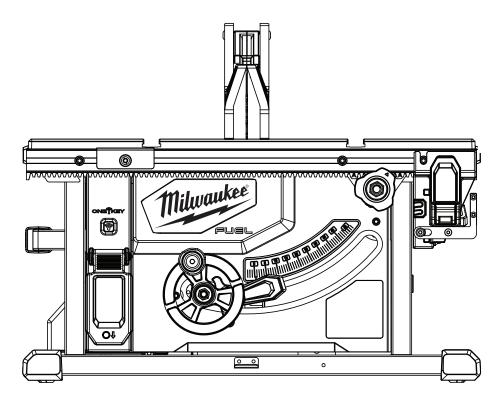


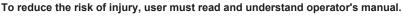
## **OPERATOR'S MANUAL**



Cat. No. M18 FTS210

M18™ FUEL™ 210mm (8 1/4") TABLE SAW W/ ONE-KEY™







# 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 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 FOR TABLE SAWS

Guarding related warnings

 Keep guards in place. Guards must be in working order and be properly mounted. A guard that is loose, damaged, or is not functioning correctly must be repaired or replaced.

 Always use saw blade guard, riving knife and anti-kickback device for every through—cutting operation. For through-cutting operations where the saw blade cuts completely through the thickness of the workpiece, the guard and other safety devices

help reduce the risk of injury.

•Immediately reattach the guarding system after completing an operation (such as rabbeting, dadoing or resawing cuts) which requires removal of the guard, riving knife and/or anti-kickback device. The guard, riving knife, and anti-kickback device help to reduce the risk of injury.

•Make sure the saw blade is not contacting the guard, riving knife or the workpiece before the switch is turned on. Inadvertent contact of these items with the saw blade could cause a hazardous

condition

•Adjust the riving knife as described in this instruction manual. Incorrect spacing, positioning and alignment can make the riving knife ineffective in reducing the likelihood of kickback.

•For the riving knife and anti-kickback device to work, they must be engaged in the workpiece. The riving knife and anti-kickback device are ineffective when cutting workpieces that are too short to be engaged with the riving knife and anti-kickback device. Under these conditions a kickback cannot be prevented by the riving knife and antikickback device. •Use the appropriate saw blade for the riving knife. For the riving knife to function properly, the saw blade diameter must match the appropriate riving knife and the body of the saw blade must be thinner than the thickness of the riving knife and the cutting width of the saw blade must be wider than the thickness of the riving knife.

Cutting procedures warnings

ADANGER Never place your fingers or hands in the vicinity or in line with the saw blade. A moment of inattention or a slip could direct your hand towards the saw blade and result in serious personal injury.

•Feed the workpiece into the saw blade or cutter only against the direction of rotation. Feeding the workpiece in the same direction that the saw blade is rotating above the table may result in the workpiece, and your hand, being pulled into the saw blade.

•Never use the mitre gauge to feed the workpiece when ripping and do not use the rip fence as a length stop when cross cutting with the mitre gauge. Guiding the workpiece with the rip fence and the mitre gauge at the same time increases the likelihood of saw blade binding and kickback.

•When ripping, always apply the workpiece feeding force between the fence and the saw blade. Use a push stick when the distance between the fence and the saw blade is less than 150 mm, and use a push block when this distance is less than 50 mm. "Work helping" devices will keep your hand at a safe distance from the saw blade.

•Use only the push stick provided by the manufacturer or constructed in accordance with the instructions. This push stick provides sufficient distance of the hand from the saw blade.

 Never use a damaged or cut push stick. Adamaged push stick may break causing your hand to slip into

the saw blade.

- •Do not perform any operation "freehand". Always use either the rip fence or the mitre gauge to position and guide the workpiece. "Freehand" means using your hands to support or guide the workpiece, in lieu of a rip fence or mitre gauge. Freehand sawing leads to misalignment, binding and kickback.
- Never reach around or over a rotating saw blade.
   Reaching for a workpiece may lead to accidental contact with the moving saw blade.
- Provide auxiliary workpiece support to the rear and/or sides of the saw table for long and/or wide workpieces to keep them level. A long and/or wide workpiece has a tendency to pivot on the table's edge, causing loss of control, saw blade binding and kickback.
- •Feed workpiece at an even pace. Do not bend or twist the workpiece. If jamming occurs, turn the tool off immediately, unplug the tool then clear the jam. Jamming the saw blade by the workpiece can cause kickback or stall the motor.
- •Do not remove pieces of cut-off material while the saw is running. The material may become trapped between the fence or inside the saw blade guard and the saw blade pulling your fingers into the saw blade. Turn the saw off and wait until the saw blade stops before removing material.
- Use an auxiliary fence in contact with the table top when ripping workpieces less than 2 mm thick. A thin workpiece may wedge under the rip fence and create a kickback.

Kickback causes and related warnings

Kickback is a sudden reaction of the workpiece due to a pinched, jammed saw blade or misaligned line of cut in the workpiece with respect to the saw blade or when a part of the workpiece binds between the saw blade and the rip fence or other fixed object. Most frequently during kickback, the workpiece is lifted from the table by the rear portion of the saw blade and is propelled towards the operator. Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

•Never stand directly in line with the saw blade. Always position your body on the same side of the saw blade as the fence. Kickback may propel the workpiece at high velocity towards anyone standing in front and in line with the saw blade.

•Never reach over or in back of the saw blade to pull or to support the workpiece. Accidental contact with the saw blade may occur or kickback may drag your fingers into the saw blade.

 Never hold and press the workpiece that is being cut off against the rotating saw blade. Pressing the workpiece being cut off against the saw blade will create a binding condition and kickback.

•Align the fence to be parallel with the saw blade.

A misaligned fence will pinch the workpiece against the saw blade and create kickback.

•Use a featherboard to guide the workpiece against the table and fence when making non-through cuts such as rabbeting, dadoing or resawing cuts. A featherboard helps to control the workpiece in the event of a kickback.

Use extra caution when making a cut into blind areas of assembled workpieces. The protruding saw blade may cut objects that can cause kickback.
 Support large panels to minimise the risk of saw blade pinching and kickback. Large panels tend to sag under their own weight. Support(s) must be placed under all portions of the panel overhanging

the table top.

•Use extra caution when cutting a workpiece that is twisted, knotted, warped or does not have a straight edge to guide it with a mitre gauge or along the fence. A warped, knotted, or twisted workpiece is unstable and causes misalignment of the kerf with the saw blade, binding and kickback.
•Never cut more than one workpiece, stacked

vertically or horizontally. The saw blade could pick up one or more pieces and cause kickback.

When restarting the saw with the saw blade in

•When restarting the saw with the saw blade in the workpiece, centre the saw blade in the kerf so that the saw teeth are not engaged in the material. If the saw blade binds, it may lift up the workpiece and cause kickback when the saw is restarted.

 Keep saw blades clean, sharp, and with sufficient set. Never use warped saw blades or saw blades with cracked or broken teeth. Sharp and properly set saw blades minimise binding, stalling and kickback.

Table saw operating procedure warnings

•Turn off the table saw and disconnect the power cord when removing the table insert, changing the saw blade or making adjustments to the riving knife, antikickback device or saw blade guard, and when the machine is left unattended. Precautionary measures will avoid accidents.

•Never leave the table saw running unattended. Turn it off and don't leave the tool until it comes to a complete stop. An unattended running saw is an uncontrolled hazard.

•Locate the table saw in a well-lit and level area where you can maintain good footing and balance. It should be installed in an area that provides enough room to easily handle the size of your workpiece. Cramped, dark areas, and uneven slippery floors invite accidents.

 Frequently clean and remove sawdust from under the saw table and/or the dust collection device. Accumulated sawdust is combustible and

may self-ignite.

•The table saw must be secured. A table saw that is not properly secured may move or tip over.

 Remove tools, wood scraps, etc. from the table before the table saw is turned on. Distraction or a potential jam can be dangerous.

 Always use saw blades with correct size and shape (diamond versus round) of arbour holes.
 Saw blades that do not match the mounting hardware of the saw will run off-centre, causing loss of control.

 Never use damaged or incorrect saw blade mounting means such as flanges, saw blade washers, bolts or nuts. These mounting means were specially designed for your saw, for safe operation and optimum performance.

 Never stand on the table saw, do not use it as a stepping stool. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally

contacted.

•Make sure that the saw blade is installed to rotate in the proper direction. Do not use grinding wheels, wire brushes, or abrasive wheels on a table saw. Improper saw blade installation or use of accessories not recommended may cause serious 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 replacement.

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.

### ADDITIONAL BATTERY SAFETY RULES

AWARNING To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your inflator, 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.

## SYMBOLOGY



Volts

Direct Current

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



Read operator's manual



Wear eye protection. Use hearing and respiratory protection.



Keep hands and body out of the path of the saw blade.



Match kerf width of blade (>1.8 mm) and blade body thickness (<1.55 mm) with the marking on the riving knife to reduce the risk of kickback.



Only use 210 mm (8 1/4") saw blades



Match the arrow direction on the saw blade with the arrow direction on the riving knife.

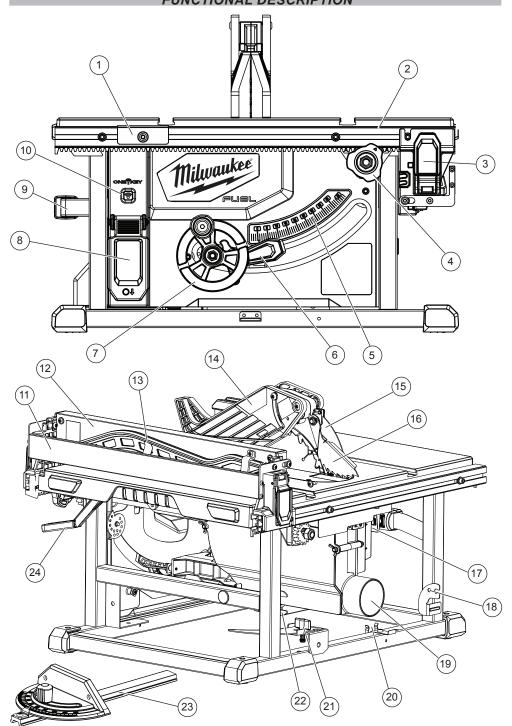


Regulatory Compliance mark (RCM). This product meets applicable regulatory requirements.

#### **SPECIFICATIONS**

Cat. No	M18 FTS210
Volts	18V DC
Battery Type	M18™
Charger Type	M18™
Recommended Ambient Operating Temperature	17°C to 51°C
No Load RPM	6300
Blade Arbour	30 mm
Blade Diameter	210 mm (8-1/4")
Blade Tilt	3° to 47°
Mitre gauge angle	60° Right or Left
Cutting Depth, 0° Bevel	63 mm (2.5")
Cutting Depth, 45° Bevel	44 mm (1.75")
Blade Kerf	>1.8 mm minimum
	<2.2 mm maximum
Blade body thickness	<1.55 mm maximum
Riving knife thickness	1.6 mm (0.063")

## **FUNCTIONAL DESCRIPTION**



6

- Rip scale indicator
- Rip scale
- Fence latch
- Fence adjusting knob
- Bevel scale
- Bevel locking lever
- Height adjusting wheel
- Switch cover
- Carrying handle
- 10. ONE-KEY™ indicator
- 11. Extending rip fence
- 12. Rip fence
- 13. Push stick
- 14. Blade guard
- 15. Riving knife and blade guard assembly
- 16. Anti-kickback pawls
- 17. Riving knife release lever
- 18. Anti-kickback pawl storage
- Dust chute
- Mitre gauge storage
- 21 Riving knife without guard / riving knife storage
- Blade wrench / blade wrench storage
- 23. Mitre gauge
- Fence lock

#### **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. WARNING Only use accessories specifically recommended for this tool. Others

may be hazardous. If any parts are damaged or missing, do not

operate this tool until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury. Do not attempt to modify this tool or create

accessories not recommended for use with this tool.

Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

Do not insert to battery pack until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

Do not lift the saw without help. Hold it close to your body. Keep your knees bent and lift with your legs, not your back. Ignoring these precautions can result in back injury.

## Unpacking

This product requires assembly.

 Carefully lift saw from the carton and place it on a level work surface.

NOTE: This tool is heavy. To avoid back injury, keep your knees bent and lift with your legs, not your back, and get help when needed.

•If tool is shipped with a battery installed, remove the battery pack.

Remove any packaging and zip ties.

 Inspect the tool carefully to make sure no breakage or damage occurred during shipping.

 Do not discard the packing material until you have carefully inspected the tool, identified all loose parts, and satisfactorily operated the tool.

## Mounting the Table Saw

# AWARNING Ensure the saw is on a stable, level surface before use.

For extra stability, mount the table saw to workbench using the mounting holes in the in the frame. Insert screws at an angle through the table saw frame.

The MILWAUKEE® Table Saw Stand can also be used.

Understanding the Table Saw Before adjusting or operating the saw, have a basic

understanding of table saw use and terminology. The upper portion of the blade projects up through the table and is surrounded by an insert called the throat plate. The height of the blade is set with a wheel on the front of the cabinet. The rip fence is used to position work for lengthwise cuts. A rip fence scale on the front rail shows the distance between the rip fence and the blade. It is very important to use the riving knife with blade guard and anti-kickback pawls for all through-sawing operations. Use the mitre gauge for all cross-cut operations.

Detailed instructions are provided in this manual for making adjustments and basic cuts: cross cuts, mitre cuts, bevel cuts, and compound cuts. This table saw is designed to cut wood and wood composition products only. Do not cut metal. Do not cut plastics. Understand these instructions before continuing.

Selecting, Installing, and Changing Blades AWARNING Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury. AWARNING Use the appropriate saw blade for the riving knife. Match kerf width of blade (>1.8 mm) and blade body thickness (<1.55 mm) with the marking on the riving knife to reduce the risk of kickback. Failure to heed this warning could result in personal injury. AWARNING Blades are sharp. Wear work gloves when handling blades.

ANOTICE To work properly, the saw blade teeth must point down toward the front of the saw. Failure to heed this warning could cause damage to the saw blade, the saw, or the workpiece.

Always use clean, sharp blades. Dull blades tend to overload the tool, bind, and cause pinching. Use only 210mm (8-1/4") table saw blades rated at least 6300 RPM.

The blade provided with the saw is a high-quality combination blade suitable for ripping and cross cut operations.

Blade kerf width and blade body thickness must be within the limits stamped on the riving knife. Do not use metal-cutting blades. Do not cut plastics.

The blade wrench should be stored on the table saw frame (see "Functional Description" for storage location).

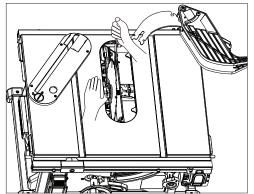
**NOTE:** To replace the blade with an accessory blade, follow the instructions provided with the accessory. To change the saw blade:

Remove the battery pack.

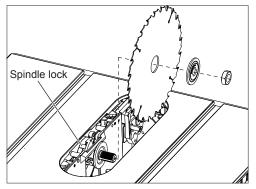
- 2. Set the blade angle (bevel) to 0° and lock it in
- 3. Raise the blade by turning the height adjusting wheel clockwise.
- Remove the riving knife.
- Remove the throat plate.

6. Press in the spindle lock and rotate the spindle/ blade until the lock engages.

7. Use the blade wrench to loosen the blade bolt counterclockwise. Carefully remove the blade bolt and blade flange by hand. Remove the blade. Wipe the blade bolt, flanges and spindle to remove dust and debris. Inspect the parts for damage. Replace if needed.



- 8. Match the arrow direction on the replacement saw blade with the arrow direction on the riving knife. The teeth should point toward the front of the table saw. Slide the blade onto the spindle.
- Install the outer blade flange. The flat side of the flange must rest against the blade.

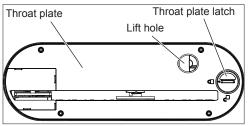


- 10. Hand-thread the blade bolt. Once the spindle starts to spin, press in the spindle lock and rotate the blade until the lock engages. Securely tighten clockwise with the blade wrench.
- 11. Reinstall the appropriate throat plate, riving knife, and anti-kickback pawls for the application.
- 12. Check blade guard and anti-kickback pawls move freely before starting the saw. Ensure the blade teeth match the direction of rotation indicated on the riving knife.

Changing the Throat Plate

AWARNING Always use the appropriate throat plate for the operation. Different blades may require different throat plates. Never operate the saw without a throat plate in place. Remove the battery pack.

- 2. Lower the blade by turning the height adjusting wheel counterclockwise.
- 3. To **remove** a throat plate, turn the throat plate latch to unlocked.



Use the hole to lift the throat plate out.

5. To install a throat plate, slide the back end into the slot and drop the front into place. Turn the throat plate latch to a locked. The throat plate must be flush with the saw table.

Changing the Riving Knife

AWARNING Use the appropriate saw blade for the riving knife. Match kerf width of blade (>1.8 mm) and blade body thickness (<1.55 mm) with the marking on the riving knife to reduce the risk of kickback. Failure to heed this warning could result in personal injury.

Two riving knives are provided with the saw; the riving knife with guard, and the riving knife without guard. The riving knife with guard should be used for through cutting operations for maximum protection against kickback. When performing an operation that requires "non-through cutting", use the riving knife without guard. Do not use any riving knife when making a dado cut.

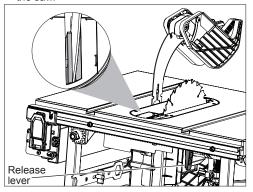
Store the riving knife on the table saw frame when not in use (see "Functional Description" for storage location).

To about a the min

To change the riving knife:

Remove the battery pack.

- Raise the blade by turning the height adjusting wheel clockwise.
- 3. Release the riving knife release lever.
- 4. To **remove**, pull the riving knife straight up.
- 5. To install, insert the riving knife into the slot directly behind the blade until it is firmly seated. NOTE: if the release lever is not fully open, the riving knife may not fully seat.
- Close the riving knife release lever fully.
- Gently tug on the riving knife to ensure it is locked into place.
- 8. When using the riving knife with guard, lift the guard legs and ensure they move independently and both sides contact the table top. The guard legs can be raised to line up the cut, but must be lowered to contact the table top before starting the saw.



## **Installing Anti-kickback Pawls**

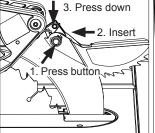
AWARNING Always install the anti-kickback pawls onto the riving knife with guard when performing "through cutting" operations.

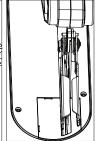
Replace dull or damaged anti-kickback pawls. Dull or damaged pawls may not stop a kickback increasing the risk of serious personal injury.

Anti-kickback pawls should only be installed for through cuts.

Remove the battery pack.

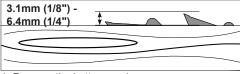
- 2. Raise the blade by turning the height adjusting wheel clockwise.
- Install the riving knife with guard.
- Press in the pawl release button and insert the slot in the pawl joint into the riving knife notch. Press down on the joint. NOTE: It may be easier to install the pawls from the front of the saw.
- Gently tug on the pawl joint to ensure it is locked into place. Ensure the pawls move freely and are not engaged in the throat plate slot.





**Changing Blade Depth** 

The blade depth should be set so that the outer points of the blade are higher than the workpiece by approximately 1/8" to 1/4" but the lowest points (gullets) are below the top surface.



- 1. Remove the battery pack.
- Lower the blade by turning the height adjusting wheel counterclockwise.
- Raise the blade by turning the height adjusting wheel clockwise.

# Installing and Moving the Rip Fence To install the rip fence on one of the fence posts:

- 1. Open the fence latches.
- 2. Fit the notches in the fence over the corresponding fence posts.
- Close the fence latches.
- Check that the fence is square to the blade (see "Blade to Fence Adjustment" in Maintenance).

#### To move the rip fence:

- 1. Pull the fence lock forward.
- 2. Use the fence adjusting knob to move the rip fence left or right.
- 3. Push the fence lock back.

To use the extending rip fence as a table extension:
Use the extending rip fence to hold the edge of the work-piece when the fence is moved out past the end of

the table.

1. Pull the fence lock forward.

- Use the fence adjusting knob to move the extending rip fence out past the edge of the table.
- edge of the table.

  3. Flip the fence extension over. The tab on the extending rip fence will fit into the lower slot on the fence.
- Adjust the fence as needed and push the fence lock back.

To use the extending rip fence when cutting thin (19 mm (3/4") or less) workpieces close to the blade:

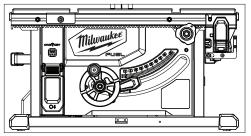
NOTE: Only use the extending rip fence in this position for workpieces 19 mm (3/4") thick or less. For thicker workpieces, use the mitre gauge.

Always use a push stick to keep hands at least 76 mm

- (3") away from the blade.1. Pull the fence lock forward.
- 2. Use the fence adjusting knob to move position the rip fence.
- Flip the fence extension over. Slide the extending rip fence back, then push down. The tab on the extending rip fence will fit into the upper slot on the fence.
- Adjust the fence as needed and push the fence lock back.
- 5. NOTE: If the fence is adjusted close to the blade, ensure the guard and anti-kickback pawls move freely. They may rest on top of the fence extension. WARNING! Never stand directly in line with the blade. Thin cut-off pieces can be thrown out and toward the operator when the anti-kickback pawls are not engaged with the wood.

#### To store the fence:

When making a cross cut or storing the tool, remove and store the rip fence, as shown. The fence fits around the fence lock. **NOTE**, the fence rail cannot be adjusted when the fence is in the storage position.



Using an Auxiliary Fence

Use an auxiliary fence for cutting thin pieces of wood, such as veneer panels, that could get pinched under the rip fence. To create an auxiliary fence, clamp a 1x4 piece of lumber (without beveled edges) to the rip fence and flush to the table.

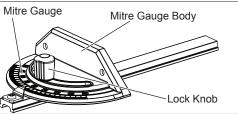
Changing Blade Angle (Bevel)

**NOTE:** A 90° cut has a 0° bevel and a 45° cut has a 45° bevel.

- 1. Remove the battery pack.
- 2. Lift the bevel locking lever.
- Grasp the height adjusting wheel and slide to the desired bevel angle.
- Push down the bevel locking lever.
- Check fence clearance before making a cut. Make a sample cut before beginning work.

Using the Mitre Gauge

The mitre gauge provides greater accuracy in angled cuts. For very close tolerances, test cuts are recommended.



There are two mitre gauge grooves, one on either side of the blade. When making a 90° cross cut, you can use either mitre gauge groove. When making a beveled cross cut (the blade tilted in relation to the table) the mitre gauge should be located in the groove on the right so that the blade is tilted away from the mitre gauge and your hands.

The mitre gauge can be turned 60° to the right or left.

Loosen the lock knob.

- With the mitre gauge in the mitre gauge groove, rotate the gauge until the desired angle is reached on the scale.
- Tighten the lock knob securely.

#### **Dust Collection**

AWARNING Collected sawdust from coated (polyurethanes, linseed oil, etc.) workpieces can self-ignite and cause fire. To reduce the risk of fire, empty frequently and never store or leave a saw without totally emptying sawdust.

The dust chute at the back of the saw can be connected to a vacuum hose (diameter 2.5"/62.6 mm). To install, push and twist the hose onto the dust chute. Leave dust chute open to direct dust down into a garbage can.

Transporting and Storing

Always store all saw parts, such as the fence, mitre gauge, riving knife, riving knife with guard, and blade wrench, with the saw when transporting and storing. Lower the blade, remove the battery pack and/or lock-out the ON/OFF switch before transporting or storing the saw.

#### ONE-KEY™

To learn more about the ONE-KEY™ functionality for this tool, please reference the Quick Start guide included with this product or go to milwaukeetool.com/One-Key. To download the ONE-KEY™ app, visit the App Store or Google Play from your smart device.

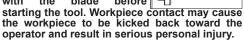
NOTE: High electronic discharge from the tool may cause the ONE-KEY™ app to lose connection. Follow the prompts in the app to reconnect.

#### OPERATION

AWARNING To reduce the risk of injury, always wear safety goggles or glasses with side shields. Wear hearing protection and respiratory protection.

ALWAYS lock-out the trigger when the tool is not in use. Insert a standard padlock or zip tie behind the switch to prevent starting by untrained

users ALWAYS make sure your workpiece is not in contact with the blade before



Never stand directly in line with the blade or allow hands to come closer than 76 mm (3") to the blade. Do not reach over or across the blade. Contact with the blade can result in serious personal injury. Ensure the saw is on a stable, level surface before use.

#### Causes of Kickback

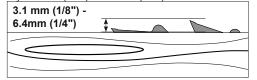
Kickback can occur when the blade stalls or binds, kicking the workpiece back toward you with great force and speed. If your hands are near the saw blade, they may be jerked loose from the workpiece and may contact the blade. Kickback can cause serious injury, and it is well worth using precautions to avoid the risks.

Kickback can be caused by any action that pinches the blade in the wood such as:

- Making a cut with incorrect blade depth
- Sawing into knots or nails in the workpiece
- •Twisting the wood while making a cut
- Failing to support work
- Forcing a cut
- Cutting warped or wet lumber
- Using the wrong blade for the type of cut
- Not following correct operating procedures
- Misusing the saw
- Failing to use the anti-kickback pawls
- Cutting with a dull, gummed-up, or improperly set blade

Avoiding Kickback

•Always use the correct blade depth setting. The top of the blade teeth should clear the workpiece by 3.1 mm (1/8") to 6.4mm (1/4")



 Inspect the work for knots or nails before beginning a cut. Knock out any loose knots with a hammer.

Never saw into a loose knot or nail.

•Always use the rip fence when rip cutting. Use the mitre gauge when cross cutting. This helps prevent twisting the wood in the cut.

Always use clean, sharp, and properly-set blades.

Never make cuts with dull blades.

 To avoid pinching the blade, support the work properly before beginning a cut.

•When making a cut, use steady, even pressure.

Never force cuts.

Do not cut wet or warped lumber.

 Use extra caution when cutting some prefinished or composition wood products as the anti-kickback pawls may not always be effective.

 Always guide your workpiece with both hands or with push sticks and/or push blocks. Keep your body in a balanced position to be ready to resist kickback should it occur. Never stand directly in line with the blade.

 Use of a featherboard will help hold the workpiece securely against the saw table or fence.

 Clean the saw, blade guard, under the throat plate, and any areas where saw dust or scrap workpieces may gather.

•Use the right type of blade for the cut being made. Always use the riving knife for every operation where it is allowed. The use of this device will greatly reduce the risk of kickback.

#### Turning Saw ON/OFF

AWARNING Carefully check and lock all adjust-ments, and rotate the blade one full revolution to assure proper clearance before inserting the battery pack. Improper blade clearance and loose adjustments can result in serious personal injury.

AWARNING When making a cross cut, make sure the blade guard is installed and working properly to avoid serious personal injury.

AWARNING To reduce the risk of injury, always wear safety goggles or glasses with side shields. Wear hearing protection and respiratory protection.

Remove zip tie before first use.

Check all adjustments.

Insert the battery pack.

3. Line up the workpiece, but do not make contact with the blade. **NOTE:** When using the riving knife with guard, the guard legs can be raised to line up the cut, but must be lowered to contact the table top before starting the saw.

4. To turn the saw ON, lift the switch cover and then

lift the switch.

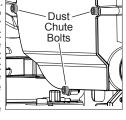
To turn the saw OFF, press the switch cover down.

AWARNING Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

# Clearing a Jam/Cleaning the Dust Chute To clear a jam:

- 1. Turn OFF the tool.
- 2. Remove the battery pack.
- 3. If it is not possible to the jam by removing the throat plate, remove the three bolts with wrench (not provided) from the dust chute and remove the jam or debris from the dust compartment. dust Clean chute completely.



 Reinstall all components and check all adjustments before restarting work.

### **APPLICATIONS**

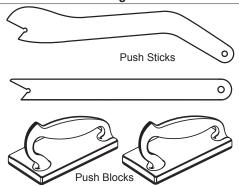
Use this tool for the purposes listed below:

- Straight line cutting operations such as cross cutting, ripping, mitring, beveling, and compound cutting
- Dado with optional accessories

Cabinet making and woodworking

**NOTE:** This table saw is designed to cut wood and wood composition products only. Do not cut metal. Do not cut plastics.

## **Cutting Aids**



Push sticks are devices that may be used for pushing a workpiece through the blade in any rip cut. When making non-through cuts or ripping narrow

stock, always use a push stick, push block, and/or featherboard so your hands do not come within 76mm (3") of the saw blade. Use the push stick provided with the table saw, or they can be made in various sizes and shapes from scrap wood and used in a specific project. The stick must be narrower than the workpiece, with a 90° notch in one end and shaping for a grip on the other end.

A push block has a handle fastened by recessed screws from the underside. Use push blocks for narrow cuts and all non-through cuts.

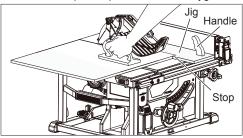
ACAUTION Be sure the screws in a push block are recessed to avoid damaging the saw or workpiece.

How to Make a Jig (For rip cutting narrow workpiece)

If ripping a narrow workpiece places the hands too close to the blade, it will be necessary to make and use a jig.

To make a jig:

- Attach a handle to a long, straight piece of wood and secure from the underside using recessed screws.
- 2. Cut an L-shaped stop in the side of the jig.



To use a jig:

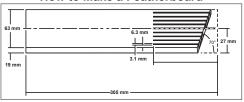
- Position the workpiece flat on the table with the edge flush against the jig and against the stop.
- Holding the jig handle and using a push block and/ or push stick, make the rip cut.

#### **Featherboard**

AWARNING Place the featherboard against the uncut portion of the workpiece to avoid kickback that could cause serious personal injury.

A featherboard is a device used to help control the workpiece by holding it securely against the table or fence. Featherboards are especially useful when ripping small workpieces and for completing nonthrough cuts. The end is angled with a number of short kerfs to give a friction hold on the workpiece and locked in place on the table with a C-clamp. Test to ensure it can resist kickback.

#### How to Make a Featherboard



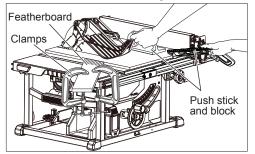
Select a solid piece of lumber approximately 19 mm (3/4") thick, 63.5 mm (2-1/2") wide and 305 mm (12") long. Mark the centre of the width on one end of the stock. Mitre the width to 70°. Mark the board from the widest point at 100 mm (4"). Prepare the saw for ripping. Set the rip fence to allow approximately a 6.3 mm (1/4") "finger" to be cut in the stock. Feed the stock only to the mark previously made at 100 mm (4"). Turn the saw **OFF** and allow the blade to completely stop rotating before removing the stock. Reset

the rip fence and cut spaced rips into the workpiece to allow approximately 6.3 mm (1/4") fingers and 3.1 mm (1/8") spaces between the fingers.

#### How to Mount a Featherboard

AWARNING Do not locate the featherboard to the rear of the workpiece. If positioned improperly, kickback can result from the featherboard pinching the workpiece and binding the blade in the saw kerf. Failure to heed this warning can result in serious personal injury.

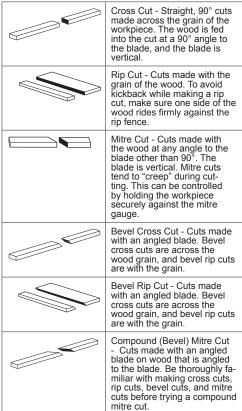
Completely lower the saw blade. Position the rip fence to the desired adjustment for the cut to be performed and lock. Place the workpiece against the fence and over the saw blade area. Adjust the featherboard to apply resistance to the workpiece just forward of the blade. Attach C-clamps to further secure the featherboard to the edge of the saw table.



AWARNING Always make sure the riving knife with blade guard and anti-kickback pawls are in place and working properly when making these cuts to avoid possible injury. Always use a push stick with small pieces of wood, and also to finish the cut when ripping a long narrow piece of wood, to prevent your hands from getting close to the blade.

**Types of Cuts** 

There are six basic cuts: the cross cut, the rip cut, the mitre cut, the bevel cross cut, the bevel rip cut, and the compound (bevel) mitre cut. All other cuts are combinations of these basic six. Operating procedures for making each kind of cut are given later in this section.



Cutting Rules

This table saw can perform a variety of cuts that are not all mentioned in this manual. DO NOT attempt to make any cuts not covered here unless you are thoroughly familiar with the proper procedures and necessary accessories. Your local library has many books on table saw usage and specialized woodworking procedures for your reference.

 Dado and rabbet cuts are non-through cuts which can be either rip cuts or cross cuts. Carefully read and understand all sections of this operator's manual before attempting these operations.

•The kerf (the cut made by the blade in the wood) will be wider than the blade to avoid overheating or binding. Make allowance for the kerf when measuring wood.

 Make sure the kerf is made on the waste side of the measuring line.

•Cut the wood with the finish side up.

•Knock out any loose knots with a hammer before making the cut.

 Always provide proper support for the wood as it comes out of the saw.

AWARNING To reduce the risk of injury from kickback, check for proper alignment after tool has been stored, dropped or bumped, or used extensively. A tool that is out of alignment will cause binding and could result in serious personal injury. See "Maintenance" for proper adjustment procedure.

AWARNING Carefully check and lock all adjustments, and rotate the blade one full revolution to assure proper clearance before inserting the battery pack. Improper blade clearance and loose adjustments can result in serious personal injury.

AWARNING Stand slightly to the side of the blade path to reduce the chance of injury should kickback occur.

AWARNING Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury.

#### Making a Cross Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

Using the rip fence as a cutoff gauge when cross cutting will result in kickback which can cause serious personal injury.

- 1. Remove the battery pack.
- Remove the rip fence.
- Set the blade to the correct depth for the workpiece.
- 4. Set the mitre gauge to 0° and tighten the lock knob.
- Insert the battery pack.
- Make sure the wood is clear of the blade before turning on the saw.

**NOTE:** It is recommended that you place the piece to be saved on the left side of the blade and that you make a test cut on scrap wood first.

Turn ON the saw. Allow the saw to come to full speed.

- 8. Hold the workpiece firmly with both hands on the mitre gauge and feed the workpiece into the blade. NOTE: The hand closest to the blade should be placed on the mitre gauge lock knob and the hand farthest from the blade should be placed on the workpiece.
- Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece.

## Making a Rip Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

AWARNING a special jig, which is commercially available. Do not attempt a free hand taper cut on this saw. Failure to follow these instructions could result in serious personal injury.

- 1. Remove the battery pack.
- Remove the mitre gauge.
- Install feather board in the appropriate position for the cut being made.
- Set the blade to the correct depth for the workpiece.
- Position the rip fence the desired distance from the blade for the cut and lock in place.
- When ripping a long workpiece, place a support the same height as the table surface behind the saw for the cut work.
- Position the workpiece flat on the table with the edge flush against the rip fence.
- 8. Insert the battery pack.
- Make sure the wood is clear of the blade before turning on the saw.
- Turn ON the saw. Allow the saw to come to full speed.
- 11. Hold the workpiece firmly against the rip fence and table.

# AWARNING Keep hands at least 76 mm (3") away from the blade at all times!

If ripping a narrow piece, use a push stick and/or push blocks to move the piece through the cut and past the blade. Once the blade has made contact with the workpiece, use the hand closest to the rip fence to guide it. Make sure the edge of the workpiece remains in solid contact with both the rip fence and the surface of the table. If ripping a narrow piece, use a push stick and/or push blocks to move the piece through the cut and past the blade.

12. Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece.

## Making a Mitre Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

Using the rip fence as a cutoff gauge when cross cutting will result in kickback which can cause serious personal injury.

The mitre gauge must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the mitre gauge to the left of the blade will result in kickback and the risk of serious personal injury.

- Remove the battery pack.
- Remove the rip fence.
- 3. Set the blade to the correct depth for the workpiece.
- 4. Set the mitre gauge to the desired angle and tighten the lock knob.
- Insert the battery pack.
- 6. Make sure the wood is clear of the blade before turning on the saw.
- 7. Turn ON the saw. Allow the saw to come to full
- 8. Hold the workpiece firmly with both hands on the mitre gauge and feed the workpiece into the blade. **NOTE**: The hand closest to the blade should be placed on the mitre gauge lock knob and the hand farthest from the blade should be placed on the workpiece.
- 9. Turn **OFF** the saw. Wait for the blade to come to a complete stop before removing the workpiece.

## Making a Bevel Cross Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

Using the rip fence as a cutoff gauge when cross cutting will result in kickback which can cause serious personal injury.

The mitre gauge must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the mitre gauge to the left of the blade will result in kickback and the risk of serious personal injury.

- Remove the battery pack.
- Remove the rip fence.
- 3. Adjust the bevel angle to the desired setting.
- Set the blade to the correct depth for the workpiece.
- 5. Set the mitre gauge to 0° and tighten the lock knob.
- Insert the battery pack.
- 7. Make sure the wood is clear of the blade before turning on the saw.
- Turn **ON** the saw. Allow the saw to come to full
- Hold the workpiece firmly with both hands on the mitre gauge and feed the workpiece into the blade. **NOTE:** The hand closest to the blade should be placed on the mitre gauge lock knob and the hand farthest from the blade should be placed on the workpiece.
- 10. Turn **OFF** the saw. Wait for the blade to come to a complete stop before removing the workpiece.

## Making a Bevel Rip Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

The rip fence must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the rip fence to the left of the blade will result in kickback and the risk of serious personal injury.

- Remove the battery pack.
- Remove the mitre gauge.
- Install feather board in the appropriate position for the cut being made.
- Adjust the bevel angle to the desired setting.
- Set the blade to the correct depth for the work-
- 6. Position the rip fence the desired distance from the blade for the cut and lock in place.
- 7. When ripping a long workpiece, place a support the same height as the table surface behind the saw for the cut work.
- 8. Position the workpiece flat on the table with the edge flush against the rip fence.
- Insert the battery pack.
- Make sure the wood is clear of the blade before turning on the saw.
- 11. Turn ON the saw. Allow the saw to come to full speed.
- 12. Hold the workpiece firmly against the rip fence and table

# AWARNING Keep hands at least 76 mm (3") away from the blade at all

If ripping a narrow piece, use a push stick and/or push blocks to move the piece through the cut and past the blade. Once the blade has made contact with the workpiece, use the hand closest to the rip fence to guide it. Make sure the edge of the workpiece remains in solid contact with both the rip fence and the surface of the table. If ripping a narrow piece, use a push stick and/or push blocks to move the piece through the cut and past the blade.

Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece.

## Making a Compound (Bevel) Mitre Cut

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

The mitre gauge must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the mitre gauge to the left of the blade will result in kickback and the risk of serious personal injury.

- Remove the battery pack.
- Remove the rip fence.
- Adjust the bevel angle to the desired setting.
- 4. Set the blade to the correct depth for the work-
- 5. Set the mitre gauge to the desired angle and tighten the lock knob.
- Insert the battery pack.
- Make sure the wood is clear of the blade before turning on the saw.
- Turn ON the saw. Allow the saw to come to full speed.

9. Hold the workpiece firmly with both hands on the mitre gauge and feed the workpiece into the blade. NOTE: The hand closest to the blade should be placed on the mitre gauge lock knob and the hand farthest from the blade should be placed on the workpiece.

10. Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece.

Making a Large Panel Cut

Make sure the saw is properly secured to a work surface to avoid tipping from the weight of a large panel.

AWARNING Make sure the blade guard assembly is installed and working properly to avoid serious possible injury.

Never make freehand cuts (cuts without the mitre gauge or rip fence). Unguided workpieces can result in serious injury.

1. Remove the battery pack.

Set the blade to the correct depth for the workpiece.

Depending on the shape of the panel, use the rip fence or mitre gauge. If the panel is too large to use either the rip fence or the mitre gauge, it is too large for this saw.

 Place a support the same height as the table surface behind the saw for the cut work. Add supports to the sides as needed.

Install a feather board in the appropriate position for the cut being made.

Make sure the wood is clear of the blade before turning on the saw.

Turn ON the saw. Allow the saw to come to full speed.

Use proper hand positions for cross cut or rip cut, as necessary.

Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece. Making a Non-Through Cut

Non-through cuts can be made with the grain (ripping) or across the grain (cross cut). The use of a non-through cut is essential to cutting grooves, rabbets, and dadoes. This is the only type cut that is made without the riving knife with blade guard installed. Use the riving knife without blade guard. Make sure the blade guard assembly is reinstalled upon completion of this type of cut. Read the appropriate section which describes the type of cut in addition to this section on non-through or dado cuts. For example, if your non-through cut is a rip cut, read and understand the section on rip cuts before proceeding.

AWARNING When making a non-through cut, the blade is covered by the work-piece during most of the cut. Be alert to the exposed blade at the start and finish of every cut to reduce the risk of personal injury.

Never feed wood with your hands when making any non-through cut such as rabbets or dadoes. To avoid personal injury, always use push blocks, push sticks, and featherboards.

Do not make complex non-through cuts, such as plunge cuts, resawing, moulding head cutting, or plowing.

Remove the battery pack.

Remove the riving knife with blade guard and anti-kickback pawls.

Install the riving knife.

4. Adjust the bevel angle to 0°.

Set the blade to the correct depth for the workpiece.

Depending on the shape and size of the workpiece, use the rip fence or mitre gauge.

7. Install a feather board in the appropriate position

for the cut being made.

Insert the battery pack.

Make sure the wood is clear of the blade before turning on the saw.

10. Turn **ON** the saw. Allow the saw to come to full speed.

 Use a push stick and/or push blocks to move the piece into the cut.

12. Turn OFF the saw. Wait for the blade to come to a complete stop before removing the workpiece.

 Once all non-through cuts are complete, remove the battery pack and reinstall the riving knife with guard and anti-kickback pawls.

## Troubleshooting

	Troubleshooti	ng	
Problem	Cause	Solution	
Excess vibration.	Blade is out of balance.	Replace blade.	
	Blade is damaged.	Replace blade.	
	Saw is not mounted securely.	Tighten all hardware.	
	Work surface is uneven.	Reposition on flat surface. Adjust legs of optional stand.	
	Blade is warped.	Check saw blade installation. Replace blade if necessary.	
Rip fence does not	Rip fence not mounted correctly.	Remount the rip fence.	
move smoothly.	Rails are dirty or sticky.	Clean rails.	
Cutting binds or	Blade is dull.	Replace or sharpen blade.	
burns work.	Blade is heeling.	See Blade to Mitre Slot Adjustment (Heeling).	
	Work is fed too fast.	Slow the feed rate.	
	Rip fence is misaligned.	Align the rip fence.	
	Wood is warped.	Replace the wood. Always cut with convex side to table surface.	
	Riving knife is out of alignment.	See Riving Knife to Saw Blade Adjustment.	
Wood edges away from rip fence when ripping.	Blade not properly sharpened or set.	Resharpen or set blade.	
Saw does not make accurate 90° or 45° cuts.	Bevel adjustment is out of alignment.	See Bevel Adjustments at 0° and 45°	
Height adjusting hand-wheel is hard to turn.	Gears or screw post inside cabinet are clogged with saw dust.	Clean the gears or screw post.	
Saw does not start.	Battery pack is at end of charge.	Charge battery pack.	
	Battery pack contacts are dirty.	Clean battery pack contacts.	

	Saw does not start.	Battery pack is at end of charge.	Charge battery pack.
		Battery pack contacts are dirty.	Clean battery pack contacts.
	Blade makes poor cuts.	Blade is dull or dirty.	Clean, sharpen, or replace blade.
N la cı		Blade is wrong type for cut being made.	Replace with correct type.
		Blade is mounted backwards.	Remount blade.
	Motor labours in rip cut.	Blade not proper for rip cut.	Change blade; rip blade typically has fewer teeth.
		Work is fed to fast into blade.	Slow feed rate.
	Saw shuts off unexpectedly	Battery over- temperature	Allow battery to cool for 10 minute before use.

## **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 injury from kickback, check for proper alignment after tool has been stored, dropped or bumped, or used extensively. A tool that is out of alignment will cause binding and could result in serious personal injury.

## When making adjustments, follow this order:

- 1. Throat Plate Adjustment
- Blade Angle (Bevel) Adjustments at 0° and 45°
- 3. Blade to Mitre Slot Adjustment
- Blade to Fence Adjustment
- Riving Knife to Saw Blade Adjustment

AWARNING To reduce the risk of injury, always remove the battery pack before performing any maintenance or adjustments.

### 1. Adjusting the Throat Plate

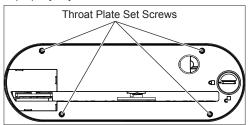
AWARNING Always use the appropriate throat plate for the operation. Different blades may require different throat plates. Never operate the saw without a throat plate in place.

A properly adjusted throat plate is important for a smooth cut. The front of the throat plate must be slightly lower or flush with the table top. The back of the throat plate must be slightly higher than the table top (0 to 0.68 mm). Check throat plate each time the throat plate is changed, and periodically before use. If the throat plate is not properly adjusted:

1. Remove the battery pack.

Remove the riving knife with guard.

- Lower the blade by turning the height adjusting wheel counterclockwise.
- 4. Use the throat plate set screws (2.5 mm) to adjust the front and back heights.
- 5. Re-measure and repeat until the throat plate is properly adjusted.



# 2. Blade Angle (Bevel) Adjustment at 0° and 45°

The angle settings of the saw have been set at the factory and, unless damaged in shipping, should not require setting during assembly. After extensive use, they should be rechecked and adjusted if necessary. Remove the battery pack.

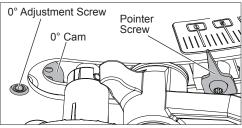
Set the blade angle to 0° and lock into place.

- 3. Raise the blade by turning the height adjusting wheel clockwise.
- Remove the riving knife.

#### To check for 0°:

- Place a combination square beside the blade on the right. The edge of the square and the saw blade should be parallel. **NOTE:** Make sure that the square contacts the flat part of the saw blade, not the blade
- teeth. If the blade and square are not parallel:
  - Unlock the bevel locking
  - Loosen the 0° adjustment screw.

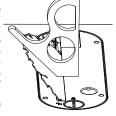




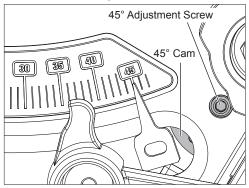
- · Adjust the blade to the 0° position
- Lock the bevel locking lever.
- Rotate the cam until it contacts the bevel
- Tighten the adjustment screw. Check again for square and continue to adjust if needed.
- Once square, loosen the pointer screw and adjust the pointer to 0°.

#### To check for 45°:

- 8. Set the blade angle to 45° and lock into place.
- 9. Place a combination square beside the blade on the right using the 45° side. The edge of the 45° side of the square and the saw blade should be parallel. **NOTE**: Make sure that the square contacts the flat part of the saw blade, not the blade teeth.



- 10. If the blade and square are not parallel:
  - · Unlock the bevel locking lever.
  - Loosen the 45° adjustment screw.

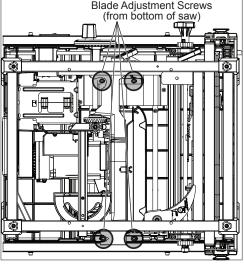


- Adjust the blade to the 45° position
- Lock the bevel locking lever.
- Rotate the cam until it contacts the bevel
- Tighten the adjustment screw. Check again for square and continue to adjust if needed.
- 11. Make a test cut at both 0° and 45° to check.

## 3. Blade to Mitre Slot Adjustment (Heeling)

Remove the battery pack.

- Set the blade angle (bevel) to 0° and lock into place.
- Raise the blade by turning the height adjusting wheel clockwise.
- Measure from front of blade to mitre slot and back of blade to mitre slot. They must be equal.
- If the blade is not square to the mitre slot, loosen the front or back blade adjustment screws (4 mm hex) located from the bottom of the saw.



- 6. Slide the blade compartment left or right and tighten the blade adjustment screws.
- Recheck the front and back blade to slot measurements again.
- 8. Repeat until the blade is square to the mitre slot.

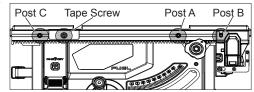
### 4. Blade to Fence Adjustment

The rip fence must be parallel to the saw blade and the mitre gauge grooves.

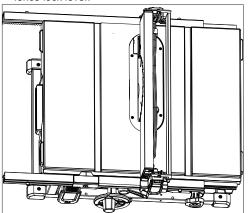
AWARNING A misaligned rip fence can cause kickbacks and jams. To reduce the risk of injury, always maintain proper rip fence alignment.

1. Remove the battery pack.

- 2. Set hove the blade angle (bevel) to 0° and lock into
- Raise the blade by turning the height adjusting wheel clockwise.
- Remove the riving knife with guard.
- Lock the fence onto Post A.



Slide the fence over to touch blade and lock the fence lock lever.



- 7. Blade should contact fence evenly, front to back.
- If not, use a 4 mm hex wrench to loosen the appropriate fence post (front and/or back). Slide the post left or right as needed, and tighten securely.
- Repeat until the fence touches the blade evenly.
   To adjust the rip scale indicator to zero, use a 4 mm hex wrench to loosen the bolt and slide the indicator to line up with zero on the silver tape.
- 11. Lock the fence onto Post B.

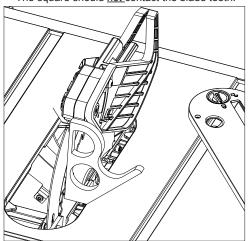
Retianten the bolt.

- Measure from front of blade to fence and back of blade to fence. Both must be 100 mm (4").
- If not, use a 4 mm hex wrench to loosen the appropriate fence post (front and/or back). Slide the post left or right as needed, and tighten securely.
- 14. Repeat until the fence measures 100 mm (4") from front of blade to fence and back of blade to fence. Fence should rest completely on fence rail with hanging off the edge of the fence rail.
- Lock the fence onto Post C
- 16. Slide the fence over to touch blade and lock the fence lock lever.
- 17. Blade should contact fence evenly, front to back.
- 18. If not, use a 4 mm hex wrench to loosen the ap propriate fence post (front and/or back). Slide the post left or right as needed, and tighten securely.
- Repeat until the fence touches the blade evenly.
   Fence should rest completely on fence rail with hanging off the edge of the fence rail.
- Make two or three test cuts on scrap wood from each fence location. If the cuts are not true, repeat the process.

## 5. Riving Knife to Saw Blade Adjustment

To check the alignment of the riving knife:

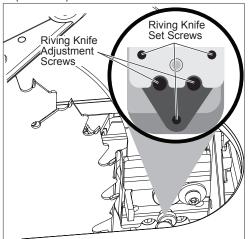
- Remove the battery pack.
- Raise the blade by turning the height adjusting wheel clockwise.
- Remove the anti-kickback pawls from the riving knife with blade guard.
- Remove the riving knife and place flat on the table. Riving knife must lay flat and not tip when an edge is touched. If the riving knife is not flat, replace the riving knife before using the saw.
- 5. Place a speed square or straight edge against riving knife over the saw blade. The saw blade and riving knife are aligned when the speed square contacts the riving knife on BOTH sides, without making contact with the blade. There should be a very thin gap between the square and the blade. The square should not contact the blade teeth.



If the riving knife is out of alignment with the saw blade, adjustment is needed. The riving knife must be in alignment front to back (horizontally) and top to bottom (vertically).

#### To adjust:

- 1. Remove the battery pack.
- 2. Remove the throat plate.
- Install the blade.
- Install the riving knife or riving knife with guard.
   NOTE: Recheck and adjust for each change in riving knife or blade.
- 5. Loosen the riving knife adjustment screws (4 mm hex).



- Tighten or loosen the 3 riving knife set screws (2.5 mm hex) as needed.
- Tighten the riving knife adjustment screws.
- 8. Recheck both sides of the blade/riving knife.
- Repeat until riving knife is properly adjusted to the blade.
- Once adjusted, remove the riving knife, reinstall the throat plate, then reinstall the riving knife and anti-kickback pawls (if appropriate for the operation).

#### 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. Turn the saw over to access the battery door.

To replace the battery:

Remove the battery pack.

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

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 centre.

### **ACCESSORIES**

**AWARNING** Use only recommended accessories. Others may be hazardous.

For a complete listing of accessories, go online to www.milwaukeetools.com.au/

www.milwaukeetools.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*<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 279 624)
or visit www.milwaukeetools.com.au / www.milwaukeetools.co.nz.

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