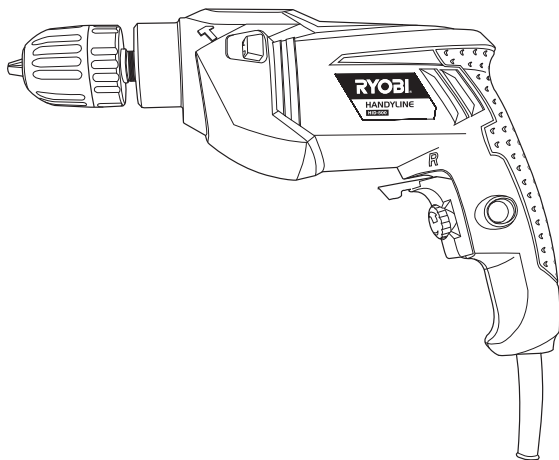


RYOBI®

HID-500

OWNER'S OPERATING MANUAL





OWNER'S OPERATING MANUAL
500W IMPACT DRILL
MODEL HID-500

SPECIFICATIONS

Voltage.....	230V~50Hz
Power input.....	500 Watt
No load speed.....	0-3000 min ⁻¹
Blows per minute.....	0-48,000 bpm
Chuck capacity.....	10 mm
Drilling capacity.....	steel: 8mm; concrete: 10mm; wood: 20 mm
Nett weight.....	1.5 kg

THANK YOUR FOR BUYING A RYOBI
IMPACT DRILL

Your new impact drill 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 impact drill 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

RELEVANT SAFETY CERTIFICATE

DOUBLE INSULATION

Double insulation is a concept in safety in electric power tools, which eliminates the need for earth grounding. Whenever there is electric current in the tool there are two complete sets of insulation to protect the user. All exposed metal parts are isolated from the internal metal motor components with protecting insulation.



DOUBLE
INSULATED



WARNING:

The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal wiring. Observe all normal safety precautions related to avoiding electrical shock.

IMPORTANT: Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service we suggest you return the tool to your nearest Ryobi Authorised Service Centre for repair. When servicing, use only identical Ryobi replacement parts.



WARNING: This machine is manufactured in accordance with the relevant safety requirements. To assure safety and reliability, all repairs should be performed by an Authorised Service Centre or other Qualified Service Organisations

GENERAL SAFETY RULES

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 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.



The operation of any tool 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 eye glasses or standard safety glasses with side shields.

Due to continued product refinement policy, product features and specifications can and will change without notice. Check current features and specifications with your retailer.

RULES FOR SAFE OPERATION

WORK AREA

1. KEEP WORK AREA CLEAN AND WELL LIT.

Cluttered, dark work areas and benches invite accidents and injury.

2. AVOID DANGEROUS WORK ENVIRONMENTS.

Do not use power tools in damp or wet locations or expose power tools to rain. Do not use power tools in the presence of flammable liquids or gases as normal sparking of the motor could ignite fumes.

3. KEEP CHILDREN, BYSTANDERS AND PETS AWAY.

Bystanders and children should wear safety glasses and be kept a safe distance from the work area. Do not let others make contact with the tool or extension cord. Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. CHECK THE POWER SOURCE VOLTAGE.

Before connecting a tool to a power source (power point receptacle, outlet, etc.) be sure that the voltage supply is the same as that specified on the nameplate of the tool. A power source with a voltage greater than that specified for the tool can result in serious injury to the user, as well as damage to the tool. If in doubt, do not plug in the tool. Using a power source with a voltage less than the nameplate rating is harmful to the motor.

2. 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 the risk of electric shock.

3. GUARD AGAINST ELECTRICAL SHOCK.

Prevent body contact with grounded surfaces and objects such as water pipes, radiators, cookers and refrigerator enclosures.

4. DO NOT ABUSE THE CORD.

Never carry the tool by its cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock. Disconnect the tool from the power supply immediately if the supply cable is damaged or cut.

5. EXTENSION CORD.

When an extension cord is used make sure:

- That the pins on the plug of the extension cord are the same in number, size and shape as those of the plug on the unit.

- That the extension cord is properly wired and in good electrical condition.
- That the wire size is large enough for the AC ampere rating of the unit.
- Ensure that the male and female plug connection is elevated and out of the way of any water contact.

6. OUTDOOR USE EXTENSION CORDS.

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

7. DO NOT EXPOSE POWER TOOLS TO RAIN OR WET CONDITIONS.

Water entering a power tool will increase the risk of electric shock.

PERSONAL SAFETY

1. USE SAFETY EQUIPMENT.

Always wear eye and hearing protection. Safety equipment such as safety glasses, a dust mask, non-skid safety shoes, hard hat, safety gloves or earmuffs, used for appropriate conditions will reduce personal injury. Everyday eyeglasses have impact resistant lenses only, they are not safety glasses. A face or dust mask is also required if dust is going to be created.

2. DRESS CORRECTLY.

Do not wear loose clothing or jewelry, they can be caught in moving parts. Rubber gloves and non-slip Footwear are recommended when working outdoors. If you have long hair, wear protective hair covering.

3. STAY ALERT AND EXERCISE CONTROL.

Watch what you are doing and use common sense. Do not operate a tool when you are tired. Do not rush.

4. DO NOT OPERATE THIS TOOL WHILE UNDER THE INFLUENCE OF DRUGS,

alcohol or any medication.

5. AVOID UNINTENTIONAL STARTING.

Always check that the switch is in the OFF position before plugging in the tool to the power supply. Do not carry a plugged in tool with your finger on the switch.

6. DO NOT USE TOOL IF SWITCH DOES NOT TURN THE TOOL ON OR OFF.

Have defective switches replaced by an authorised service centre.

7. TOOLS ARE NOT INTENDED FOR USE BY YOUNG OR INFIRM PERSONS WITHOUT SUPERVISION.

Young children should be supervised to ensure that they do not play with the tool.

RULES FOR SAFE OPERATION

- 8. REMOVE ADJUSTING KEYS AND WRENCHES BEFORE TURNING THE POWER TOOL ON.** A wrench or a key left attached to a rotating part of the power tool may result in serious personal injury.
- 9. DO NOT OVERREACH.** Keep proper footing and balance at all times. Do not use tool on a ladder or unstable support. Secure tools when working at elevated levels.
- 10. CONNECT DUST EXTRACTION EQUIPMENT.** 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.
- 11. DO NOT ALLOW PERSONS UNFAMILIAR WITH THE POWER TOOL OR THESE INSTRUCTIONS OPERATE THE POWER TOOL.** Power tools are dangerous in the hands of untrained users.

POWERTOOL USE AND CARE

- 1. KNOW YOUR POWER TOOL.** Read this Operating Manual carefully learn its applications and limitations as well as the specific potential hazards related to this tool.
- 2. DO NOT FORCE THE TOOL.** The tool will do the job better and safer working at the rate for which it was designed.
- 3. USE THE CORRECT TOOL FOR THE JOB.** Do not force small tools or attachments to do the job of a heavier duty tool. Never use a tool for a purpose for which it was not intended.
- 4. THE TOOL MUST BE USED FOR ITS PRESCRIBED PURPOSE.** Any use other than those mentioned in this manual will be considered a case of misuse. The user and not the manufacturer shall be liable for any damage or injury resulting from such cases of misuse.
- 5. SECURE YOUR WORK.** Use clamps or a vice to hold your work. It is safer than using your hands and it frees both hands to operate the tool.
- 6. DISCONNECT IDLE TOOLS.** Switch off the power and disconnect the plug from the power supply before servicing, when changing accessories and when the tool is not in use.
- 7. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged have them repaired

by an authorised service facility. Inspect extension cords periodically and replace them if damaged. Keep tool handles dry, clean and free from oil and grease. Never use brake fluids, petrol, petroleum based products, or any strong solvents to clean your tools.

- 8. CHECK DAMAGED PARTS.** Before using a tool, check that there are no damaged parts. If a part is damaged, carefully determine if it will operate properly and perform its intended function. Check for misalignment of moving parts, binding of moving parts, breakage of parts, proper mounting and any other conditions that may affect the operation of the tool. A part that is damaged should be properly repaired or replaced by an authorised service centre, unless otherwise indicated in this Operating Manual. Defective switches must be replaced by an authorised service centre. Do not use a tool if the switch does not turn the tool on and off correctly.
- 9. DISCONNECT THE PLUG FROM THE POWER SUPPLY BEFORE MAKING ANY ADJUSTMENTS,** changing accessories, or storing the power tool. Such preventative safety measures reduce the risk of starting the power tool accidentally.
- 10. USE ONLY APPROVED PARTS.** When servicing, use only identical replacement parts. Use an authorised service centre to fit replacement parts.
- 11. DO NOT MAKE ANY CHANGES TO THE TOOL.** The manufacturer shall not be liable for any changes made to the tool nor for any damage resulting from such changes.
- 12. STORE TOOLS SAFELY.** When not in use, tools should be stored in a dry, high and locked-up place, out of reach of children.



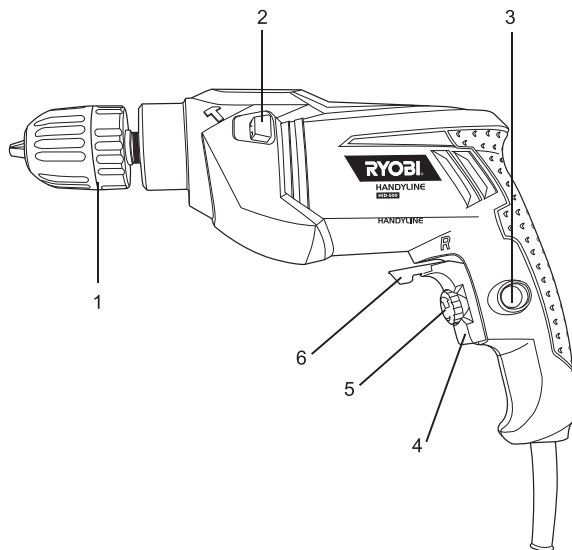
WARNING:

This electric tool is manufactured in accordance with the relevant safety requirements. To assure safety and reliability, all repairs should be performed by an Authorised Service Centre or other Qualified Service Organisation.

SAFETY RULES FOR DRILLS

- 1. HOLD TOOL BY INSULATED GRIPPING SURFACES WHEN PERFORMING AN OPERATION WHERE THE CUTTING TOOLS MAY CONTACT HIDDEN WIRING OR ITS OWN CORD.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator. Do not drill, fasten or break into existing walls or other blind areas where electrical wiring may exist. If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.
- 2. ALWAYS USE AUXILIARY HANDLE FOR MAXIMUM CONTROL OVER TORQUE REACTION OR KICK-BACK.**
- 3. ALWAYS WEAR SAFETY GOGGLES OR EYE PROTECTION WHEN USING THIS TOOL.**
Use a dust mask or respirator for applications which generate dust.
- 4. SECURE THE MATERIAL BEING DRILLED. NEVER HOLD IT IN YOUR HAND OR ACROSS LEGS.** Unstable support can cause the drill bit to bind causing loss of control and injury.
- 5. NEVER LEAVE THE TRIGGER LOCKED "ON".** Before plugging the tool in, check that the trigger lock is "OFF". Accidental start-ups could cause injury.
- 6. POSITION THE CORD CLEAR OF ROTATING BIT.** Do not wrap the cord around your arm or wrist. If you lose control and have the cord wrapped around your arm or wrist it may entrap you and cause injury.
- 7. POSITION YOURSELF TO AVOID BEING CAUGHT BETWEEN THE TOOL OR SIDE HANDLE AND WALLS OR POSTS.** Should the bit become bound or jammed in the work, the reaction torque of the tool could crush your hand or leg.
- 8. IF THE BIT BECOMES BOUND IN THE WORKPIECE, RELEASE THE TRIGGER IMMEDIATELY, REVERSE THE DIRECTION OF ROTATION AND SLOWLY SQUEEZE THE TRIGGER TO BACK OUT THE BIT.** Be ready for a strong reaction torque. The drill body will tend to twist in the opposite direction as the drill bit is rotating.
- 9. DO NOT GRASP THE TOOL OR PLACE YOUR HANDS TOO CLOSE TO THE SPINNING CHUCK OR DRILL BIT.** Your hand may be lacerated.
- 10. DO NOT USE THE SWITCH "LOCK-ON" FEATURE IN SITUATIONS WHERE DRILL BIT BINDING IS LIKELY.** (For example: just before the bit is ready to break through the material, anytime when using a "Hole Saw", auger bits..... etc.) When the bit binds, the drill's body will twist or kick-back in opposite direction and the release of the trigger "Lock-ON" may be difficult.
- 11. BE AWARE OF THE LOCATION AND SETTING OF THE SWITCH "LOCK-ON" BUTTON.** If the switch is locked "ON" during the use, be ready for emergency situations to switch it "OFF", by first pulling the trigger then immediately releasing it without pressing the "Lock-ON" button.
- 12. WHEN INSTALLING A DRILL BIT, INSERT THE SHANK OF THE BIT WELL WITHIN THE JAWS OF THE CHUCK.** If the bit is not inserted deep enough, the grip of the jaws over the bit is reduced and the loss of control is increased.
- 13. DO NOT USE DULL OR DAMAGED BITS AND ACCESSORIES.** Dull or damaged bits have a greater tendency to bind in the workpiece.
- 14. WHEN REMOVING THE BIT FROM THE TOOL AVOID CONTACT WITH SKIN AND USE PROPER PROTECTIVE GLOVES WHEN GRASPING THE BIT OR ACCESSORY.** Accessories may be hot after prolonged use.
- 15. CHECK TO SEE THAT KEYS AND ADJUSTING WRENCHES ARE REMOVED FROM THE DRILL BEFORE SWITCHING THE TOOL "ON".** Keys or wrenches can fly away at high velocity striking you or a bystander.
- 16. DO NOT RUN THE DRILL WHILE CARRYING IT AT YOUR SIDE.** A spinning drill bit could become entangled with clothing and injury may result.

DESCRIPTION



1. Keyless chuck

2. Impact shifting knob

3. Lock-on button

4. Trigger switch

5. Variable speed control

6. Forward reverse lever

OPERATION

MOUNTING OF THE DRILL BIT

The drill has a keyless chuck to tighten or release drill bits in the chuck jaws. The arrows on the chuck indicate which direction to rotate the chuck body in order to LOCK (tighten) or UNLOCK (release) the drill bit. (Fig.1)



WARNING

Do not hold the chuck with one hand and use the power of the drill to tighten the chuck jaws on the drill bit. The chuck body could slip in your hand, or your hand could slip and come in contact with the rotating drill bit. This could cause an accident resulting in serious personal injury.

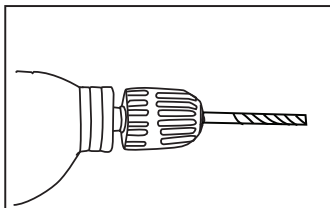


Fig. 1

SWITCHES (Fig.2)

Your drill starts and stops by squeezing and releasing the trigger switch. For continuous operation, press the lock on button while the trigger switch is fully depressed. To release the lock, squeeze the trigger switch again.

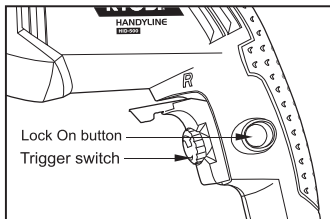


Fig. 2

FORWARD REVERSE SWITCH (Fig.3)

Your drill is fitted with a forward reverse lever which allows the removal of screws.

- Install screws: situate the lever in the "R" side indicated on your drill.
- Remove screws: situate the lever in the "L" side indicated on your drill.

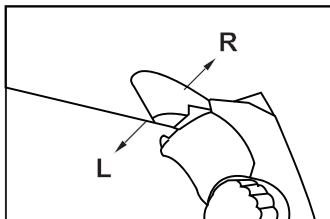


Fig. 3

OPERATION

VARIABLE SPEED (Fig.4)

Your drill has a variable speed control mechanism designed to allow the operator to have control and adjustment of speed and torque limits. The speed and torque of your drill can be increased or decreased by rotating the variable speed control button. It is advisable to start the drill at low speed so that the drill does not move from the intended centre.

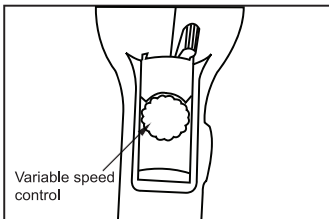


Fig. 4

IMPACT MECHANISM (Fig.5)

The impact mechanism can be operated with the machine running. When drilling materials that are liable to break, such as tiles, it is advisable to start the drill without impact. For deep holes, frequently remove the tool to exhaust chips from the hole. To drill with impact, only use drill bits with a carbide tip and negative cut angle on the lip. Carbide tip drill bits should only be sharpened with silicone carbide wheels. To work WITHOUT IMPACT, as a normal drill, turn the lever to the point where a drill is printed. To work WITH IMPACT, push the lever to the position where a hammer icon is printed.

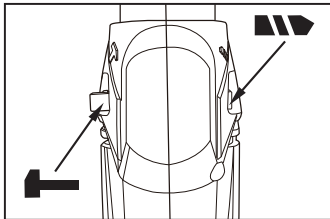


Fig. 5



WARNING:

The chuck and exposed metal surfaces of the tool may become 'live' if the tool drills into wiring in a wall. The operator must always ensure that the area being drilled does not conceal electrical wiring or plumbing.

APPLICATIONS

DRILLING IN WOOD

To prevent ugly splits around the drill hole on the reverse side of the workpiece, place a scrap piece of timber beneath the material to be drilled.

DRILLING IN METAL

Metals such as steel, brass, aluminium sheets, stainless steel and pipe may also be drilled. Mark the point to be drilled with a nail or a punch before drilling.

DRILLING IN CONCRETE

Rock and masonry are generally drilled in impact mode. When drilling delicate material such as wall tiles, it is essential to start with ordinary drilling and once the tile is pierced, to continue with impact drilling. In deep boreholes the drill bit should be pulled out occasionally in order to remove the dust and chips from the hole.



WARNING:

Never cover the air vents. They must be open at all times for proper motor cooling.

MAINTENANCE

1. Do not make any adjustments while the motor is in motion.
2. Always disconnect the electrical cord from the power source before mounting a drill bit, changing brushes or lubricating.
3. After use, check your tool to keep it in top condition.
4. Clean out accumulated dust.
5. When the carbon brushes are worn to the standard line, they must be replaced.



WARNING:

To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air.



CAUTION:

Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

SERVICE

Now that you have purchased your tool, should a need ever exist for repair parts 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.

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 12 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.