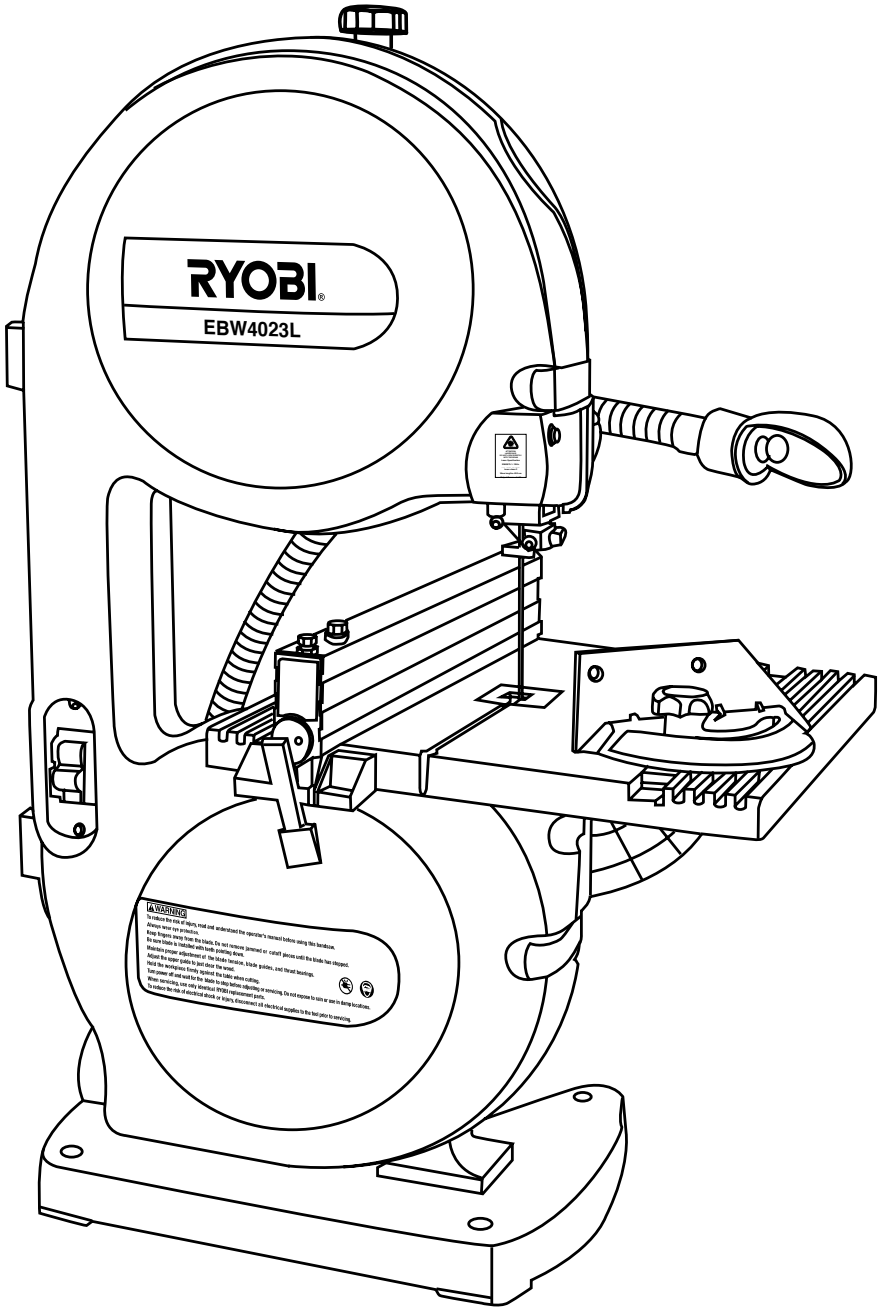
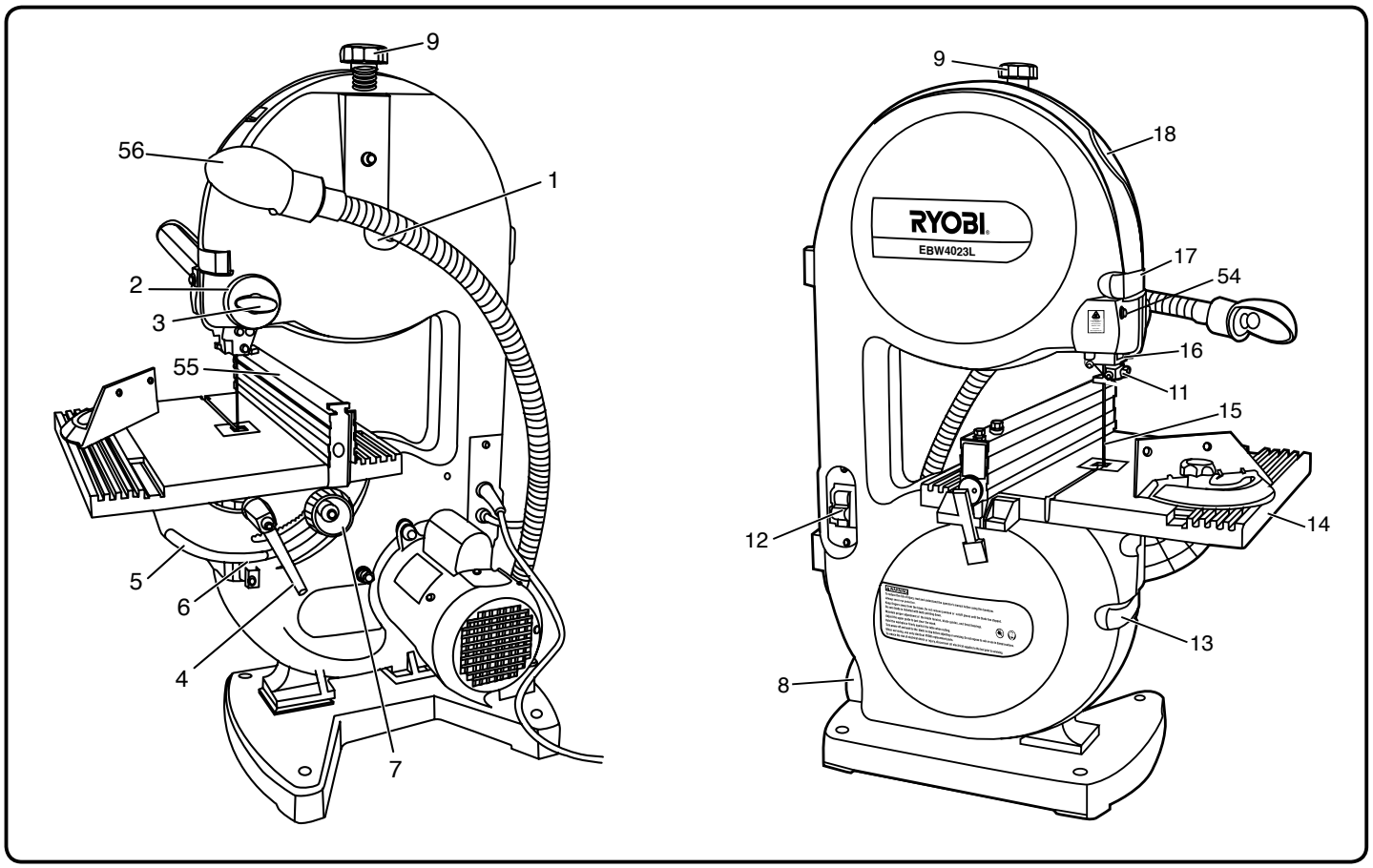
RYOBI®

EBW4023L

230mm BAND SAW WITH LASER AND LIGHT

OWNER'S OPERATION MANUAL





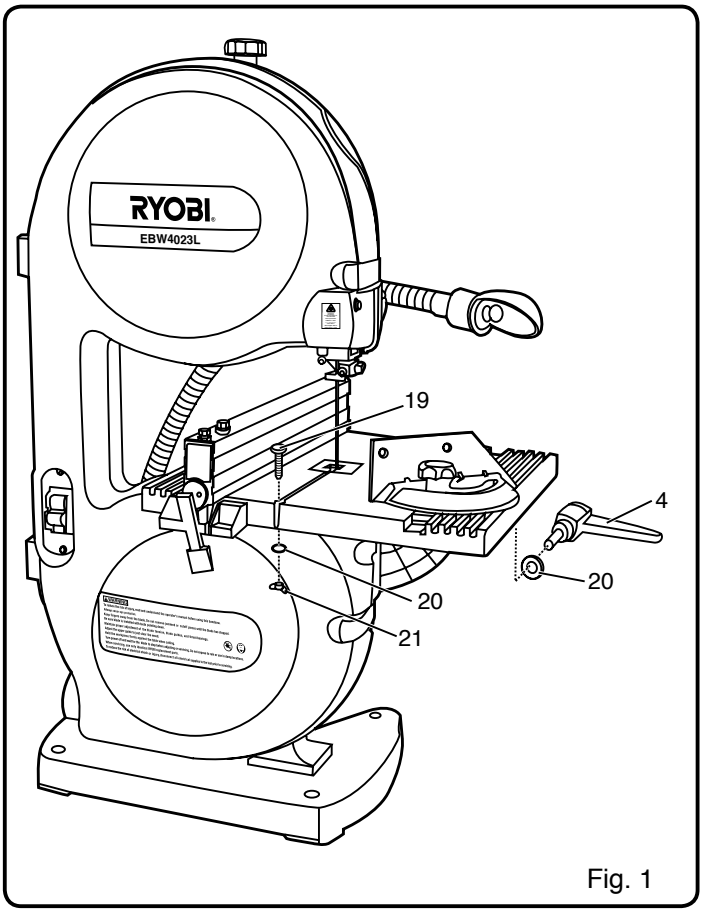
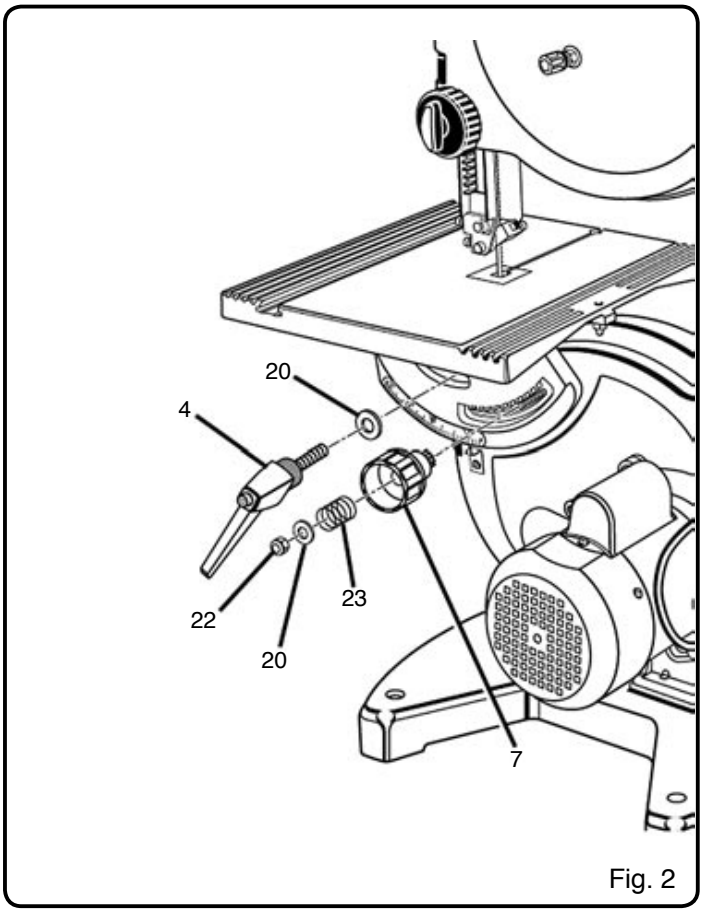


Fig. 1



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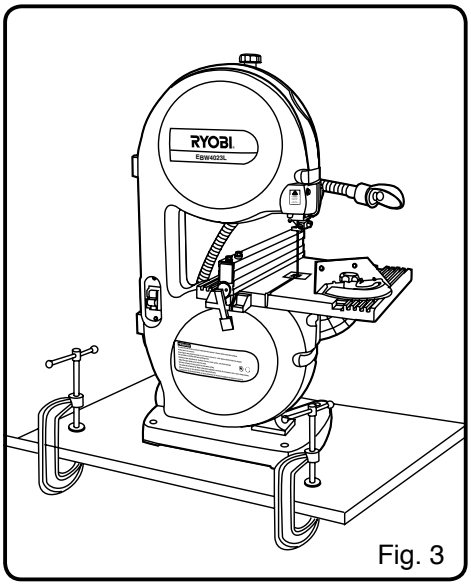

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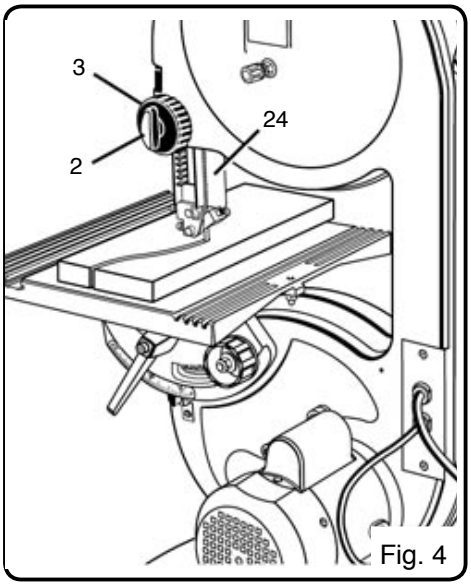

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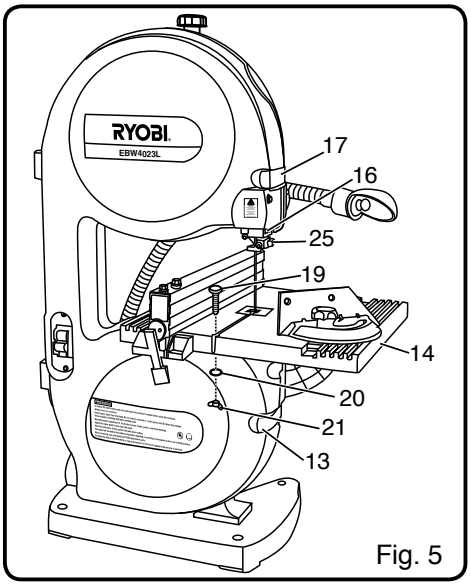

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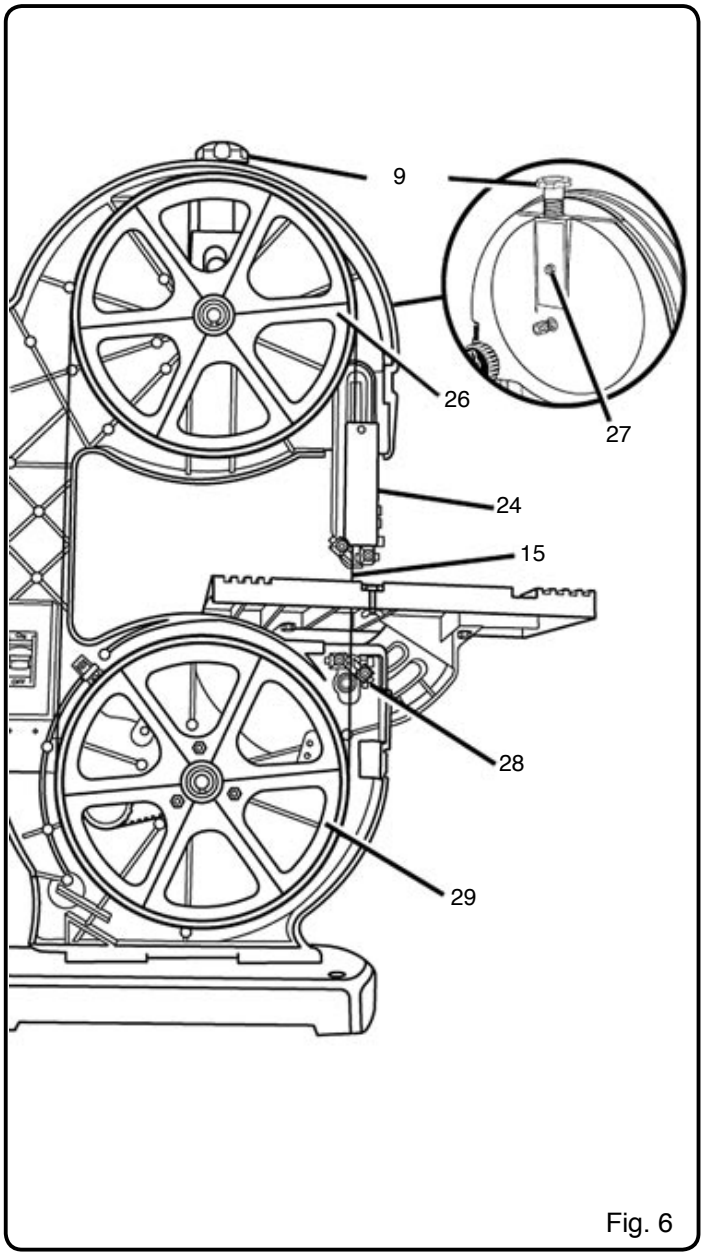

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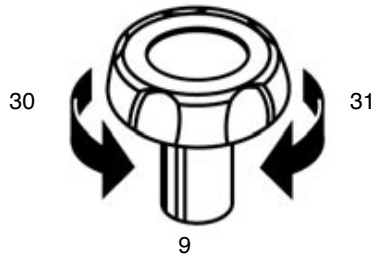

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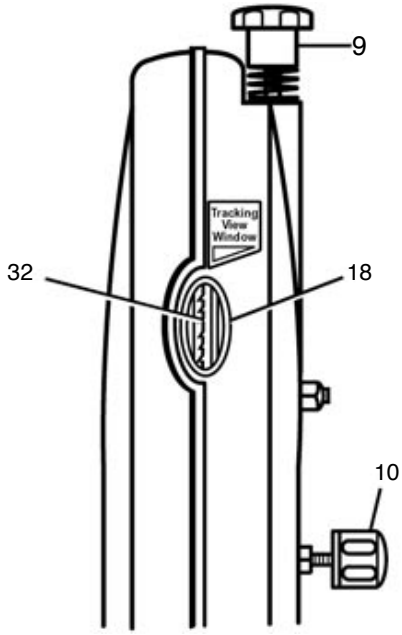

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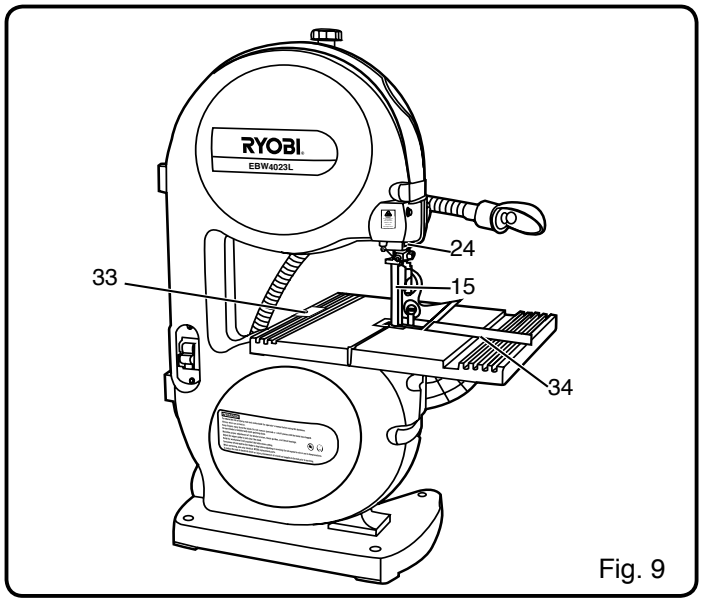

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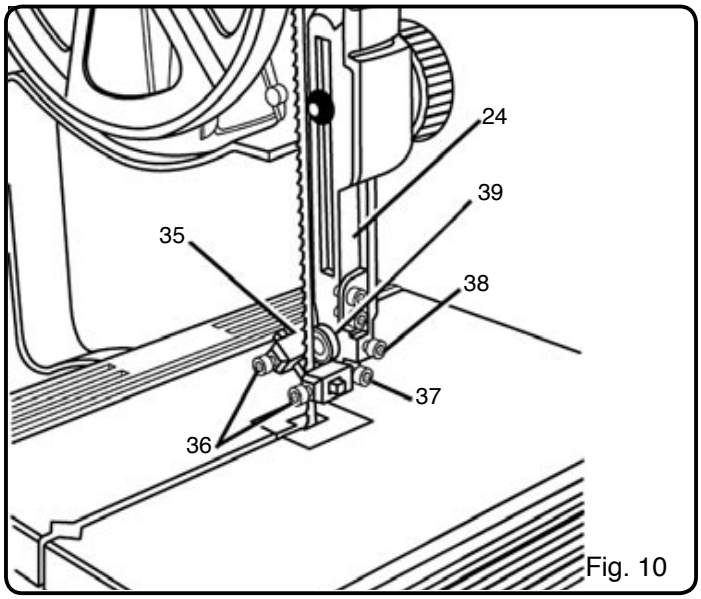

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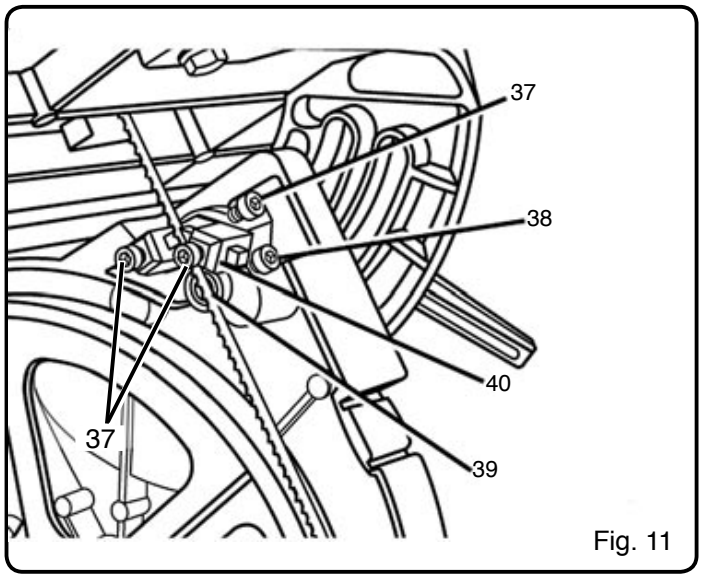

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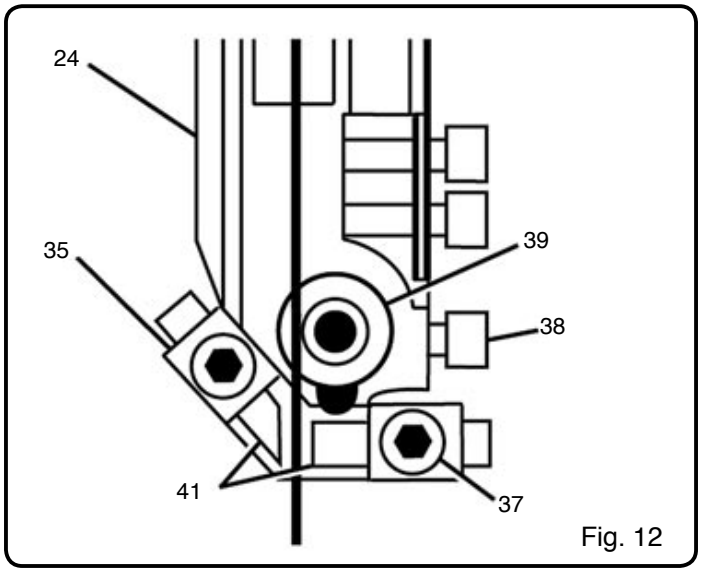

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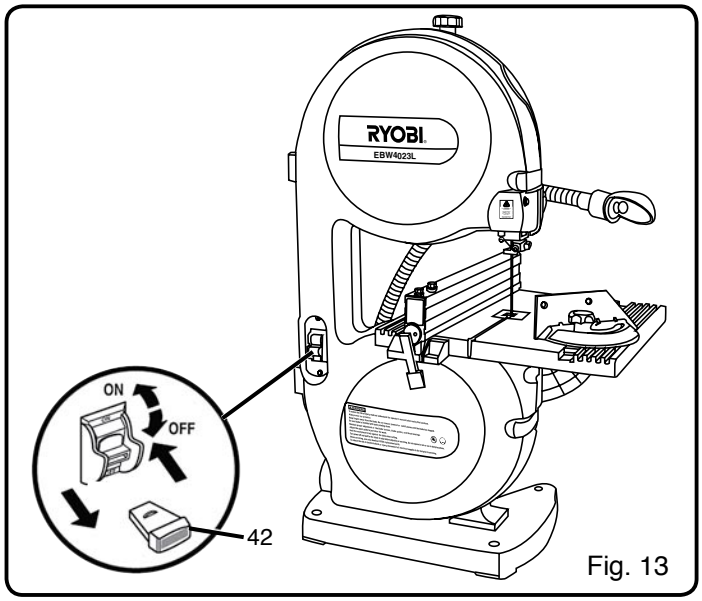

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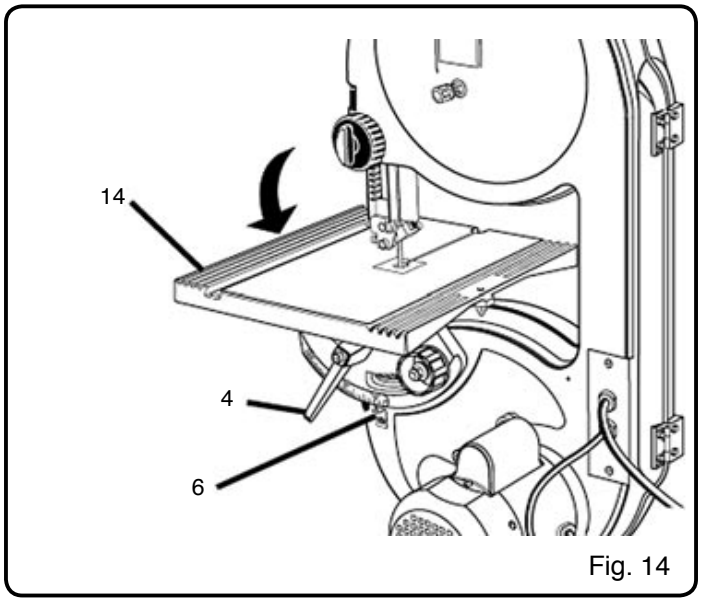

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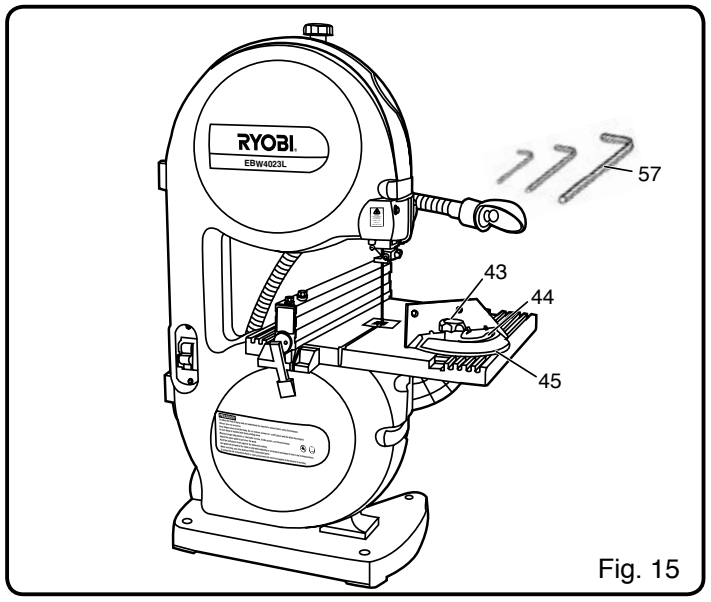

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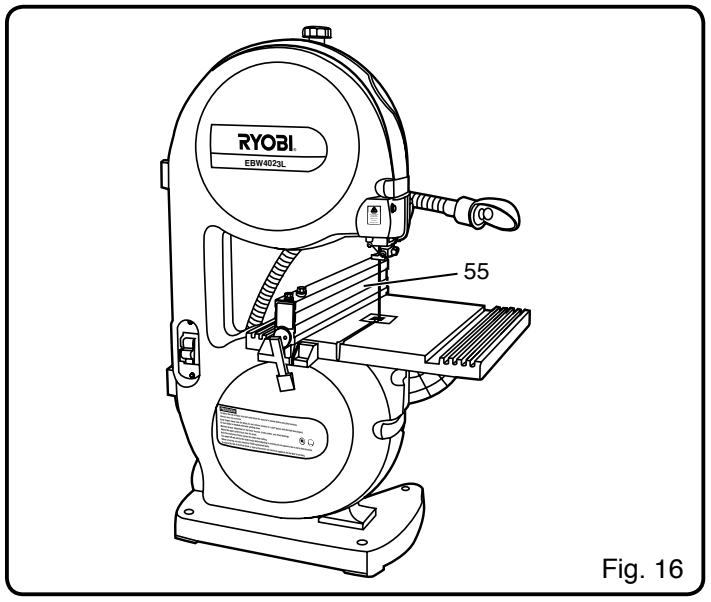

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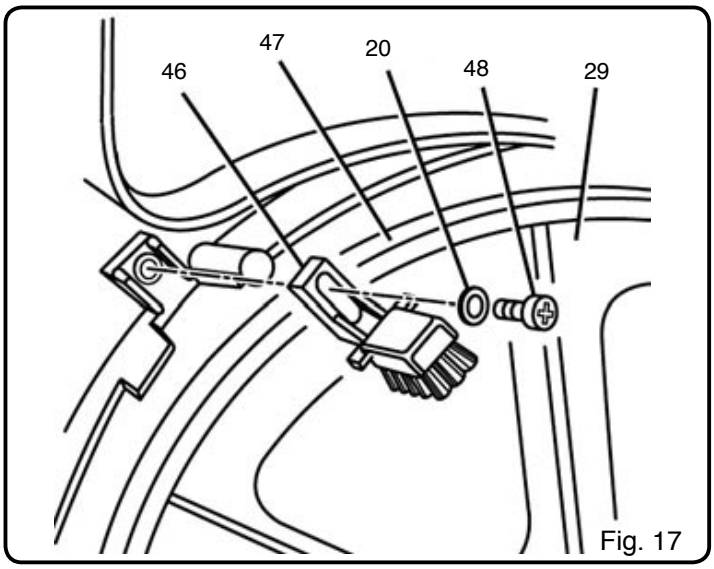

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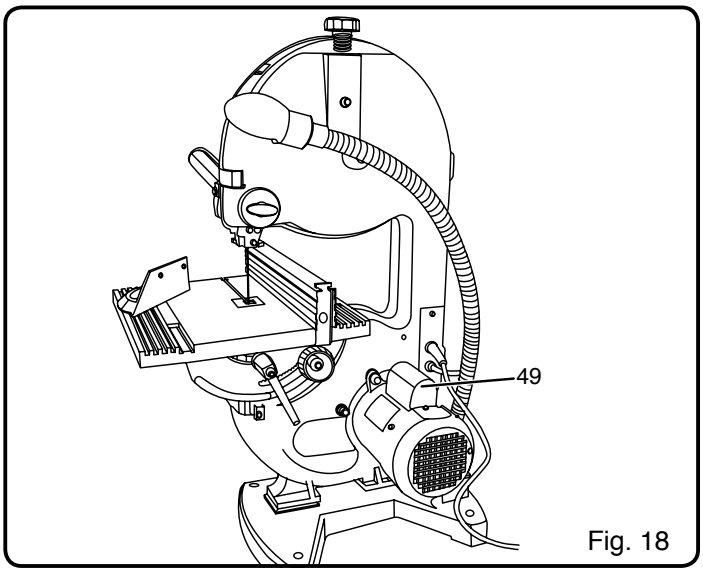

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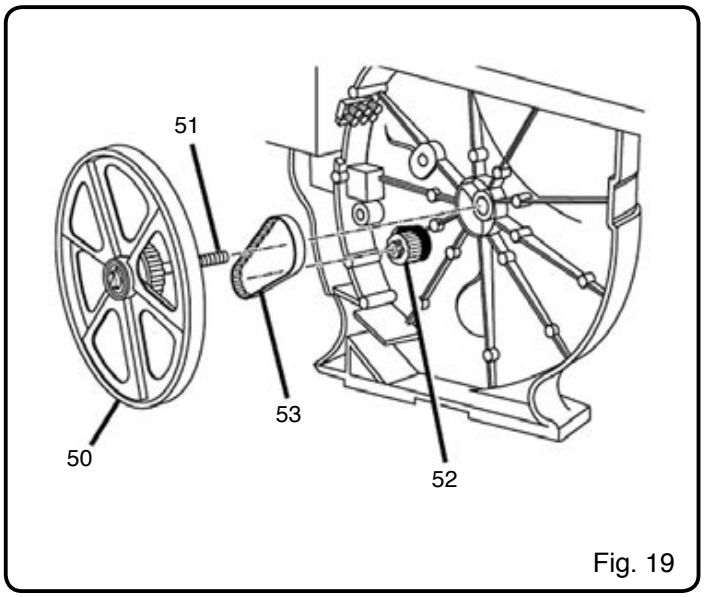

Fig. 19

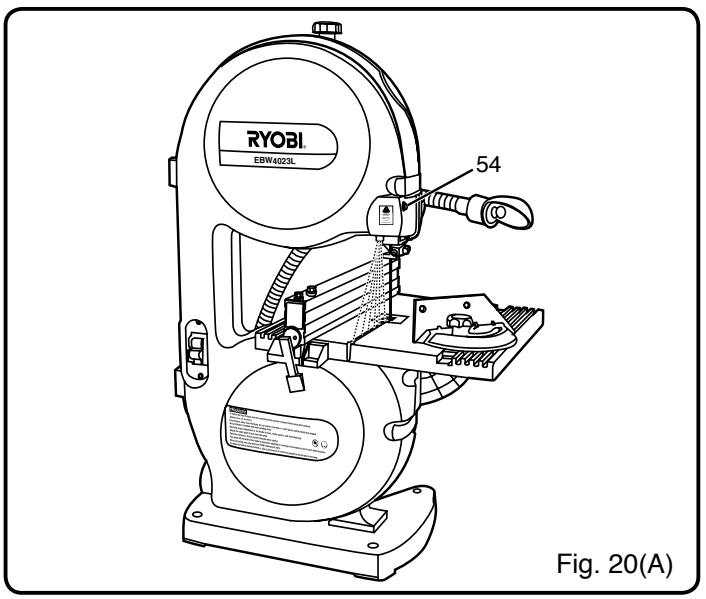

Fig. 20(A)

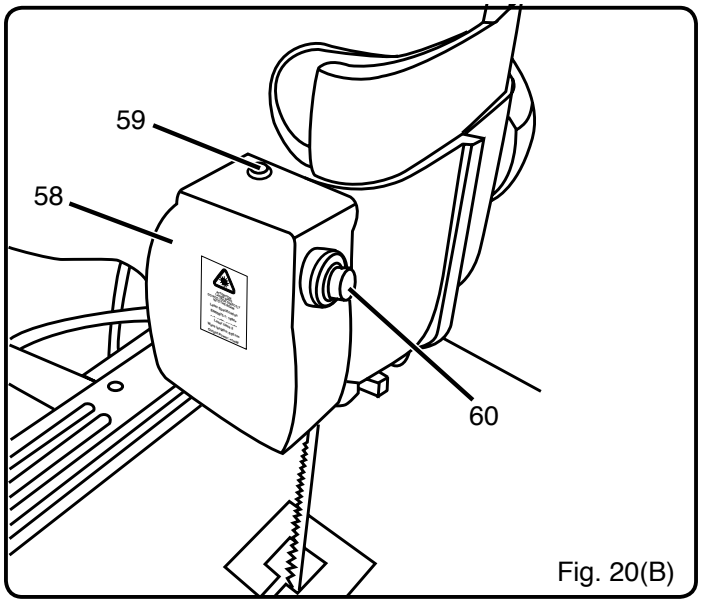

Fig. 20(B)

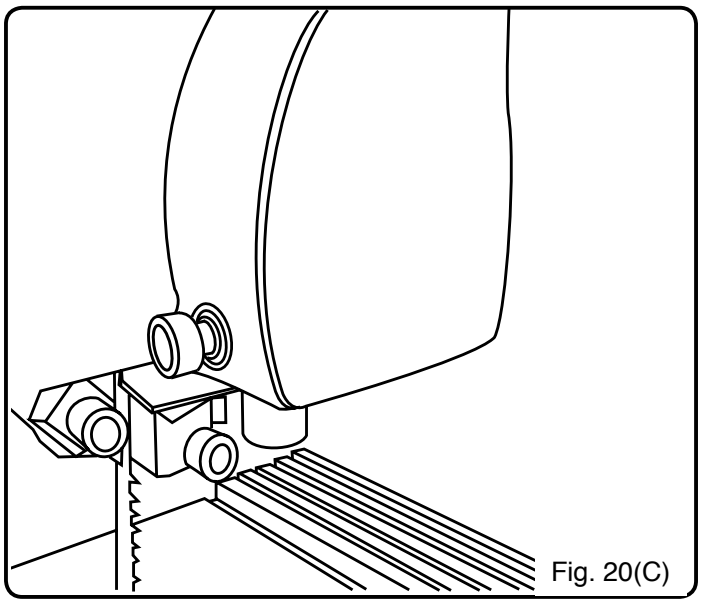
Fig. 20(C)

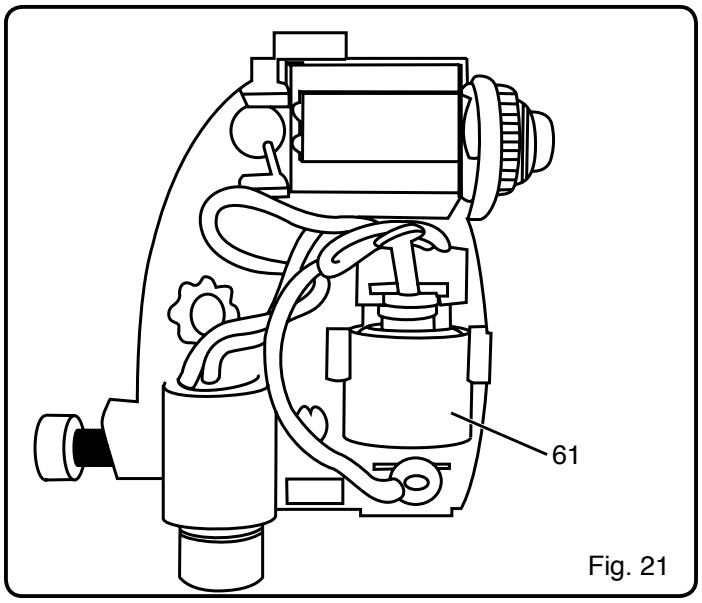

Fig. 21

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PRODUCT SPECIFICATIONS

- Input - - - - - 240 V~50 Hz
- Power - - - - - 400W
- No load speed - - - - - 1400 min^{-1}
- Dust port - - - - - Ø44.5 mm
- Throat capacity - - - - - 230mm
- Max saw blade width / length - - - - - 10 mm X 1510 mm
- Max saw blade thickness - - - - - 0.35 mm
- Max height of cut - - - - - 80 mm
- Saw table size - - - - - 290 mm x 290 mm
- Weight - - - - - 17.8 Kg

RULES FOR SAFE OPERATION

Keep work area clear
- Cluttered areas and benches invite injuries.

Consider work area environment
- Do not expose tools to rain.
- Do not use tools in damp or wet locations.
- Keep work area well lit.
- Do not use tools in the presence of flammable liquids or gases.

Guard against electric shock
- Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

Keep other persons away
- Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

Store idle tools
- When not in use, tools should be stored in a dry locked-up place, out of reach of children.

Do not force the tool
- It will do the job better and safer at the rate for which it was intended.

Use the right tool
- Do not force small tools to do the job of a heavy duty tool.
- Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.

Dress properly
- Do not wear loose clothing or jewellery, they can be caught in moving parts.
- Non-skid footwear is recommended when working outdoors.
- Wear protective hair covering to contain long hair.

Use protective equipment
- Use safety glasses.
- Use face or dust mask if working operations create dust.

Connect dust extraction equipment
- The tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

Do not abuse the cord
- Never yank the cord to disconnect it form the socket. Keep the cord away from heat, oil and sharp edges.

Secure work
- Where possible use clamps or a vice to hold the work. It is safer than using your hand.

Do not overreach
- Keep proper footing and balance at all times.

Maintain tools with care
- Keep cutting tools sharp and clean for better and safer performance.
- Follow instruction for lubricating and changing accessories.
- Inspect tool cords periodically and if damaged have them repaired by an authorised service facility.
- Inspect extension cords periodically and replace if damaged.
- Keep handles dry, clean and free from oil and grease.

Disconnect tools
- When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

Remove adjusting keys and wrenches
- Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

Avoid unintentional starting
- Ensure switch is in off position when plugging in.

Use outdoor extension leads
- When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

Stay alert
- Watch what you are doing, use common sense and do not operate the tool when you are tired.

Check damaged parts
- Before using the tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
- Have defective switches replaced by an authorised service centre.
- Do not use the tool if the switch does not turn on and off.

⚠ WARNING:

The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

Have your tool repaired by a qualified person
- This tool complies with the relevant safety regulations. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.
- Do not use saw blades which are damaged or deformed;
- Replace the table insert when worn;
- Connect band saw to a dust-collecting device when sawing wood;
- Do not operate the machine when the door or guard protecting the saw blade is open;
- Take care that the selection of the saw blade matches the material to be cut;
- Do not clean the saw blade whilst it is in motion;

Wear suitable personal protective equipment, when necessary, this could include;
- Hearing protection to reduce the risk of induced hearing loss,
- Respiratory protection to reduce the risk of inhalation of harmful dust,
- Gloves for handling the saw blade and rough material.

Maintenance and servicing
- The operators instructions in factors influencing exposure to noise (e.g. material to be supported to reduce the emitted noise, selected saw blade);
- Correct adjustment and regular maintenance of the saw blade and band wheel cleaning equipment and of lubrication system.

RULES FOR SAFE OPERATION

- When straight cutting against the fence use a push stick.
- During transportation the saw blade guard should be fully down and close to the table.
- When bevel-cutting with the table incline, place the guide on the lower part of the table.
- When cutting round timber use a suitable holding device to prevent twisting of the workpiece.
- When transporting use one hand to support the machine base, and another to hold the machine body in which the main switch is located.
- Do not use guarding for handling or transportation.
- Adjust the adjustable guard as close to the workpiece as practicable.
- Where possible use clamps or a vice to hold the work. It is safer than using your hand.
- Use and correctly adjust the saw blade guard.

THANK YOU FOR BUYING A RYOBI PRODUCT.
To ensure your safety and satisfaction, carefully read through this **OWNER'S** M**ANUAL**and **SAFETY INSTRUCTIONS** before using the product.

DESCRIPTION

1. Blade tracking knob
2. Blade guide knob
3. Lock lever
4. Table lock handle
5. Scale
6. Scale indicator
7. Angle adjustment knob
8. Dust exhaust port
9. Blade tension knob
10. Blade tracking knob
11. Blade guide support
12. Switch and switch key
13. Lower Latch
14. Saw table
15. Saw blade
16. Blade guard
17. Upper Latch
18. Tracking view window
19. Table aligning bolt
20. Washer
21. Wing nut
22. Nut
23. Spring
24. Blade guide assembly
25. Set screws
26. Upper wheel
27. 8mm Hex nut
28. Lower blade guides
29. Lower wheel
30. To decrease tension
31. To increase tension
32. Blade on wheel
33. Zero stop set screw
34. Small combination square (Not included)
35. Upper blade guide support
36. Blade guide screws
37. Blade guide support screw
38. Thrust bearing screw
39. Thrust bearing
40. Lower blade guide support
41. Blade guide
42. Switch key
43. Lock knob
44. Mitre gauge slot
45. Mitre gauge
46. Brush
47. Tire
48. Screw
49. Motor Capacitor
50. Lower wheel
51. Pulley shaft
52. Motor pulley
53. Drive belt
54. Laser
55. Straight Fence
56. Light
57. Hex Key (W3, W4, W5)
58. Laser cover
59. M3 Tapping screw
60. Laser ON/OFF switch
61. Button cell protection tube

FEATURES

KNOW YOUR BAND SAW

Before attempting to use, familiarise yourself with all the operating features and safety requirement of your saw.

- **Angle Adjustment Knob**
  Tilts the saw table for bevel cutting.
- **Blade Guard**
  Protects the operator from coming in contact with the blade.
- **Blade Guide Support**
  Helps keep the blade from twisting during operation.
- **Blade Guide Knob with Lock Lever**
  Use the blade guide knob and lock lever to adjust the blade guide assembly to keep the blade from twisting or breaking. Always lock the blade guide assembly in place before turning on the band saw.
- **Blade Tension Knob**
  Controls blade tension when changing blades and making adjustments for various sawing applications.
- **Dust Exhaust Port and Adaptor**
  A 44.5 mm (1-3/4") dust exhaust port makes dustless cutting possible by blowing the dust away from the user. Attach the adaptor to the dust exhaust port when using a dust collection system or vacuum.
- **Laser**
  Allows accurate and precise location when cutting the workpiece.
- **Straight Fence**
  Allows straight cutting for the workpiece.
- **Light**
  Increases workpiece illumination.
- **Latch**
  Easy open latches allow front cover to be opened for making adjustments.
- **Saw Blade**
  Saw comes with a standard 6mm (1/4") blade.
- **Saw Table with Throat Plate**
  Your band saw has a square 290mm (11-3/8") aluminum saw table with tilt control for maximum accuracy. The throat plate, installed in the saw table at the factory, allows for blade clearance.
- **Scale and Scale Indicator**
  The scale and scale indicator show the angle or degree the saw table is titled for bevel cutting.

FEATURES

- **Switch and Switch Key**
  Your band saw has an easy access power switch. To lock in the OFF position, remove the yellow switch key.
  Place the key in a location inaccessible to children and others not qualified to use the tool.
- Table Lock Handle
  Loosening the table lock handle allows the saw table to be tilted at different angles. Tightening the table lock handle locks the saw table in place.
- Tracking Knob
  Adjusts tracking to keep blade centered on the wheels.
- Tracking View Window
  The tracking view window makes tracking adjustments easier to see.

ASSEMBLY

MOUNTING THE SAW TABLE (Fig. 1 & 2)

- Remove the angle adjustment knob (7) from the side of the saw housing.
  NOTE: Take care when removing the nut (22) and washer (20) from the centre of the angle adjustment knob. There is a spring (23) in the centre that is released after the nut and washer are removed.
- Remove the table aligning bolt (19), washer (20), and wing nut (21) from the saw table.
- Standing at the front of the band saw, slide the saw table through the slot moving from the front side of the saw table to the back.
- Insert the washer (20) on the threaded end of the table lock handle (4). The table lock handle is spring loaded and is released by pulling the handle away from the saw housing. Tighten the saw table to the saw housing by ratcheting the table lock handle clockwise or by finger tightening the table lock handle.
- Reattach the angle adjustment knob using the spring, washer and nut.
- Reattach the table aligning bolt (19), washer (20), and wing nut (21) to the saw table.
  NOTE: The wing nut goes below the saw table.

MOUNTING BAND SAW TO WORKBENCH

If the band saw is to be used in a permanent location, we recommend that you secure it to a workbench or other stable surface. When mounting the saw to a workbench, holes should be drilled through the supporting surface of the workbench.

- Each hole in the saw base should be bolted securely using bolts, lock washers, and hex nuts (not included).
- Place band saw on the workbench. Using the saw base as a pattern, locate and mark the holes where the band saw is to be mounted.
- Drill four holes through the workbench.
- Place band saw on the workbench aligning holes in the saw base with the holes drilled in the workbench.
- Insert all four bolts (not included) and tighten securely with lock washers and hex nuts (not included).
  NOTE: All bolts should be inserted from the top. Install the lock washers and hex nuts from the underside of the bench.

Supporting surface where band saw is mounted should be examined carefully after mounting to insure that no movement during use can result. If any tipping or warping is noted, secure workbench or support surface before beginning cutting operation.

CLAMPING BAND SAW TO WORKBENCH (Fig. 3)

If the band saw is to be used as a portable tool, it is recommended that you fasten it permanently to a mounting board that can easily be clamped to a workbench or other supporting surface. The mounting board should be of sufficient size to avoid tipping of saw while in use. Any good grade plywood or chipboard with a 19 mm (3/4") thickness is recommended.

- Mount saw to board using holes in saw base as a template for hole pattern. Locate and mark the holes where the band saw is to be mounted.
- Follow the last three steps in previous section "Mounting Band Saw to Workbench".

If lag bolts are used, make sure they are long enough to go through holes in the saw base and material the saw is being mounted to. If machine bolts are being used, make sure bolts are long enough to go through holes in the saw base, the material being mounted to, and the lock washers and hex nuts.

NOTE: It may be necessary to countersink hex nuts and washers on bottom side of mounting board.

ADJUSTMENTS

⚠ WARNING:
Failure to turn the saw off, and unplug the saw could result in accidental starting causing possible serious personal injury.

ADJUSTING BLADE GUIDE ASSEMBLY (Fig. 4)

To prevent the blade from twisting or breaking, the blade guide assembly (24) should always be set approximately 3 mm (1/8") above the workpiece.

- Turn the lock lever (3) counterclockwise to unlock the blade guide assembly.
- As a guide, use a scrap piece of the same wood you are about to cut to set the height of the blade guide assembly. Adjust the blade guide assembly by turning the blade guide knob (2).
- Lock blade guide assembly in place by turning the lock knob clockwise.

- Always lock the blade guide assembly in place before turning on the band saw.

⚠ WARNING:
To avoid personal injury, maintain proper adjustment of blade tension, blade guides, and thrust bearings.

INSTALLING AND ADJUSTING THE BLADE (Fig. 5 & 6)

⚠ WARNING:
Failure to turn the saw off, and unplug the saw could result in accidental starting causing possible serious personal injury.

- Loosen and remove the wing nut (21) and table aligning bolt (19) from the saw table (Fig. 5).
- Open the front cover by releasing the upper (17) and lower latches (13).
- Loosen the two set screws (25) that hold the blade guard (16) in place using the 4mm hex key provided then remove the blade guard (Fig. 5).
- Turn the lock lever counterclockwise to unlock the blade guide assembly. Turning the blade guide knob (clockwise raises the blade guide assembly; counterclockwise lowers it), position the blade guide assembly about halfway between the saw table and saw housing. Retighten the lock lever.

⚠ WARNING:
Always wear safety goggles or safety glasses with side shields to protect your eyes while uncoiling band saw blades. Failure to heed this warning could result in a serious eye injury.

- Release blade tension by loosening the 8 mm hex nut then turning the blade tension knob (9) counterclockwise (Fig. 6).
- Carefully remove the old blade.

  NOTE: The spring on the upper wheel (26) allows the wheel to be pulled down for easier removal of the blade.
- Wearing gloves, carefully uncoil the blade at arms length. If the new blade was oiled to prevent rusting, it may need to be wiped to keep the oil from your workpiece. Carefully wipe in the same direction the teeth are pointing so the rag does not catch on the teeth of the saw blade.

  NOTE: The blade may need to be turned inside out if the teeth are pointing in the wrong direction. Hold the blade with both hands and rotate it inward.
- With the teeth of the blade toward the front of the saw and facing downward, place the blade through the lower blade guides and around the lower wheel (29). Pull down on the upper wheel to place the saw blade on the wheel.
- Slowly turn the upper wheel to the right or clockwise by hand to centre the blade on the rubber tires.
- Adjust the blade tension; check or adjust the blade tracking.
- Adjust both upper and lower blade guides and thrust bearings.
- Reattach the saw table and the aligning bolt, washer, and wing nut. Tighten securely.
- Reattach the blade guard.
- Close front cover.

ADJUSTING BLADE TENSION (Fig. 7 & 8)

Turn off and unplug the saw.

⚠ WARNING:
Failure to turn the saw off, remove the switch key and unplug the saw could result in accidental starting causing possible serious personal injury.

- Before using the band saw, turn the blade tension knob (9) on the top of the saw clockwise to engage tension.
- To check tension, raise the blade guide assembly all the way up to expose the blade.
- Push the blade to the side with moderate force; the blade should flex approximately 3 mm (1/8").

  NOTE: Adjustments of blade tension can be made at anytime.

  Another method of checking blade tension has to do with the sound the blade makes when plucked like a guitar string.
- Pluck the back straight edge on the coasting side opposite the blade guides while turning the tension knob. Sound should be a musical note. Sound becomes higher pitched as tension increases.

Using either method to check blade tension can be developed with practice.

- Never increase blade tension so tight as to completely compress the spring. When completely compressed, the spring can no longer act as a shock absorber.

NOTE: Too much tension may cause the blade to break. Too little tension may cause the blade to slip on the wheels.

TRACKING THE BLADE (Fig. 8)

⚠ WARNING:
Failure to turn the saw off, remove the switch key and unplug the saw could result in accidental starting causing possible serious personal injury.

NOTE: Adjust blade tension properly before making tracking adjustments. Check that the blade guides are not interfering with the blade.

To Adjust:

- Open the front cover by releasing the upper and lower latches. Watch the blade's position on the upper tire through the tracking view window (18) as, by hand, you slowly turn the upper wheel clockwise. If the blade moves away from the centre of the tire, the tracking must be adjusted.

If the blade has moved left or right of centre:

- Turn the blade tracking knob (10) (clockwise if blade has moved left and counterclockwise if blade has moved right) while turning the wheel by hand until the blade moves back and rides in the centre of the tire.
- Check the position of the blade on the lower tire. The blade should be completely on the tire. If not, adjust the tracking until the blade is on both tires.

- Rotate the upper wheel by hand in a clockwise direction for a few more turns. Make sure the blade stays in the same location on the tires. Readjust, if necessary, until blade is tracking properly.
- Close front cover and relatch.

NOTE: A 3 mm (1/8") blade may not track properly in the center of the wheel. It may be better to track this blade on the back half of the upper wheel.

SQUARING THE SAW TABLE TO THE BLADE (Fig. 9)

⚠ WARNING:
Failure to turn the saw off, remove the switch key and unplug the saw could result in accidental starting causing possible serious personal injury.

- Remove the blade guard by loosening the two set screws with 4mm hex key.
- Turn the lock knob counterclockwise to unlock the blade guide assembly. Turning the blade guide knob clockwise, raise the blade guide assembly as far as it will go. Retighten the blade guide knob.
- Place a small combination square (34) on the saw table beside the blade.
- Loosen the table lock knob and rotate the angle adjustment knob to tilt the saw table up or down to align table 90° to blade (0° position). Retighten the table lock knob.
- Using a hex keys, adjust the zero stop set screw (33) until the set screw just touches the saw housing.
- Check squareness of the saw table to the blade. Make readjustments if necessary.
- Loosen screw on scale indicator with a phillips screwdriver and align scale indicator to zero.
- Tighten all screws securely.
- Replace the blade guard once the saw table has been squared.

ADJUSTING THRUST BEARINGS, BLADE GUIDE SUPPORT, AND BLADE GUIDES (Fig. 10, 11, 12)

The upper and lower blade guides and thrust bearings support the band saw blade during cutting operations. The adjustment of the guides and bearings should be checked whenever a different blade is installed.

⚠ WARNING:
Failure to turn the saw off, remove the switch key and unplug the saw could result in accidental starting causing possible serious personal injury.

To Adjust Thrust Bearings:

The thrust bearings support the back edge of the blade during cutting. The blade should not contact the thrust bearings (39) when you stop cutting. It is important that both upper and lower thrust bearings be adjusted equally.

NOTE: The thrust bearing screw is the upper cap screw located on the right side of the blade guide assembly. It is the lower cap screw on the right side of the saw housing below the saw table for the lower bearing.

- Remove the blade guard by loosening the two set screws with 4mm hex key.
- Turn the lever counterclockwise to unlock the blade guide assembly (24). Turning the blade guide knob (clockwise raises the blade guide assembly, counterclockwise lowers it), position the blade guide assembly about halfway between the saw blade and saw housing. Retighten the lock lever.
- Adjust the thrust bearings first. Using the 4 mm hex key, loosen the thrust bearing screw.
- Move the thrust bearing (39) to within 0.4 mm (1/64") of the blade. Tighten the thrust bearing screw (38) securely. Repeat this procedure on the lower thrust bearing located below the saw table.
- Replace the blade guard if no additional adjustments are to be made.

Adjust Blade Guide Support:

- Remove the blade guard by loosening the two set screws with 4mm hex key.
- Adjust the position of the blade guide assembly. Loosen the bottom screw on the right side of the blade guide assembly using the 4 mm hex key.
- Slide the upper blade guide support on the shaft until the front edge of the blade guides are about 0.4 mm (1/64") behind the gullet of the blade. Tighten the screw securely. Repeat this procedure for the lower blade guide support.
- Replace the blade guard if no additional adjustments are to be made.

NOTE: The lower blade guide support screw (37) is the top screw located on the right of the saw housing under the table (Fig. 11).

⚠ WARNING:
Never operate saw without blade guard secured in place. To do so could result in possible serious personal injury.

To Adjust Blade Guides:

The blade guides help keep the blade from twisting and binding. The blade will be ruined if the blade teeth hit the blade guides while using the band saw. The set of teeth and the sharpened edge of teeth will be damaged by hitting the blade guides. Proper adjustment of the upper and lower blade guides will prevent this from happening.

- Remove the blade guard by loosening the two set screws with 4mm hex key.
- Loosen the two blade guide support screws that lock the upper blade guides. Slide the two guides to within 0.8 mm (1/32") of the blade. Do not pinch the blade. Make sure one guide is not further away from the blade than the other. Retighten the two blade guide support screws securely
- Replace the blade guard if no additional adjustments are to be made.
- Repeat this procedure on the lower blade guides located under the saw table (Fig. 11).

⚠ WARNING:

To avoid blade contact, adjust the blade guide assembly to just clear the workpiece. Failure to do so could result in serious personal injury.

This band saw is designed to cut wood and wood composition products only.

BASIC OPERATION OF THE BAND SAW

A band saw is basically a curve cutting machine that can also be used for straight-line cutting operations like cross cutting, ripping, mitring, beveling, compound cutting, and resawing. It is not capable of making inside or non-through cuts.

Before starting a cut, watch the saw run. If you experience excessive vibration or unusual noise, stop immediately. Turn the saw off, remove the switch key and unplug the saw. Do not restart until locating and correcting the problem.

CUTTING PROCEDURES

- Hold the workpiece firmly against the saw table.
- Use gentle pressure and both hands when feeding the work into the blade. Do not force the work; allow the blade to cut.
- The smallest diameter circle that can be cut is determined by blade width. A 6 mm (1/4") wide blade will cut a minimum diameter of 38 mm (1-1/2"); a 3 mm (1/8") wide blade will cut a minimum diameter of 13 mm (1/2").
- Keep your hands away from the blade. Do not hand hold pieces so small your fingers will go under the blade guard.
- Avoid awkward operations and hand positions where a sudden slip could cause serious injury from contact with the blade. Never place hands in blade path.
- Use extra supports (tables, saw horses, blocks, push stick etc.) when cutting large, small or awkward workpieces.
- Never use a person as a substitute for a table extension or as additional support for a workpiece that is longer or wider than the basic saw table.
- When cutting irregularly shaped workpieces, plan your work so it will not pinch the blade. For example, a piece of molding must lay flat on the saw table. Workpieces must not twist, rock or slip while being cut.

When backing up the workpiece, the blade may bind in the kerf (cut). This is usually caused by sawdust clogging the kerf or when the blade comes out of the guides. If this happens:

- Wait until the saw has come to a full and complete stop.
- Place the switch in the OFF position then remove the switch key from the switch assembly. Store key in a safe place.
- Unplug the saw from the power source.
- Wedge the kerf open with a flat screwdriver or wooden wedge.
- Open front cover and turn the upper wheel by hand while backing up the workpiece.

RELIEF CUTS

Relief cuts are made when an intricate curve (too small a radius for the blade) is to be cut. Cut through a scrap section of the workpiece to curve in pattern line then carefully back the blade out. Several relief cuts should be made for intricate curves before following the pattern line as sections are cutoff of curve relieving blade pressure.

SCROLL CUTTING

For general type scroll cutting, follow the pattern lines by pushing and turning the workpiece at the same time. Do not try to turn the workpiece while engaged in the blade without pushing it - the workpiece could bind or twist the blade.

REMOVING JAMMED MATERIAL

Never remove jammed cutoff pieces until the blade has come to a full and complete stop.

- Place the switch in the OFF position, remove the switch key from the switch assembly.
- Unplug the saw from the power source before removing jammed material.

AVOIDING INJURY

- Make sure saw is level and does not rock. Saw should always be on a firm, level surface with plenty of room for handling and properly supporting the workpiece.
- Bolt saw to the support surface to prevent slipping, walking or sliding during operations like cutting long, heavy boards.
- Turn saw off, and unplug cord from the power source before moving the saw.
- Do not remove jammed cutoff pieces until blade has come to a full and complete stop.
- Choose the right size and style blade for the material and type of cut you plan to do.
- Make sure that the blade teeth point down toward the saw table, that the blade guides, thrust bearings, and blade tension are properly adjusted, that the blade guide knob is tight, and that no parts have excessive play.
- To avoid accidental blade contact, minimise blade breakage, and provide maximum blade support, always adjust the blade guide assembly to just clear the workpiece.
- With the exception of the workpiece and related support devises, clear everything off the saw table before turning the saw on.
- Properly support round materials such as dowel rods or tubing because they have a tendency to roll during a cut To avoid this, always use a clamp workpiece to a mitre gauge.
- Before removing loose pieces from the saw table, turn saw off and wait for all moving parts to stop.

OPERATION

⚠ WARNING:
Do not allow familiarity with your saw make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

BEFORE LEAVING THE SAW

- Wait until the saw has come to a full and complete stop.
- Place the switch in the **OFF** position, remove the switch key form the switch assembly. Store key in a safe place.
- Unplug the saw from the power source.
- Make workshop childproof.
- If possible lock your workshop.

TILTING THE TABLE (Fig. 14)

- Loosen the table lock handle (4) slightly
- Turn the angle adjustment knob, tilting the saw table toward the front of the saw housing until it reaches the desired angle.
- Using the scale indicator (6), check angle markings.
- Retighten the table lock handle (4) to hold saw table (14) securely in place.

USING THE MITRE GAUGE (Fig. 15)

The mitre gauge can be turned 45^0 to the right or left.

- Loose the lock knob (43) on the mitre gauge (45).
- With the mitre gauge in the mitre gauge slot (44), rotate the gauge until the desired angle is reached on the index scale.
- Retighten the lock knob (43).

NOTE: For convenience, store the mitre gauge in the slot provide on the back of the band saw.

USING THE STRAIGHT FENCE (Fig. 16)

- Allows straight cuts to be made of the workpiece.

USING LASER BEAM (Fig. 20&21)

The light from the laser beam allows you to locate precisely the exact location on the workpiece to be cut. (Fig 20)

To start work with the laser beam the first time,

- Turn off Band Saw and then remove switch key.
- Check to make sure the 2 Button Cells provided have already been assembled into the Button Cell Protection Tube (61) that is located inside the Laser Frame. (see Fig 21)
- Press Laser On/Off Switch (60) to turn the Laser on.

The Laser beam should be aligned before being used for the first time.

- Turn on the Laser.

  Place a pencil line mark as the target location to be cut on the workpiece.
- Press the On/Off Knob to switch on the laser beam and let the laser line directly over the centre of the pencil mark on the workpiece.
- Switch On the Band Saw to cut the required workpiece.

MAINTENANCE

LUBRICATION

All the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. Therefore no further lubrication is required.

GENERAL MAINTENANCE

Avoid using solvents when cleaning parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

⚠ WARNING:
Do not, at any time, let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

- Keep your band saw clean.
- Remove sawdust from the inside frequently.
- Do not allow pitch to accumulate on the saw table, blade guides, or thrust bearings. Clean them with gum and pitch remover.
- Apply a thin coat of automobile type wax to the saw tables top so the wood slides easily while cutting.

⚠ WARNING:
To prevent accidental starting that could cause possible serious personal injury, turn off the saw, remove the switch key and unplug the saw before working on the band saw.

TIRE (47)

Cleaning tires:

- Pitch and sawdust accumulates on tires and needs to be removed with a fine wire brush or a piece of wood. Do not use a sharp knife or any kind of solvent.

Replacing tires:

- Open front cover and remove saw blade. Refer to section on Installing and Adjusting the Blade.
- Pry the worn tire way from the wheel carefully.
- Stretch the new tire around the wheel.
- Replace the saw blade and close the front cover.

BLADE GUIDES (Fig. 12)

- Blade guides may become rounded and worn during use. Remove the blade guides and file or grind flat.
- Replace blade guides when filing or grinding has worn them down and they can no longer be properly secured in place.

MOTOR / ELECTRICAL

Frequently vacuum or blow out sawdust from the motor.

⚠ WARNING:
If the power cord is worn, cut or damaged in any way, have it replaced immediately by a qualified service technician. Failure to do so could result in serious personal injury.

⚠ WARNING:
To avoid fire or electrocution, reassemble electric parts with only identical Ryobi replacement parts. Reassemble exactly as originally assembled.

BRUSHES (Fig. 17)

⚠ WARNING:
To prevent accidental starting that could cause possible serious personal injury, turn off the saw, and unplug the saw before working on the band saw.

There is a brush (46) located inside the saw housing, next to the lower wheel (29). It helps to protect the tire (47) and wheel by brushing off saw dust. As the brush becomes worn out, it will need to be adjusted or replaced.

- Remove the screw (48) and washer (20), then pull the brush (46) off.
- Place the new brush in the groove with the plastic tabs under the saw housing.
- Retighten using the washer and screw.

DRIVE BELT (Fig. 18&19)

⚠ WARNING:
To prevent accidental starting that could cause possible serious personal injury, turn off the saw, and unplug the saw before working on the band saw.

- Due to wear or breakage,the drive belt may need to be replaced. The drive belt (53) is located behind the lower wheel (50) of the band saw.
- Remove the saw blade and set it aside. See section on installing and Adjusting the Blade.
- Pull the lower wheel away from the saw housing.
- Remove the worn drive belt.
- Place new drive belt on the pulley. As you slide the pulley shaft (51) back into the hole in the saw housing, place the drive belt over the motor pulley (52)
- Replace the nut and washer on the pulley shaft and retighten.
- Replace saw blade.
- Check thrust bearings and blade guides.

Change batteries of Laser (Fig. 21)

- Turn Off the Band Saw and switch off the laser beam.
- Open the Laser Switch Box Cover by using Philip Head Screw Driver to loosen that M3 Tappping Screw (59) (see Fig. 20)
- Replace the 2x Button Cell (AG13 or LR44 or SR44) into the Button Cell Protection Tube (61). (see Fig. 21)
- Close the Laser Switch Box Cover (58) and tighten the M3 Tapping Screw (59). (see Fig. 20)
- Switch on the laser beam and turn on the Band Saw for cut operation.

⚠ WARNING:
Use only correct batteries Button Cell. (see Fig. 21)

NOTE

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GUARANTEE

Subject to the guarantee condition below, this Ryobi tool (hereinafter called "the product") is guaranteed by Ryobi (hereinafter called "the Company") to be free from defects in material or workmanship for a period of 24 months from the date of original purchase covering both parts and labour. Under the terms of this guarantee, the replacement shall be the opinion of the Company or its authorised agent. Should service become necessary during the warranty period, the owner should contact the RYOBI HELPLINE 1300 361505, or the Ryobi retailer from where the product was purchased.In order to obtain guarantee service, the owner must present the sales docket and Guarantee Certificate to confirm date of purchase. This product is sold by the dealer or agent as principal and the dealer has no authority from the Company to give any additional guarantee on the Company's behalf except as herein contained or herein referred to.

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Certain legislation, including the Trade Practices Act, 1974 (as amended) and other state and territorial laws give rights to the buyer and impose liability on the seller in certain circumstances. Nothing herein shall have the effect of excluding, restricting or modifying any condition, guarantee, right or liability imposed, to the extent only that such exclusion, restriction or modification would render any term herein void.

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Date _____ Model No _____ Serial No _____

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