

RYOBI POWER EQUIPMENT WARRANTY

Subject to the warranty conditions below, this RYOBI tool (hereinafter called "the Product"), is warranted by Ryobi (herein 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 warranty, the repair or replacement of any part shall be the opinion of the Company or its authorised agent. Should service become necessary during the warranty period, the owner should contact the authorised Ryobi retailer from whom the product was purchased, or the nearest Company branch office. In order to obtain warranty service, the owner must include the Sales Docket and Warranty 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 warranty or guarantee on the Company's behalf except as herein contained or herein referred to.

Warranty Conditions

This warranty 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 warranty does not cover consumable components, 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 Agent. This guarantee will not apply if the tool is damaged by accident or if repairs arise from normal wear and tear.

Accessories such as bits, blades, sanding discs, cutting lines, etc., are excluded from this guarantee. Normal consumable parts, such as carbon brushes, bearings, chucks, cord assembly's, spark plugs, recoil pulleys and bump head assembly's are specifically excluded from this guarantee.

The Company accepts no additional liability pursuant to this warranty for the costs of traveling or transportation of the Product or parts to and from the service dealer or agent - which costs are not included in the warranty.

Nothing herein shall have the effect of excluding, restricting or modifying any conditions, warranty, right or liability imposed, to the extent only that such exclusion, restriction or modification would render any term herein void.

RYOBI®

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THIS WARRANTY FORM SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES.

For your record and to assist in establishing date of purchase (necessary for in-warranty 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 Warranty Service is required.



OWNER'S OPERATING MANUAL
ANGLE GRINDER
MODEL G-2240

SPECIFICATIONS

Voltage.....	230V~50Hz
Rated input.....	2200W
No load speed.....	6500min ⁻¹
Grinding wheel.....	230mm
Spindle thread.....	M14
Disk bore size.....	22.2mm
Sound pressure level.....	L _{pA} 97.6dB(A),k=3dB(A)
Sound power level.....	L _{WA} 108.6dB(A),k=3dB(A)
Vibration levels (Main handle).....	11.598m/s ² , K=1.5m/s ²
Vibration levels (Side handle).....	5.618m/s ² , K=1.5m/s ²
Nett weight.....	5.4kg

THANK YOU FOR BUYING A RYOBI
ANGLE GRINDER

Your new angle grinder has been engineered and manufactured to Ryobi's high standard of dependability, ease of operation and operator safety. Properly cared for, it will give you years of rugged, trouble free performance. If you use your angle grinder properly and only for what it is intended, you will enjoy years of safe, reliable service.



CAUTION: Carefully read through this entire owner's manual, paying close attention to the general safety rules and rules for safe operation, before using.

KEEP THIS MANUAL FOR FUTURE REFERENCE

IMPORTANT SAFETY INSTRUCTIONS

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.



SAFETY ALERT SYMBOL. Indicates danger, caution or warning. May be used in conjunction with other symbols or pictures.

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.

Do not attempt to operate this tool until you have read thoroughly and completely understood the safety rules, etc. contained in this manual. Failure to comply can result in accidents involving fire, electric shock or serious personal injury. Save this Owners Operating Manual and review it frequently for continual safe operation and for instructing others who may use this tool.

INTENDED USE

Grinding metals.

Use the tool only for approved applications. Operations such as cutting, sanding, wire brushing, polishing are not recommended to be performed with this power tool. Use of the power tool for operations different from intended could result in a hazardous situation.



WARNING

To reduce the risk of injury, the user must read and understand the operator's manual.



WARNING

Do not attempt to operate this tool until you have read thoroughly and understood completely all instructions, safety rules etc contained in this manual. Failure to comply may result in accidents involving fire, electric shock or serious personal injury. Save operator's manual and review frequently for continuing safe operation, and instructing others who may use this tool.



WARNING

Always use the guard that accompanied the grinder. Comply with mounting and use instructions and warnings found in the manual for the grinder and ANSI B7.1. Failure to heed these warnings can result in wheel breakage and serious personal injury.



The operation of any angle grinder can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or

safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

SPECIFIC SAFETY INSTRUCTIONS



WARNING

The 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.

This appliance is not intended for use by young children or infirm persons. Adequate supervision by a responsible person must be provided to ensure that they do not play with the appliance.

Keep children and visitors away. Visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or 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.

IMPORTANT SAFETY INSTRUCTIONS

SAFETY WARNINGS COMMON FOR GRINDING OPERATIONS

This power tool is intended to function as a grinder tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Operations for which the power tool was not designed may create a hazard and cause personal injury.

Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.

The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.

The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.

The arbour size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool. Accessories with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.

Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.

Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of

stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.

Hold power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.

Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.

Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.

Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.

Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.

Do not operate the power tool near flammable materials. Sparks could ignite these materials.

Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.

IMPORTANT SAFETY INSTRUCTIONS

The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel.

Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.

Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.

KICKBACK AND RELATED WARNINGS

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory.

Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a. Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over

kickback or torque reaction during startup. The operator can control torque reactions or kickback forces, if proper precautions are taken.

- b. Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- c. Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- d. Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- e. Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.
- f. The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel and sparks that could ignite clothing.

ANGLE GRINDER SAFETY PRECAUTIONS

Check that the speed marked on the grinding wheel is equal to or greater than the rated speed of the tool.

Ensure that the dimensions of the grinding wheel are compatible with the tool and that the wheel fits the spindle.

Grinding wheels must be stored in a dry place.

Do not store objects on top of the grinding wheels.

Grinding wheels must not be used for any operation other than grinding.

Inspect the grinding wheel before use to ensure that it is not chipped or cracked. Chips or cracks can cause the wheels to shatter, resulting in possible serious injury.

Ensure that the grinding wheel is correctly mounted and tightened before use and run the tool at no load speed for 30 seconds in a safe position.

IMPORTANT SAFETY INSTRUCTIONS

Stop immediately if there is considerable vibration or if other defects are detected. If this condition occurs, check the tool to determine the cause.

Do not use separate reducing bushings or adapters to adapt large hole grinding wheels.

Check that the workpiece is properly supported.

Ensure that sparks resulting from use do not create a hazard e.g. do not hit people, or ignite flammable substances.

Always use protective safety glasses and ear protectors.

Use other personal protective equipment such as gloves, apron and helmet when necessary.

Never place the tool on the floor or other surfaces while it is running. Grinding wheels continue to rotate after the tool is switched off. Never touch the wheel or place it on the floor or other surfaces while it is rotating.

The flange and clamp nut must have same outer diameter.

Use the tool only for approved applications. Never use coolants or water or use the tool as a fixed tool.

Grip the tool securely with both hands while operating.

ELECTRICAL SAFETY

CAUTION! The following states how damage to the machine and possible injury to people can be avoided:

Handle the unit with care. Clean the ventilation slots regularly, follow the maintenance instructions.

Do not overload your device. Work only within the indicated range of performance. Do not use low power machines for heavy duty work. Do not use your device for purposes for which it has not been designed.

Do not attempt to repair the machine yourself unless you are qualified to do so. Any work not specified in this manual may only be carried out by a qualified service centre.

Only use extension cables that have been approved for outdoor use and are resistant to splash water. The core diameter for extension

cables measuring up to 25m must be at least 1.5 mm², and 2.5 mm² for cables longer than 25m. Always roll the whole cable off the reel before use. Check the cable for damage.

The supply voltage must correspond to the voltage specified on the modelplate.

Do not abuse the cable. Never move the unit by the cable or pull the cable to disconnect it from the mains socket. Keep the cable away from heat, oil and sharp edges. Ensure that the cable is arranged so that it cannot be tripped over, stepped on or have heavy weights rested on it. Make sure the cable will not be subjected to any damage.

Do not use the machine if the cables are damaged or worn.

Do not connect a damaged cable to the mains supply or touch a damaged cable before it is disconnected from the mains supply. A damaged cable can lead to an electric shock.

GENERAL SAFETY RULES

WARNING! Read all instructions Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1) WORK AREA

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

2) ELECTRICAL SAFETY

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

IMPORTANT SAFETY INSTRUCTIONS

- 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.

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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in 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 these devices can reduce dust related hazards.

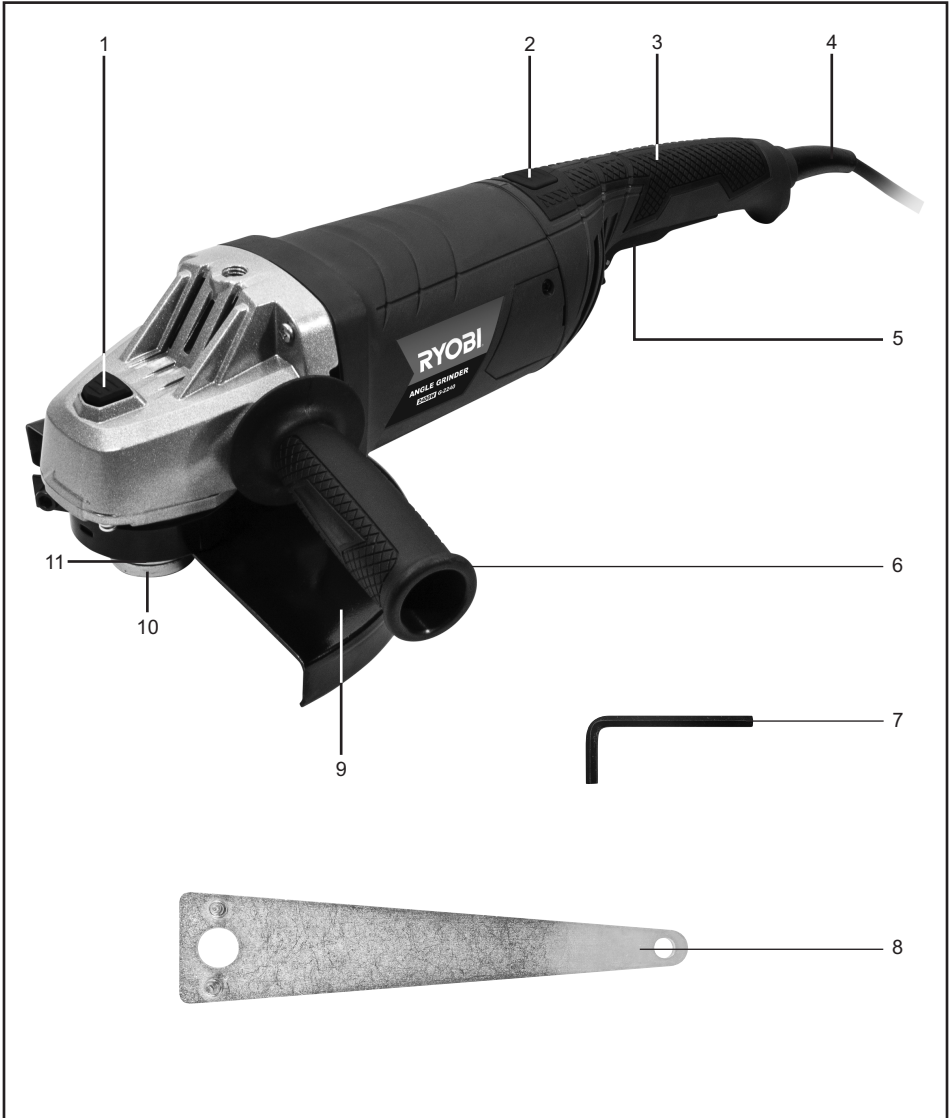
4) POWER TOOL USE AND CARE

- 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 cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source 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.

DESCRIPTION



- 1. Spindle lock button
- 2. Handle lock button
- 3. Rear hand grip
- 4. Power cable
- 5. On/Off trigger
- 6. Auxiliary handle

- 7. Hex key
- 8. Wrench
- 9. Wheel guard
- 10. Clamp nut
- 11. Disc flange

UNPACKING



CAUTION. This packaging contains sharp objects. Take care when unpacking. Remove the machine, together with the accessories supplied, from the packaging. Check carefully to ensure that the machine is in good condition and account for all the accessories listed in this manual. Also make sure that all the accessories are complete.

If any parts are found to be missing, the machine and its accessories should be returned together in their original packaging to the retailer. Do not throw the packaging away, keep it safe throughout the guarantee period, then recycle if possible, otherwise dispose of it by the proper means. Do not let children play with empty plastic bags due to the risk of suffocation.

ASSEMBLY

PACKING CONTENTS

- Angle grinder
- Auxiliary handle
- Wheel guard
- Wrench and hex key
- Operator's manual.



WARNING. If any parts are damaged or missing, do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.



WARNING. Your grinder should never be connected to power supply when you are assembling parts, making adjustments, installing or removing grinding wheels, or when not in use. Disconnecting your grinder will prevent accidental starting that could cause serious injury.



WARNING. Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

INSTALLING THE AUXILIARY HANDLE



WARNING. Failure to unplug your grinder could result in accidental starting causing serious injury.

Install the auxiliary handle by screwing it into the side of the gear housing, Fig. 1.

Note: The handle can be installed on either the left or right side or top of the grinder, depending on operator preference. It must always be used to prevent loss of control and possible serious injury.

Tighten auxiliary handle securely.



Fig. 1

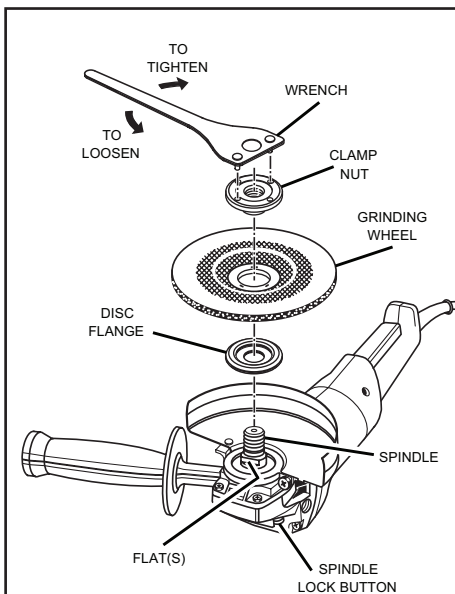


Fig. 2

ASSEMBLY

INSTALLING A GRINDING WHEEL (NOT INCLUDED) (FIG.2)



WARNING. Failure to unplug your grinder could result in accidental starting causing serious injury.

Your grinder is shipped with the disc flange and clamp nut attached to the spindle.

Depress spindle lock button and rotate clamp nut until spindle locks.

Loosen and remove clamp nut from spindle. Do not remove disc flange.

Make sure flats on the bottom of disc flange are engaged with flats on spindle.

Place the grinding wheel over the spindle with the concave side of the wheel facing up.



WARNING. Always install grinding wheel with the depressed center against the disc flange as shown in Fig 2. Failure to do so will cause the grinding wheel to crack when tightening the clamp nut. This could result in serious personal injury because of loose particles breaking off and being thrown from the grinder. Never use a grinding wheel with a mounting hole larger than 22.2mm. Do not overtighten.

Thread the clamp nut on the spindle with the flat side of the nut facing up. Fit the raised, small diameter portion of the clamp nut into the hole in the grinding wheel and finger tighten.

Depress the spindle lock button and rotate the wheel clockwise until the spindle locks in position.

Securely tighten the clamp nut with the wrench provided. Do not overtighten.

ADJUSTMENTS



WARNING. Before connecting your grinder to power supply, always check to be sure switch is not in lock-on position. Failure to do so could result in accidental starting of your grinder resulting in possible serious injury.

GUARD LOCATION

The guard on your grinder should be correctly installed depending on which side the handle is mounted. Never use your grinder without the guard correctly in place.

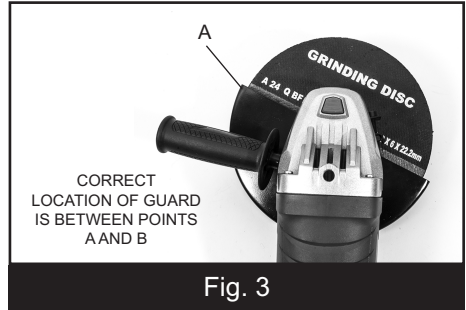


Fig. 3

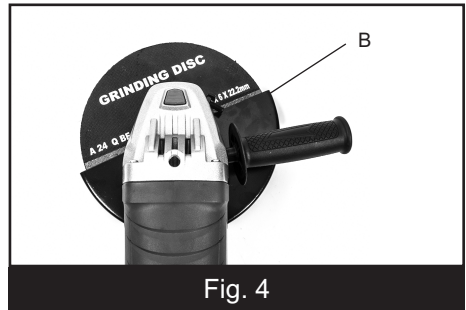


Fig. 4

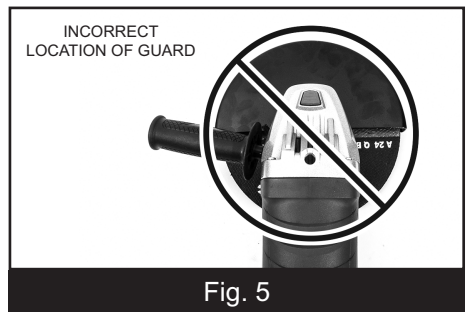


Fig. 5

Figures 3, 4, and 5 show correct and incorrect locations of the guard.



WARNING. Never place the guard so that it is on front of the grinder as shown in figure 5. This could result in serious injury because sparks and loose particles thrown from the grinding wheel would be directed toward the operator. Always place the guard in the correct location as shown in figures 3 and 4.

OPERATION



WARNING. Always wear safety glasses and keep guard in place when grinding.

Hot metal sparks from metal grinding can cause a fire. Avoid spark contact with flammable materials such as saw dust or clothing.

Grinding wheels must be free of fissures and cracks. Fissures and cracks can cause a grinding wheel to shatter resulting in possible serious injury. Thoroughly inspect a new grinding wheel before it is installed on the grinder.

1. Use a wooden hammer for the inspection.
2. Using the hammer, lightly tap all around the wheel, carefully listening to the resulting sounds.
3. Any places with fissures or cracks will result in a different sound. Do not use a wheel containing fissures or cracks. When installing a new grinding wheel, a no load revolution test of approximately one minute must be carried out with the grinding wheel facing a safe direction, i.e. away from people or objects.



DANGER. Never attach a wood cutting or carving blade of any type to this angle grinder. It is only designed for grinding metal. Use for any other purpose is not recommended and creates a hazard which will result in serious injury.



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



WARNING. Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

CONNECTING TO A POWER SUPPLY

Make sure the on/off switch is in its off position. Connect the plug with a suitable socket.



WARNING. Check the voltage! The voltage must comply with the information on the rating label.



CAUTION. Never cover air vents. They must always be open for proper motor cooling.



Fig. 6



Fig. 7

ON/OFF TRIGGER

To switch on the unit, press forward the safety lock and then press the on/off trigger, Fig.6.

To switch off the unit, release the on/off trigger.

ADJUSTING THE ROTATING HANDLE POSITION

Turn off the tool. Press and hold the handle lock button, Fig.7, then turn the rotating handle to the desired position until it snaps in place.



WARNING. Do not adjust the rotating handle while the tool is in operation.

GRINDING

Always carefully select and use grinding wheels that are recommended for the material to be ground. Make sure that the minimum operating speed of the grinding wheel selected is not less than 6,500rpm.

The correct grinding wheel should be suitable for grinding welds, preparing surfaces to be welded, grinding structural steel, and grinding stainless steel.

OPERATION

Secure all work before beginning a grinding operation.

Secure small workpieces in a vise or clamp to a workbench.



DANGER. Never use your grinder with the guard removed. It has been designed for use only with the guard installed. Attempting to use grinder with guard removed will result in loose particles being thrown against the operator resulting in serious personal injury.



WARNING. Never use your grinder without wearing eye protection. Following this rule will reduce the risk of serious personal injury.

The key to efficient operation begins by controlling the pressure and surface contact between the grinding wheel and workpiece. Flat surfaces are ground at an acute angle, normally between 5 to 15 degrees.

For maximum control, hold the grinder in front and away from you with both hands, keeping the grinding wheel clear of the workpiece. Start your grinder and let the motor and grinding wheel build up to full speed. Gradually lower grinder until the grinding wheel contacts the workpiece.

For best results keep the grinder tilted at an angle from 5 to 15 degrees, Fig.8, and continuously moving at a steady, consistent pace. Move the grinder back and forth or up and down over the work area. Keep the grinder moving so that an excessive amount of material is not removed from one area. If the grinder is held in one spot too long, it will gouge and cut grooves in the workpiece. If the grinder is held at too sharp an angle, it will also gouge the workpiece because of concentration of pressure on a small area.

Use just enough pressure to keep the grinder from chattering or bouncing. Heavy pressure will decrease its speed and put a strain on the motor. Normally the weight of the tool alone is adequate for most grinding jobs. Use light pressure when grinding jagged edges or loose bolts where there is the potential for the grinder to snag on the metal edge.

Lift the grinder away from the workpiece before turning your grinder off.



Fig. 8

MAINTENANCE



WARNING. To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.



WARNING. Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic 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, dust, oil, grease, etc.



WARNING. Do not at any time let brake fluids, gasoline, petroleum based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

LUBRICATION

All of 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.

GUARD REPLACEMENT (FIG.9)

After extended use, the guard may become worn and need adjustments or replacing. If you drop your grinder and damage the guard it may also be necessary for you to replace it.

PROCEED AS FOLLOWS WHEN REPLACEMENT IS REQUIRED:

Unplug the grinder. Failure to unplug your grinder could result in accidental starting causing serious injury.

Remove and reassemble parts as shown in Fig.9.

Depress spindle lock button and rotate clamp nut until spindle locks.

Using the wrench provided, loosen and remove clamp nut from spindle.

Remove grinding wheel and disc flange.

Using the hex key, loosen the clamp screw until the guard can be adjusted or removed.

If you are making adjustments, rotate the guard to its correct position as shown in figures 3, 4, and 9, then retighten clamp screw securely. Never use your grinder without the guard in place and properly adjusted. See Fig.3, 4, and 5.

Note: Be sure the tabs on the guard are seated in the groove in the bearing cap.

If you are replacing the guard, loosen the clamp screw until the guard can be removed from the bearing cap.

Place the new guard on the shoulder of the bearing cap, Fig.9.

Note: If the new guard will not fit, loosen the clamp screw until the guard slides over the bearing cap.

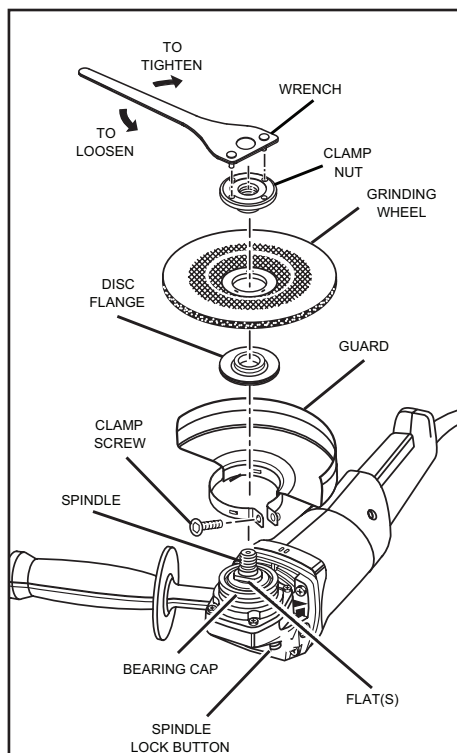


Fig. 9

MAINTENANCE

Rotate guard to the correct position as shown in figures 3, 4, and 5.

Tighten clamp screw securely.

Note: Be sure the tabs on the guard are seated in the groove in the bearing cap.

Reassemble disc flange, grinding wheel, and clamp nut.

Refer to "INSTALLING THE GRINDING WHEEL" instructions on page 9.

Depress the spindle lock button and rotate the wheel clockwise until the spindle locks in position.

Securely tighten the clamp nut with the wrench provided.

LUBRICATION

All of 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.

REPAIR

This product does not contain any parts that can be repaired by the consumer. Contact a qualified specialist to have it checked and repaired.

STORAGE

Clean the product as described.

Store the product and its accessories in a dry, frost-free place.

Always store the product in a place that is inaccessible to children.

The ideal storage temperature is between 10°C and 30°C.

We recommend using the original package for storage or covering the product with a suitable cloth to protect it against dust.

SERVICE

Now that you have purchased your tool, should a need ever exist of repair or service, simply contact your nearest Ryobi Authorised Service Centre or other qualified service organisation. Be sure to provide all pertinent facts when you call or visit.

SYMBOLS

SYMBOL	SIGNAL	MEANING
	DANGER:	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
	Safety Alert Symbol	Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	Read Your Operator's Manual	Your manual contains special messages to bring attention to potential safety concerns as well as operating and servicing information. Please read all the information carefully to ensure satisfaction and safe use.
	Wear eye, hearing and head protection	Wear eye, hearing and head protection when operating this equipment.
	Gloves	Wear non-slip, heavy-duty gloves.
	Insulation Symbol	Double insulated for additional protection.
	Recycle Symbol	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.
	CE Marking	Conforms to relevant safety standards.

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.

NOTES