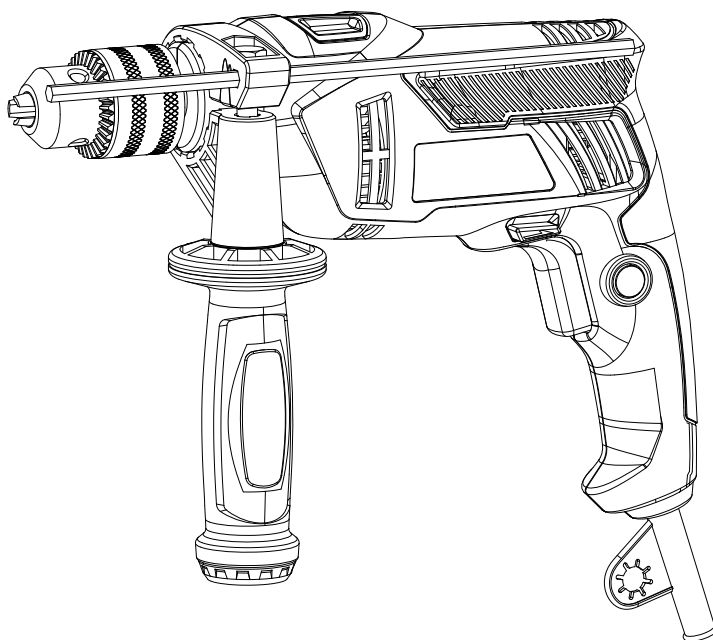


model no. 054-2015-6

Mastercraft™

CORDED HAMMER DRILL WITH 50-PIECE ACCESSORY KIT



IMPORTANT:

Please read this manual carefully before running this hammer drill and save it for reference

**INSTRUCTION
MANUAL**

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NOTE:

If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-800-689-9928.




SAVE THESE INSTRUCTIONS


This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product

TECHNICAL SPECIFICATIONS

Motor	120 V, 60 Hz, 6A
Variable speeds	0–2700 RPM (no load)
Hammer	0–43,200 BPM (no load)
Keyed chuck	1/2" (12.7 mm)
Drilling capacity	
in wood	1" (25.4 mm)
in metal	1/2" (12.7 mm)
in concrete	1/2" (12.7 mm)
Weight	4 lb 13 oz (2.2 kg)

SAFETY GUIDELINES:

 **Safety symbols in this instruction manual are used to flag possible dangers.** The safety symbols and their explanations require your full understanding. The safety warnings do not, by themselves, eliminate any danger, nor are they substitutes for proper accident prevention measures.

 **This safety alert symbol indicates caution, warning, or danger.** Failure to obey a safety warning can result in serious injury to yourself or others. To reduce the risk of injury, fire, or electric shock, always follow the safety precautions.

KNOW YOUR TOOL

To operate this tool, carefully read this instruction manual and all labels affixed to the hammer drill before using. Keep this manual available for future reference.

IMPORTANT

This tool should only be serviced by a qualified service technician. For more information, call the toll-free helpline at 1-800-689-9928.

READ ALL INSTRUCTIONS THOROUGHLY

Save these instructions

**WARNING:**

READ ALL SAFETY WARNINGS AND 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.

GENERAL POWER TOOL SAFETY WARNINGS

- **Do not overreach.** Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- **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.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

POWER TOOL USE AND CARE

- **Do not force the power tool.** Use the correct power tool for your application. The correct power tool will do the job better and more safely at the rate for which it was designed.
- **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.
- **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.
- **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.
- **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.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories, 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.

SERVICE

- **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.

WORK AREA SAFETY

- **Keep the work area clean and well lit.** Cluttered or 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.

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.
- **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.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.
- **If operating a power tool in a damp location is unavoidable, use a ground-fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- **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.
- **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.
- **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 energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left

- **Wear ear protectors when impact drilling.** Exposure to noise can cause hearing loss.
- **Use the auxiliary handles if supplied with the tool.** Loss of control can cause personal injury.
- **Hold the power tool by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

V.....volts

A.....amperes

Hz.....hertz

W.....watts

min.....minutes


alternating current

direct current

No.....no load speed

Class II Construction

RPM.....revolutions per minute

grounding terminal

BPM.....beats per minute

Package Contents:

Corded hammer drill, auxiliary handle with depth-stop rod, chuck key, 50-piece accessory kit, and instruction manual

50-piece accessory kit includes:

- 8 HSS drill bits: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 1/4"
- 6 masonry drill bits: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16"
- 6 wood-boring brad point bits: 1/8, 5/32, 3/16, 1/4, 9/32, 5/16"
- 4 nut drivers-non magnetic: 3/16, 1/4, 5/16, 3/8"
- 18 screwdriver bits (1"):
 - 3/32, 1/8, 5/32, 3/16, 1/4"
 - 3-4, 6-8, 8-10, 10-12
 - ⊕ #1, 2 (x4), 3
 - ◐ #1, 2, 3
- 7 screwdriver bits (2"):
 - 6-8, 8-10
 - ⊕ #2, 3
 - ◐ #1, 2, 3
- 1 Stubby screw guide



WARNING:

TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL. USE CLAMPS OR ANOTHER PRACTICAL WAY TO SUPPORT THE WORKPIECE AND SECURE IT TO A STABLE PLATFORM. HOLDING THE WORKPIECE BY HAND OR AGAINST YOUR BODY IS UNSTABLE AND MAY LEAD TO LOSS OF CONTROL.

INSPECT THE TOOL CORDS PERIODICALLY AND, IF DAMAGED, HAVE THEM REPAIRED BY A QUALIFIED REPAIR PERSON. CONSTANTLY STAY AWARE OF THE CORD LOCATION. FOLLOWING THIS RULE WILL REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE.



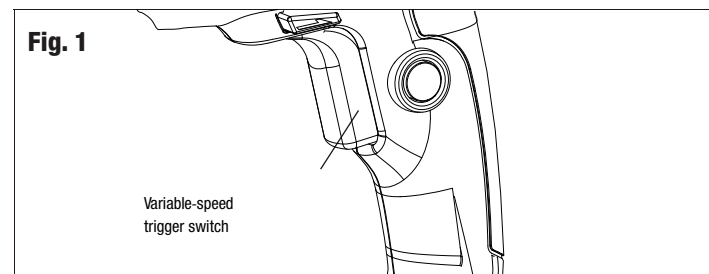
WARNING:

REMOVE THE HAMMER DRILL FROM THE PACKAGE AND EXAMINE IT CAREFULLY. DO NOT DISCARD THE CARTON OR ANY PACKAGING MATERIAL UNTIL ALL PARTS HAVE BEEN EXAMINED.

OPERATING INSTRUCTIONS**Variable-speed trigger switch (Fig. 1)**

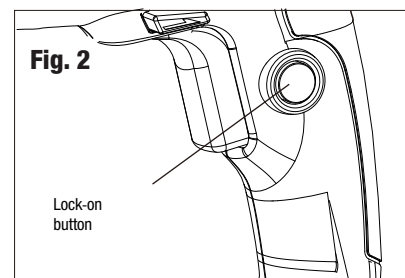
The variable-speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

1. Connect the power cord of your hammer drill to a standard household power outlet.
2. To turn the hammer drill ON, press the trigger switch.
3. To turn the hammer drill OFF, release the trigger switch.

**Lock-on button (Fig. 2)**

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

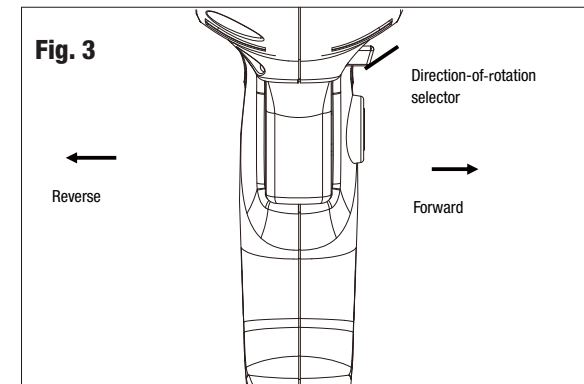
1. To drill continuously, press and hold the trigger switch and then press the lock-on button. Release the trigger switch.
2. To unlock the lock-on button and stop continuous drilling, press the trigger switch and the lock-on button will release automatically.

**Direction-of-rotation selector (Fig. 3)**

The direction of bit rotation is reversible and is controlled by a selector located above the trigger switch.

With the drill held toward you:

1. Position the direction-of-rotation selector to the right of the tool for forward rotation.
2. Position the direction-of-rotation selector to the left of the tool for reverse rotation.

**WARNING:**

NEVER CONNECT THE HAMMER DRILL TO THE POWER SOURCE WHEN YOU ARE ASSEMBLING PARTS, MAKING ADJUSTMENTS, INSTALLING OR REMOVING BITS, CLEANING, OR WHEN IT IS NOT IN USE. DISCONNECTING THE HAMMER DRILL WILL PREVENT ACCIDENTAL STARTING, WHICH COULD CAUSE SERIOUS PERSONAL INJURY.

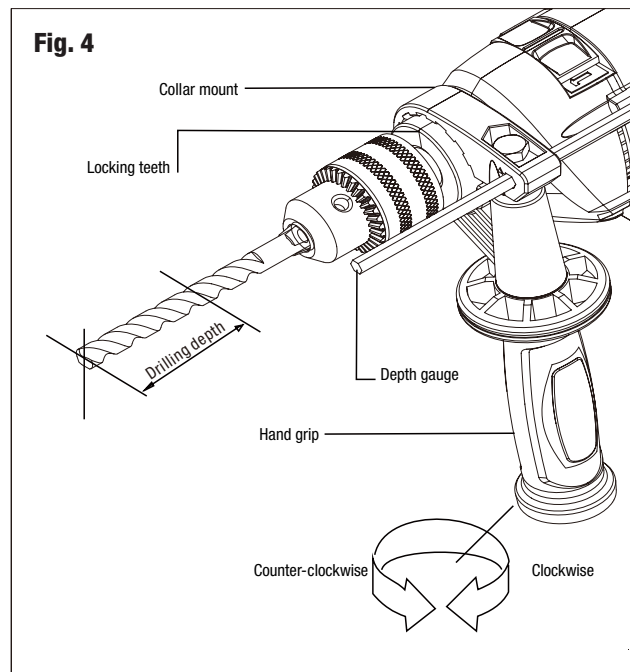
**WARNING:**

TO PREVENT GEAR DAMAGE, ALWAYS ALLOW THE HAMMER DRILL TO COME TO A COMPLETE STOP BEFORE CHANGING THE DIRECTION OF ROTATION.

Auxiliary handle (Fig. 4)

The tool must be supported with the auxiliary handle, which can be swiveled and locked into 12 positions 360° around the collar mount.

To reposition and/or swivel the handle, rotate lower portion of hand grip counter-clockwise, push handle forward until it disengages from locking teeth in the collar mount, move handle to the desired position and push handle inward until it engages, then securely tighten hand grip clockwise.

**Depth gauge (Fig.4)**

Your drilling depth can be pre-set and/or repeated by using the depth gauge.

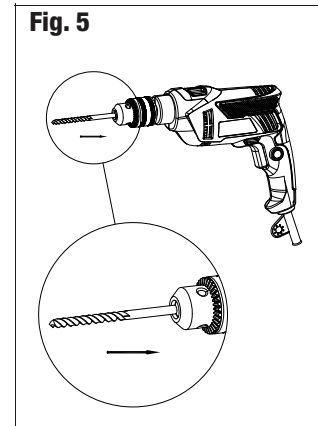
Setting depth: After the auxiliary handle is installed, make sure the accessory has been fully inserted into the chuck before setting the depth gauge (Fig. 4). To adjust depth, rotate lower portion of handgrip counter-clockwise to loosen depth gauge, slide depth gauge to desired position and securely tighten hand grip clockwise (Fig. 4).

**WARNING:**

IT IS IMPORTANT TO TIGHTEN THE CHUCK WITH ALL THREE KEY HOLES TO PREVENT SLIPPAGE.

Installing bits (Fig. 5)

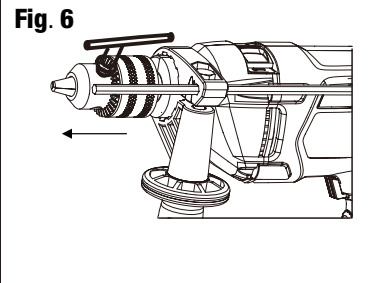
1. Unplug the hammer drill from the power source.
2. Open the chuck jaws by turning the sleeve in a counterclockwise direction until the opening is slightly larger than the bit you intend to use, and raise the front of the drill slightly to keep the bit from falling out of the chuck jaws.
3. Insert the drill bit into the chuck.
4. Tighten the sleeve by hand.
5. Place the chuck key in one of the three chuck key holes and tighten in clockwise direction. Repeat with the remaining two chuck key holes.
6. Remove the chuck key.

**Removing bits (Fig. 6)**



1. Unplug the hammer drill from the power source.
2. Place the chuck key in one of the three chuck key holes and loosen the chuck by turning in a counterclockwise direction.
3. Remove the chuck key.
4. Loosen the sleeve by hand.
5. Remove the drill bit.

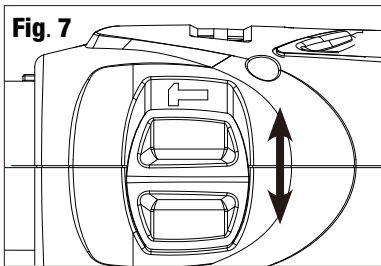
**WARNING:**

INSERT THE DRILL BIT STRAIGHT INTO THE CHUCK JAWS. INSERTING THE DRILL BIT INTO THE CHUCK JAWS AT AN ANGLE AND THEN TIGHTENING THE CHUCK AND USING THE DRILL COULD CAUSE THE DRILL BIT TO BE THROWN FROM THE HAMMER DRILL, RESULTING IN POSSIBLE SERIOUS PERSONAL INJURY OR DAMAGE TO THE CHUCK.



Hammer/drilling selection switch (Fig. 7)

1. When drilling in concrete, granite, tile, marble, etc., push the selection switch to the side marked with symbol .
2. To select drilling mode for drilling in wood and metal, push the selection switch to the side marked with symbol .



Drilling

1. Secure the material to be drilled in a vise or with clamps to keep it from turning as the drill bit rotates.
2. Install the correct bit.
3. Verify that the direction-of-rotation selector is at the correct setting (forward).
4. Hold the hammer drill firmly and place the bit at the point to be drilled.
5. Press the trigger switch to start the hammer drill.
6. Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting. Do not force the hammer drill or apply side pressure to elongate a hole. Allow the tool to do the work.
7. When drilling hard, smooth surfaces, use a centre punch to mark the desired location of the hole. This will prevent the drill bit from slipping off-centre as the hole is started.
8. If the bit jams in the workpiece or if the drill stalls, stop the tool immediately. Reverse the direction of rotation and gently squeeze the trigger switch to remove the bit from the workpiece. Investigate and correct the cause of jamming before you resume work.

Drilling in wood

For maximum performance, use high-speed steel or brad-point bits for wood drilling.

1. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
2. Increase the speed as the drill bit enters the material.
3. When drilling holes all the way through the workpiece, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

Drilling in metal

For maximum performance, use high-speed steel bits for metal or steel drilling.

1. When drilling metals, use 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.
2. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
3. Maintain a speed and pressure that allows cutting without overheating the bit. Applying too much pressure will:
 - (1). Overheat the hammer drill
 - (2). Wear the bearings
 - (3). Bend or burn the bits
 - (4). Produce off-centre or irregularly shaped holes.

Drilling in masonry

For maximum performance, use carbide-tipped masonry bits when drilling holes in brick, tile, concrete, etc.

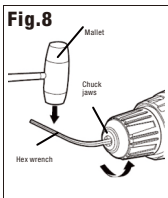
1. Maintain a speed and pressure that allows cutting without overheating the bit or drill. Applying too much pressure will:
 - (1). Overheat the hammer drill
 - (2). Wear the bearings
 - (3). Bend or burn bits
 - (4). Produce off-centre or irregular shaped holes.
2. Apply light pressure and medium speed for best results in brick.
3. Apply additional pressure for hard materials such as concrete.
4. When drilling holes in tile, practice on a scrap piece to determine the best speed and pressure. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.

Before each use

- 1. Inspect the hammer drill, the trigger switch, the cord and the accessories for damage.
- 2. Check for damaged, missing, or worn parts.
- 3. Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
- 4. If abnormal vibration or noise occurs, turn the tool off immediately and have the problem corrected before further use. Unplug the tool from the power source before cleaning or performing any maintenance. Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools using compressed air.

Removing the chuck (Fig. 8)

- 1. Unplug the hammer drill from the power source.
- 2. Open the chuck jaws by turning the sleeve in a counterclockwise direction.
- 3. Use a Phillips screwdriver (not included) to remove the chuck screw by turning it in a clockwise direction.
- 4. Insert a 5/16 in. or larger hex key (not included) into the chuck and securely tighten the chuck jaws around the hex key.
- 5. Tap the hex key sharply with a mallet (not included) in a counterclockwise direction. This will loosen the chuck for easy removal.



NOTICE:

The chuck screw has left-handed threads. Attach a new chuck to the spindle and tighten the chuck screw.



WARNING:

DO NOT ALLOW BRAKE FLUIDS, GASOLINE AND PETROLEUM-BASED PRODUCTS, PENETRATING OIL, ETC. TO COME INTO CONTACT WITH PLASTIC PARTS. THESE SUBSTANCES CONTAIN CHEMICALS THAT CAN DAMAGE, WEAKEN, OR DESTROY PLASTIC. WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS. THE USE OF ANY OTHER PARTS MAY CREATE A HAZARD OR CAUSE DAMAGE TO THE PRODUCT.

IF THE SUPPLY CORD OF THIS POWER TOOL IS DAMAGED, IT MUST BE REPLACED BY A SPECIALLY PREPARED CORD AVAILABLE THROUGH THE SERVICE ORGANIZATION.

USE ONLY ACCESSORIES THAT ARE RECOMMENDED FOR THIS HAMMER DRILL BY THE MANUFACTURER. ACCESSORIES THAT MAY BE SUITABLE FOR ONE TOOL MAY BECOME HAZARDOUS WHEN USED WITH ANOTHER TOOL.

MAINTAIN TOOLS WITH CARE. KEEP CUTTING TOOLS SHARP AND CLEAN. PROPERLY MAINTAINED TOOLS WITH SHARP CUTTING EDGES ARE LESS LIKELY TO BIND, AND ARE EASIER TO CONTROL.

TO ENSURE SAFETY AND RELIABILITY, ALL REPAIRS SHOULD BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN.

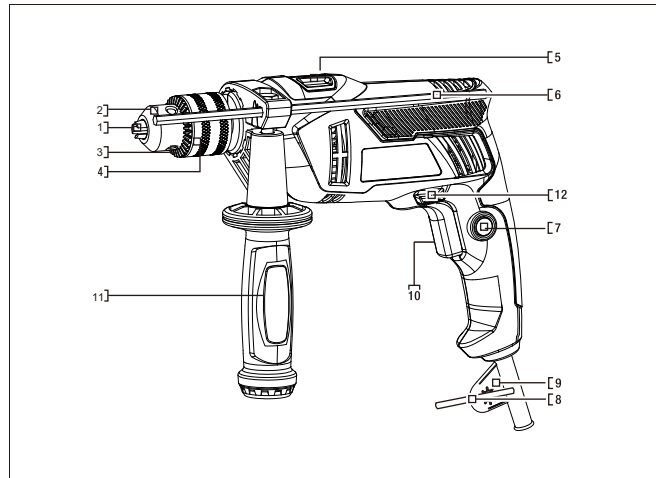
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The motor does not start	The tool is not connected to a power source	Connect the tool to a power source
The bit cannot be installed	1. The sleeve is not released 2. The bit does not fit the chuck jaw	1. Release the sleeve 2. Use the appropriate bit
The motor overheats	Ensure cooling vents are free of dust and obstacles	Clean and clear vents. Do not cover with hand during operation

NOTE:

If the problem remains unsolved after performing the checks described above, call the toll-free helpline at 1-800-689-9928.

KEY PARTS DIAGRAM



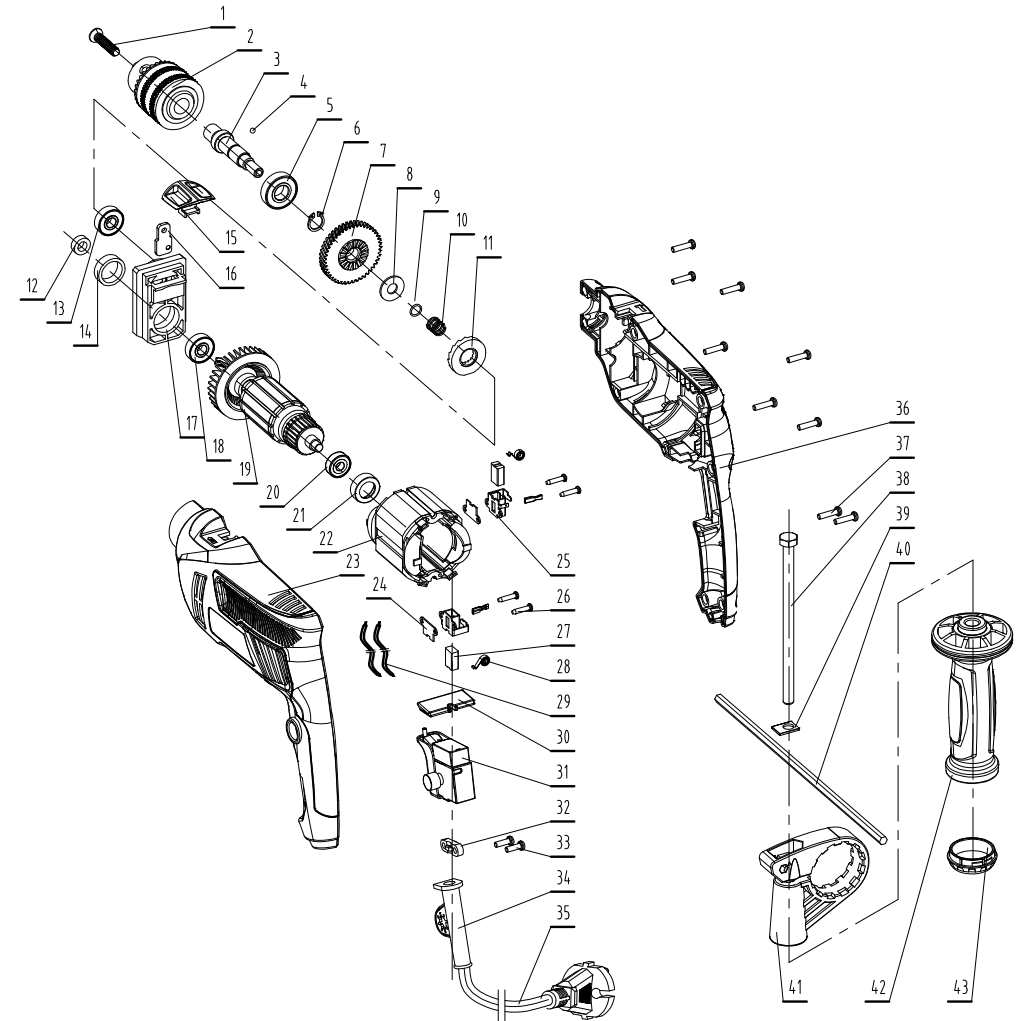
1. Chuck jaws
2. Chuck
3. Chuck key holes
4. Chuck sleeve
5. Hammer/drilling selection switch
6. Depth-stop gauge
7. Lock-on button
8. Chuck key
9. Chuck key strap
10. Switch trigger
11. Auxiliary handle
12. Direction-of-rotation selector

Before attempting to use this tool, become familiar with all of its operating features and safety requirements. For optimum performance and safety, read the preceding operating instructions carefully before using.

**WARNING!**

DO NOT ALLOW FAMILIARITY WITH THE HAMMER DRILL TO CAUSE A LACK OF ALERTNESS. A FRACTION OF A SECOND OF CARELESSNESS IS ENOUGH TO CAUSE SEVERE INJURY.

EXPLODED VIEW



PARTS LIST

No.	Description	Qty	No.	Description	Qty
1	Chuck screw	1	23	Housing cover	1
2	1/2" all-metal key chuck	1	24	Brush holder support	1
3	Output shaft	1	25	Brush holder	1
4	Steel ball	1	26	Screw	1
5	Ball bearing	1	27	Carbon brush	1
6	Retaining ring	1	28	Spring	1
7	Gear 1	1	29	Lead wire	1
8	Output shaft washer	1	30	F/R button	1
9	O-ring	1	31	Switch	1
10	Spring	1	32	Cord clamp	1
11	Gear 2	1	33	Screw	1
12	Seal ring	1	34	Bend relief	1
13	Bearing	1	35	Power cord	1
14	Sleeve	1	36	Housing support	1
15	Hammer/drill shift button	1	37	Screw	9
16	Impact plate	1	38	Screw	1
17	Bearing block	1	39	Square washer	1
18	Bearing	1	40	Depth guide	1
19	Armature	1	41	Hand support	1
20	Bearing	1	42	Aux handle	1
21	Bearing cover	1	43	Aux handle cover	1
22	Field	1			

WARRANTY



This Mastercraft® product is guaranteed for a period of 3 years from the date of original retail purchase against defects in workmanship and materials, except for the following components:

- a) Component A: Batteries, chargers and carrying case, which are guaranteed for a period of 2 years from the date of original retail purchase against defects in workmanship and materials;
- b) Component B: Accessories, which are guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials. Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our option. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations:

- a) a bill of sale verifying the purchase and purchase date must be provided;
- b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product that are expected to become inoperative or unusable after a seasonable period of use;
- d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);

- g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Notice to consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.