- 7. Do not crush, drop, or damage battery pack. Always securely contain battery packs during transport. Do not use a battery pack 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.
- 8. Do not disassemble. If it is damaged, take it to a *MILWAUKEE*<sup>®</sup> service facility.
- 9. 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.

- 10. 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.
- 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.
- 12. Do not hold or carry battery pack by accessory handle while installed in tool.
- 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.
- 14. 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*<sup>®</sup>, the carrier, or other trained Dangerous Goods professional to determine applicable regulations.

## ADDITIONAL BATTERY SAFETY RULES

**AWARNING** 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.

AWARNING Do not charge non-rechargeable batteries.

## SYMBOLOGY



Safety Alert

Volts



Risk of Electric Shock



Do not allow battery to contact corrosive or conductive fluid.



Direct Current



Read Operator's manual

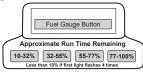
Regulatory Compliance Mark (RCM). This product meets applicable regulatory requirements.



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 recvclina facility.



Operating Temperature...... 4°C to 40°C 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 runtime. 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.

Fuel Gauge Lights	Diagnosis	Solution
Lights 1 - 4 Solid	Remaining runtime	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&3 / 2&4, flashing alternatingly	Battery temperature too high	Release trigger and allow battery to cool.
Lights 1&4 / 2&3, flashing alternatingly	Communica- tion error	Remove the battery. Press the Fuel Gauge button to clear. Reinsert the battery. <sup>†</sup>

<sup>†</sup> If the problem persists, take the product, charger, and battery pack to a MILWAUKEE® service facility. 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 of a battery with a shipping switch.

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. 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.

### Maintenance and Storage

Do not expose your battery pack or cordless products to 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 at room temperature away from moisture. Store batteries upright. Do not store in damp locations where corrosion of terminals may occur. Storing in high temperatures (over 49°C) for long periods can result in permanent capacity loss for any battery. Charge before use after storing for long periods.

**Disposing of MILWAUKEE®** Li-Ion Battery Packs MILWAUKEE® Lithium-Ion battery packs are more environmentally friendly than some other types of battery packs (e.g., nickel-cadmium). Always dispose of your battery packs 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.

## 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*<sup>®</sup> prides itself in producing a premium quality product that is Nothing But Heavy Duty<sup>™</sup>. 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*<sup>®</sup> dealer.

For a list of *MILWAUKEE*<sup>®</sup> dealers, guarantee or service agents please contact *MILWAUKEE*<sup>®</sup> 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.

## **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. PROFESSIONALLY MADE IN CHINA PRINTED IN CHINA