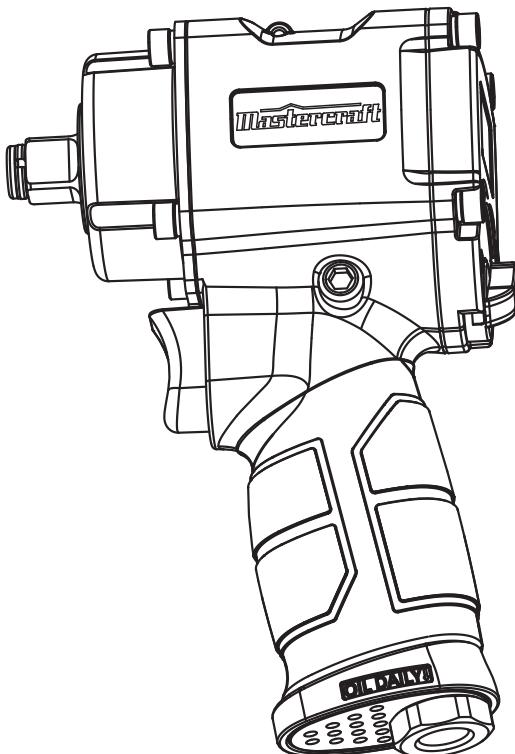


model no. 058-9849-2

**Mastercraft**®

# AIR-POWERED STUBBY IMPACT WRENCH



## **IMPORTANT:**

For your own safety, read and follow all of the Safety Guidelines and Operating Instructions before operating this impact wrench. Keep this manual for future reference.

## **OPERATING 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

SQUARE DRIVE	1/2" (12.7 mm)
SPEED (NO LOAD)	8500 RPM
MAXIMUM TORQUE	450 ft-lb
CF REQUIREMENT	3.5 CFM @ 90 PSI
WORKING PRESSURE	90 PSI
AIR INLET	1/4"-18 NPT
AIR HOSE REQUIRED	3/8" (9.5 mm)
WEIGHT	3 lb 3 oz (1.45 kg)

CFM: Cubic Feet per Minute (the volumetric flow rate of air corrected to standardized conditions of temperature and pressure).

NPT: National Pipe Thread.

## SAFETY GUIDELINES

This manual contains information that relates to PROTECTING PERSONAL SAFETY and PREVENTING EQUIPMENT PROBLEMS. It is very important to read this manual carefully and understand it thoroughly before using the product. The symbols listed below are used to indicate this information.

## DANGER!

 Potential hazard that will result in serious injury or death.

## WARNING!

 Potential hazard that could result in serious injury or death.

## CAUTION!

 Potential hazard that may result in injury or damage to equipment.

## PERSONAL SAFETY

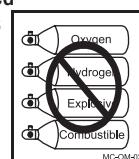
These precautions are intended for the personal safety of the user and others working with the user. Please take time to read and understand them.

Make sure you read and understand this manual before using this tool. Make sure other users read and understand this manual before they use the tool.

**NOTE:** The word "Note" is used to inform the reader of something he/she needs to know about the tool.



- Do not use oxygen or any other combustible or bottled gas to power air-powered tools. Failure to observe this warning can cause explosion and serious personal injury or death. Use only compressed air to power air-powered tools. Use a minimum of 25' (7.6 m) of hose to connect the tool to only compressor. Failure to comply will result in serious injury or death.



- Risk of inhalation: Never directly inhale the air produced by the compressor.



- Risk of electric shock: Do not expose a compressor to rain. Store it indoors. Disconnect the compressor from the power source before servicing. The compressor must be grounded. Do not use grounding adaptors.



- Risk of personal injury: Do not direct compressed air from the air hose towards the user or other people or animal.



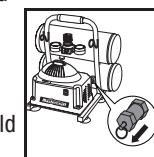
- Risk of burns: The pump and the manifold generate high temperatures. In order to avoid burns or other injuries, do not touch the pump, the manifold, or the transfer tube while the compressor is running. Allow the parts to cool down before handling or servicing. Keep children and pets away from the compressor at all times.



- Risk of bursting: Do not adjust the pressure switch or safety valve for any reason. They have been preset at the factory for this compressor's maximum pressure. Tampering with the pressure switch or the safety valve may cause personal injury or property damage.



- Risk of bursting: Make sure the regulator is adjusted so that the compressor outlet pressure is set lower than the maximum operating pressure of the tool. Before starting the compressor, pull the ring on the safety valve to make sure the valve moves freely. Drain water from the tank after each use. Do not weld nor repair the tank. Relieve all pressure in the hose before removing or attaching accessories.

**DANGER!**

Potential hazard that will result in serious injury or loss of life.

- Keep children away from the work area. Do not allow children to handle power tools.
- Keep air hose away from heat, oil, and sharp edges. Check air hose for wear before each use and ensure that all connections are proper.
- Always ensure that the workpiece is firmly secured leaving both hands free to control the tool.
- Always ensure that the tool has stopped before putting it down after use, for safety purposes and to prevent possible damage to the tool/user.
- Keep proper footing at all times in order to ensure correct balance.

**WARNING!**

Potential hazard that could result in serious injury or loss of life.

- Do not allow inexperienced or untrained individuals to operate the air-powered impact wrench.
- Always ensure that the accessories such as impact sockets are specially designed for use with the tool. Also ensure they are secured and correctly fastened before connecting the tool to the air supply.
- Do not use the air-powered impact wrench for any task other than that which it is designed to perform.
- Do not use air-powered impact wrench unless you have been instructed on its use. Only a qualified person should use the tool.
- Pull the pressure safety valve ring of the compressor every day in order to ensure that the valve is functioning properly.
- Locate the compressor in a well-ventilated area for cooling, and a minimum of 12" (31 cm) away from the nearest wall.
- Protect the air hose and the power cord from damage and puncture. Inspect them for weak or worn spots every week, and replace them if necessary.



### CAUTION!

Potential hazard that may result in injury or damage to equipment.

- Keep proper footing at all times in order to ensure correct balance.
- Do not use a tool that is leaking air, that has missing or damaged parts, or that requires repairs. Verify that all screws are securely tightened.
- For optimal safety and tool performance, inspect the tool daily in order to ensure free movement of the trigger, safety mechanisms, and springs.
- Check the tightness of screws before operating the tool. Before operating the tool, make sure all the screws and caps are securely tightened to prevent leakage.
- Keep the work area clean. A cluttered or dirty workbench may lead to an accident. Floors should be kept clear.
- Handling and storage of oil: Use with adequate ventilation. Avoid contact of oil with eyes, skin, and clothing. Avoid breathing spray or mist. Store in a tightly closed container in a cool, dry, well-ventilated area free from incompatible substances.
- Do not use the tool near or below freezing temperatures, as doing so may cause tool failure.
- Do not store the tool in a freezing environment to prevent ice formation on the operating valves of the tool, as doing so may cause tool failure.

• Use safety goggles and ear protection. Wear safety glasses with side shields when operating the tool/compressor and verify that others in the work area are also wearing safety glasses. Safety glasses must conform to American National Standards Institute (ANSI Z87.1) requirements and must provide protection from flying particles from the front and the sides.

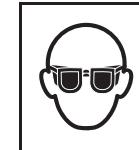
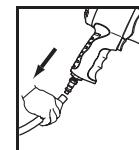
Air-powered tools are loud and the sound can cause hearing damage. Always wear ear protection to help prevent hearing damage and loss. Failure to comply may result in moderate injury.



### CAUTION!

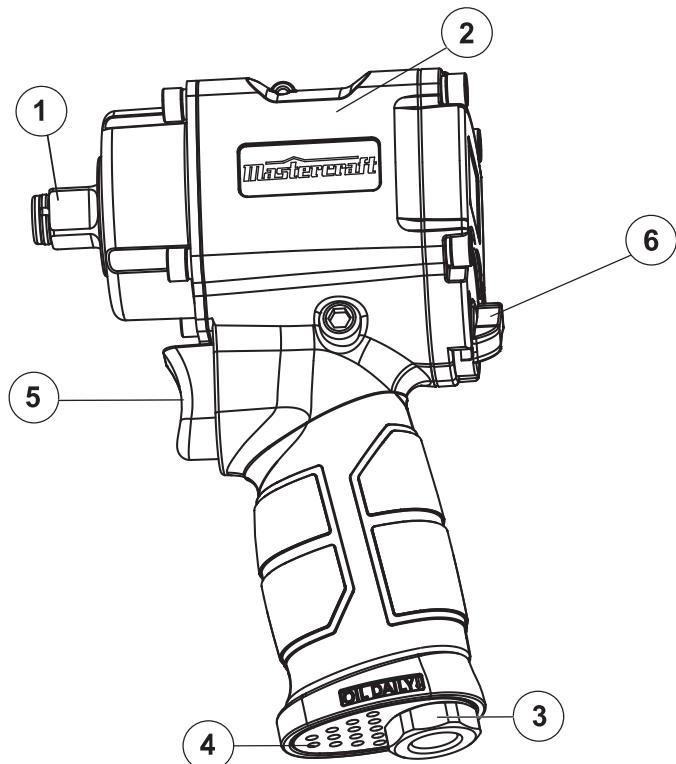
Potential hazard that may result in injury or damage to equipment.

- Disconnect tool from the air supply and turn off the compressor before performing any maintenance, or changing accessories, when the tool is not in use, when it is being handed to another person, and when it is left unattended. Failure to comply may result in injury or damage to equipment.
- Use safety goggles and ear protection: Wear safety glasses with side shields when operating the tool/compressor and verify that others in the work area are also wearing safety glass. Safety glasses must provide protection from flying particles from the front and the sides. Air-powered tools are loud and the sound can cause hearing damage. Always wear ear protection to prevent hearing damage and loss. Failure to comply may result in injury.



**Note:** Recycle unwanted materials rather than disposing of them as waste. Sort the tools, hoses, and packaging in specific categories and take them to the local recycling centre or dispose of them in an environmentally safe way.

No.	Description	No.	Description
1	Square drive	4	Air deflector
2	Housing	5	Trigger
3	Air inlet plug	6	Power setting



## General use

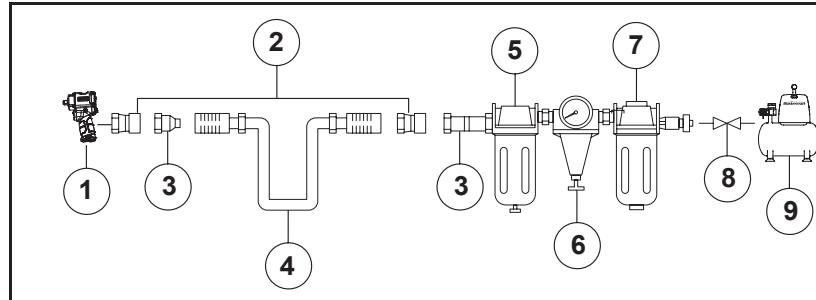
This Mastercraft® Air-powered Stubby Impact Wrench features jumbo-hammer mechanism for higher torque, an adjustable (3 position) torque regulator, and variable speed adjustment. The tool has a front exhaust. The tool is mainly used for removing and installing nuts and bolts and automotive lug nuts on tires, and for general assembly work. The sheer power and performance of the tool enables the operator to tackle the toughest jobs with ease. The tool is durable and economical to use.

## Compatible compressor and air tool

### GUIDELINES FOR PROPER USE AND OPERATION

Always ensure that a suitable air compressor is used with this Mastercraft® Air-powered Stubby Impact Wrench. The compressor should be able to supply a minimal air delivery of 4 CFM @ 90 PSI to ensure the compressor can run continuously with the Mastercraft® Air-powered Impact Wrench. Using a tool or combinations of tools that together or separately require more than compressor capacity will reduce performance and could void the guarantee/warranty of compressor or tool.

Air Compressor Size and Power	2 HP	2 1/2 HP	3 HP and more
5–6 Gallons	Light-duty and intermittent use	Light-duty and intermittent use	Light-duty and intermittent use
8–11 Gallons	Light-duty and intermittent use	Medium-duty and intermittent use	Medium-duty and intermittent use
15 Gallons and more	Medium-duty and intermittent use	Heavy-duty and continuous use	Heavy-duty and continuous use



No.	Description	No.	Description
1	Mastercraft® Air-powered Stubby Impact Wrench	6	Regulator 0 – 123 PSI (0 – 8.5 bar)
2	Quick connector	7	Filter
3	Quick coupler	8	Cut-off valve
4	Air hose	9	Air compressor
5	Lubricator		

## Air system

- Always use clean, dry, regulated, compressed air at 4.8 to 7.5 bar (70 to 110 PSI).
- Do not exceed the maximum or minimum pressures. Operating the tool at the wrong pressure (too low or too high) will cause excessive noise or rapid wear.



### WARNING!

Potential hazard that could result in serious injury or loss of life.

- Do not use if the tool is not in proper working order.
- Do not use oxygen or any other combustible or bottled gas to power the tool.
- Do not use this tool in the presence of any flammable liquids or gases.
- Always keep the hoses away from heat, oil, and sharp edges. Check hoses for wear and ensure that all connections are tightened.

- It is recommended that an automatic in-line filter-regulator-lubricator be used and be located as close to the tool as possible. This increases tool life and keeps the tool in good working order.
- Regularly check the in-line lubricator and fill it with lubricating oil.
- If a filter-regulator-lubricator is not installed, place up to 6 drops of lubricating oil into the air inlet plug before each use and for every 2 hours of use.
- If a filter-regulator-lubricator is installed, keep the air filter clean. A dirty filter will reduce the air pressure to the tool, which leads to power reduction, less efficiency, and poor performance of the tool.
- For proper adjustment of the in-line lubricator, place a sheet of paper next to the exhaust ports and hold the throttle open for approximately 30 seconds. The lubricator is properly set when a light stain of oil collects on the paper. Excessive amount of oil should be avoided.

- Always use impact sockets specifically designed for this air-powered impact wrench.
- Ensure that air is supplied at regulated pressure and the air flow is maintained as per specifications.
- Drain the compressor tank daily. Water in the air line will damage the impact wrench.
- Clean the air inlet filter weekly.
- Increase the line pressure to compensate for an unusual long air hose (longer than 8 m). The minimum hose diameter (I.D.) should be 1/4" (6.4 mm) and the fittings must have the same inner dimensions.



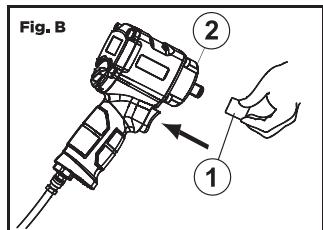
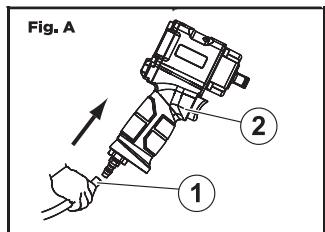
### WARNING!

Potential hazard that could result in serious injury or loss of life.

- Keep hands and other parts of the body away from the tool's discharge and working areas when connecting it to the air supply.

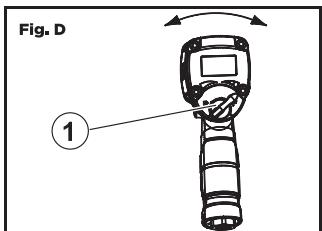
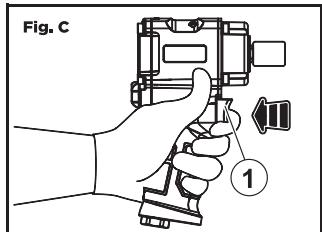
**OPERATION**

1. Plug in compressor, turn it on, set the pressure regulator to 90 PSI, attach one end of the air hose to the compressor and the other end of the air hose (1) to the tool (2) (Fig. A).



2. Attach the socket (1) of required size to the drive head (2) of the tool (Fig. B).
3. Place the socket over the nut to be removed or installed.

4. Press the trigger (1) of the tool for rotating operation (Fig. C).



5. Adjust the regulator knob (1) at the rear end of the tool to control the speed of the airflow and to adjust the direction of rotation (forward and reverse) (Fig. D).
6. Verify that the air supply is clean and that air pressure does not exceed 90 PSI (6.3 bar) while operating the air-powered impact wrench.

**NOTE:** Use only the impact sockets that are specifically designed for use with this air-powered impact wrench.

**WARNING!**

Potential hazard that could result in serious injury or loss of life.

- Carefully read all instructions in this manual and understand them thoroughly before using the air-powered impact wrench. Failure to comply could result in serious injury or loss of life.

**WARNING!**

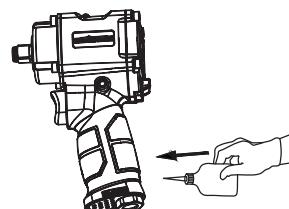
Potential hazard that could result in serious injury or loss of life.

- Keep children away from the tools and work areas.
- Do not apply additional force to the air-powered impact wrench in order to remove a nut.
- Do not allow the air-powered impact wrench to run free for an extended period of time. Doing so will shorten the life of the impact wrench. Failure to comply could lead to serious injury or loss of life.

**Maintenance**

MAINTENANCE REQUIRED	DESCRIPTION	TOOLS OR MATERIALS REQUIRED	MAXIMUM SERVICE INTERVAL		
			Each Use or Every 2 Hrs	Monthly	As Needed
General inspection—free movement	Trigger, spring, safety mechanism	None		X	
In-depth inspection	Worn or broken parts			X	X
Replace worn or broken parts				X	
Lubrication	See below	Pneumatic tool oil	X		

- Lubrication: If the air-powered stubby impact wrench and the compressor are not equipped with an in-line lubrication system, place up to 6 drops of pneumatic tool oil into the air inlet before each work day or after every 2 hours of continuous use, depending on the characteristics of the workpiece and type of fasteners used.
- Air-operated tools must be inspected periodically and worn or broken parts must be replaced to ensure that the tools are operating safely and efficiently.
- Inspect and replace worn or damaged O-rings, seals, etc. Tighten all screws and caps frequently in order to help prevent personal injury.

**Storage**

- When the tool is not in use, disconnect it from the air supply, clean, and store it in a safe, dry, childproof location.
- When the tool is stored for longer period of time, apply an ample amount of lubricating oil before storing.
- Run the tool for approximately 30 seconds after lubricating, in order to ensure that the lubrication is uniformly distributed throughout the tool. Store the tool in a clean and dry environment.

- The tool should be properly lubricated by keeping the in-line lubricator filled and correctly adjusted. Without proper lubrication, the tool will not work effectively and parts will wear prematurely.
- Inspect the tool periodically and replace worn or broken parts in order to keep tools operating safely and efficiently.
- Tighten all screws and caps frequently in order to prevent personal injury.
- Inspect the trigger, the spring, and safety mechanism for free movement on a regular basis in order to ensure that the safety system is fully functional. Verify that no parts are loose or missing.

**WARNING!**

Potential hazard that could result in serious injury or loss of life.

- Replace or repair damaged parts or accessories before using the air-powered impact wrench.
- Use only recommended and properly rated replacement parts. Non-authorized parts may be dangerous and will void the warranty.
- Disconnect the air-powered impact wrench from the air supply before changing accessories, servicing, or performing maintenance. Failure to comply could lead to serious injury or loss of life.

**CAUTION!**

Potential hazard that may result in moderate injury or damage to equipment.

- Never use damaged parts.
- Do not use an excessively worn tool. Failure to comply may result in moderate injury or damage to equipment.

## Troubleshooting

The following chart lists common issues and solutions. Please read it carefully and follow all instructions closely.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
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Tool runs at normal speed but loses speed under load.

1. Motor parts are worn or damaged.
2. Rotor blade is worn or stuck due to lack of lubricant.

1. Repair or replace the parts.
2. Lubricate the parts.

Note: If the air tool is used for an extended period, it is recommended to lubricate regularly.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Tool runs at low speed.	1. Dirt particles are jammed in motor. 2. Power regulator is in closed position. 3. Airflow is blocked by dirt. 4. Air supply is too low.	1. Check if there is a blockage in air inlet filter. 2. Pour lubricating oil into the air inlet as per instructions. 3. Operate the tool by reversing the rotation in a back and forth direction in short durations (wherever applicable). 4. Check for obstructions in the air supply.
Tool stops working. Air flows freely from exhaust.	One or more motor vanes got stuck due to material build up.	1. Pour air tool lubricating oil into air inlet. 2. Operate the tool in short bursts by quickly reversing the rotation in a back and forth direction (wherever applicable). 3. Tap motor housing gently with plastic mallet. 4. Disconnect the air supply. Operate the motor by manually rotating the drive shank (wherever applicable).

Tool does not shut off.

O-rings in the throttle valve are dislodged from the seat inlet valve.

Replace O-rings.



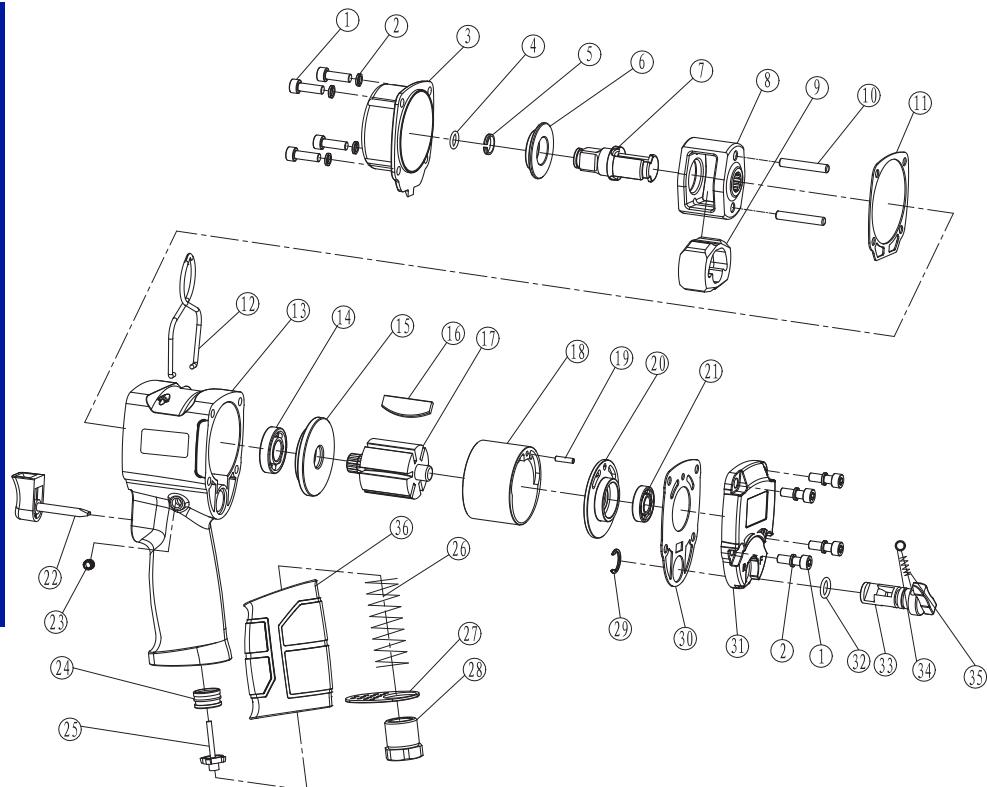
### WARNING!

Potential hazard that could result in serious injury or loss of life.

- If any of the following symptoms appear while the tool is in use, turn it off and disconnect it from the air supply immediately. Failure to heed this warning will result in serious personal injury.
- Disconnect the tool from the air supply before making any adjustments.
- Repairs must be performed in an authorized service centre only.

**NOTE:** For further repair information, please call 1-800-689-9928.

## EXPLODED VIEW



No.	Description	Qty.	No.	Description	Qty.
1	Bolt M5x16	8	19	Pin 3 x 10	1
2	Washer 5	8	20	Rear plate	1
3	Housing cover	1	21	Ball bearing R6	1
4	O-ring 7.5 x 1.8	1	22	Trigger	1
5	Anvil bushing	1	23	Bolt M8 x 6	1
6	Valve sleeve	1	24	Block	1
7	Anvil	1	25	Pin	1
8	Hammer frame	1	26	Spring	1
9	Hammer	1	27	Exhaust deflector	1
10	Hammer pin	2	28	Air inlet plug	1
11	Hammer case gasket	1	29	C-ring CTW-50	1
12	Hook	1	30	Gasket 2	1
13	Housing	1	31	Housing cap	1
14	Ball bearing R8	1	32	O-ring 9 x 2	1
15	Front plate	1	33	Reverse valve	1
16	Rotor blade	6	34	Steel ball Dw=3	1
17	Rotor	1	35	Spring	1
18	Cylinder	1	36	Rubber grip	1

## PARTS LIST

## 3-Year Limited Warranty

This 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 component:

**Component A: 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 labor 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 instruction 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 which 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 discoloring by heat, or abrasives and chemical cleaners.
- 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