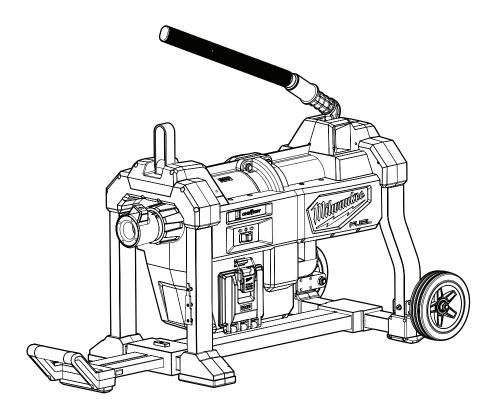


# **OPERATOR'S MANUAL**



Cat. No. **M18 FSSM32** 

M18 FUEL™ SEWER SECTIONAL MACHINE W/ CABLE DRIVE™



WARNING 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 an 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 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 130°C (265°F) 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 authorised service providers.

## SPECIFIC SAFETY RULES

•Only grasp the rotating cable with gloves recommended by the manufacturer. Latex or loose fitting gloves or rags can become wrapped around the cable and may result in serious personal injury.

•Do not allow the cutter to stop turning while the cable is turning. This can overstress the cable and may cause twisting, kinking or breaking of the cable

and may result in serious personal injury.

•Use latex or rubber gloves inside the gloves recommended by the manufacturer, goggles, face shields, protective clothing, and respirator when chemicals, bacteria or other toxic or infectious substances are suspected to be in a drain line. Drains may contain chemicals, bacteria and other substances that may cause burns, be toxic or infectious or may result in other serious personal injury.

 Keep a gloved hand on the cable whenever the tool is running. This provides better control of the cable and helps prevent twisting, kinking or breaking of the cable and may result in serious personal injury.

- •Practice good hygiene. Do not eat or smoke while handling or operating the tool. After handling or operating drain cleaning equipment, use hot, soapy water to wash hands and other body parts exposed to drain contents. This will help reduce the risk of health hazards due to exposure to toxic or infectious material.
- Only use the drain cleaner for the recommended drain sizes. Using the wrong size drain cleaner can lead to twisting, kinking or breaking of the cable and may result in personal injury.

Inspect cable for wear and damage before use.
 Replace a worn or damaged cable before using the

drain cleaner.

 Do not twist, kink or over bend cables. Breaking of the cable may result in serious personal injury.

- •Inspect the drain to be cleaned before use. If possible, determine the access point(s) to the drain, the size(s) and length(s) of the drain, distance to mainlines, the nature of the blockage, presence of drain cleaning chemicals or other chemicals, etc. If chemicals are present in the drain, it is important to understand the specific safety measures required to work around those chemicals. Contact the chemical manufacturer for required information.
- •Do not operate this tool if the user or tool is standing in water. Operating the tool while in water increases the risk of electric shock.

•If needed, place protective covers in the work area.
The drain cleaning process can be messy.

•Make sure cable is fully retracted inside the rear guide hose of the drain cleaner. This will prevent whipping at start up.

•Place the drain cleaner at a distance no greater than two feet from drain opening. If the drain cleaner cannot be placed within two feet from the drain opening, the drain opening will need to be extended using a similar size pipe and fittings. Greater distances can cause control problems leading to twisting, kinking, breaking or whipping of the cable.

 One person must control both the trigger switch and cable. If the tool stops rotating, the user must be able to turn the tool off to prevent twisting, kinking,

breaking or whipping of the cable.

•Do not operate the drain cleaner in reverse rotation except as described in this manual. Running the tool in reverse for extended periods can cause damage to the cable and 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.

#### SYMBOLOGY

V

Volts

\_\_\_

**Direct Current** 

n₀ XXXX min¹ No-Load Revolutions per Minute (RPM)



Only wear leather gloves.



Always wear goggles when using the product.



Do not allow battery to contact corrosive or conductive fluid.



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



Read Operator's Manual

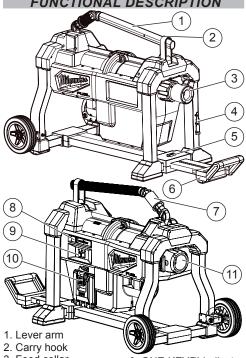
#### **SPECIFICATIONS**

Cat. No	M18 FSSM32				
Volts	18V DC				
Battery Type	M18™				
Charger Type	M18™				
No Load RPM	700				
Cable Size	32mm (1-1/4")				
Recommended Pipe Diameter	. 50-203mm (2"-8")				
Recommended Ambient					
Operating Temperature	17°C to 51°C				

## ADDITIONAL BATTERY SAFETY RULES

RNING 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.

## FUNCTIONAL DESCRIPTION



- Feed collar
- 4. Cable hook
- Handle release button
- Telescoping handle
- Lever arm collar
- 8. ONE-KEY™ indicator
- 9. Forward/Off/Reverse
- 10. Battery door
- 11. Rear quide hose

# connection

## **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, unlatch the battery door, push in the release buttons and pull the battery pack away from the tool. Close and relatch the battery door.

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

To insert the battery, unlatch the battery door and slide the pack into the body of the tool. Make sure it latches securely into place. Close and relatch the battery door.

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

ACAUTION To prevent damage to the cable and attachments, do not use in larger diameter pipes.

#### Cable Attachment Installation To install the attachment:

Snap the attachment coupler into the cable coupler. Test the cable before inserting into the drain to make sure the attachment does not fall off during use.

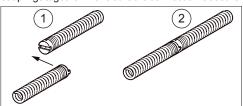
#### To remove the attachment:

Insert the pin key into the coupling hole and pull attachment off of cable.

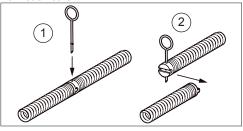
## Connecting/Disconnecting Sectional Cables

Keep the cable couplings clean and lubricated. The pin key must move freely and fully extend to secure the connection.

To **connect** the sectional cables, slide the two cable couplings together. Make sure the connection is secure.



To **disconnect** the sectional cables, insert the pin key into the coupling hole and pull the cables away from each other.



Using the Telescoping Handle

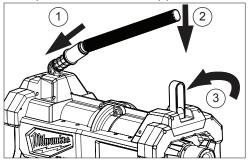
To use the telescoping handle, press and hold the unlock button located near the handle. Pull the handle out until it locks into place.

To return the handle, press and hold the unlock button and push the handle into place.

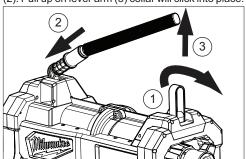
## Locking/Unlocking the Lever Arm

The lever arm should be locked any time the tool is being transported or is not in use.

To **lock** the lever arm, push back on the lever arm collar (1) and lower the lever arm (2) push the carry hook up to secure the lever arm (3).



To **unlock**, remove lever arm from carry hook (1). Push back on lever arm collar (fully compress the spring) (2). Pull up on lever arm (3) collar will click into place.



#### ONE-KEY™

To learn more about the ONE-KEY™ functionality for this tool, please refer to the quick reference included with this product or go to onekey.milwaukeetools.com.au To download the ONE-KEY™ app, visit the App Store or Google Play from your smart device.

ONE-KEY™ Indicator				
Solid Blue	Wireless mode is active and ready to be configured via the ONE-KEY™ app.			
Blinking Blue	Tool is actively communicating with the ONE-KEY™ app.			
Blinking Red	Tool is in security lockout and can be unlocked by the owner via the ONE-KEY™ app.			

#### **OPERATION**

AWARNING Always remove battery pack before changing or removing accessories. Only use accessories specifically recommended for this tool. Others may be hazardous.

To reduce the risk of short circuit, when setting tool or battery down, do not allow battery to contact corrosive or conductive fluid.

To reduce the risk of injury, wear safety goggles or glasses with side shields. Always wear leather gloves. Cable tip may be sharp.

## Using the Forward/Off/Reverse Switch

The forward/off/reverse switch controls the rotation of the cable.

- For forward (clockwise) rotation, turn the forward/ off/reverse switch to the arrow pointing away from the wheels of the tool -. Check the direction of rotation before use.
- For reverse (counterclockwise) rotation, turn the forward/off/reverse switch to the arrow pointing towards the wheels of the tool -- Check the direction of rotation before use.
- 3. To lock the switch, turn the forward/off/reverse switch to the centre position O. The cable will not spin while the forward/off/reverse switch is in the centre locked position. Always lock the switch or remove the battery pack before performing maintenance, transporting the tool, changing accessories, storing the tool and any time the tool is not in use.

## Inserting Cable Into Drain

 Place the tool at a distance no greater than two feet from the drain opening. If needed, place protective covers in the work area.

 Pull cable out of its carrier and into the rear guide hose connection using the guide tube. WARNING! Wear leather gloves. Route the cable directly into the drain from the tool, minimising exposed cable and changes in direction.

Continue feeding the cable until approximately one foot of cable remains before the guide tube.

4. Disconnect the cable from its carrier. **WARNING!**Rotating cable while still connected to their carriers may cause striking or crushing injuries.

5. Turn the forward/off/reverse switch to the forward position — to rotate the cable.

 If needed, attach additional sectional cables according to the instructions under "Connecting/ Disconnecting Sectional Cables".

 Continue feeding cable into the drain until the obstruction is reached. Cable can be fed manually or by advancing the CABLE-DRIVE™ system.

When the clog is reached, move the cable in a back and forth motion until the obstruction is cleared.

## Using the Cable-Drive™

The cable feed system controls the advancement and retraction of the cable.

- To feed the cable, make sure the forward/off/ reverse switch is in forward —. Pull the feed collar outward and turn it to the feed/retract setting ... Check the direction of movement before use.
- To retract the cable, make sure the forward/off/ reverse switch is in reverse →. Pull the feed collar outward and turn it to the feed/retract setting
   Check the direction of movement before use.

# **Using Manual Operation**

To feed the cable:

- 1. Pull the feed collar outward and rotate to Spin O.
- Grasp the cable close to the front collar and pull enough cable from the machine to start cable in the drain opening.
- 3. Turn forward/off/reverse switch to forward ← .
- 4. Pull 152mm-203mm of cable from the tool.
- 5. Press down on lever arm with one hand while guiding the cable down the line with the other.
- 6. Release lever arm.
- 7. Repeat steps 2-6 until obstruction is reached.

To retract the cable:

- Ensure forward/off/reverse switch is in forward ←.
- Press down on lever arm.
- 3. With gloved hand pull cable from the drain line until loop forms.
- Release lever arm.
- Feed cable back through the machine.
- Repeat steps 2-5 until all cable removed from

NOTE: See "Inserting Cable into Drain" for further instructions.

#### To Unbind Cable

- 1. Turn the forward/off/reverse switch to the reverse position → and rotate the feed collar to Spin O.
- 2. Withdraw the cable a few inches while in reverse to free the cable.
- 3. Stop the tool.
- 4. After the tool has come to a complete stop, switch forward/off/reverse switch back to the forward

ACAUTION Running the tool in reverse for extended periods can cause damage to the cable and accessories.

## Removing Cable from Drain

- 1. Turn the forward/off/reverse switch to the reverse position - and turn the feed collar to the feed/ retract setting \$.
- 2. Release off lever arm when connector coupling reached.
- 3. Disconnect from connector coupling.
- Place cable in cable container.

maintenance).

Repeat steps 2-4 until all cable is free from the drain. 6. Before storing the tool, wash the cable and feed tube (see "cleaning cables, tube and machine" in

#### 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.

#### ONE-KEY™

AWARNING Chemical Burn Hazard. This device contains a lithium button/coin cell battery. A new or used battery can cause severe internal burns and lead to death in as little as 2 hours if swallowed or enters the body. Always secure the battery cover. If it does not close securely, stop using the device, remove the batteries, and keep it away from children. If you think batteries may have been swallowed or entered the body, seek immediate medical attention.

Internal Battery

An internal battery is used to facilitate full ONE-KEY™ functionality. The internal battery is located inside of the M18<sup>™</sup> battery door.

To replace the battery:

1. Remove the battery pack.

- Remove the screw(s) and open the battery door.
- Remove the old battery, keep it away from children, and dispose of it properly.
- 4. Insert the new battery (3V CR2032), with the positive side facing up.
- Close the battery door and tighten the screw(s) securely.

AWARNING To reduce the risk of personal in-jury 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.

Cleaning Cables, Tube and Machine

The cable and tube should be thoroughly flushed with water after every use to prevent damaging effects of sediment and drain cleaning compounds. **WARNING!** Wear leather gloves. After washing, dry the cable and tube completely. Then, wipe cable with an oiled rag before returning it to its carrier.

Cleanout procedure:

- 1. Insert the battery pack and close the battery door. Switch the tool into forward position -.
- Rotate the feed collar to Spin O.
- Press lever and run tool for 30 seconds. Insert cable and check function.
- Rotate the feed collar to the feed/retract setting \$.
- 5. Tip tool on an angle with the front of the tool pointing upward.
- Flush the tool continually with water until all components appear to be moving freely.
- Repeat steps 2-6 until all components are moving freely.

Continue to flush with water as necessary until the tool is functioning normally.

NOTE: Avoid using high pressure water when cleaning the tool. Only clean the tool using water. No additives such as degreasers or drain cleaning chemicals should be added to the water.

Repairs

For repairs, return the tool, battery pack and charger to the nearest 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 in Australia and New Zealand.

## SERVICE - AUSTRALIA and NEW ZEALAND

 $MILWAUKEE^{\textcircled{@}}$  prides itself in producing a premium quality product that is Nothing But Heavy Duty<sup>TM</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  $MILWAUKEE^{\textcircled{@}}$  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

## **Milwaukee Electric Tool Corporation**

13135 West Lisbon Road, Brookfield, Wisconsin U.S.A. 53005

## Milwaukee Tool (Australia)

21 Kelletts Road, Rowville, VIC 3178 Melbourne, Australia

# Milwaukee Tool (New Zealand)

274 Church Street, Penrose, Auckland, 1061, New Zealand

Designed by Milwaukee Electric Tool Corp.

Professionally Made in China for Milwaukee Tool (Australia) / Milwaukee Tool (New Zealand)

Printed in China