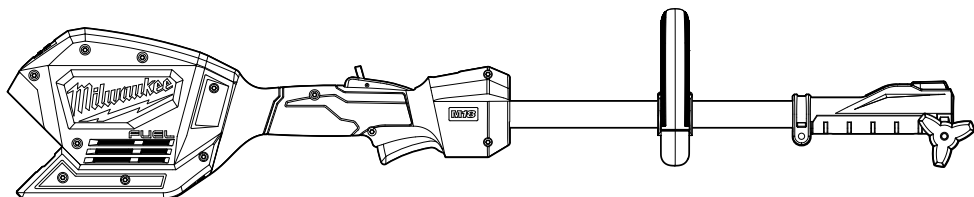




OPERATOR'S MANUAL



Cat. No.
2825-20

M18 FUEL™ ATTACHMENT SYSTEM W/ QUIK-LOK™ POWER HEAD



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

- **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 ground fault circuit interrupter (GFCI) protected supply.** Use of an GFCI reduces 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.

- **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 jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry 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.

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.
 - **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.
- ### 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.

SPECIFIC SAFETY RULES FOR POWER HEAD

- Before use, read this manual, and all manuals and labels of this tool and its attachments. Failure to follow the warnings and instructions may result in serious injury.
- Before using the battery pack or charger read the operator's manuals, and any labels on the battery pack, charger and tool.
- Do not handle battery pack, tool, or charger (including charger plug and terminals) with wet hands.
- Always wear eye, hearing, and head protection, and protective clothing and footwear, according to the operation being performed. Wear heavy, long pants, long sleeves, boots, and gloves. Contain long hair. Do not wear loose clothing or jewelry. Do not wear short pants, sandals, or go barefoot.
- Keep bystanders at least 50' away during use. Objects may be thrown or ricochet in all directions.
- Do not use blades, brush cutting wheels, accessories, or attachments other than those recommended by MILWAUKEE. Serious injury or product damage may occur.
- Only use an attachment extension when recommended in the tool attachment operator's manual.
- AWARNING** Do not operate near electric power lines. The unit has not been designed to provide protection from electric shock in the event of contact with electric power lines. Consult local regulations for safe distances from electric power lines and ensure that the operating position is safe and secure before use.
- Inspect the area before using the tool. Remove all debris and hard objects such as rocks, glass,

- wire, etc. that can ricochet, be thrown, or otherwise cause injury or damage during operation.
- Do not operate the tool without the front handle in place. The front handle must be attached properly during use. Use both hands when operating the tool, according to the attachment instructions. Maintain a firm grip. Using one hand could cause loss of control and result in serious injury.
- Brace for unexpected movement when contact is made with a hard object. Loss of control could result in serious injury.
- Keep face, hands and feet clear of moving parts at all times. Moving parts can cause severe lacerations.
- Thrown objects may ricochet off of hard surfaces, such as walls, trees, and rocks and cause injury. When possible, do trimming by hand in closed in areas.
- Use care when using around decorative plants and other obstacles. Accessories will cut/damage many materials.
- Always turn off the tool when transporting from one location to another. Do not carry tool with finger on the trigger. Accidental starting can cause serious personal injury.
- Carry the tool by the front handle to avoid accidental starting. Proper handling of the tool will prevent injury.
- Always use common sense and be cautious when using tools. It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact Milwaukee Tool or a trained professional for additional information or training.
- 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.

READ AND SAVE ALL INSTRUCTIONS FOR FUTURE USE SPECIFICATIONS

Cat. No.	2825-20*
Volts.....	18 DC
Battery Type	M18™
Charger Type.....	M18™
RPM.....	High 0 - 8680 Low 0 - 6860
Recommended Ambient Operating Temperature.....	0°F to 125°F
*Use only with compatible Milwaukee M18 FUEL™ Attachment System w/ Quik-Lok™ components.	

SYMBOLGY



Volts



Direct Current

$n, XXXX \text{ min}^{-1}$ No Load Revolutions per Minute (RPM)



Safety Alert Symbol



Read operator's manual



Always wear eye protection and use proper personal protective equipment.



Wear non-slip safety footwear



Wear protective gloves



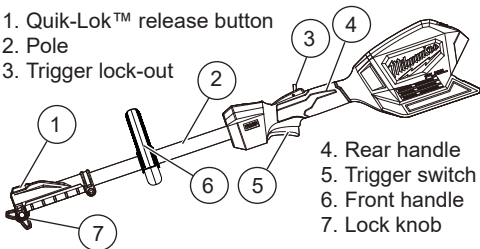
Do not expose to rain or use in damp locations.



UL Listing for Canada and U.S.

FUNCTIONAL DESCRIPTION

1. Quik-Lok™ release button
2. Pole
3. Trigger lock-out



4. Rear handle
5. Trigger switch
6. Front handle
7. Lock knob

ASSEMBLY

WARNING 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.

WARNING 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.

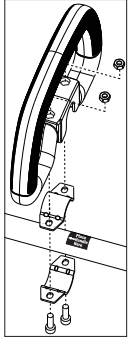
WARNING Do not use blades, brush cutting wheels, accessories, or attachments other than those recommended by MILWAUKEE. Serious injury or product damage may occur.

Do not operate the tool without the front handle in place. The front handle must be attached properly during use. Use both hands when operating the tool, according to the attachment instructions. Maintain a firm grip. Using one hand could cause loss of control and result in serious injury.

Installing the Front Handle

The front handle is shipped uninstalled and must be installed before use.

1. Place the two nuts into the front handle detents.
2. Insert one bracket into the handle.
3. Install the side handle on the power head pole, below the "Place Handle Here" sticker, at a distance that is comfortable and provides the best control.
4. Wrap the other bracket around the back of the shaft.
5. Insert the two screws through the lower bracket and into the side handle.
6. Tighten the screws securely using the included key.

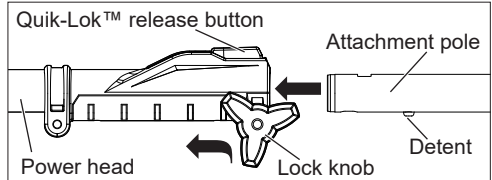


WARNING Before use, read manual and labels of the attachment tool. Important assembly and use instructions are provided in the attachment manual. Only use an attachment extension when recommended in the tool attachment manual.

Quik-Lok™ System

To **install** an attachment or extension:

1. Remove battery pack.
2. Loosen the lock knob.
3. Slide the attachment pole into the Quik-Lok™ latch. The detent on the pole should line up with the slot in the Quik-Lok™ latch.
4. Push the sections together securely. Tug on the poles to ensure they are secure.
5. Tighten the lock knob.



To **remove** an attachment or extension:

1. Remove battery pack.
2. Loosen the lock knob.
3. Push in the Quik-Lok™ release button and pull the poles apart.

Attaching the Shoulder Strap

(Available as an accessory)

When operating this tool, use the shoulder strap to reduce user fatigue and help in maintaining control during use.

To **install** the strap:

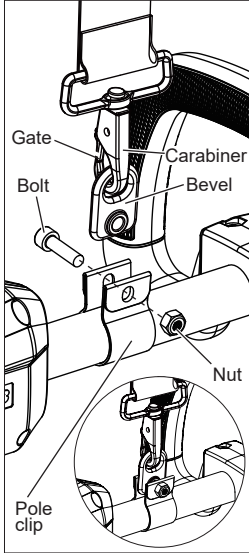
1. Remove the battery pack.
2. Fit the pole clip around the power head pole between the front handle and rear handle in a location comfortable during use.
3. Insert the bolt through the pole clip and strap bevel. Thread the nut onto the bolt and tighten securely.
4. Clip the strap carabiner to the bevel.

To **wear** the strap:

1. Put your right arm and head through the strap.
2. Adjust the strap clips to change the strap length to fit comfortably.
3. Slide the neck pad to the appropriate position.

To **unclip** the strap:

1. Hold the tool by the front handle with your left hand.
2. Grip the carabiner with your right hand and unclip by pushing in the gate and it sliding off the bevel.



OPERATION

AWARNING To reduce the risk of injury, always wear proper eye protection marked to comply with ANSI Z87.1.

Always remove battery pack before changing or removing accessories or attachments.

Use both hands when operating the tool, according to the attachment instructions. Maintain a firm grip. Using one hand could cause loss of control and result in serious injury.

Inspect the area before using the tool. Remove all debris and hard objects such as rocks, glass, wire, etc. that can ricochet, be thrown, or otherwise cause injury or damage during operation.

Quik-Lok™ Attachments

This tool can be connected to a number of MILWAUKEE Quik-Lok™ attachments. Use only in accordance to the attachment's operator's manual. Specifications and operation instructions are provided in the attachment manual. Use only attachments recommended by MILWAUKEE.

Selecting the Speed

Use the speed control button to select Low or High speeds. Refer to your attachment manual for speed recommendations.



Starting/Stopping the Power Head

AWARNING To reduce the risk of injury, always hold the power head away from the body keeping clearance between body and the tool/attachment. Any contact with an attachment or cutting head can result in cuts, burns and other serious personal injury.

Always remove the battery pack and keep hands clear of the trigger and lock-out when carrying or transporting tool.

1. Grasp the tool firmly by both handles.
2. To **start** the tool, squeeze the trigger lock-out and pull the trigger.
3. To **vary** the speed, increase or decrease the pressure on the trigger. The further the trigger is pulled, the greater the speed up to the maximum set by the speed control button.
4. To **stop** the tool release the trigger. Make sure the tool comes to a complete stop before laying the tool down.

MAINTENANCE

AWARNING 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.

AWARNING 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

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 gasoline, 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 service center.

ACCESSORIES

AWARNING Use only recommended accessories. Others may be hazardous.