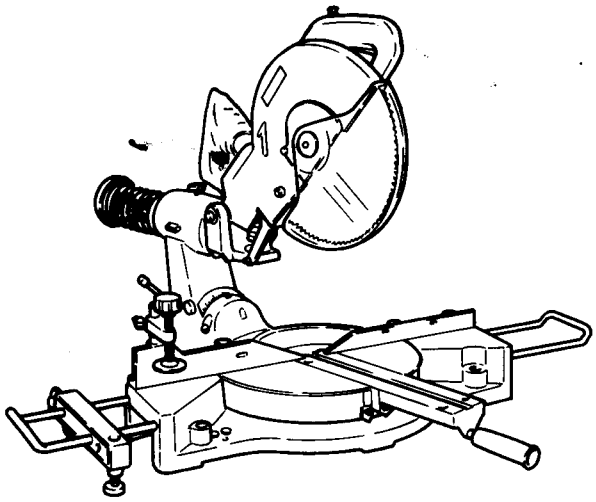
makita

Slide Compound Saw

305 mm (12") MODEL LS1211

Equipped with Electric Brake

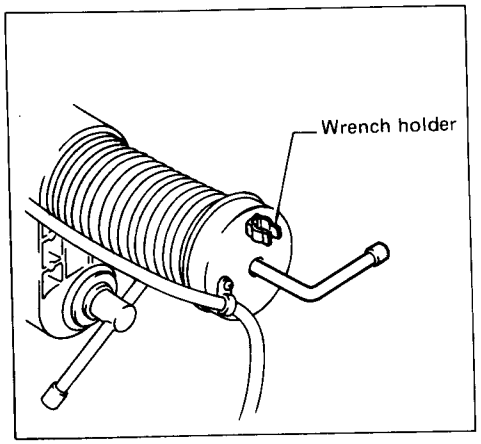
INSTRUCTION MANUAL



DOUBLE INSULATION

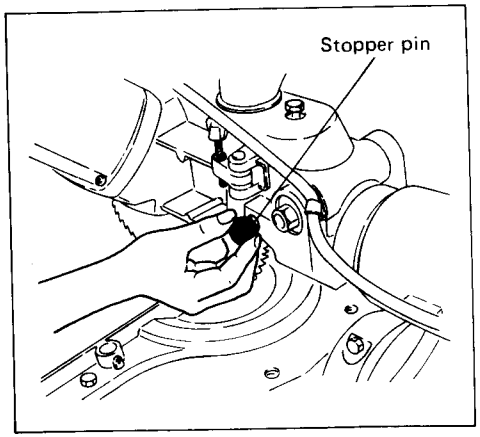
Socket wrench

Store the socket wrench in the wrench holder at the rear of the tool after using it.

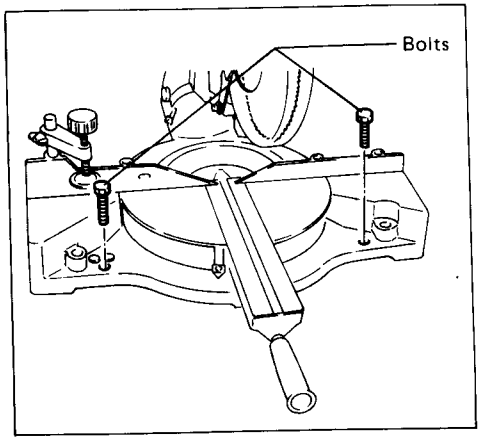


Bench mounting saw

When the tool is shipped, the handle is locked in the lowered position by the stopper pin. Release the stopper pin by lowering the handle slightly and pulling the stopper pin.



This tool should be bolted with two bolts to a level and stable surface using the bolt holes provided in the tool's base. This will help prevent tipping and possible injuly.

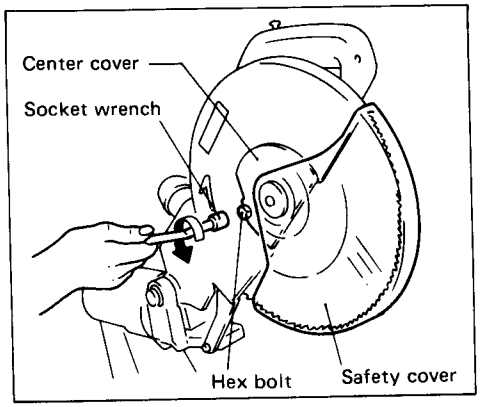


Installing or removing saw blade

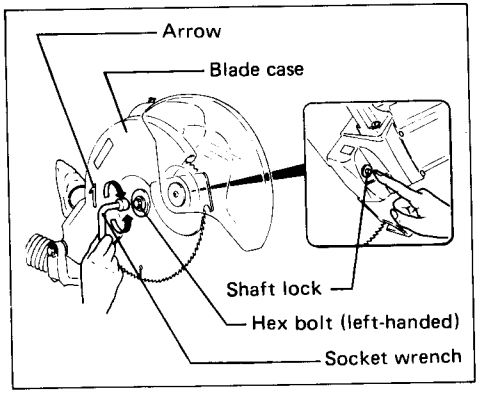
CAUTION:

Always be sure that the tool is switched off and unplugged before installing or removing the blade.

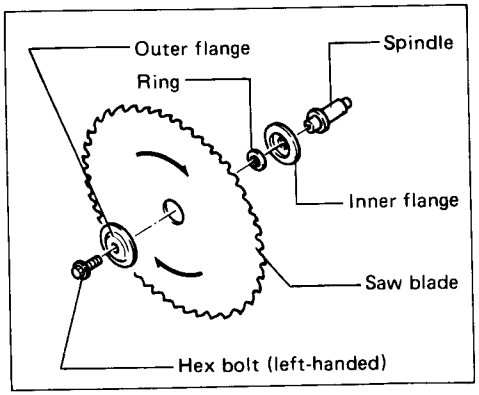
Use the socket wrench to loosen the hex bolt which secures the center cover by turning counterclockwise. Raise the safety cover and the center cover.



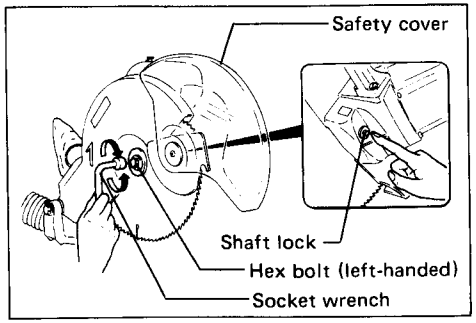
Press the shaft lock to lock the spindle and use the socket wrench to loosen the hex bolt by turning it clockwise. Then remove the hex bolt, outer flange and blade.



To install the blade, mount it carefully onto the spindle, making sure that the direction of the arrow on the surface of the blade matches the direction of the arrow on the blade case.



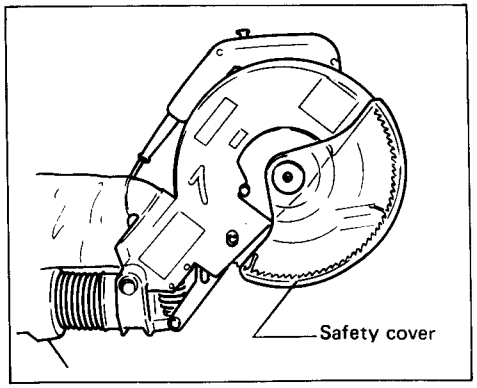
Install the outer flange and hex bolt, and then use the socket wrench to tighten the hex bolt securely by turning it counter-clockwise while pressing the shaft lock. Return the safety cover and the center cover to the original position. Then tighten the hex bolt to secure the center cover. Lower the handle to make sure that the safety cover moves properly.



CAUTION:
Use only the Makita socket wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause serious injury to operator or others in the general vicinity of the tool.

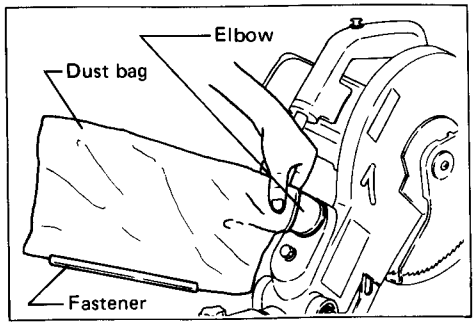
Safety cover

When lowering the handle, the safety cover rises automatically. The cover returns to its original position when the cut is completed and the handle is raised. NEVER DEFEAT OR REMOVE THE SAFETY COVER. In the interest of your personal safety, always maintain the safety cover in good condition. Any irregular operation of the safety cover should be corrected immediately. NEVER USE THE TOOL WITH A FAULTY SAFETY COVER. If the see-through safety cover becomes dirty, or sawdust adheres to it in such a way that the blade and/or work-piece is no longer easily visible, unplug the saw and clean the cover carefully with a damp cloth. Do not use solvents or any petroleum-based cleaners on the plastic cover.



Dust bag

To attach the dust bag, fit it into the elbow. When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag by tapping it lightly to remove as much dust as possible.

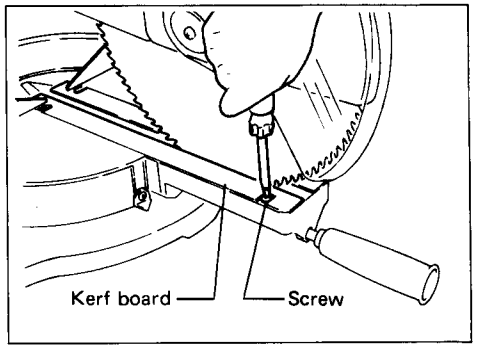


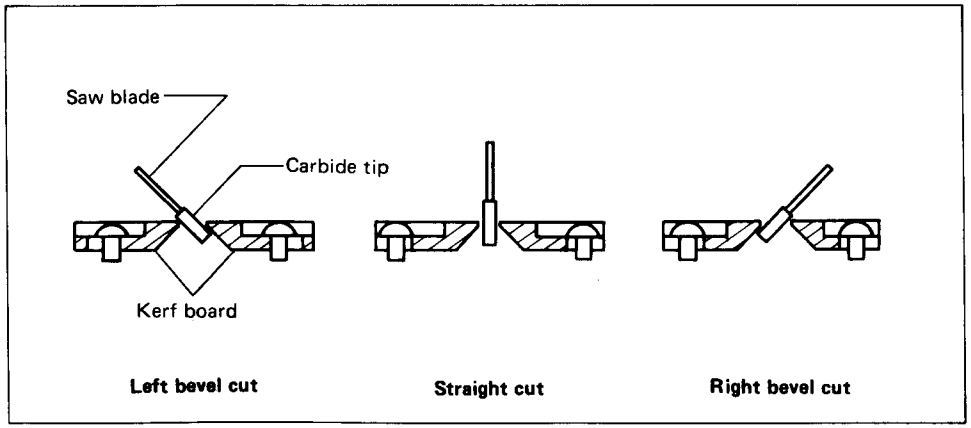
NOTE:
If you connect a vacuum cleaner to your saw, more efficient and cleaner operations can be performed.

Positioning kerf boards

This tool is provided with kerf boards in the turn base. The kerf boards are factory-adjusted so that the saw blade does not contact the kerf boards. Before use, adjust the kerf boards as follows:

First unplug the tool. Loosen the all screws (2 each on left and right) which secure the kerf boards. Retighten them to the extent that the kerf boards can be easily moved by hand. Lower the handle fully and press the stopper pin to lock the handle in the lowered position. Then loosen the clamp screw on the arm. Pull the carriage toward you fully and lower the handle fully. Adjust the kerf boards so that the kerf borads just contact the sides of blade teeth slightly. Tighten the front screws (do not tighten firmly). Push the carriage toward the guide fence fully and adjust the kerf boards so that the kerf boards just contact the sides of blade teeth slightly. Tighten the rear screws (do not tighten firmly.) After adjusting the kerf boards, release the stopper pin and raise the handle. Then tighten the all screws securely.





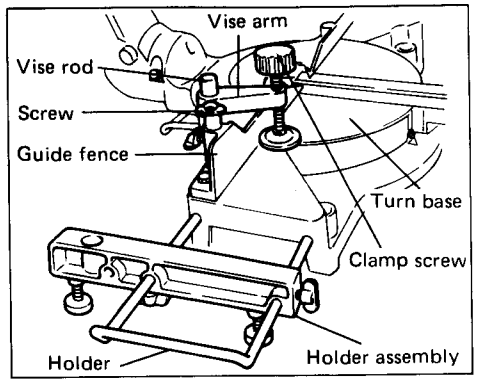
CAUTION:
After changing the bevel angle, always readjust the kerf boards as described above.

Securing workpiece

WARNING:

It is extremely important to always secure the workpiece properly and tightely with the vise. Failure to do so can cause the tool to be damaged and/or the workpiece to be destroyed. PERSONAL INJURY MAY ALSO RESULT. Also, after any cutting operation, DO NOT raise the blade until the blade has come to a complete stop.

1. Vertical vise

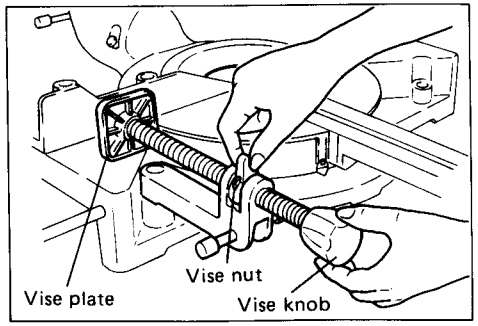


The vertical vise can be installed in two positions on either the left or right side of the guide fence, or holder assembly. Insert the vise rod into the hole in the guide fence or holder assembly and tighten the screw to secure the vise rod. (Note: When using the holder assembly, install it on the holder as shown in the figure.) Position the vise arm according to the thickness and shape of the workpiece and secure the vise arm by tightening the screw. Make sure that no part of the tool contacts the vise when lowering the handle fully or when pulling or pushing the carriage. If some part contacts the vise, re-position the vise. Press the workpiece flat against the guide fence and the turn base. Position the workpiece at the desired cutting position and secure it firmly by tightening the clamp screw of the vise. The maximum thickness of workpieces which can be secured by the vertical vise is 120 mm (4-3/4").

CAUTION:

The workpiece must always be secured firmly against the turn base and guide fence with the vise during all operations.

2. Horizontal vise (optional acccssory)



The horizontal vise can be installed in two positions on either the left or right side of the base. When performing 15° or greater miter cuts, install the horizontal vise on the side opposite the direction in which the turn table is to be turned. By flipping the vise nut to the left, the vise is released, and rapidly moves in and out. To grip workpieces, push the vise knob forward until the vise plate contacts the workpiece and flip the vise nut to the right. Then turn the vise knob clockwise to secure the workpiece. The maximum width of workpieces which can be secured by the horizontal vise is 200 mm (7-7/8").

CAUTION:

Always set the vise nut to the right fully when securing the workpiece. Failure to do so may result in insufficient securing of the workpiece. This could cause the workpiece to be thrown, cause damage to the blade or cause the dangerous loss of control of the tool.

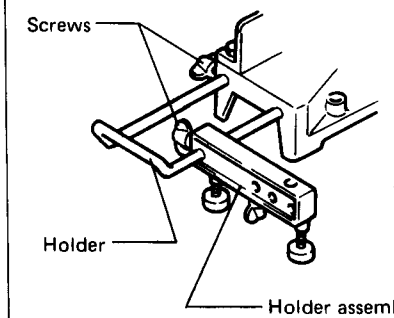
3. Holders and holder assembly

The holders and the holder assembly can be installed on either side as a convenient means of supporting workpieces horiziontally. Install them as shown in the figures. Then tighten the screws firmly to secure the holders and the holder assembly.

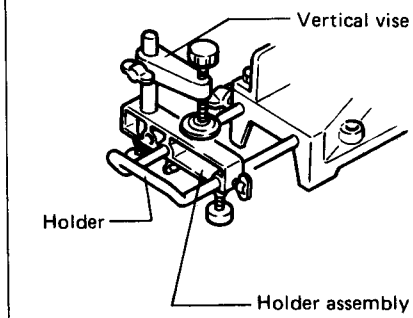
CAUTION:

Always support long workpieces level with the top surface of the turn base for accurate cuts and to prevent dangerous loss of control of the tool.

When securing wide workpieces

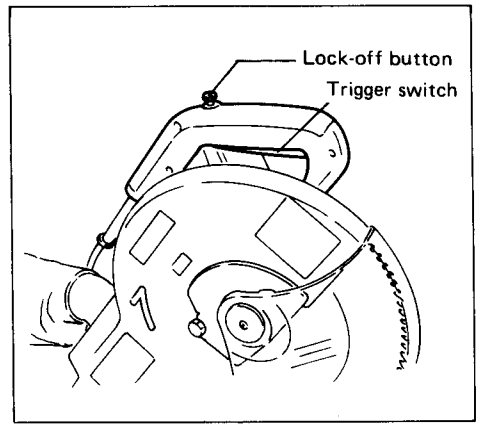


When installing the vertical vise on the holder assembly



Switch action

To prevent the trigger from being accidentally actuated, a lock-off button is provided. To start the tool, press in the lock-off button and pull the trigger at the same time. Release the trigger to stop.



CAUTION:

- Before plugging in the tool, always check to see that the trigger switch actuates properly and returns to the "OFF" position when released.
- When not using the tool, remove the lock-off button and store it in a secure place. This prevents unauthorized operation.
- Do not pull the trigger hard without pressing in the lock-off button. This can cause breakage of the switch.

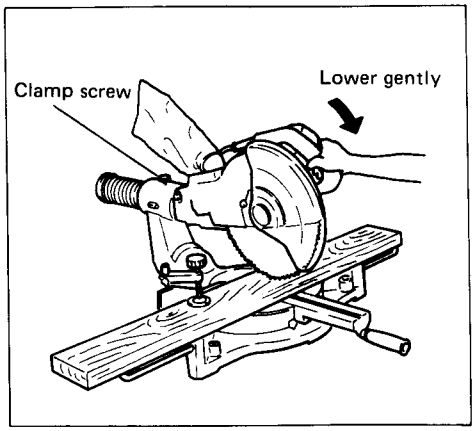
Operation

CAUTION:

- Before use, be sure to release the handle from the lowered position by pulling the stopper pin.
- Make sure the blade is not contacting the workpiece, etc. before the switch is turned on.
- Do not apply excessive pressure on the handle when cutting. Too much force may result in overload of the motor and/or decreased cutting efficiency.
- Gently press down the handle to perform the cut. If the handle is pressed down with force or if lateral force is applied, the blade will vibrate and leave a mark (saw mark) in the workpiece and the precision of the cut will be impaired.
- During a slide cut, gently push the carriage toward the guide fence without stopping. If the carriage movement is stopped during the cut, a mark will be left in the workpiece and the precision of the cut will be impaired.

1. Press cutting (cutting small workpieces)

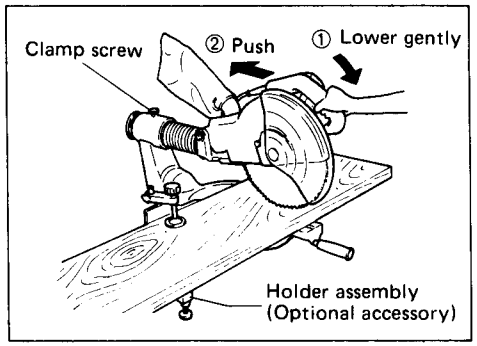
- Workpieces up to 94 mm (3-11/16") high and 130 mm (5-1/8") wide or 107 mm (4-3/16") high and 110 mm (4-5/16") wide can be cut in the following way.
- Push the carriage toward the guide fence fully and tighten the clamp screw on the arm to secure the carriage in the "back" position. Secure the workpiece with a vise. Switch on the tool and wait until the blade attains full speed before lowering gently into the cut. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



CAUTION:
Firmly tighten the clamp screw on the arm so that the carriage will not move during operation. Insufficient tightening may cause unexpected kickback of the blade. Possible serious injury may result.

2. Slide (push) cutting (cutting wide workpieces)

- Workpieces up to 94 mm (3-11/16") high and 310 mm (12-3/16") wide or 107 mm (4-3/16") high and 290 mm (11-7/16") wide can be cut in the following way.
- Loosen the clamp screw on the arm so that the carriage can slide freely. Secure the workpiece with a vise. Pull the carriage toward you fully. Switch on the tool and wait until the blade attains full speed. Then gently lower the handle to the fully lowered position and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE TO CUT THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



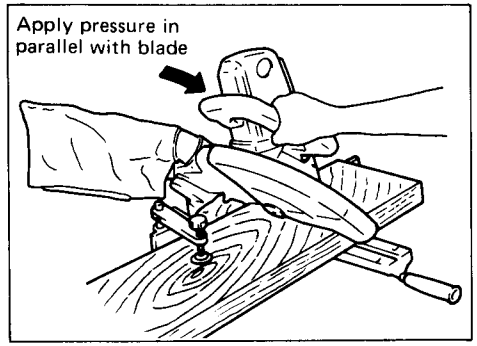
CAUTION:
Whenever performing the slide cut, FIRST PULL THE CARRIAGE TOWARD YOU FULLY and press down the handle to the fully lowered position, then PUSH THE CARRIAGE TOWARD THE GUIDE FENCE. If you perform the slide cut without pulling the carriage fully or if you perform the slide cut toward your direction, the blade may kick back unexpectedly with the potential to cause serious injury.

3. Miter cutting

Refer to the previously covered "Positioning for adjusting the miter angle".

4. Bevel cut

- Left and right 0° – 45° bevel cuts can be performed. At a left 45° bevel angle, workpieces up to 48 mm (1-7/8") high and 310 mm (12-3/16") wide or 57 mm (2-1/4") high and 290 mm (11-7/16") wide can be cut. At a right 45° bevel angle, workpieces up to 31 mm (1-1/4") high and 310 mm (12-3/16") wide or 40 mm (1-9/16") high and 290 mm (11-7/16") wide can be cut.
- Loosen the lever and tilt the saw blade to set the bevel angle. Be sure to re-tighten the lever firmly to secure the selected bevel angle safely. Secure the workpiece with a vise. Switch on the tool and wait until the blade attains full speed. Then gently lower the handle to the fully lowered position while applying pressure in parallel with the blade and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE TO CUT THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



CAUTION:

- During a bevel cut, it may create a condition whereby the piece cut off will come to rest against the side of the blade. If the blade is raised while the blade is still rotating, this piece my be caught by the blade, causing fragments to the scattered around which is dangerous. The blade should be raise ONLY after the blade has come to a complete stop.
- When pressing down the handle, apply pressure in parallel with the blade. If a force is applied perpendicularly to the turn base or if the pressure direction is changed during a cut, the precision of the cut will be impaired.

5. Compound cutting

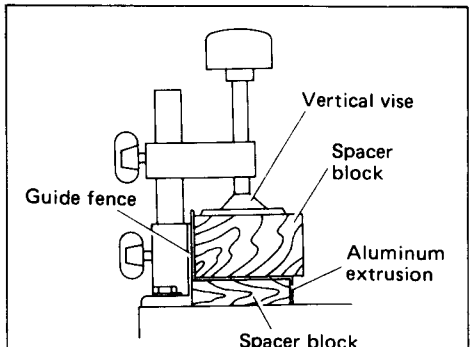
Compound cutting is the process in which a bevel angle is made at the same time in which a miter angle is being cut on a workpiece. Compound cutting can be performed at angle shown in the table below.

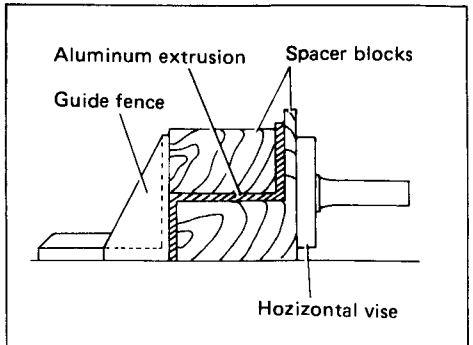
Bevel angle	Miter angle
Left and right 45°	Left and right 0° – 45°
Left and right 40°	Left and right 0° – 50°
Left and right 35°	Left and right 0° – 55°
Left and right 0° – 30°	Left and right 0° – 60°

At the miter angle of left and right 45° and bevel angle of left 45°, workpieces up to 48 mm (1-7/8") high and 219 mm (8-5/8") wide or 57 mm (2-1/4") high and 205 mm (8-1/16") wide can be cut.
At the miter angle of left and right 45° and bevel angle of right 45°, workpieces up to 31 mm (1-7/32") high and 219 mm (8-5/8") wide or 40 mm (1-9/16") high and 205 mm (8-1/16") wide can be cut.
When performing compound cutting, refer to "Press cutting", "Slide cutting", "Miter cutting" and "Bevel cut" explanations.

6. Cutting aluminum extrusion

When securing aluminum extrusions, use spacer blocks or pieces of scrap as shown in the figure to prevent deformation of the aluminum. Use a cutting lubricant on the blade teeth when cutting the aluminum extrusion to prevent build-up of the aluminum material on the blade.





CAUTION:

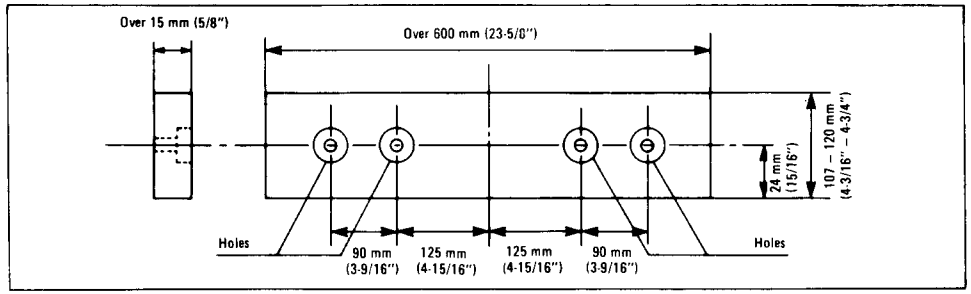
Never attempt to cut thick or round aluminum extrusions. Thick aluminum extrusions may come loose during the cutting operation and round aluminum extrusions are very difficult to be secured firmly and safely with this tool.

7. Wood facing

When cutting workpieces from 107 mm (4-3/16") to 120 mm (4-3/4") high, use a wood facing attached to the face of the guide fence to prevent a portion of the workpiece near the guide fence from being left uncut. Attach a straight wood board of even thickness to the guide fence using the holes in the guide fence and screws. The screws should be installed so that their heads remain beneath the surface of the wood facing. See the figure below concerning the dimensions for a suggested wood facing.

NOTE:

When using a wood facing, the max. cutting width will be reduced by the thickness of the wood facing.

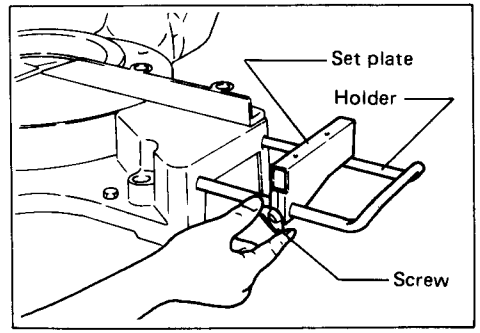


(Example)

When cutting workpieces 120 mm (4-3/4") high, use a wood facing with the following thickness.

Miter angle	Thickness of wood facing
0°	Over 30 mm (1-3/16")
Left and right 45°	Over 21 mm (13/16")
Left and right 60°	Over 15 mm (9/16")

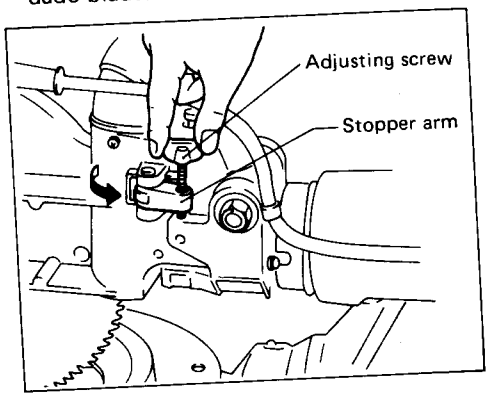
8. Cutting repetitive lengths

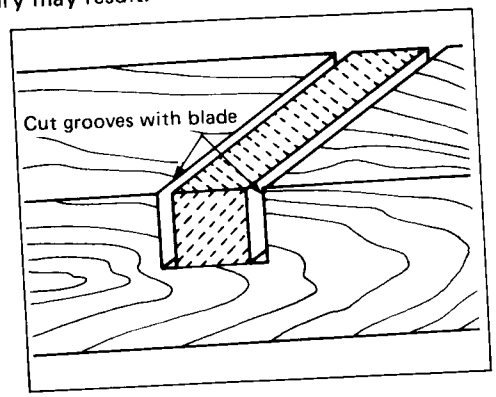


When cutting several pieces of stock to the same length, ranging from 305 mm (12") to 440 mm (17-5/16"), use of the set plate (optional accessory) will facilitate more efficient operation. Install the set plate on the holder (optional accessory) as shown in the figure. Align the cutting line on your workpiece with either the left or right side of the groove in the kerf board, and while holding the workpiece from moving, move the set plate flush against the end of the workpiece. Then secure the set plate with the screw.

9. Groove cutting

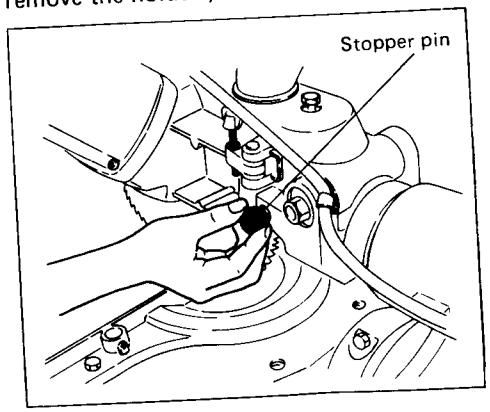
A dado type cut can be made by proceeding as follows:
Adjust the lower limit position of the blade using the adjusting screw on the stopper arm to limit the cutting depth of the blade. To adjust it, rotate the stopper arm to the position shown in the figure. Adjust the adjusting screw so that the blade stops at the desired position when lowering the handle fully. After adjusting the lower limit position of the blade, cut parallel grooves across the width of the workpiece using a slide (push) cut as shown in the figure. Then remove the workpiece material between the grooves with a chisel. Do not attempt to perform this type of cut using wide (thick) blades or with a dado blade. Possible loss of control and injury may result.

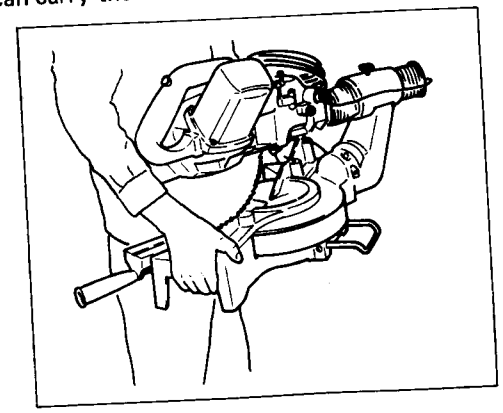




Carrying tool

Makes sure that the tool is unplugged. Secure the blade at 0° bevel angle and the turn base at 60° miter angle to the right. Secure the slide pole after pulling the carriage toward you fully. Lower the handle fully and lock it in the lowered position using the stopper pin. Carry the tool by holding both sides of the tool base as shown in the figure. If you remove the holders, dust bag, vise, etc., you can carry the tool more easily.





CAUTION:
Always secure all moving portions before carrying the tool.