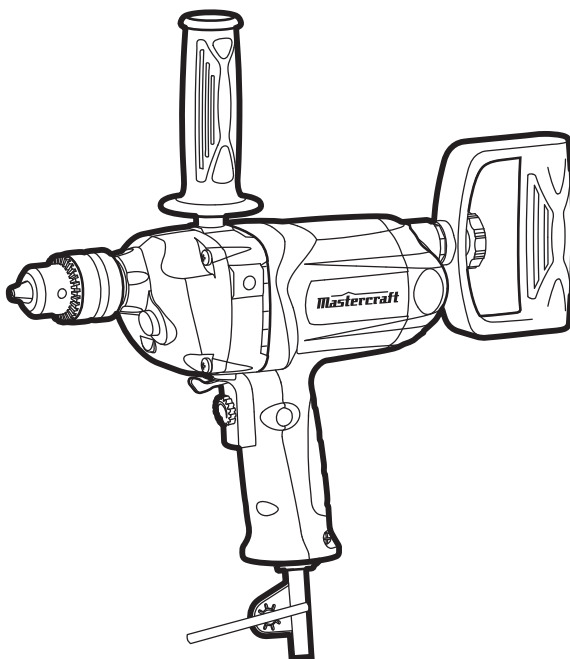


model no. 054-5849-4

**Mastercraft**<sup>®</sup> MD

## LOW GEAR MIXER



**IMPORTANT:**

Read and understand this instruction manual thoroughly before using the product.

**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**

Rated power input	9A
Rated voltage	120 V~, 60 Hz
No-load speed	0–600 RPM
Keyed chuck	1/2" (13 mm)
Tool weight	6 lb 12 oz (3.05 kg)
Noise level	87.8 dB(A)

**SAFETY GUIDELINES****WARNING!**

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.

**WARNING!**

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 mixer 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****GENERAL POWER TOOL SAFETY WARNINGS****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.

**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 the 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 that the switch is in the off-position before connecting to a 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.
- **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.
- **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.

**SAFETY GUIDELINES FOR MIXER**

- **Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.**
- **Hold the power tool by its insulated gripping surfaces 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 could give the operator an electric shock.
- **Keep hands away from rotating parts.**
- **Do not leave the tool running.** Operate the tool only when it is securely hand-held.
- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

- The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V ..... Volts

A ..... Amperes

Hz ..... Hertz

W ..... Watts

min ..... Minutes

~ ..... Alternating current

— — — ..... Direct current

n<sub>0</sub> ..... No-load speed

..... Class II Construction

.../min ..... Revolutions or reciprocation per minute



..... Grounding terminal

BPM ..... Beats per minute



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



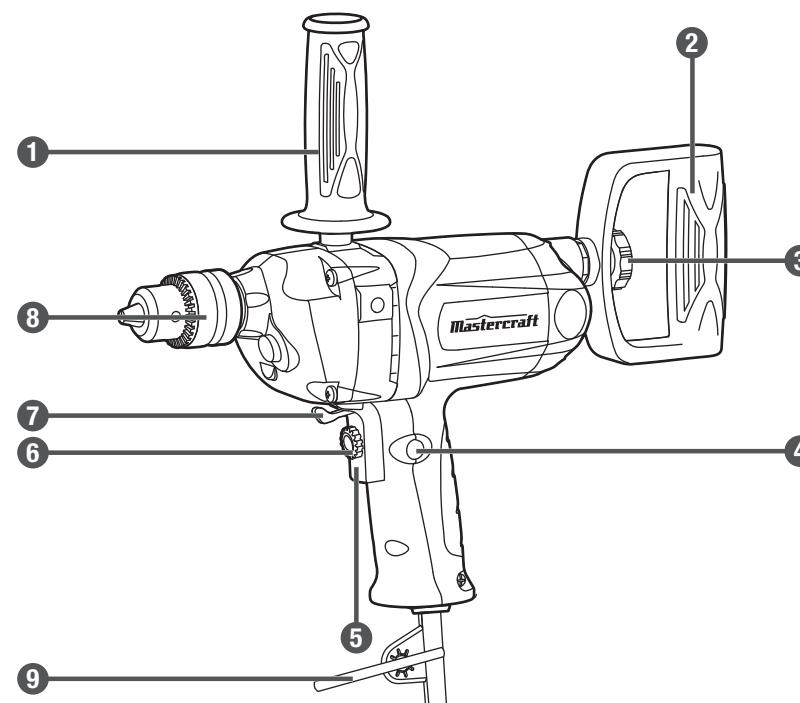
..... WARNING – To reduce the risk of injury always wear eye protection.



..... WARNING – To reduce the risk of injury always wear ear protection.

**PACKAGE CONTENTS:**

Low gear mixer, auxiliary handle, chuck key, rear D-handle, locking screw and instruction manual.

**KEY PARTS DIAGRAM**

No.	Description
1	Auxiliary handle
2	Rear D-handle
3	Locking screw
4	Lock-on button
5	Variable-speed trigger switch

No.	Description
6	Speed-adjustment dial
7	Direction-of-rotation lever
8	Chuck
9	Chuck key

**WARNING!**

- Remove the mixer from the package and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.

**ASSEMBLY INSTRUCTIONS****INSTALLING AUXILIARY HANDLE**

Securely screw the auxiliary handle onto the tool. The auxiliary handle may be installed at any of three different positions on the mixer body.

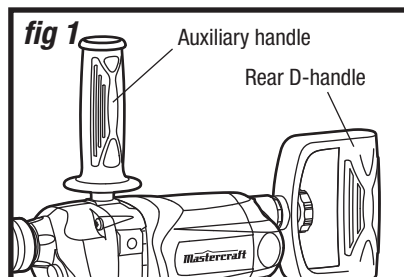
**REAR D-HANDLE (fig 1)**

The rear D-handle can be swivelled and locked into any of 8 positions, 360° around the back of the tool.

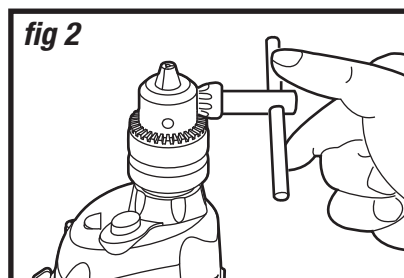
To adjust the rear D-handle:

Remove the locking screw by rotating it counter-clockwise.

Attach the rear D-handle to the desired position and secure it with the locking screw.

**INSTALLING OR REMOVING PADDLE BIT (fig 2)****To install a paddle bit:**

1. Open chuck jaws fully and place the paddle bit in the chuck as far as it will go.
2. Tighten the chuck by hand. Place the chuck key in each of the three holes and tighten it clockwise. Be sure to tighten all three chuck holes evenly.

**To remove a paddle bit**

1. Turn the chuck key counter-clockwise in only one hole, then loosen the chuck by hand.
2. Remove the paddle bit.

**NOTICE:** The rear D-Handle is not to be used as an auxiliary handle to resist torque reactions.

**WARNING!**

- To prevent accidental starting that could cause serious personal injury, always disconnect the tool from the power supply when assembling parts, making adjustments, installing or removing bits, cleaning, or when the mixer is not in use.

**OPERATING INSTRUCTIONS****VARIABLE-SPEED TRIGGER SWITCH**

To turn the mixer on, press the trigger switch.

To turn the mixer off, release the trigger switch.

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

**LOCK-ON BUTTON**

To operate continuously, press and hold the trigger switch and then press the lock-on button. Release the trigger switch.

To unlock the lock-on button and stop continuous operation, press the trigger switch and the lock-on button will release automatically.

**SPEED-ADJUSTMENT DIAL**

For working at low speed, turn the dial to the “-” position.

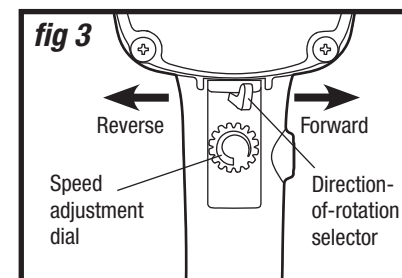
For working at high speed, turn the dial to the “+” position.

**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 mixer held toward you:

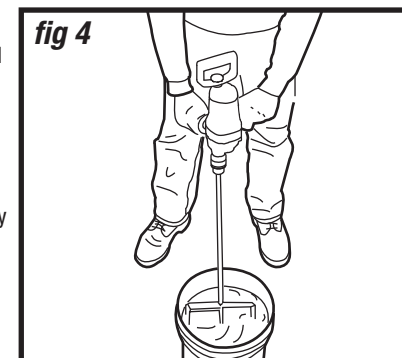
- Position the direction-of-rotation selector to the right of the tool for forward rotation.
- Position the direction-of-rotation selector to the left of the tool for reverse rotation.



Change the direction of rotation only when the tool comes to a complete stop. Changing it before the tool stops may damage the tool.

**MIXING (fig 4)**

1. Install a paddle bit (not supplied) into the chuck.
2. Place the paddle bit into the compound and slowly depress the trigger switch. As mixing begins, increase the speed of the mixer. Use the auxiliary handle for increased control.



**MAINTENANCE****BEFORE EACH USE**

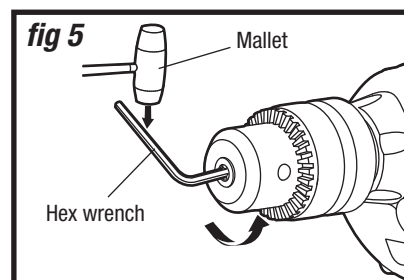
1. Inspect the low gear mixer, the on/off switch, the cord and the accessories for damage.
2. Check for damaged, missing, or worn parts.
3. Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
4. If abnormal vibration or noise occurs, turn the tool off immediately and have the problem corrected before further use.
5. Unplug the tool from 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.

**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 conditions. Therefore, no further lubrication is required.

**CHUCK REMOVAL (fig 5)**

1. Unplug the mixer from the power source.
2. Open chuck jaws fully. Insert a screwdriver into front of chuck between jaws to engage the screw head. Remove the screw by turning it clockwise (left-hand thread).
3. Insert a 5/16" (8 mm) or larger hex key into the chuck and securely tighten the chuck jaws.
4. Tap the hex key sharply with a mallet in a counter-clockwise direction. This will loosen the chuck for easy removal. The chuck can now be unscrewed by hand and removed from the spindle.

**TROUBLESHOOTING**

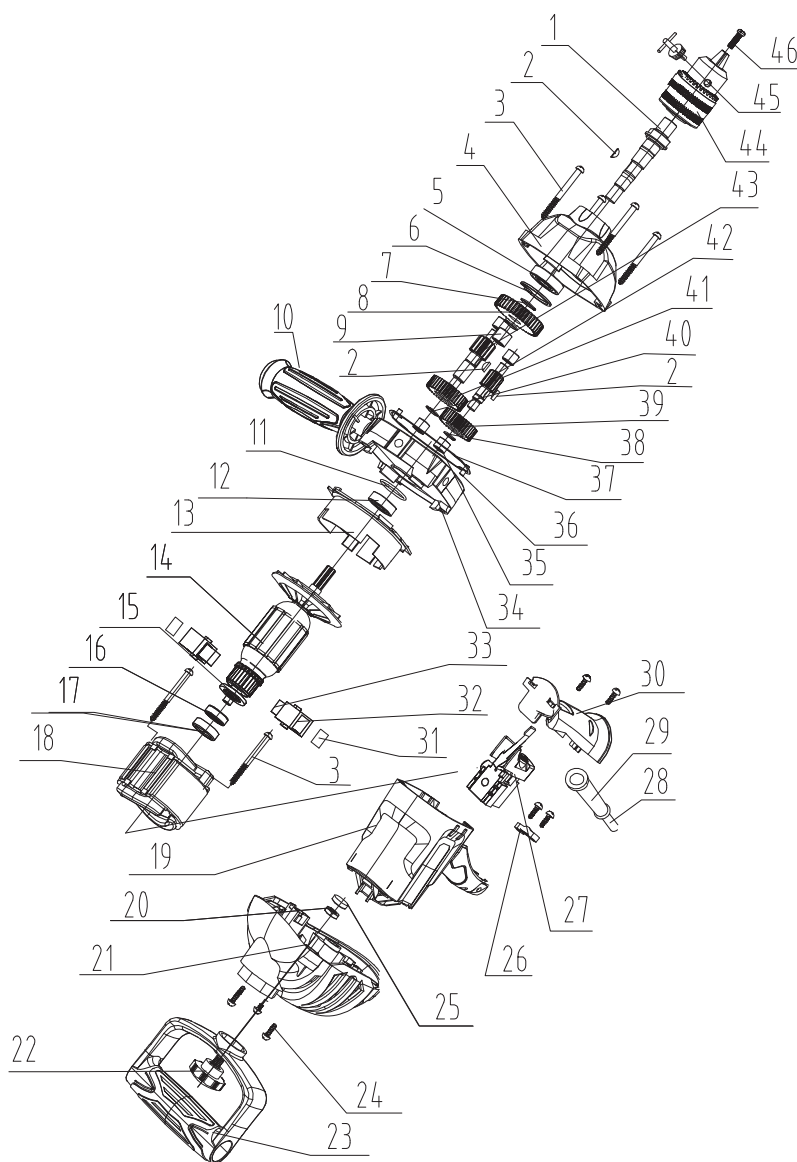
Problem	Possible Causes	Solution
The motor is overheating	Cooling vents are obstructed	Clean and clear vents. Do not cover with hand during operation

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

**WARNING!**

- Do not let brake fluids, gasoline and petroleum-based products, penetrating oil, etc. 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.
- Use only accessories that are recommended for this mixer by the manufacturer. Accessories that may be suitable for one tool may become hazardous when used with another tool.
- If the supply cord is damaged, it must be replaced by a specially-prepared cord available through the service organization.
- To ensure safety and reliability, all repairs should be performed by a qualified service technician.

## EXPLODED VIEW



No.	Part No.	Description
1	054584901	Output shaft
2	054584902	Semi-circular key
3	054584903	Screw
4	054584904	Gear box
5	054584905	Bearing
6	054584906	Elastic collar
7	054584907	Elastic collar
8	054584908	Gear for output shaft
9	054584909	Bearing
10	054584910	Auxiliary handle
11	054584911	Ring
12	054584912	Bearing
13	054584913	Fan guide
14	054584914	Rotor
15	054584915	Insulation ring
16	054584916	Bearing
17	054584917	Rubber cover
18	054584918	Stator
19	054584919	Motor housing
20	054584920	Screw
21	054584921	Back cover for motor housing
22	054584922	Locking screw
23	054584923	Rear handle

No.	Part No.	Description
24	054584924	Screw
25	054584925	Inside cover for back handle
26	054584926	Cable pressing board
27	054584927	Switch
28	054584928	Cable
29	054584929	Cable sleeve
30	054584930	Handle cover
31	054584931	Brush hold sets
32	054584932	Brush hold sets
33	054584933	Carbon brush
34	054584934	Middle cover
35	054584935	Bearing
36	054584936	Pin
37	054584937	Sealed washer
38	054584938	Elastic collar
39	054584939	Big gear for main driving shaft
40	054584940	Elastic collar
41	054584941	Big gear for sub-driving shaft
42	054584942	Main driving shaft
43	054584943	Sub-driving shaft
44	054584944	Chuck
45	054584945	Key
46	054584946	Counter-clockwise screw

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





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 reasonable 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.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8

