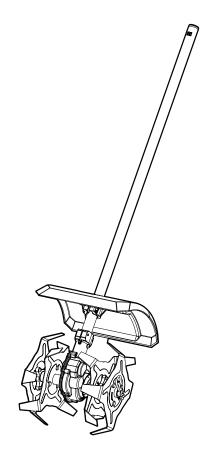


# **OPERATOR'S MANUAL**



Cat. No. M18 FOPH CA

M18 FUEL™ QUIK-LOK™ CULTIVATOR ATTACHMENT



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

# GENERAL POWER TOOL SAFETY WARNINGS

AWARNING 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 residual current device (RCD) protected supply. Use of a RCD 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 energising 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 jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery 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 behaviour 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 130°C (265°F) may cause

explosion.

 Follow all charging instructions and do not charge the battery pack or tool outside the range specified the temperature Charging improperly instructions. 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 authorised service providers.

## SPECIFIC SAFETY RULES FOR **CULTIVATORS**

General cultivator safety warnings:

 Do not use the machine in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning

 Thoroughly inspect the area for wildlife where the machine is to be used. Wildlife may be injured

by the machine during operation.

 Thoroughly inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects. Thrown objects can cause personal injury.

 Before using the machine, always visually inspect to see that the blades are not damaged. Damaged

parts increase the risk of injury.

- Follow instructions for changing accessories. Improperly tightened blade securing nuts or bolts may either damage the blade or result in it becoming detached.
- The rated rotational speed of the blade must be at least equal to the maximum rotational speed marked on the machine. Blades running faster than their rated rotational speed can break and fly apart.
- Wear eye, ear, head and hand protection. Adequate protective equipment will personal injury by flying debris or accidental contact with the blades.
- While operating the machine, always wear safety footwear. Do not operate the machine when barefoot or wearing open sandals. This reduces the chance of injury to the feet from contact with a moving blade.

 While operating the machine, always wear long trousers. Exposed skin increases the likelihood of injury from thrown objects.

 Keep bystanders away while operating the machine. Thrown debris can result in serious personal

 Always use two hands when operating the machine. Holding the machine with both hands will avoid loss of control.

 Hold the machine by the insulated gripping surfaces only, because the blades may contact hidden wiring. Blades contacting a "live" wire may make exposed metal parts of the machine "live" and could give the operator an electric shock.

 Always keep proper footing and operate the machine only when standing on the ground. Slippery or unstable surfaces may cause a loss of

balance or control of the machine.

 Do not operate the machine on excessively steep **slopes.** This reduces the risk of loss of control, slipping and falling which may result in personal

injury.

 When working on slopes, always be sure of your footing, always work across the face of slopes, never up or down and exercise extreme caution when changing direction. This reduces the risk of loss of control, slipping and falling which may result in personal injury

 Keep all parts of the body away from the blades when the machine is operating. Before you start the machine, make sure the blades are not contacting anything. A moment of inattention while operating the machine may result in injury to

yourself or others.

 Do not operate the machine above waist height. This helps prevent unintended blade contact and enables better control of the machine in unexpected situations.

 Maintain control of the machine and do not touch blades and other hazardous moving parts while they are still in motion. This reduces the risk of injury from moving parts.

 Carry the machine with the machine switched off and away from your body. Proper handling of the machine will reduce the likelihood of accidental contact with a moving blade.

 Only use replacement blades specified by the manufacturer. Incorrect replacement parts may

increase the risk of breakage and injury.

 When clearing jammed material or servicing the machine, make sure the switch is off and the battery pack is removed. Unexpected starting of the machine while clearing jammed material or servicing may result in serious personal injury.

Blade thrust causes and related warnings:

- Blade thrust is a sudden sideways, forward or backward motion of the machine, which may occur when the blade jams or catches on an object such as a sapling or a tree stump. It can be violent enough to cause the machine and/or operator to be propelled in any direction, and possibly lose control of the machine.
- Blade thrust and its related hazards can be avoided by taking proper precautions as given below.

 Maintain a firm grip with both hands on the machine and position your arms to resist blade thrust. Position your body to the left side of the machine. Blade thrust can increase the risk of injury due to the machine moving unexpectedly. Blade thrust can be controlled by the operator if

proper precautions are taken.

•If the blade binds, switch the machine off and hold the machine motionless in the material until the blade comes to a complete stop. While the blade is binding, never attempt to remove the machine from the material or pull the machine backward while the blade is in motion, otherwise blade thrust may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

 Do not use blunt or damaged blades. Blunt or damaged blades increase the risk of jamming or catching on an object, resulting in blade thrust.

 If you are approached by another person while operating the machine, switch the machine off.
 There is an increased risk of injury to other persons being struck by the moving blade in the event of blade thrust.

Other cultivator safety rules:

 Before use, read this manual, and all manuals and labels of this tool and its power head.
 Failure to follow the warnings and instructions may result in serious injury. Use tool only as described in this manual. Use only attachments recommended by MILWAUKEE<sup>®</sup>.

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.

 Do not use an attachment extension with this tool attachment. The additional length will make this attachment difficult to control and could cause injury.

•Use the shoulder strap to reduce user fatigue and help in maintaining control of the tool

during use.

 Do not wear multiple shoulder straps simultaneously. When wearing a shoulder strap, ensure that no other wearable interferes with the release and removal of the strap.

•Do not use the tool near anything that is burning or smoking such as cigarettes,

matches, or hot ashes.

- To reduce the risk of health hazards from vapors or dust, do not use tool near toxic, carcinogenic or other hazardous materials such as asbestos, arsenic, barium, beryllium, lead, pesticides or other health endangering materials.
- Use care when using around decorative plants and other obstacles. Accessories will

cut/damage many materials.

 Do not operate the tool without the guard in place. The guard must be attached properly during use. Operating the tool without the guard will cause serious injury.

 Do not use tool with a damaged blade. Cracked or broken pieces can be thrown.  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.

 Keep face, hands and feet clear of moving parts at all times. Moving parts can cause severe

acerations.

 Brace for unexpected movement when contact is made with a hard object. Loss of control could result in serious injury.

 Thrown objects may ricochet off of hard surfaces, such as walls, trees, and rocks and cause injury. When possible, do cultivation by hand in closed in areas.

 Carry the tool by the front handle to avoid accidental starting. Proper handling of the tool

will prevent injury

 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.

Do not immerse in water or spray with a hose.
 Do not clean with a pressure washer. Water entering a power tool will increase the risk of electric shock. Store tool indoors.

•Do not store the power tool on or near to

fertilisers or chemicals.

 Always turn off the tool and then remove battery pack before changing or removing accessories.

•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

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

# 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*



Volts



Direct Current

 $n_0$  XXXX min $^{\text{-}1}$  No Load Revolutions per Minute (RPM)



Safety Alert Symbol



Read operator's manual.



Wear eye, ear and head protection.



Wear slip-resistant footwear.



Wear protective gloves.



Keep hands and feet away from the blade



Beware of blade thrust



Beware of thrown objects.



The distance between the machine and bystanders shall be at least 15 m.



Do not use with saw or edger blade.



Surface is hot. Avoid contact.



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

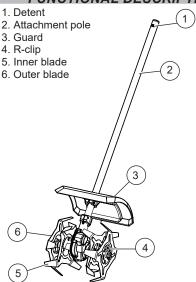


Do not dispose of electric tools together with household waste material. Electric tools and electronic equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

# DECITION

SPECIFICATIONS				
Cat. No	M18 FOPH CA			
For use with	M18 FUEL™ QUIK-LOK™			
	Power Heads			
RPM	Low 0 - 150			
	Med 0 - 175			
	High 0 - 200			
Blade Diameter	230 mm (9")			

# **FUNCTIONAL DESCRIPTION**



NOTE: The shoulder strap provided with the M18 FUEL™ QUIK-LOK™ Power Head must be installed on the Power Head prior to use with the Cultivator Attachment.

#### ASSEMBLY

AWARNING Before use, read manual and labels of the power head. Important assembly and use instructions are provided in the power head manual. Connect the attachment to the power head in accordance with the power head manual.

Do not operate the tool without the guard in place. The guard must be attached properly during use. Operating the tool without the guard will cause serious injury.

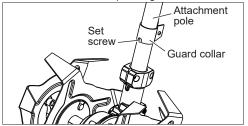
Always remove battery pack before changing or removing accessories.

Do not use tool with a damaged blade. Cracked or broken pieces can be thrown.

#### Installing the Guard

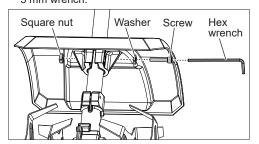
The guard is shipped uninstalled and must be installed before use.

- 1. **AWARNING** Remove battery to avoid starting the tool.
- Push the guard collar down the attachment pole until the collar locks in place against the set screw.



- 3. Push the guard down the attachment pole.
- Line up the guard with the hole in the guard collar.
   Put the square nut in place on one end of the guard collar, and then insert the screw with
- washer through the other end of the guard collar.

  6. Tighten the screw securely using the included 5 mm wrench.

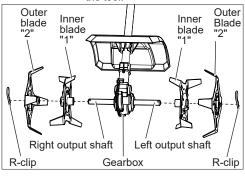


#### Installing/Removing the Blades

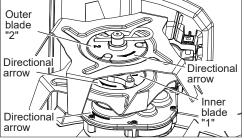
The blades are shipped uninstalled and <u>must</u> be installed before use.

To **install** the blades:

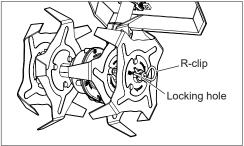
1. **AWARNING** Remove battery to avoid starting the tool.



- 2. Locate the directional arrow on the left output shaft side of the gearbox. Select the inner blade marked "1" with a directional arrow that matches the gearbox. Place the inner blade through the left output shaft. The stamped side of the blade with "1" and the directional arrow should face outward.
- 3. Select the outer blade marked "2" with a directional arrow that matches the arrow on the left output shaft side of the gearbox. Place the outer blade through the left output shaft. The stamped side of the blade with "2" and the directional arrow should face outward, away from the inner blade.



 Insert the R-clip into the locking hole. Twist the R-clip flat against the outer blade to secure the blades to the shaft.



5. Repeat Steps 2-4 on the right output shaft.

To **remove** the blades:

1. <u>AWARNING</u> Remove battery to avoid starting the tool.

2. Remove the R-clip from the locking hole.

3. Remove the blades from the output shaft.

4. Repeat Steps 2-3 on the other output shaft. **NOTE:** To ensure an even application, all blades should be replaced at the same time.

Attaching the Shoulder Strap

AWARNING Do not wear multiple shoulder ing a shoulder strap, ensure that no other wearable interferes with the release and removal of the strap.

Use the shoulder strap provided with the M18 FUEL™ QUIK-LOK™ Power Head to reduce user fatigue and help in maintaining control of the tool during use.

To install the strap:

1. **AWARNING** Remove battery to avoid starting the tool.

 Fit the pole clip around the power head pole between the front handle and rear handle in a location comfortable during use.

 Inserf the bolt through the pole clip and strap bevel. Thread the nut onto the bolt and tighten securely.

Clip the strap carabiner to the bevel.

 Adjust the pole clip as needed to ensure the blade is at operating level.

To **wear** the strap:

1 Put your right arm and head through the strap.

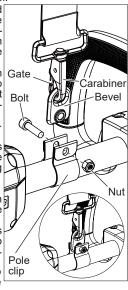
Adjust the strap clips to change the strap length to fit comfortably.

3 Slide the neck pad to clip the appropriate position.

To **unclip** the strap:

1. Hold the tool by the front handle with your left hand.

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 AS/NZS 1337.1.

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

Do not operate the tool without the front handle in place. The front handle must be attached properly for use. Using one hand could cause loss of control and result in serious injury.

Do not operate the tool without the guard in place. The guard must be attached properly during use. Operating the tool without the guard will cause serious injury.

During operation, use the shoulder strap. Keep

the cultivator on your right side firmly.

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 use. 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.

Selecting the Speed

Use the speed control button to select the speed. Different power heads offer different speed selection options. Refer to your power head manual for more information.

Use lower speeds for larger jobs where extended battery life is needed. Use higher speeds for dense applications.

Operating the Attachment

Inspect the blades for damage before use. If damaged, do not use. Replace the blades.

Grasp the trigger handle with your right hand and the front handle with your left hand.

To start the tool, squeeze the lock-off lever and pull the trigger.

4. 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.

5. Guide the cultivator in the best method to suit your purpose. The cultivator can be guided forward or backward, from left to right or vice versa, or in a circular motion. The best method will depend on the size and shape of the area and soil conditions.



- 6. In the event of blockages, turn the tool off and remove the battery before clearing any debris. For major blockages, remove the R-clip and blades to easily access the blockage. Reinstall the blades when the blockage is clear by following the "Installing/Removing the Blades" section of this manual.
- To stop the tool release the trigger. Make sure the tool comes to a complete stop before laying the tool down.

#### **APPLICATIONS**

The cultivator can be used for the following applications:

- Breaking up soil
- ·Loosening soil around plants
- Working in soil improvers
- Trenching or furrowing

## **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 battery pack, charger, or tool, except as provided in these instructions. Contact a MILWAUKEE® service facility for all other 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 to a MILWAUKEE® service facility for repair. After six months to one year, depending on use, return the tool 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 to a MILWAUKEE® service facility for repairs.

AWARNING Do not use blunt or damaged blades. Blunt or damaged blades increase the risk of jamming or catching on an object, resulting in blade thrust.

#### Replacing the Blades

The blades should be inspected before each use. If a blade chips or becomes dull, it should be replaced. For instructions on removing and installing the blades, please see the "Installing/Removing the Blades" section of this manual.

Cleaning the Attachment

Clean dust and debris from vents. Keep tool 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

AWARNING Use only recommended accessories. Others may be hazardous.

For a complete listing of accessories, go online to milwaukeetool.com.au / milwaukeetool.co.nz or contact a 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*<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  $\it MILWAUKEE^{\it B}$  dealers, guarantee or service agents please contact  $\it MILWAUKEE^{\it B}$  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.

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