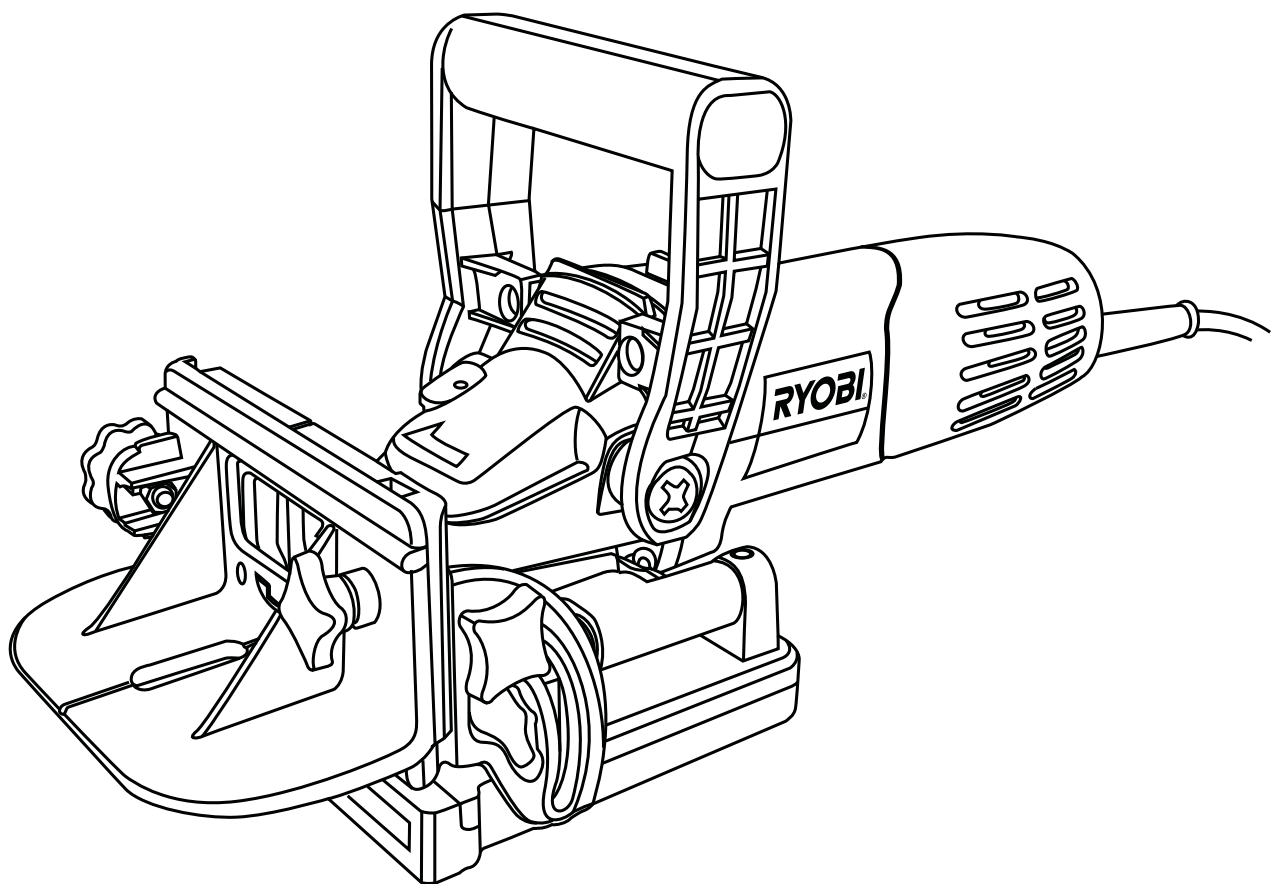




EBJ900RG / EBJ900K

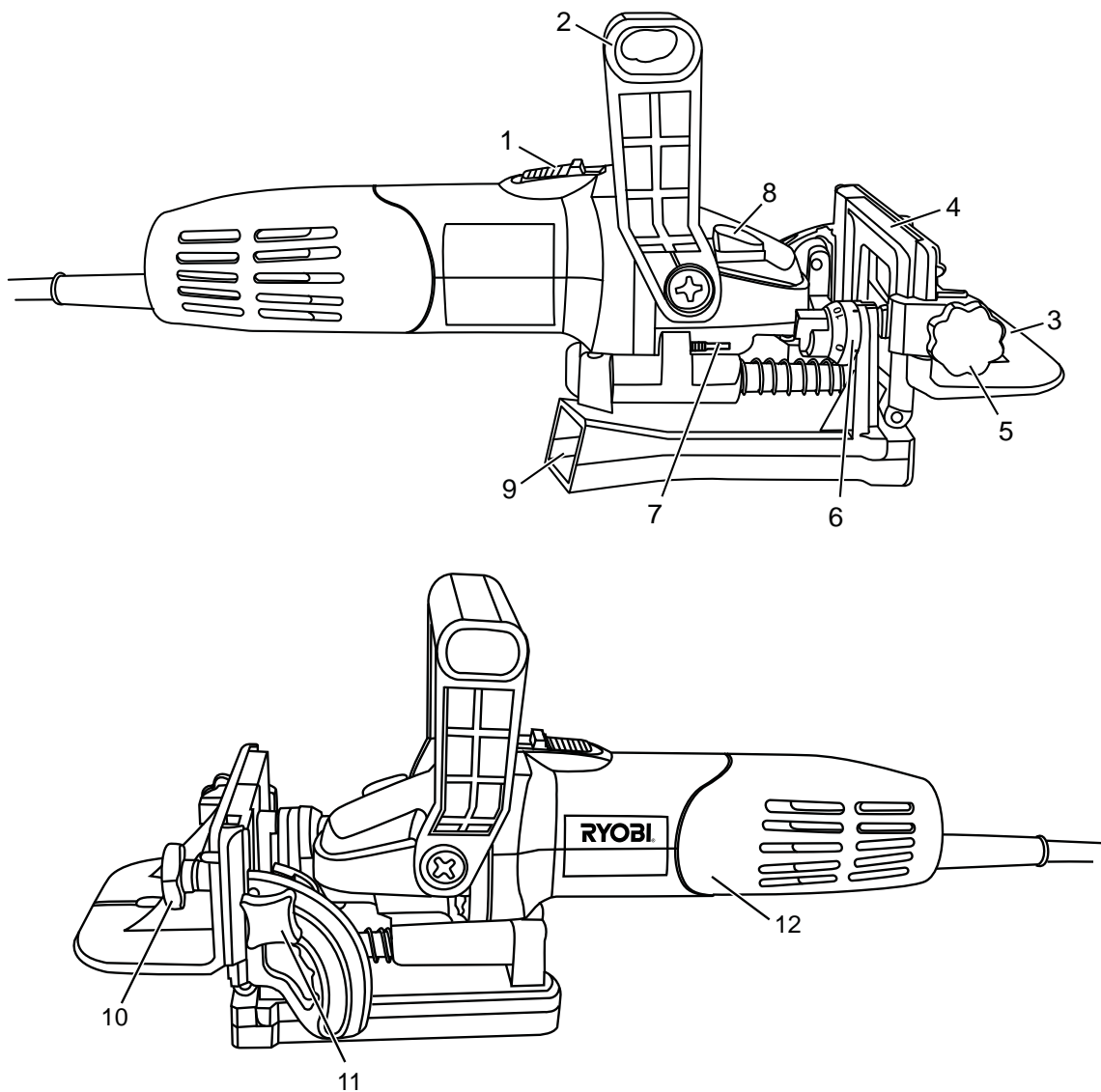
BISCUIT JOINER OWNER'S OPERATING MANUAL

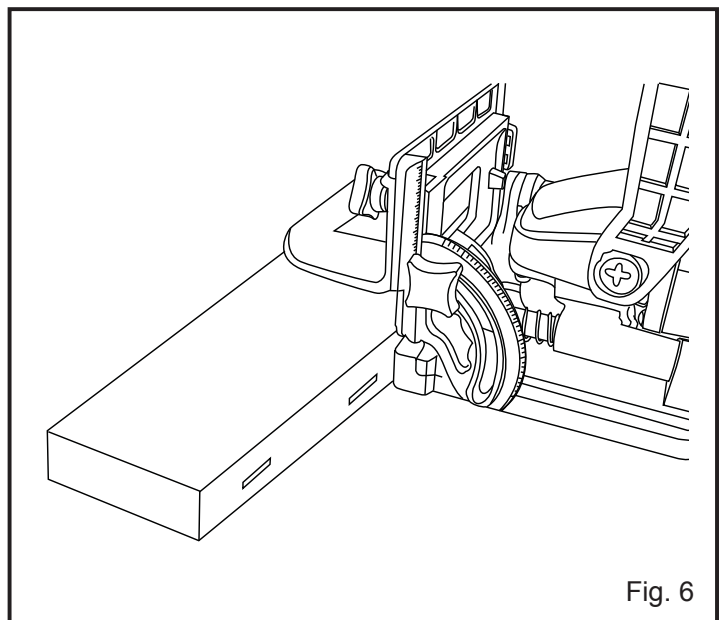
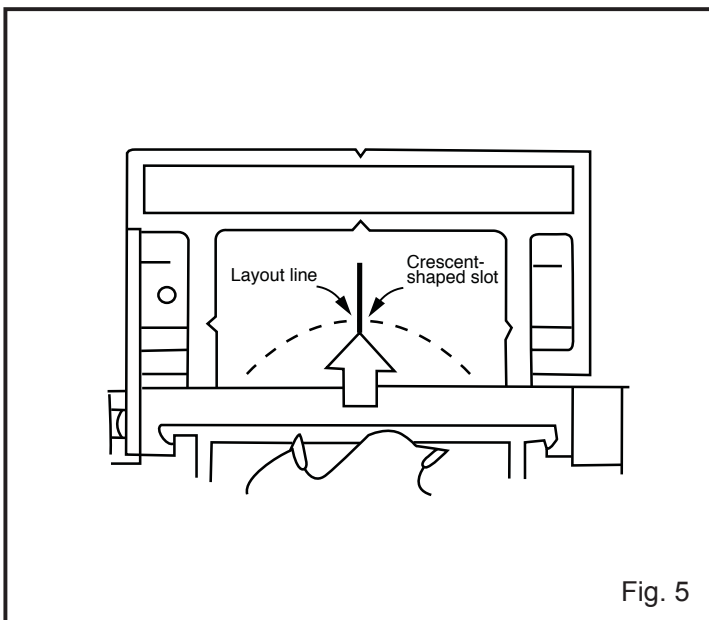
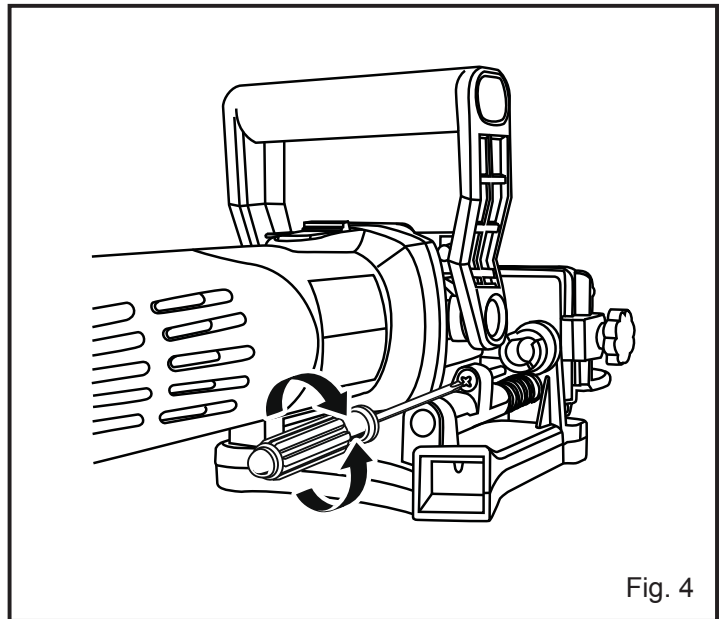
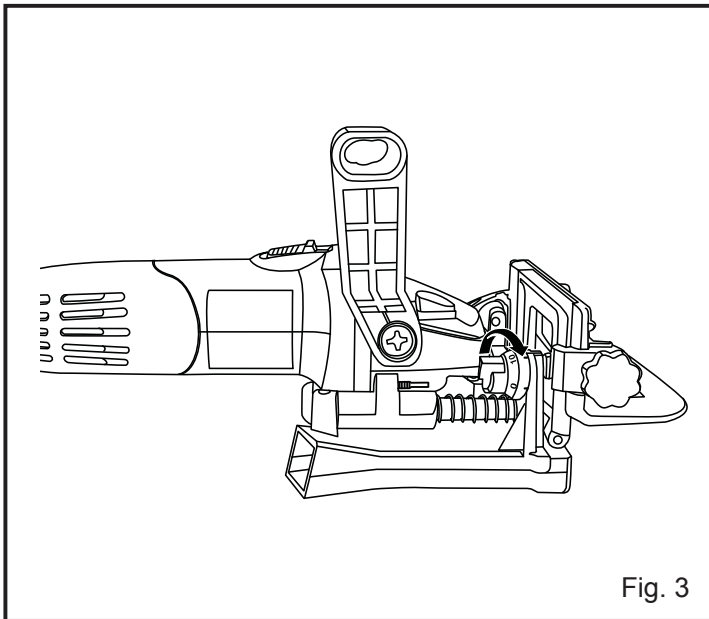
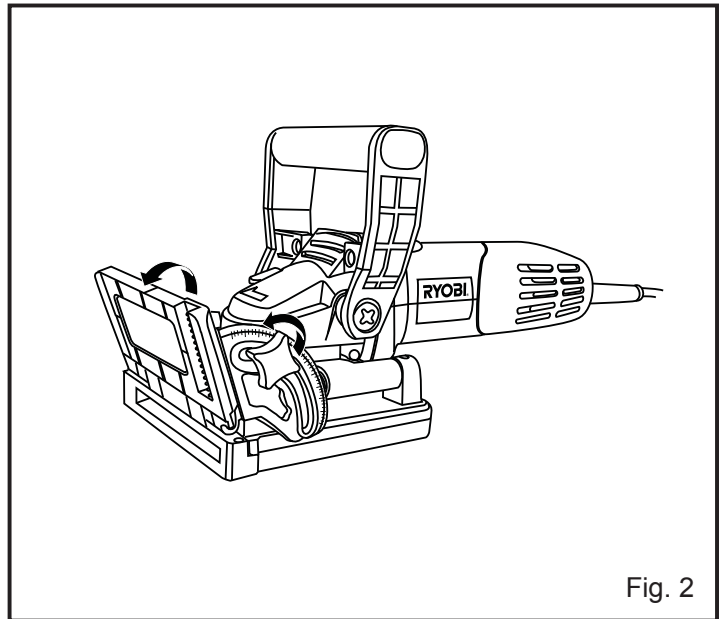
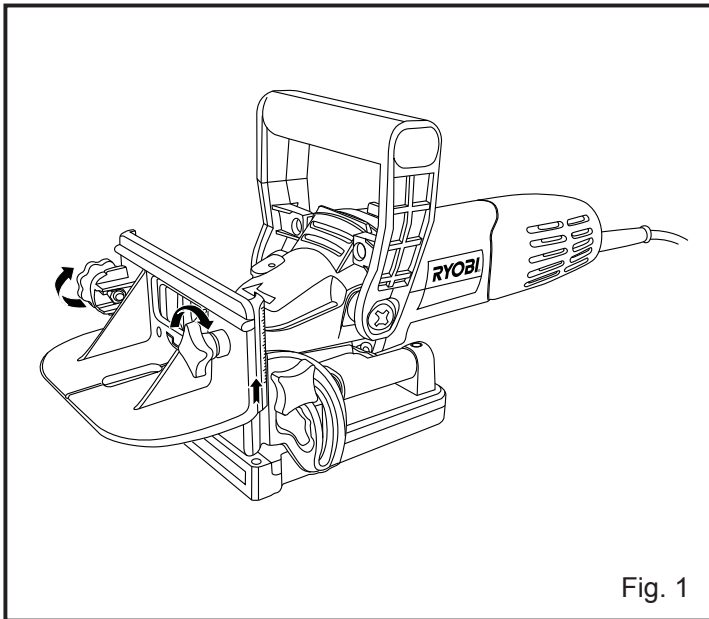


N197

DESCRIPTION

- | | |
|---------------------|----------------------------|
| 1. Power switch | 7. Depth adjustment rod |
| 2. Handle | 8. Arbor lock |
| 3. Fixed fence | 9. Dust port |
| 4. Adjustable fence | 10. Height adjustment knob |
| 5. Height lock knob | 11. Angle lock knob |
| 6. Depth selector | 12. Motor housing |





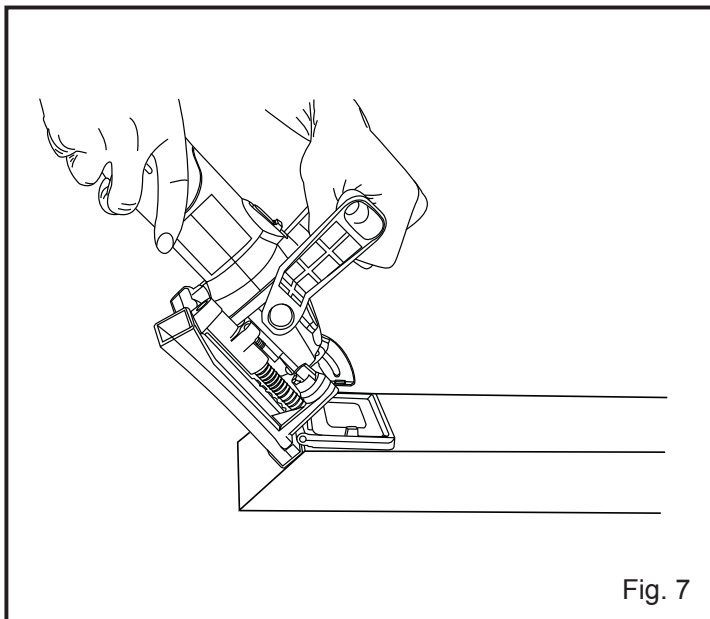


Fig. 7

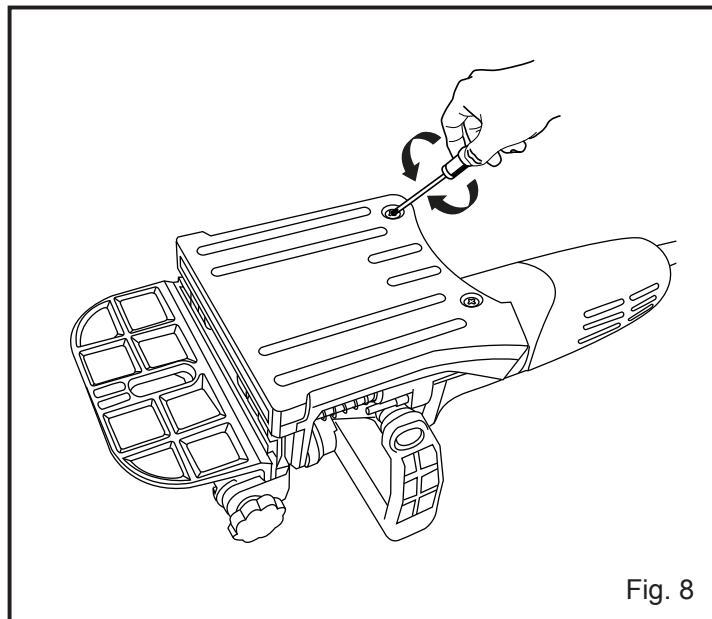


Fig. 8

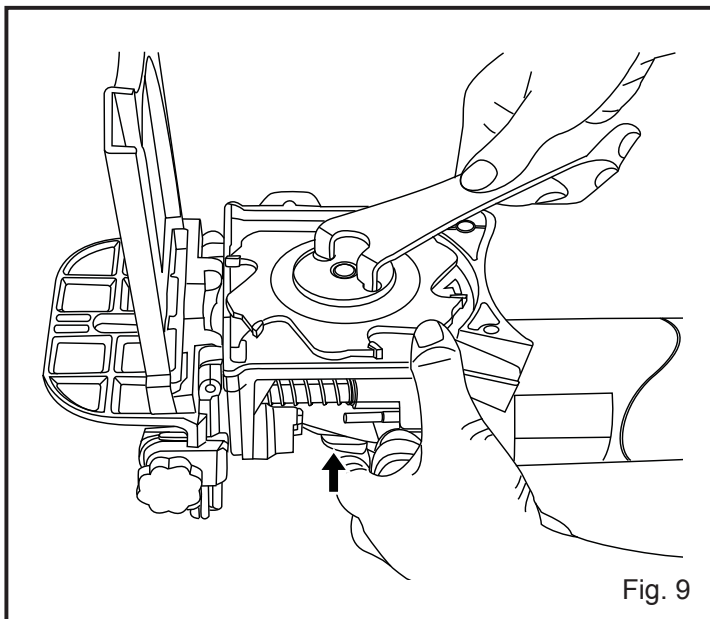


Fig. 9

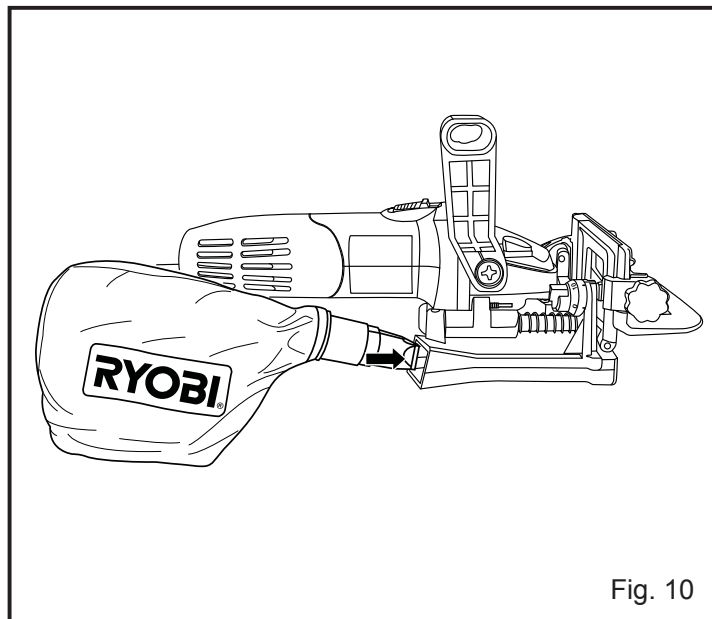


Fig. 10

Important!

It is essential that you read the instructions in this manual before operating this machine.

Subject to technical modifications.

GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. WORK AREA SAFETY

- a. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. ELECTRICAL SAFETY

- a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. **If operating power tools in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3. PERSONAL SAFETY

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while

operating power tools may result in serious personal injury.

- b. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

4. POWER TOOL USE AND CARE

- a. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that can not be controlled with the switch is dangerous and must be repaired.
- c. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- g. **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from intended could result in a hazardous situation.

5. SERVICE

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

SPECIFIC FOR JOINER

- **Disc cutters must be rated for at least the speed recommended on the tool.** Disc cutters running over rated speed can fly apart and cause injury.
- **Always use the guard.** The guard protects the operator from broken disc cutter fragments and unintentional contact with the disc cutter.
- **Do not use blunt or damaged disc cutters.**

SPECIAL SAFETY RULES

- **This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.** Children should be supervised to ensure that they do not play with the product.
- **Keep children and visitors away.** Visitors should wear safety glasses and be kept at a safe distance from work area. Do not let visitors come in contact with the tool or the extension cord.
- It is recommended that this tool always be supplied via a residual current device with a rated residual current of 30mA or less.
- The purpose of safety rules is to attract your attention to possible dangers. The safety symbols and the explanations with them require your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instruction or warnings they give are not substitutes for proper accident prevention measures.

⚠ WARNING

Indicates caution or warning. May be used in conjunction with other symbols or pictures.

⚠ WARNING

Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

- **Keep handles dry, clean and free from oil and grease.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum based products, or any strong solvents to clean your tool.
- Due to continued product refinement policy, product features and specifications can and will change without notice. Check current features and specifications with your retailer.

SYMBOL



Safety Alert

V

Volts

Hz

Hertz

~

Alternating Current

W

Watts

n_0

No-load speed

min^{-1}

Revolutions or reciprocations per minute



Conformity



Double insulation



Wear ear protection



Wear eye protection



Please read the instructions carefully before starting the product.



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



Recycle raw materials instead of disposing of as waste. The machine, accessories and packaging should be sorted for environmental-friendly recycling.

SPECIFICATIONS

Input	240 V ~ 50 Hz
Wattage	600 W
No-load speed	12000 rpm
Adjustable height	5 - 35 mm
Adjustable angle	0° - 90°
Blade size	100 x 22 x 4 mm
Biscuit size	#0, #10, #20
Weight	2.65 kg

APPLICATIONS

Use only for the purposes listed below:

- cutting and joining of timber
- edge joining long boards of either natural wood or manufactured sheeting

FEATURES

- The biscuit joiner is designed for cutting and joining of timber. It provides an accurate, effective and convenient alternative to other means of joining (such as doweling) and can be particularly useful for edge joining long boards of either natural wood or manufactured sheeting.
- The 100 mm (4 in) TCT blade is plunged into the wood to the required depth, which is pre-set depending on the biscuit to be used. Commonly available biscuits are #20 (12 mm wide), #10 (10 mm wide) and #0 (8 mm wide). Glue is applied and the biscuit inserted into the semicircular slot that is left by the blade. As the glue sets, it expands the biscuit, resulting in an extremely strong join. The adjustable fence allows the height and angle of the blade to be positioned to suit different join requirements. The depth of cut can be dialed up on the pre-set control dial, depending on the biscuit to be used. As with dowels, two biscuits can be used, one above the other, for extra strength.

ADJUSTMENTS

⚠ WARNING

Before making any adjustments, unplug the tool.

FENCE ADJUSTMENTS

See Figure 1 - 2.

- The joiner comes with two fence options. The joiner comes with the fixed fence attached. This allows cuts at 90 degrees to a cut height of a maximum of 35 mm (1-3/8 in). To adjust the cut height, loosen the height lock knob and rotate the height adjustment knob to achieve the desired cut height. Tighten the height lock

knob firmly using finger pressure only.

- The adjustable fence will cut joins at angles from 0 to 90 degrees at a fixed cut height of 9 mm (5/16 in) (the center of a 25.4 mm board). To utilize the adjustable fence, remove the fixed fence by loosening the height lock knob and rotating the height adjustment knob until the fixed fence comes clear of the top of the joiner fence. Loosen the angle lock knob and move the adjustable fence to the desired angle and re-tighten the knob. When using the adjustable fence for 90-degree cuts, it is recommended that you verify the angle of cut with a measuring tool such as a combination square or other device. Angle cuts of other degrees should also be verified with additional measuring tools.

PLUNGE DEPTH ADJUSTMENT

See Figure 3.

- The depth of cut can be set to match the dimensions of the particular size of biscuit you use. The numbers on the depth selector coincide with the three most common sizes of biscuits, 0-10-20. The letter "M" stands for maximum depth capacity of the tool (18 mm).
- To select a depth, align the appropriate number with the mark on the tool's housing. Rotate the depth adjustment dial to the desired position and it "clicks" into place.

FINE DEPTH ADJUSTMENT

See Figure 4.

- All biscuits are manufactured to slightly different sizes, so you might need to adjust the depth of cut on the tool. The depth adjustment rod can be rotated to increase or decrease the depth of cut.

OPERATION

See Figure 5.

Biscuit joiners can be used for making various types of strong, accurate joins in pieces of timber or wood sheeting.

To cut the biscuit slot, the body of the joiner is moved toward the material after alignment. By utilizing the various features of the biscuit joiner you can create a wide range of different types of joins. Always make a reference line to line up the machine with the center of the material to be plunged to ensure accurate biscuit placement.

NOTE: The center of the adjustable fence is omitted in order to better explain the joining process.

MAKING A NORMAL BISCUIT CUT

See Figure 6 - 7.

1. Position your workpieces together and draw a reference mark at 90° to the center point of each proposed join location. Space the joins about 100 mm (4 in) apart.
2. Separate your work material and clamp each piece securely to a stable work bench or work table.

3. Set the biscuit depth selector to correspond with the size of biscuit you are using. Generally #20 biscuits suit most applications. If you are using stock that is 16 mm thick or less, you will need smaller biscuits.
4. Adjust the height of the fence as required and if using the fixed fence, firmly tighten the height lock knob using finger pressure only. If using the adjustable fence, firmly tighten the angle lock knob.
5. Place one hand on the handle and the other hand on the motor housing.
6. Place the cutting guide at the center point of each slot in turn and press the fence against the edge of the workpiece. Make sure the joiner fence is flush with both sides of your work surface.
7. Switch on the power switch and push the motor housing towards the work material. Once the cut is made, pull the motor housing back and allow the return spring to retract the blade from the slot. Turn the power switch off. Repeat the procedure until all slots are cut in your workpiece.
8. Cut the slots in the matching piece of work material, lining up the center point of each slot to make the cuts.
9. Once all the cuts are complete, dry fit your biscuits into your joins and test fit your materials to ensure proper alignment.
10. Remove the biscuits and insert glue into the slots using a nozzle applicator or thin wood scrap. It is also helpful to apply a small amount of glue on the biscuits before inserting them into the slot.
11. Place the biscuits in position and clamp your work materials together until the join line becomes invisible. Keep your work materials clamped until the biscuits swell and the glue sets.

It is possible that thick pieces of timber may require two biscuits at each location, one at a height of about 1/3 the thickness of the wood, and the other at about 2/3 the thickness.

NOTE: Unlike other saws and drills, mastering the biscuit joiner should take some practice. Remember that the ultimate goal is to achieve a parallel set of cuts in your work surface. If you find yourself making uneven cuts, you are probably working too fast. Take note of these points:

- When the tool powers on, it might vibrate out of position. Prior to making a cut, make sure the center of the tool is aligned with the center of your cut mark.
- Make sure the height lock knob is firmly tightened.
- Go slow. Visually make sure you have the joiner lined up with your cut mark and most importantly that the fence is flush with both the top and side edges of your work material prior to making the cut. Once these are accomplished, make the cut. Patience and practice are the keys to creating perfect joins.

1. Pull out the power plug.
2. Remove the fixed fence and raise the adjustable fence to the 0 degree position.
3. Turn the machine over and unscrew the two screws in the base plate. Pivot the base plate open.
4. With the arbor lock on the top of the gearbox housing depressed, rotate the blade by hand until the blade locks.
5. Loosen the blade flange anti-clockwise using the pin wrench supplied.
6. Remove the outer blade flange.
7. Remove the blade leaving the inner flange in place.
8. Mount the new blade, insert the outer blade flange and fasten.

⚠ IMPORTANT

The cutting bevel of the teeth (i.e. the direction of rotation of the saw blade) has to conform to the direction of the arrow marked on the housing.

9. Make sure the blade lock is released.

⚠ IMPORTANT

After replacing the blade, make sure the blade runs freely by turning the saw head by hand.

10. Close the base and re-install the two screws.
11. Before using the machine again, check that the safety devices are in good working order.
12. Plug the machine into a main socket outlet and run the machine without actually cutting any work material. This is to make sure the blade is spinning freely.

DUST EXTRACTION

See Figure 10.

- You can use the dust bag provided or with the aid of the adaptor accessory, connect the tool to a vacuum system.
- The plastic dust extraction assembly fits in the dust port on the joiner. You can attach a vacuum hose or the supplied dust bag to the adaptor.
- When the bag becomes full, the dust will back-up into the adaptor and the dust port. To clean them, turn off and unplug the tool and remove the packed dust.
- Keep the machine's air vents unclogged and clean at all times. Remove dust and dirt regularly from the machine. Cleaning is best done with compressed air or a rag. Re-lubricate all exposed moving parts at regular intervals.

MAINTENANCE

REPLACING THE BLADE

See Figure 8 - 9.

WARNING

The tool should never be connected to the power supply when assembling parts, making adjustments, cleaning, performing maintenance, or when the tool is not in use. Disconnecting the tool will prevent accidental starting that could cause serious injury.

WARNING

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

GENERAL

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to 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.

Electric tools used on fiberglass material, wallboard, spackling compounds, or plaster are subject to accelerated wear and possible premature failure because the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutators, etc. Consequently, we do not recommend using the tool for extended work on these types of materials. However, if you do work with any of these materials, it is extremely important to clean the tool using compressed air.

LUBRICATION

All of the bearings in the 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.

TECHTRONIC INDUSTRIES AUSTRALIA PTY LIMITED

GUARANTEE



Subject to the guarantee condition below, this Ryobi tool (hereinafter called "the product") is guaranteed by TECHTRONIC INDUSTRIES AUSTRALIA PTY LIMITED (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 repair or replacement of any part shall be the opinion of the Company or its authorised Service centre. Should service become necessary during the warranty period, the owner should contact the customer service HELPLINE 1300 361 505 or contact the retailer from whom 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 Service centre 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.

Guarantee Conditions

This guarantee only applies provided that the Product has been used in accordance with the manufacturer's recommendations under normal use and reasonable care (in the opinion of the Company) and such guaran-

tee does not cover damage, malfunction or failure resulting from misuse, neglect, abuse, or used for a purpose for which it was not designed or is not suited and no repairs, alterations or modifications have been attempted by other than an Authorised Service centre. This guarantee will not apply if the tool is damaged by accident or if repairs arise from normal wear and tear. The Company accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the Product or parts to and from the service dealer or Service centre - such costs are not included in this guarantee.

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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Contact during normal business hours.

This Guarantee Form Should Be Retained By The Customer At All Times

For your record and to assist in establishing date of purchase (necessary for in-guarantee service) please keep your purchase docket and this form completed with the following particulars.

Purchased From _____

Address Of Dealer _____

Date _____ Model No _____ Serial No _____

Present This Form With Your Purchase Docket When Guarantee Service Is Required.