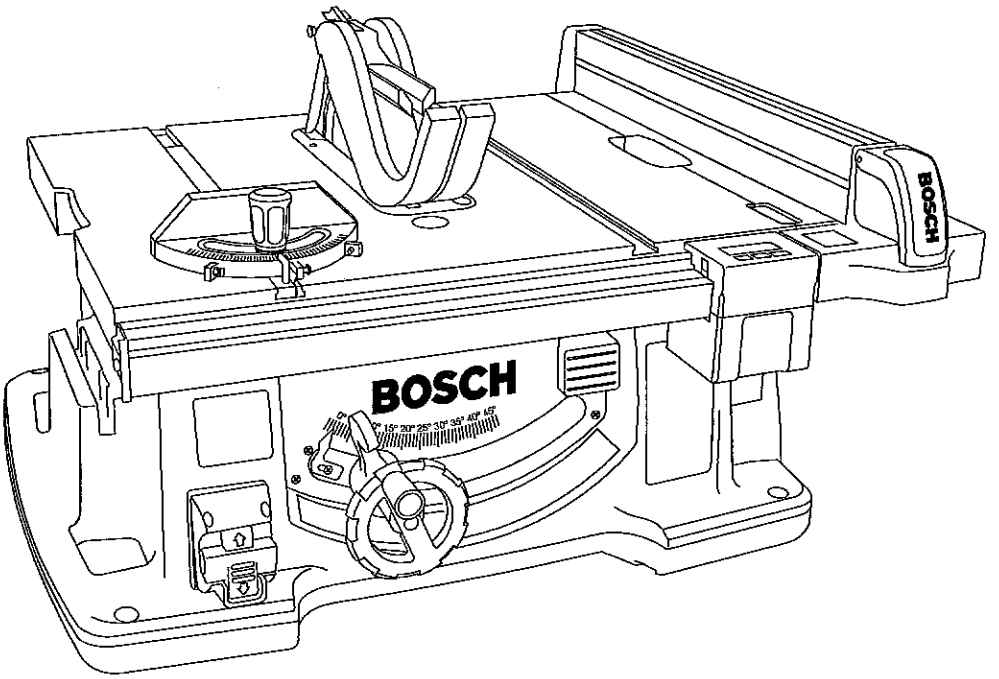
IMPORTANT: Read Before Using | **IMPORTANT :** Lire avant usage | **IMPORTANTE:** Leer antes de usar

Operating/Safety Instructions
Consignes de fonctionnement/sécurité
Instrucciones de funcionamiento y seguridad

4100
4100DG



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For English Version See page 2 | **Version française Voir page 8** | **Versión en español Ver la página 14**

General Safety Rules

⚠ WARNING "READ ALL INSTRUCTIONS" Failure to follow the safety rules listed below and other basic safety precautions may result in serious personal injury.

Work Area

KEEP CHILDREN AWAY
Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.

KEEP WORK AREAS CLEAN
Cluttered areas and benches invite accidents.

MAKE WORKSHOP CHILD-PROOF
With padlocks, master switches.

AVOID DANGEROUS ENVIRONMENTS
Don't use power tools in damp or wet locations. Keep work area well lit. Do not expose power tools to rain. Do not use tool in presence of flammable liquids or gases.

Personal Safety

KNOW YOUR POWER TOOL
Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

DON'T OVERREACH
Keep proper footing and balance at all times.

STAY ALERT
Watch what you are doing. Use common sense. Do not operate tool when you are tired. Do not operate while under medication or while using alcohol or other drug.

DRESS PROPERLY
Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.

USE SAFETY GOGGLES
Also face or dust mask if cutting operation is dusty, and ear plugs during extended periods of operation.

GUARD AGAINST ELECTRIC SHOCK
Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.

DISCONNECT TOOL FROM POWER SOURCE
When not in use, before servicing, when changing blades, bits, cutters, etc.

KEEP GUARDS IN PLACE
In working order, and in proper adjustment and alignment.

REMOVE ADJUSTING KEYS AND WRENCHES
When not in use, before servicing, when changing blades, bits, cutters, etc.

AVOID ACCIDENTAL STARTING
Make sure the switch is in the "OFF" position before plugging in tool.

NEVER STAND ON TOOL OR ITS STAND
Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials on or near the tool such that it is necessary to stand on the tool or its stand to reach them.

CHECK DAMAGED PARTS
Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly replaced.

⚠ WARNING All repairs, electrical or mechanical, should be attempted only by trained repairmen. Contact the nearest Bosch Factory Service Center, Authorized Service Station or other competent repair service.

⚠ WARNING Use only Bosch replacement parts; any others may create a hazard.

⚠ WARNING Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

Tool Use

DON'T FORCE TOOL
It will do the job better and safer at the rate for which it was designed.

USE THE RIGHT TOOL
Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended — for example; don't use circular saw for cutting tree limbs or logs.

SECURE WORK
Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate the tool.

DIRECTION OF FEED
Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

NEVER LEAVE TOOL RUNNING UNATTENDED
Turn power off. Don't leave tool until it comes to a complete stop.

"SAVE THESE INSTRUCTIONS"

Additional Safety Rules

Tool Care

DO NOT ALTER OR MISUSE TOOL
These tools are precision built. Any alteration or modification not specified is misuse and may result in dangerous conditions.

AVOID GASEOUS AREAS
Do not operate electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and may result in a dangerous condition.

MAINTAIN TOOLS WITH CARE
Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.

⚠ WARNING Before connecting the tool to a power source (receptacle, outlet, etc.), be sure voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in serious injury to the user — as well as damage to the tool. If in doubt, DO NOT PLUG IN THE TOOL. Using a power source with voltage less than the nameplate rating is harmful to the motor.

⚠ WARNING For your own safety, do not operate your table saw until it is completely assembled and installed according to the instructions ... and until you have read and understood the following:

7. STABILITY OF SAW
Your table saw MUST BE BOLTED securely to a stand or workbench. In addition, if there is any tendency for the table saw to tip over or move during certain operations such as cutting long, heavy boards, use an auxiliary support.

8. LOCATION
Use the table saw in a well lit area and on a level surface, clean and smooth enough to reduce the risk of trips and falls. Use it where neither the operator nor the casual observer is forced to stand in line with the blade.

9. KICKBACK
Kickbacks can cause serious injury: A "KICKBACK" occurs when a part of the workpiece binds between the sawblade and the rip fence or other fixed object. Workpiece binding the blade due to misalignment, can also cause kickback. During kickback, workpiece rises from table and is thrown toward the operator. Keep your face and body to one side of the sawblade, out of line with a possible "KICKBACK".

KICKBACKS AND POSSIBLE INJURY CAN USUALLY BE AVOIDED BY:

a. Maintaining the rip fence parallel to the sawblade.

b. Keeping the sawblade sharp. Replacing or sharpening anti-kickback pawls when points become dull.

c. Keeping sawblade guard, spreader and anti-kickback pawls in place and operating properly. The spreader must be in alignment with the sawblade and the pawls must stop a kickback once it has started. Check their action before ripping.

d. NOT ripping workpiece that is twisted or warped or does not have a straight edge to guide along the rip fence.

e. NOT releasing work until you have pushed it all the way past the sawblade.

f. Using a Push Stick for ripping widths of 2" to 6" and an auxiliary fence and Push Block for ripping widths narrower than 2" (See "Basic Saw Operation, Using The Rip Fence" section, pages 70, 72).

g. NOT confining the cut-off piece when ripping or cross-cutting.

h. When ripping, apply the feed force to the section of the workpiece between the sawblade and the rip fence. Use Push Stick or Push Block when appropriate (See item f. above).

10. PROTECTION: Eyes, hands, face, ears and body.

⚠ WARNING **TO AVOID BEING PULLED INTO THE SPINNING TOOL,**
DO NOT WEAR: Loose Fitting Gloves
Loose Clothing
Necktie, Jewelry
DO: TIE BACK LONG HAIR
ROLL LONG SLEEVES ABOVE ELBOWS

a. If any part of your saw is missing, malfunctioning, has been damaged or broken ... such as the motor switch, or other operating control, a safety device or the power cord ... cease operating immediately until the particular part is properly repaired or replaced.

b. Wear safety goggles and a face shield if operation is dusty. Wear ear plugs or muffs during extended periods of operation. Small loose pieces of wood or other objects that contact the rear of the revolving blade can be thrown back at the operator at excessive speed. This can usually be avoided by keeping the guard and spreader in place for all "THRU-SAWING" operations (sawing entirely thru the work) AND by removing all loose pieces from the table with a long stick of wood IMMEDIATELY after they are cut off.

c. Use extra caution when the guard assembly is removed for resawing, dadoing, rabbeting or molding — replace the guard as soon as that operation is completed.

d. NEVER turn the saw "ON" before clearing the table of all tools, wood scraps, etc., except the workpiece and related feed or support devices for the operation planned.

Additional Safety Rules

e. NEVER place your face or body in line with the cutting tool.

• NEVER place your fingers and hands in the path of the sawblade or other cutting tool.

• NEVER reach in back of the cutting tool with either hand to hold down or support the workpiece, remove wood scraps, or for any other reason. Avoid awkward operations and hand positions where sudden slip could cause fingers or hand to move into a sawblade or other cutting tool.

• DO NOT perform any operation "FREEHAND" — always use either the rip fence or the miter gauge to position and guide the work.

• NEVER use the rip fence when crosscutting or the miter gauge when ripping. DO NOT use the rip fence as a length stop.

• NEVER hold onto or touch the "free end" of the workpiece or a "free piece" that is cut off, while power is "ON" and/or the sawblade is rotating.

• Shut "OFF" the saw and disconnect the power cord when removing the table insert, changing the cutting tool, removing or replacing the blade guard, or making adjustments.

• Provide adequate support to the rear and sides of the saw table for wider or long workpieces.

• Plastic and composition (like hardboard) materials may be cut on your saw. However, since these are usually quite hard and slippery, the anti-kickback pawls may not stop a kick-back. Therefore, be especially attentive to following proper set-up and cutting procedures for ripping. Do not stand, or permit anyone else to stand, in line with a potential kickback.

f. If you stall or jam the sawblade in the workpiece, turn saw "OFF", remove the workpiece from the sawblade, and check to see if the sawblade is parallel to the table slots or grooves and if the spreader is in proper alignment with the sawblade. If ripping at the time, check to see if rip fence is parallel with the sawblade. Readjust as indicated.

g. NEVER gang crosscut — lining up more than one workpiece in front of the blade (stacked vertically, or horizontally outward on the table) and then pushing thru sawblade. The blade could pick up one or more pieces and cause a binding or loss of control and possible injury.

h. DO NOT remove small pieces of cut-off material that may become trapped inside the blade guard while the saw is running. This could endanger your hands or cause a kick-back. Turn saw "OFF" and wait until blade stops.

11. KNOW YOUR CUTTING TOOLS

Dull, gummy or improperly sharpened or set cutting tools can cause material to stick, jam, stall the saw, or kickback at the operator. Minimize potential injury by proper cutting tool and machine maintenance. NEVER ATTEMPT TO FREE A STALLED SAWBLADE WITHOUT FIRST TURNING THE SAW OFF.

a. NEVER use grinding wheels, abrasive cut-off wheels, friction wheels (metal slitting blades) wire wheels or buffing wheels.

b. USE ONLY RECOMMENDED ACCESSORIES.

c. Crosscutting operations are more conveniently worked and with greater safety if an auxiliary wood facing is attached to the miter gauge. (See Page 64).

d. Make sure the top of the cutting tool rotates toward you when standing in normal operating position. Also make sure the cutting tool, arbor collars and arbor nut are installed properly. Keep the cutting tool as low as possible for the operation being performed. Keep all guards in place whenever possible.

• Do not use any blade or other cutting tool marked for an operating speed less than 4800 R.P.M. Never use a cutting tool larger in diameter than the diameter for which the saw was designed. For greatest safety and efficiency when ripping, use the maximum diameter blade for which the saw is designed, since under these conditions the spreader is nearest the blade.

e. Make sure the table insert is flush or slightly below the table surface on all sides except for rear side. NEVER operate the saw unless the proper insert is installed.

NOTE AND FOLLOW SAFETY INSTRUCTIONS THAT APPEAR ON THE FRONT OF YOUR TABLE SAW.

⚠WARNING For Your Own Safety - Read and Understand owner's manual before operating saw.

- Wear eye protection, earplugs and dust mask as needed. Know how to shut off tool in an emergency.
- Before starting any "thru-cutting" make sure:
  - blade guards are not locked in the "up" position, can freely move up and down and are resting on the table
  - riving knife is in the full "up" position
  - kick-back pawls are attached
  - depth of cut is adjusted just above workpiece thickness.
- When ripping:
  - push the workpiece only on the fence side of the blade
  - never place your non-pushing hand on the workpiece beyond the mid-point of the blade
  - fence must be parallel to blade
  - bevel cuts, use the fence only on right side of blade
  - use "Push-Stick" or "Push Block" on narrow workpieces.
- Know how to avoid risk of "Kickback". Do not press workpiece against side of spinning blade.
- Do not stand in front of spinning saw blade. Keep your body and hands to either side of blade. Never reach around or over saw blade.
- Disconnect saw from power source before servicing or changing blade. No adjustment should be made until the tool has been stopped.
- Do not allow loose cut-off pieces to be wedged between spinning blade and fence.
- Never remove jammed or cut off pieces until blade has stopped.
- Never make cuts using the miter gauge together with fence.
- Do not perform any operation "Freehand".
- Use miter gauge for crosscutting. When miter gauge is set past 45°, the wood may force the guard into blade.
- Before "non-thru cutting", remove the guard, kick-back pawls, and adjust the riving knife to the position just below the height of the saw blade. For "dado-cutting", the riving knife must be set to the lowest position.
- Support wide or long workpieces with auxiliary stands.
- Securely fasten tool base to stable platform or workbench.
- Keep saw interior free of sawdust buildup to avoid fire hazard.
- When servicing, use only identical replacement parts.
- Do not expose to rain or use in damp locations.

Additional Safety Rules

12. THINK SAFETY
SAFETY IS A COMBINATION OF OPERATOR COMMON SENSE AND ALERTNESS AT ALL TIMES WHEN THE TABLE SAW IS BEING USED.

⚠ WARNING Do not allow familiarity (gained from frequent use of your table saw) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles that comply with ANSI Z87.1 (shown on package) before commencing power tool operation.

⚠ WARNING **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 paints,
- 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.

Double Insulated Tools

Double Insulation ⧈ is a design concept used in electric power tools which eliminates the need for the three wire grounded power cord and grounded power supply system. It is a recognized and approved system by Underwriter's Laboratories, CSA and Federal OSHA authorities.

IMPORTANT: Servicing of a tool with double insulation requires care and knowledge of the system and should be performed only by a qualified service technician.

WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS.

POLARIZED PLUGS. If your tool is equipped with a polarized plug (one blade is wider than the other), this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. To reduce the risk of electric shock, do not change the plug in any way.

Extension Cords

⚠ WARNING Replace damaged cords immediately. Use of damaged cords can shock, burn or electrocute.

⚠ WARNING Always use proper extension cord. If an extension cord is necessary, a cord with adequate size conductors should be used to prevent excessive voltage drop, loss of power or overheating. The table shows the correct size to use, depending on cord length and nameplate amperage rating of tool. If in doubt, use the next heavier gauge. Always use U.L. and CSA listed extension cords.

RECOMMENDED SIZES OF EXTENSION CORDS
120 VOLT ALTERNATING CURRENT TOOLS

Tool's Ampere Rating	Cord Size in A.W.G.				Wire Sizes in mm^2			
	Cord Length in Feet				Cord Length in Meters			
	25	50	100	150	15	30	60	120
3-6	18	16	16	14	.75	.75	1.5	2.5
6-8	18	16	14	12	.75	1.0	2.5	4.0
8-10	18	16	14	12	.75	1.0	2.5	4.0
10-12	16	16	14	12	1.0	2.5	4.0	—
12-16	14	12	—	—	—	—	—	—

NOTE: The smaller the gauge number, the heavier the cord.

"SAVE THESE INSTRUCTIONS"

Basic Table Saw Operation

Safety Power Switch

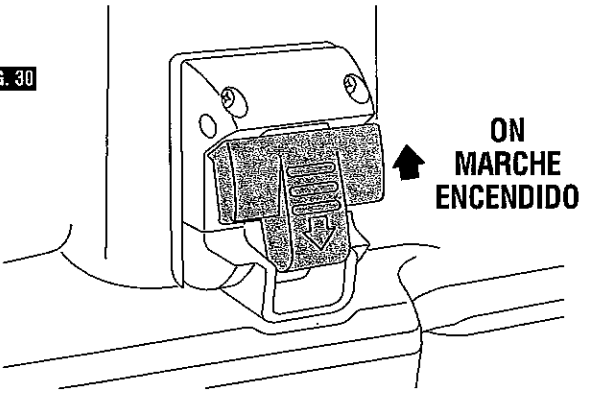
NOTE: This table saw has a safety feature that helps prevent accidental starting.

To turn saw on: lift switch lever by pinching side walls and pulling up. This action starts the saw (Fig. 30)

To turn off power: push switch lever down to its original position (Fig. 31).

To prevent unauthorized use, the switch can accommodate a padlock with a long, 3/16" or 1/4" diameter shackle (not provided with table saw), (Fig. 31).

FIG. 30



Smart Guard System

The Bosch Smart Guard has been designed for modularity, enabling the use of multiple combinations of the three main components – Main barrier guards, Anti-kickback device, and riving knife. Additionally, the riving knife can be quickly adjusted to three positions (high, middle, and stored), depending on the application requirement.

Component Parts (figure 32):

❶ Riving Knife
The Riving Knife is the central element of the Bosch Smart Guard blade guarding system, serving as the attachment point for both the Main Barrier Guard and the Anti-Kickback Device. In the event that the Main Barrier Guard and Anti-Kickback Device are removed, the Riving Knife maintains its functionality as material splitter, and is adjustable to three positions. Because of this adjustability, the Riving Knife can be appropriately positioned for all cutting applications.

❷ Main Barrier Guard
The main guard is comprised of a pair of plastic barriers attached to the metal upper barrier guard. The side barriers (one to the left and one to the right of the blade) operate independently of one another, maintaining maximum blade coverage during cutting operations. The main guard incorporates a quick-connect attachment point and can be attached or removed from the blade guarding system independent of the Anti-Kickback Device and Riving Knife.

> **Note:** To best secure the main guard for transport, adjust the blade to its lowest position. This keeps the guard tight to the table surface and prevents damage related to the guard swinging during transport.

❸ Anti-Kickback Device
In the event of kickback, the Anti-Kickback Device, (also known as dogs, or pawls) is intended to help prevent the board from being thrown in the direction of the user. The sharp teeth of the pawls are intended to "catch" the material in the event of kickback.

FIG. 31

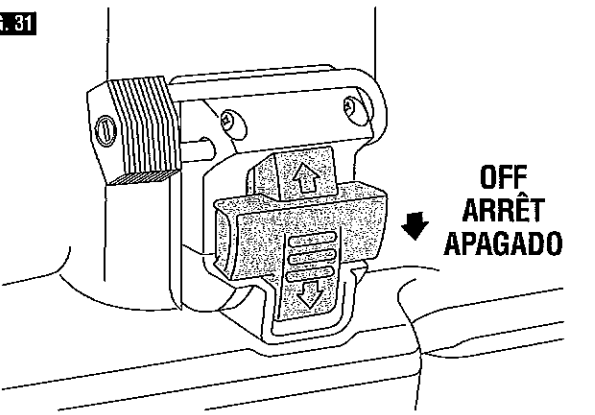
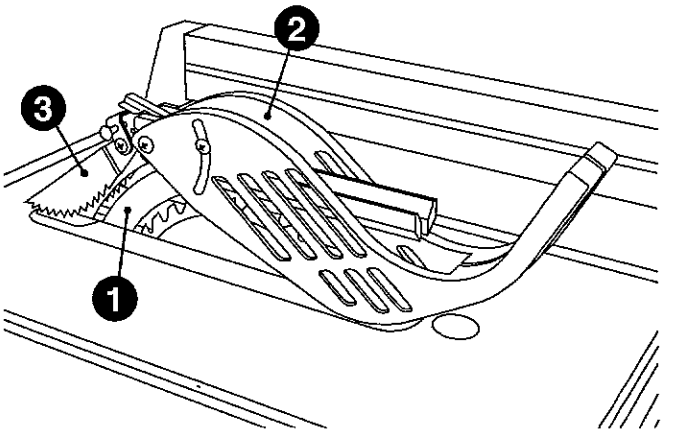


FIG. 32



Attachment/Removal

(see page 26 for detailed instructions)

The three primary components of the Smart Guard blade guarding system are designed for rapid attachment, adjustment, and/or removal without the need for additional tools.

The Main Barrier Guard component can be quickly attached and detached through the use of a quick release lever. The guard is attached by seating the crossbar into the top of the Riving Knife and engaging the locking lever. Following this process in

reverse, the guard can be easily removed for special operations such as dados or rabbets.

The Anti-Kickback Device can be easily attached by aligning the attachment pin with the hole in the rear of the riving knife. It can be easily removed by depressing the compression pads on either side of the Anti-Kickback Device and lifting it away.

The Riving Knife can be easily adjusted to one of three heights by removing the table insert, raising the blade to its full height and releasing the riving knife release lever at the base of the Riving Knife. The Riving Knife should be locked in its highest position for use with the Main Barrier Guard and Anti-Kickback Device. It can be adjusted to its middle position for non-through cuts and for use as a material splitter without the Main Barrier Guard and Anti-Kickback Device.

In the event that the Riving Knife can not be used for a specific cut, it can be adjusted to its lowest position, thus placing it 1" above the surface of the table (while the blade is at its full height).

System Storage

When not in use, the Main Barrier Guard and Anti-Kickback Device can be stored under the right side table extension.

⚠ WARNING Use of all the components of the Smart Guard System, including Main Barrier Guard, Anti-Kickback Device, and Riving Knife is highly recommended to provide protection against accidents and injury.

1. Slide the Main Barrier Guard assembly (upside down) up and back into the U-bracket at the rear right side of the saw (Fig. 33).

2. Pivot the rear of the guard up and into the front mounting bracket.

3. Lock the Main Barrier Guard assembly into place in the same manner as you would attach it to the Riving Knife (Fig. 34).

4. Attach the Anti-Kickback Device to the hanging bracket in the same manner that it attaches to the Riving Knife.

Blade Bevel Control

Loosen blade bevel lock handle **1** counterclockwise (Fig. 35), slide the elevation wheel **2** until pointer **3** is at desired angle and tighten blade tilt lock handle **1** clockwise.

Extending Table Extension

To extend the table, raise the table extension lock handle **4** (Fig. 35) and slide table extension **5** to desired width (Fig 36). To secure table setting, lower the lock handle **4**.

FIG. 33

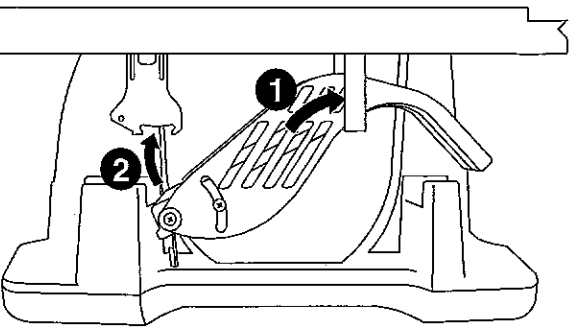


FIG. 34

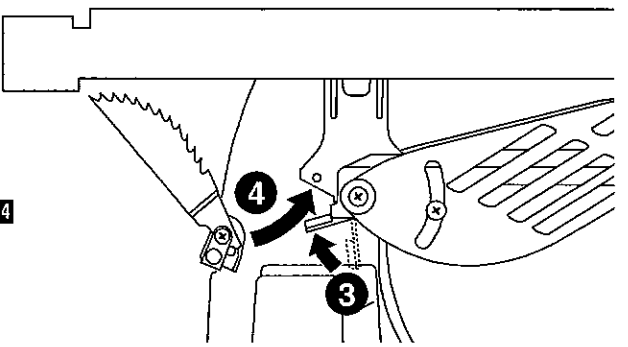


FIG. 35

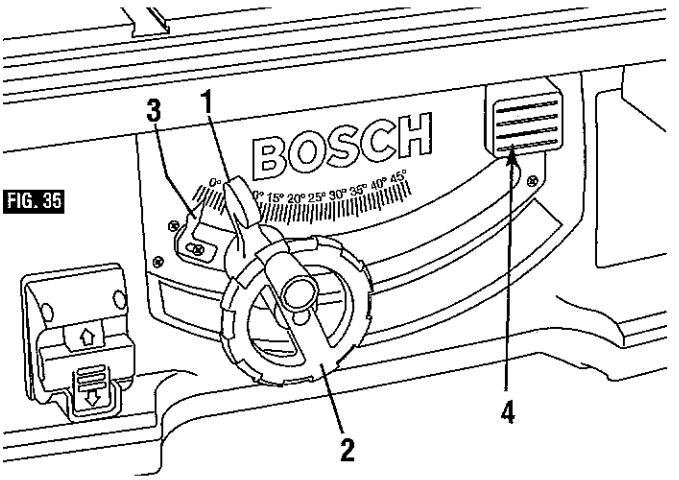


FIG. 36