



# 750W Impact Drill

**HD750X** 



Made in China/Fabriqué en Chine Lotus Tool Group (Philippines) www.lotustoolworks.com









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



Save all warnings and instructions for future reference.

#### 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 adapter 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 a power tool 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 cannot 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 tool's 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, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) Use clamps or other practical way to secure and support the workpiece to as table platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- i) Empty dust container frequently, especially when sanding wood with polyurethane, varnish or similarity coated surface. Fine particles of sanding dust may self ignite and cause fire.

# **SERVICE**

- a) Have your power tool serviced by qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- b) Develop a periodic maintenance scheduled for your tool, when cleaning a tool be careful not to disassemble any portion of the tool since internal wires maybe misplaced or piched or safety guard return spring maybe improperly mounted. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia etc. may damage plastic parts.

## SAFETY RULES FOR DRILLS

a) Hold tool by insulated gripping surfaces when performing an operation where the cutting tools may





















contact hidden wiring or its own cord. Contact with "live" wire will make exposed metal parts of the tool "live" and shock the operator. Do not drill fasten or break into existing wall or other blind areas where electrical wiring may exist If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.

- b) Always wear safety goggles or eye protection when using this tool. Use a dust mask or respirator for applications which generate dust. Hold it in your hand or across legs. Unstable support can cause the drill bit to bind causing loss of control and injury.
- c) Never leave the trigger locked "ON" before plugging the tool in, check that the trigger lock is OFF. Accidental start-ups could cause injury. Position the cord clear of rotating bit. Do not wrap the cord around your armor wrist. If you loose control and have the cords wrapped around your armor wrist, it will entrap you and cause injury.
- d) 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 you and/or leg.
- e) 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.
- f) Do not grasp the tool or place your hands too close to the spinning chuck or drill bit. Your hand may be lacerated.
- g) Do not use the switch "Lock-On" feature in situation where drill bit binding is likely. (For example: just before the bit is ready to breakthrough the material, anytime when using a "Hole saw" Auger bits....etc.) When the bits binds, the drill's body will twist or kick-back in opposite direction and the release of the trigger "Lock-On" maybe difficult.
- h) 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.
- i) 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 reduce and the loss of control is increased.
- j) Do not use dull or damaged bits and accessories. Dull or damaged bits have a greater tendency to bind in the workpiece.
- k) When removing the bit from the tool avoid contact with skin and use proper protective gloves when grasping the bit or accessory. Accessories maybe hot after prolonged use.
- I) Check to see that the keys and adjusting wrenches are removed from the drill before switching the tool "On". Keys or wrenches can flyaway at high velocity striking you or a bystander.
- m) Do not run the drill while carrying it at your side. A spinning drill bit could become entangled with clothing and injury may result.
- n) This tool maybe used with sanding and polishing disks, grinding wheels, wire wheel and wire cup brushes. These accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running overrated speed can fly apart and cause injury.
- o) Avoid bounce and snagging the wheels, discs or brushes e specialty when working corners, sharp edges etc.. This can cause loss of control and kickback.
- p) Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemical known to cause cancer, birth defect, or other reproductive harm. Some example of this are:
- ·Lead from lead based paints

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- ·Crystalline silica from bricks and cement and other masonry products
- ·Arsenic and chromium from chemically treated lumber

Your risk from these exposure 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.

## **SYMBOLS**

V: Volts
Hz: Herts
W: Watts

vv. vvaus

~: Alternating Current

Min<sup>-1</sup>: Revolutions or reciprocation per minute



To reduce the risk of injury, the user must read the instruction manual.



Safety alert



Personal Protective Equipment (P.P.E.), such as ear defenders, eye protection, safety gloves and a dust mask, must be worn during the operation of the device.







The product should not be discarded with household waste but must be returned to a collection system which conforms to the European Directive 2012/19/EU. It will then be recycled or dismantled in order to reduce the impact on the environment. Electric and electronic equipment can be hazardous for the environment and for human health since they contain hazardous substances.























SKU	HD750X	
Rated Voltage/Frequency	220V~/ 60Hz	
Rated Input Power	750W	
Revolution Per Minutes (No Load)	0-2800r/min	
Chuck Capacity	13mm	
Drilling Capacity in Mild Steel/Masonry/Wood	10mm/13mm/25mm	
Spindle Thread	1/2"x20	
Sound Pressure Level	93.2 dB(A)	
Sound Power Level	104.2 dB(A)	
Vibration Level	11,987m/S2	
	Drill Chuck Wrench 1pc	
	Depth Gauge 1pc	
	Auxiliary Handle 1pc	
Standard Accessories	HSS-CO 1/8"x65mm Drill Bit 10pcs	
	Carbon Brushes 1pair	
	Instruction Manual 1pc	
	Warranty Card 1pc	

# **OPERATION**



# /!\ WARNING!

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



# ∕!\ warning!

Always wear safety goggles of safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

#### **APPLICATIONS**

You may use this tool for the purpose listed below:

- 1) Drilling in wood
- 2) Drilling in ceramics, plastics, fiberglass and laminates
- 3) Drilling in metals

#### **SWITCH OPERATION**

To turn the drill ON, depress the switch trigger.

To turn it OFF, release the switch trigger.

## **VARIABLE SPEED**

The rotational speed of the drill can be controlled











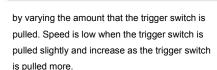






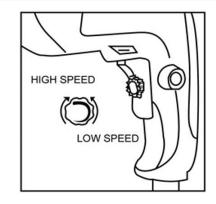






The desired rotation speed can be preselected with the speed control dial. Turn the speed control dial clockwise for higher speed and counterclockwise for lower speed (If applicable).

Pulling the trigger and pushing the stopper, it keeps the switched-on condition which is convenient for continuous running. When switching off, the stopper can be disconnected by pulling the trigger again.

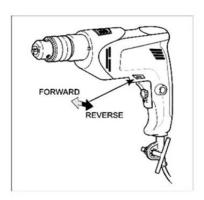


#### Note:

You might hear a whistling or ringing noise from the switch during use. Do not be concerned: this is a normal part of the switch function.

# DIRECTION OF ROTATION SELECTOR (FORWARD/RERVERSE)

The direction of bit rotation is reversible and is controlled by a selector located above the switch trigger. With the drill held in normal operating position, the direction of rotation selector should be positioned to the left of the switch trigger for forward drilling. The drilling direction is reversed when the selector is to the right of the switch trigger.



#### CAUTION:

To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation.

To stop the drill, release the switch trigger and allow the chuck to come to a complete stop.

# NOTE:

The drill will not run unless the direction of rotation selector is pushed fully to the left or right.

Avoid running the drill at low speed for extended periods of time. Running at low speeds under constant usage may cause the drill to become overheated. If this occurs, cool the drill by running it without a load and at all full speed.

# TO INSTALL BITS

- 1) Unplug the drill.
- 2) Insert the chuck key and twist counterclockwise.
- 3) Open or close the chuck jaws to a point where the opening is slightly larger than the bit size you intend to use. Also raise the front of the drill slightly to keep the bit from falling out of the chuck jaws.











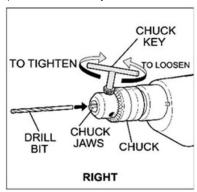








- 4) Insert the drill bit.
- 5) Tighten the chuck jaws securely on the drill bit using the chuck key provided.
- 6) Remove the chuck key.



#### TO REMOVE BITS

- 1) Unplug the drill.
- 2) Loosen the chuck jaws using the chuck key provided.
- 3) Remove the drill bit.
- 4) Remove the chuck key.



#### WARNING!

Make sure to insert the drill bit straight into the chuck jaws. Do not insert the drill bit into the chuck jaws at an angle then tighten as shown in figure.

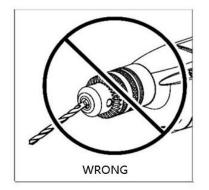
This could cause the drill bit to be thrown from the drill, resulting in possible serious personal injury or damage to the chuck.

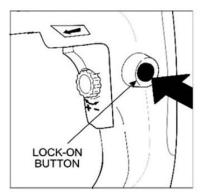
#### LOCK-ON BUTTON

This drill is equipped with a lock-on feature which is convenient for continuous drilling for extended periods of time.

#### To lock-on:

- 1) Depress the switch trigger.
- 2) Push in and hold the lock-on button located on the side of the handle.
- 3) Release the switch trigger.













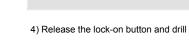












will continue running.

5) To release the lock, depress and release the switch trigger.

If the lock-on feature is engaged during use and the drill becomes disconnected from the power supply, disengage the lock-on feature immediately.

#### **DRILLING**

- 1) Depress and release the switch trigger to be sure the drill is in the OFF position before connecting it to power supply.
- 2) Check the direction of rotation selector for correct setting(forward or release).

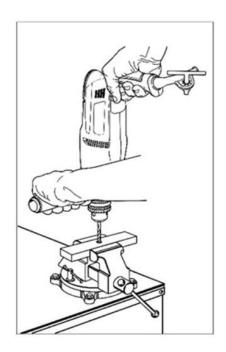
- Secure the material to be drilled in a vise or with clamps to keep it from turning as the drill bit rotates.
- 4) Plug the drill into power supply source.
- 5) Hold the drill firmly and please the bit at the point to be drilled.
- 6) Depress the switch trigger to start the drill. Do not lock the switch ON for jobs where the drill may need to be stopped suddenly.
- 7) Move the drill bit into the workpiece applying only enough pressure to keep the bit cutting. Do not force the drill or apply side pressure to elongate a hole. Let the drill and bit do the work.



#### WARNING!

Be prepares for binding at bit breakthrough. When these situations occur, drill has a tendency to grab and kick opposite to the direction of rotation and could cause loss of control when breaking through material. If not prepared, this loss of control can result in possible serious injury.

- a) When drilling hard smooth surfaces use
   a center punch to mark the desired hole
   location. This will prevent the drill bit from
   slipping off center as the hole is started.
- b) When drilling metals use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
- c) If the bit jams in the workpiece or if the drill stalls, stop the tool immediately.
   Remove the bit from the workpiece and determine the reason for jamming.



# WOOD DRILLING

- a) Always clamp the workpiece to a steady base. Never hold in your hand or across your legs.
- b) Apply pressure inline with the bit. Applying pressure at an angle could cause the bit to bind or break.
- c)Thin materials that may splinter should be drilled with another piece of wood placed underneath.
- d)Twist bit can be used for wood drilling but will overheat if the flutes are not cleared of wood chips

























e)To prevent splintering when finishing holes, stop drilling just before the hole breaks through and complete the hole from the other side.

#### MASONRY DRILLING

- a) Always use carbide tip bis for drilling masonry.
- b) Use an even pressure, hard enough to keep the drill biting, but not so hard that the bits pins in the hole. Spinning the bit will dull it quickly. Bricks and similar soft materials will take less pressure than a hard material like concrete.

#### **METAL DRILLING**

- a) For maximum performance, use high speed steel bits for metal or steel drilling.
- b) Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
- c) Maintain a speed and pressure which allows cutting without overheating the bit.

Applying to much pressure will:

- ·Overheat the drill
- ·Wear the bearings
- ·Bend or bum bits
- ·Produce off-center or irregular-shaped holes
- d) When drilling large holes in metal, start with a small bit, then finish with a larger bit. Also lubricate the bit with oil to improve drilling and increase bit life.

#### **DRILL BITS**

Always inspect drill bits for excessive wear. Use only bits that are sharp and in good condition.

#### **TWIST BITS**

Available with straight and reduced shanks for wood and light duty metal drilling. High speed bits cut faster and last longer on hard material.

#### **CARBIDE TIPPED BITS**

Used for drill stone, concrete, plaster, ceramics, cements and other unusual hard non-metals.

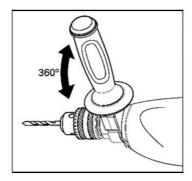
Use continuous heavy feed pressure when employing carbide tip bits.

# **USING THE AUXILIARY HANDLE ASSEMBLY**

You drill is equipped with an auxiliary handle assembly. For ease operation use the handle with either the left or right hand. The handle can be rotated 360°.

#### NOTE:

For convenience and ease of starting threads the hex nut has been trapped inside the molded slot in the handle assembly.























#### To adjust the auxiliary handle assembly:

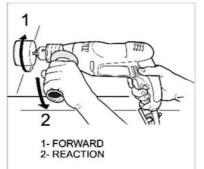
- 1) Loosen the handle assembly by turning the handle counterclockwise.
- 2) Rotate the handle assembly to the desired operating position.
- 3) Securely tighten by turning the handle assembly clockwise.



# **Holding tool**

When drilling large hole with a hole saw, etc. the side grip(auxiliary handle) should be used as a brace to maintain safe control of the tool.

Grasp the rear handle and the front grip firmly when starting or stopping the tool, since there is an initial and final reaction. When drilling action is forward(clockwise) the tool be braced to prevent a counterclockwise reaction if the bit should bind. When reversing, brace the tool to prevent a clockwise reaction. If the bit must be removed from a partially drilled hole, be sure the tool is properly braced before reversing.

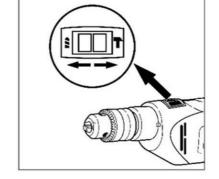


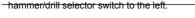
# **DRILLING FUNCTION**

This drill can pass from normal drilling to percussion drilling, simply by rotating selector fitted on top of the drill. It is possible to turn the percussion system on and off even while the machine is running and without the risk of causing damage to the mechanism.

#### **HAMMER/DRILL FUNCTION**

- 1) To use the tool as a hammer, move the hammer/drill selector switch to the right.
- 2) To use the tool as a drill move the























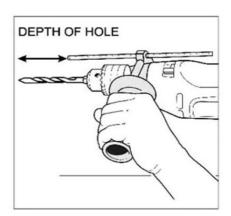






When drilling to a pressed depth, use the adjustable depth gauge to mark the exact depth needed.

- 1) Insert depth gauge into the hole in the side of the handle.
- 2) Determine drilling depth needed.
- 3) Loosen the handle and lower the gauge until the distance between the end of the depth gauge and the end of the drilling bit equals the required depth. Tighten the handle.
- 4) Drill the material around the end of the depth gauge. The hole will be the desired depth.



# MAINTENANCE AND CARE

- 1) Unplug the tool from the socket before performing any works on the tool!
- 2) Tool requires no special maintenance, but after sometime you must control the parts that are submitted to wear-and-tear under normal operating conditions. This includes the control and replacement of carbon brushes and grease in reducing gear housing. Take the tool to an authorized service center.
- 3) Keep the tool and supply cord clean. Keep ventilation slots clean and open. Wipe the surface of the tool with a soft cloth.
- 4) It is not allowed to use household cleaning agents that contain petrol, trichloroethylene, ammonia and chlorides. These substances corrode and damage plastic parts of the tool.
- 5) Excessive sparking generally indicates the presence of dirt in the motor or abnormal wear on the
- 6) In case of electric or mechanical failure, send the tool to a authorized service center for repair.

# SERVICING AND REPAIRS

- If servicing is required contact one of our listed service centers. It is not allowed and dangerous to perform any individual work on the tool.
- ·Have the tool repaired by authorized persons.
- ·Any repair of the tool in unauthorized service centers is performed at own responsibility
- The owner of the tool is responsible for all works on the tool that were not performed in authorized service center and therefore he losses the claim for guarantee.













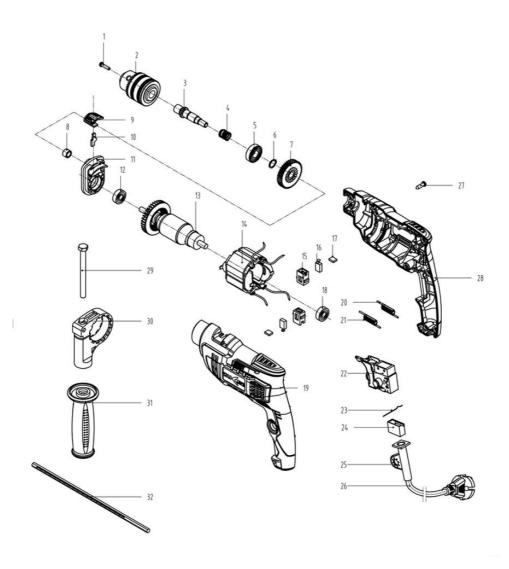








# **EXPLODED VIEW**

























# **PARTS LIST**

1	Chuck Screw	17	Brush Holder Cap
2	Key Chuck	18	Ball Bearing
3	Output Spindle	19	Left Housing
4	Spring	20	Inductance 1
5	Ball Bearing	21	Inductance 2
6	Circlip	22	On -Off Switch
7	Big Gear	23	Wire
8	Needle Bearing	24	Capacitor
9	Function Knob	25	Power Cord Protector
10	Function Plate	26	Power Cord
11	Bearing Support+Impact Block	27	Housing Screw
12	Ball Bearing	28	Right Housing
13	Armature	29	Bolt
14	Field	30	Handle Support
15	Brush Holder	31	Side Handle













