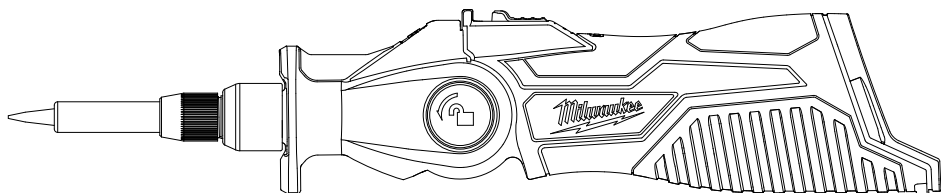




## OPERATOR'S MANUAL



Cat. No. 2488-20

### M12™ SOLDERING IRON



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

## GENERAL POWER TOOL SAFETY WARNINGS

**WARNING** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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 refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### 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.

### ELECTRICAL SAFETY

- Indoor Use. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

### PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense 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. Protective equipment such as a 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.
- 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 jewelry. Keep your hair and clothing away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- 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.

### 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 remove the battery pack, if detachable, 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 and accessories. 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.
- 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.

### 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 behavior 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 265°F (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.

### 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.
- Do not modify or attempt to repair the tool or the battery pack except as indicated in the instructions for use and care.

### SPECIFIC SAFETY RULES FOR SOLDERING IRON

- Contact with a hot tool tip could ignite flammable materials. Contact with a hot tip could ignite a fire.
- Do not stand or store tool upright on the battery pack. Tool could tip resulting in contact between hot tip and flammable materials. Always set/store tool on its side when not in use.
- Keep hands and fingers behind finger guard. Serious burns can occur if skin contacts tip.
- Remove battery before storing. Such preventive safety measures reduce the risk of starting the power tool accidentally.

• **Work in well ventilated areas.** Soldering can produce fumes and smoke.

• **Use personal protective equipment when using chemicals, such as flux and solder paste.** Follow all manufacturer instructions.

• **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a MILWAUKEE service facility for a free replacement.

• **AWARNING** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

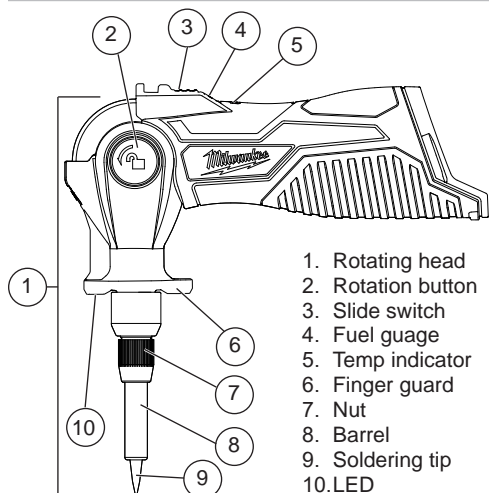
• lead from lead-based paint  
• crystalline silica from bricks and cement and other masonry products, and

• arsenic and chromium from chemically-treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

## SPECIFICATIONS

Cat. No. ....	2488-20
Volts .....	12 DC
Battery Type .....	M12™
Charger Type .....	M12™
Average Heater Power (Max) .....	90 W
Set Tip Temperature .....	750°F
Replacement Point Tip .....	49-80-0400
Replacement Chisel Tip .....	49-80-0401
Recommended Ambient Operating Temperature .....	0°F to 125°F

## FUNCTIONAL DESCRIPTION



1. Rotating head
2. Rotation button
3. Slide switch
4. Fuel gauge
5. Temp indicator
6. Finger guard
7. Nut
8. Barrel
9. Soldering tip
10. LED

## SYBOLGY

- V** Volts
- Direct Current
- ⚠** CAUTION! Tip is hot. Avoid contact.
- cULus** UL Listing for Canada and U.S.

## 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.

### Removing/Inserting the Battery

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

**AWARNING** Always remove battery pack before changing or removing accessories.

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

**AWARNING** Only use accessories specifically recommended for this tool. Others may be hazardous.

### Changing the Soldering Tip

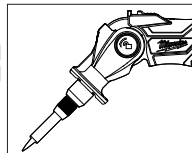
**AWARNING** Ensure the tip is cool and the tip temp indicator is off before touching the tip. Serious burns could occur if skin contacts a hot tip.

To replace the tip:

1. After the tip has cooled and the tip temp indicator is off, remove the battery pack.
2. Unscrew the nut and remove the nut and barrel.
3. Remove the tip and replace.
4. Reinstall the nut and barrel. Tighten the nut securely.

### Rotating the Head

To rotate the head at any time, press in the rotation button and rotate the head to the desired angle.



## OPERATION

**AWARNING** To reduce the risk of injury, always wear safety goggles or glasses with side shields.

**Keep hands and fingers behind finger guard. Serious burns could occur if skin contacts a hot tip.**

### Soldering

1. Prepare the workpiece.
2. Rotate head to desired angle.
3. Press the slide switch forward to turn on the tool.
4. To lock-on the switch press down on the front of the switch.
5. Allow the tool to come to full temperature.

Temp Indicator:

Blinking Green → Heating

Solid Green → Solder melt temp (400-750°F)

6. Solder according to material requirements.
7. When done, turn off tool by releasing switch or, if locked-on, pressing back of switch and releasing.
8. While still hot, clean the tip with a wet sponge or brass cleaning wire. **WARNING!** Avoid contact, tip is hot and could cause serious burns.
9. Place tool on its side with the tip away from any contact until it has cooled. Tip should cool in approximately 20 minutes. Temp indicator will go out once tip has cooled.

Temp Indicator:

Solid Red → Cooling

**WARNING!** Do not touch tip or remove battery pack until Temp Indicator turns off, indicating the tool has cooled. Storing a hot tool could cause fire.

## 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 tool, battery pack or charger. Contact a MILWAUKEE service facility for ALL repairs.

### Maintaining Tool

Keep your tool, battery pack and charger in good repair by adopting a regular maintenance program. Inspect your 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. After six months to one year, depending on use, return the tool, battery pack and charger to a MILWAUKEE service facility for inspection.

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 your tool, battery pack or charger in liquid or allow a liquid to flow inside them.

### Cleaning

While still hot, clean the tip with a wet sponge or brass cleaning wire. Tip-tinner/cleaner can also be used. **WARNING!** Avoid contact, tip is hot and could cause serious burns.

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 gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.