BENCHMARK™ MC

6" ORBITAL PNEUMATIC SANDER

LIMITED 5 YEAR* WARRANTY

5 Year Limited Warranty

READ ALL INSTRUCTIONS BEFORE FIRST USE.
KEEP THIS MANUAL FOR FUTURE REFERENCE.
KEEP AWAY FROM CHILDREN.

WEAR CSA APPROVED EYE PROTECTION

WEAR EAR PROTECTION

WEAR A FACE MASK

BENCHMARK

PRODUCT SPECIFICATIONS

6" ORBITAL PNEUMATIC SANDER	
Sanding Pad	6" (150mm) hook & loop fastening system
Variable Free speed	0-12,000 OPM
Average Air consumption	4.5 cfm @ 90 PSI
Operating pressure	90 psi (6.3 bar)
Maximum air pressure	120 psi (8.3 bar)
Air inlet size	1/4”
Recommended hose size	3/8”
Weight	1.8 lbs (0.8 kg)

*Please note (where the ¼” NPT connecter is not already installed on the tool) your tool may be shipped with a black plastic cap installed in the air inlet. Pry the cap out prior to installing the ¼” NPT connector.

NEED ASSISTANCE?

Call us on our toll- free customer support line:
1-866-349-8665 (Monday through Friday 9am – 5pm Eastern Standard Time)

- Technical questions
- Replacement parts
- Parts missing from package

⚠ Note these instructions pertain to the tool only. Please refer to your compressors operator manual and follow the manufacturers instructions.

TABLE OF CONTENTS

SAFETY GUIDELINES

⚠ WARNING:
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 loss of life.**

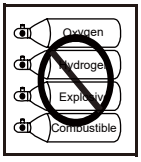
⚠ **WARNING! Potential hazard that could result in serious injury or loss of life.**

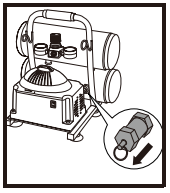
⚠ **CAUTION! Potential hazard that may result in moderate injury or damage to equipment.**

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

⚠ 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.

SYMBOL	MEANING
	• **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 the compressed air to power the air-powered tools. Use a minimum of 25' (7.6 m) of hose to connect the tool to the compressor. Failure to comply will result in serious injury or loss of life. 
	• **Risk of electric shock:** Do not expose a compressor to rain. Store it indoors. Disconnect the compressor from power source before servicing. 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 personnel.

SYMBOL	MEANING
	• **Risk of inhalation:** Never directly inhale the air produced by the compressor.
	• **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 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 away from the compressor at all times.
	• **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 tank after each use. Do not weld or repair tank. Relieve all pressure in the hose before removing or attaching accessories. 

DANGER!

- Keep children away from the work area. Do not allow children to handle power tools.
- Do not use this tool in the presence of flammable liquids or gases. Sparks that are created during use may ignite gases.
- 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.
- Always assume that the tool contains fasteners.
- Do not point the tool toward yourself or anyone else.

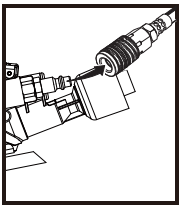
⚠ WARNING!

- Do not allow unskilled or untrained individuals to operate the air tool.
- Do not use the tool for any task other than that it is designed to perform.
- 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.
- Always wear hearing protection when using the air compressor. Failure to do so may result in hearing loss.
- Do not carry the compressor while it is running.
- Do not operate the compressor if it is not in a stable position.
- Do not operate the compressor on a rooftop or an elevated position that could allow the unit to fall or be tipped over.
- Always replace a damaged gauge before operating the unit again.
- Do not connect the tool to a compressed air source with a pressure output that is higher than 120psi.

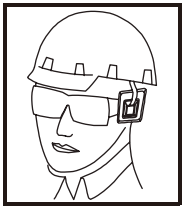
⚠ CAUTION!

- Always ensure that the tool has stopped before disconnecting the air supply.
- Do not wear watches, rings, bracelets, or loose clothing when using any air- powered tool.
- Do not overload the tool. Allow the tool to operate at its optimum speed for maximum efficiency.
- 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 before every usage, in order to ensure free movement of the trigger, safety mechanisms, and springs.
- Always keep your air tool clean and lubricated. Daily lubrication is essential to avoid internal corrosion and possible failures.
- Ensure the floor is not slippery and wear non-slip shoes. Floors should be kept clean and clear.
- Always follow all workshop safety rules, regulations, and conditions when using the tool and keep the work area clean.
- Carry the tool by the handle only, keeping fingers away from the trigger. Do not carry the tool by the hose, magazine, or any other parts.
- Do not use the tool near or below freezing point, as doing so may cause tool failure. Do not store the tool in a freezing environment to prevent ice formation on the tools operating valves, as doing so may cause tool failure.
- 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.
- Tripping hazard. The air hose may become a tripping hazard when it is placed in the work area. Use care when walking in the work area.

CAUTION!



- Disconnect tool from the air supply and turn off the compressor before performing any maintenance or changing accessories, when clearing a jammed fastener, 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 moderate 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 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 prevent hearing damage and loss. Failure to comply may result in moderate injury.

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

SYMBOLS

⚠**WARNING:** Some of the following symbols may appear on the tool. Study these symbols and learn their meaning. Proper interpretation of these symbols will allow for more efficient and safer operation of this tool.

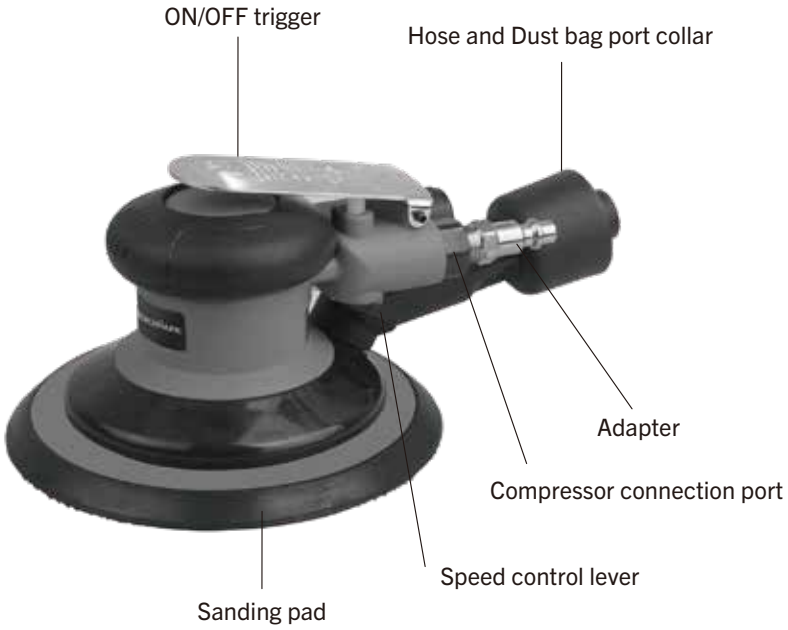
V	Volts	3n ~	Three-phase alternating current with neutral
A	Amperes		
Hz	Hertz	⎓	Direct current
W	Watts	n_o	No load speed
kW	Kilowatts	⎓~	Alternating or direct current
µF	Microfarads	⧈	Class II construction
L	Litres	⚠	Splash-proof construction
kg	Kilograms	💧💧	Watertight construction
H	Hours	⏚	Protective grounding at terminal, Class I tools
N/cm^2	Newtons per square centimetre	.../min	Revolutions or reciprocations per minute
Pa	Pascals	Ø	Diameter
Min	Minutes	0	Off position
S	Seconds	→	Directional arrow
~ or AC	Alternating current	⚠	Warning symbol
3~	Three-phase alternating current		Wear your safety glasses

TOOL SPECIFIC WARNINGS

⚠ **WARNING! DO NOT** let comfort or familiarity with product (gained from repeated use) replace strict adherence to the tool safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- Use the correct tool for the job. This tool was designed for a specific function. Do not modify or alter this tool or use it for an unintended purpose. Do not use the tool if any parts are damage broken or misplaced. Repair or replace the parts.
- Do not use any power tool with a malfunctioning power switch or control. A power tool that fails to respond to the controls is dangerous and can cause an injury. A qualified technician must repair and verify the power tool is operating correctly before it can be used.
- Never use a tool with a cracked or worn tool accessory. Change the tool accessory before using it.
- Do not cover the air vents.
- Only use accessories that are specifically designed for use with the tool. Ensure the accessory is tightly installed.
- Only use an accessory that exceeds the speed rating (see Specifications).
- Disconnect the power source before installing or servicing the tool.
- Before using the tool on a workpiece, test the tool by running it at the highest speed rating for at least 30 seconds in a safe position. Stop immediately if there is any abnormal vibration or wobbling. Check the tool to determine the cause.
- Never force the tool. Excessive pressure could break the tool, resulting in damage to your workpiece or serious personal injury. Excessive pressure is the cause if your tool runs smoothly under no load, but roughly under load.
- Keep hands and fingers away from the work area. Any part of the body contacting the tool's working parts could result in an injury.
- Do not place the tool down until the tool's accessory has stopped moving. The accessory may catch the surface of work material and wrench itself free, causing injury to the user or others in the work area.
- Be aware of the rotation direction before starting the tool to reduce hazardous situations due to unexpected rotation direction.
- Never run the tool unless the abrasive pad is applied to the workpiece.

KNOW YOUR
6" ORBITAL PNEUMATIC SANDER



Hose

Dust bag

ASSEMBLY AND OPERATING

COMPATIBLE COMPRESSORS

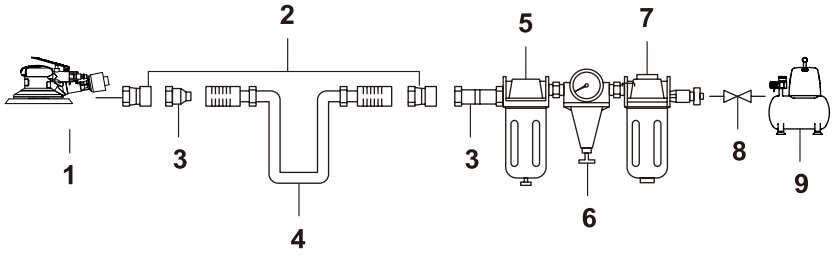
GUIDELINES FOR PROPER USE AND OPERATION

Be sure to use a proper air compressor with air-powered tools. The compressor should be able to supply a minimal air delivery of 4.56 CFM @ 90 PSI to ensure the compressor can run continuously with the tool.

Air Compressor Size & Power	1 1/2–2 HP	2 1/2 HP	3+ HP
4 - 5 Gallons	Light duty and intermittent use	Light duty and intermittent use	Light duty and intermittent use
6 - 11 Gallons	Light duty and intermittent use	Medium duty and intermittent use	Medium duty and intermittent use
15+ Gallons	Medium duty and intermittent use	Heavy-duty and continuous use	Heavy duty and continuous use

AIR SYSTEM

Always use clean, dry, regulated, compressed air at 4.8 to 6.9 bar (70 to 100 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 of tool.



No.	Description
1	6" Orbital Pneumatic Sander
2	Quick connector
3	Quick coupler
4	Air hose
5	Lubricator
6	Regulator (0 to 8.5 bar)
7	Filter
8	Cut-off valve
9	Air compressor

If a filter/regulator/lubricator is not installed on the air system, air operated tools should be lubricated at with each use or after 2 hours work with 2 to 6 drops of oil, depending on the work environment, directly through the male fitting in the tool housing.

⚠ **WARNING:** Ensure the tool is disconnected from the air hose (compressor) before making any adjustments or repairs to the tool.

INSTALLING AIR HOSE AND TOOL START UP

⚠ **WARNING! Ensure you read, understand, and apply safety instructions before use.**

- As a standard practice, drain water from the air compressor tank and air lines prior to use each use (reference your compressor operators manual for detailed instructions).
- Remove cap and then install the 1/4" male connector into the air inlet port on the tool.
- Turn on the air compressor and allow it to build up pressure.
- Adjust the air compressor's regulator or the supply line regulator to 90PSI.
- Connect compressor air hose to the 1/4" male connector installed on the sander.
- Adjust the speed control switch on the tool to the desired variable speed.
- Squeeze trigger gently. Start the sander at a slight angle to the work surface.
- Move the sander slowly back and forth in wide overlapping areas. Let the sander do the work. Do not put additional pressure on the sander.
- This slows down the speed of the pad, reducing sanding efficiency and puts additional burden on the air tool motor.
- When finishing sanding, lift sander off the work before releasing the trigger.

ON/OFF TRIGGER

To operate the tool, press the trigger located on the top of the tool.
To stop tool, release the trigger.

INSTALLING OR CHANGING SANDING DISCS (FIG. 1)

To attach a hook and loop sanding disc to your sander; turn over your sander so that the backing pad is facing up. Push the paper on the sanding base ensuring it is stuck to pad. To remove and replace, peel off and repeat process to install.

Fig 1

INSTALLING DUST HOSE AND DUST BAG (FIG.2).

Tie the dust bag to one end of the dust hose and then insert the other end of the hose into the hose and dust bag port collar at the back of the sander. Turn the collar clock-wise to lock hose into the tool. Turn the collar counter-clockwise to loosen and remove the hose.

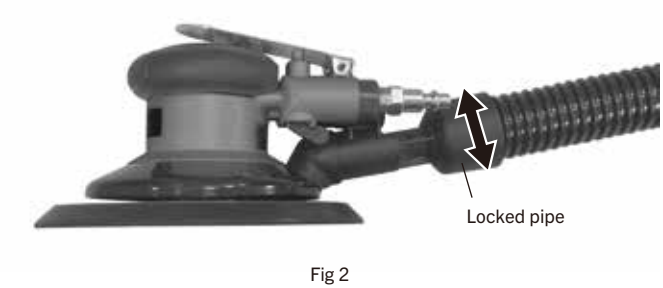


Fig 2

OPERATING THE SPEED CONTROL LEVER

The speed control lever is located on the underside of the tool just below the ¼" connector.
To increase speed pull lever up (away from body of tool). To decrease speed, push the lever toward the body of the tool.

STORAGE

If it is necessary to store the tool for an extended period of time, apply a generous amount of lubrication before storing. The tool should be allowed to run for approximately 30 seconds after lubricating in order to ensure that the lubrication is uniformly distributed throughout the tool.

MAINTENANCE

NOTE: Do not store the tool anywhere temperatures will fall below freezing.

⚠ WARNING:

Disconnect tool from air supply before maintenance/service, adjusting, cleaning jams, reloading and when not in use. Repairs must be performed by a qualified service technician only. Failure to comply will lead to serious injury or loss of life.

Lubricate the air sander daily with a few drops of air tool oil dripped into the air inlet

- Clean the tool after use. Do not use worn, or damaged tool.
- Loss of power or erratic action may be due to the following:
  a) Excessive drain on the air line. Moisture or restriction in the air pipe. Incorrect size or type of hose connectors. To remedy check the air supply.
  b) Grit or gum deposits in the tool may also reduce performance. If your model has an air strainer (located in the area of the air inlet), remove the strainer, and clean it.
- When not in use, disconnect from air supply, clean tool, and store in a safe, dry, childproof location.

REMOVING AND REPLACING SANDING PAD

⚠ WARNING: Ensure tool is disconnected from the air hose (Compressor) before removing base from tool

Use the open wrench included with your tool and slide wrench between the sanding pad and the base of the tool to engage the nut. Turn the wrench clock-wise while holding the sanding pad (to stop it from turning). Continue turning wrench until the sanding pad separates from the base of the tool. Reverse process to re-install sanding pad on base.

TROUBLE SHOOTING

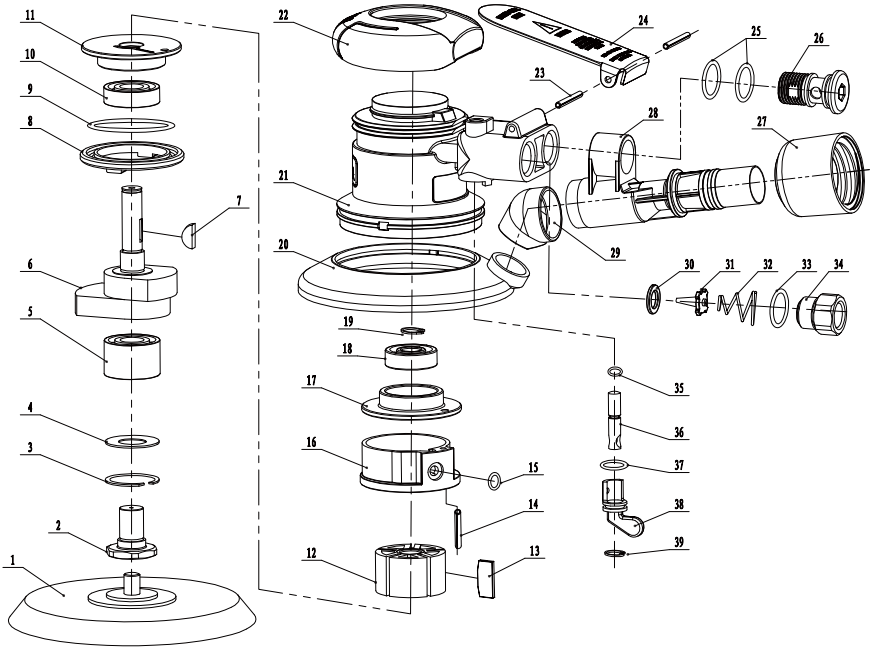
⚠ WARNING:

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 comply will lead to serious injury or loss of life. Disconnect the tool from the air supply before making any adjustments. Repairs must be performed by a qualified service technician only.

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

PROBLEM	POSSIBLE CAUSES	REMEDIES
Tool runs at normal speed but loses under load	1. Motor parts worn. 2. Cam clutch worn or sticking due to lack of lubricant.	1. Lubricating clutch housing. 2. Check for excess clutch oil. Clutch cases need onlu be half full. Overfilling can cause drag on high speed clutch parts, ie. a typical oiled/lubricated wrench requires 1/2 ounce of oil. GREASE LUBRICATED: NOTE: Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.
Tool runs slowly. Air flows slightly from exhaust	1. Motor parts jammed with dirt particles 2. Power regulator in closed position 3. Air flow blocked by dirt.	1. Check air inlet filter for blockage. 2. Pour air tool lubricating oil into air inlet as per instructions. 3. Operate tool in short bursts quickly reversing rotation back and forth where applicable. 4. Repeat above as needed. If this fails return to service centre.
Tools will not run. Air flows freely from exhaust	1. One or more motor vanes stuck due to material build up.	1. Pour air tool lubricating tool into air inlet. 2. Operate tool in short bursts of forward and/or reverse rotation where applicable. 3. Tap motor housing gently with plastic mallet. 4.Disconnect supply. Free motor by rotating drive shank manually where applicable. 5. If tool remains jammed return to service centre.
Tool will not shut off	1. “O” rings throttle valve dislodged from seat inlet valve.	1. Replace“O” ring or return to service centre.

EXPLODED VIEW



PARTS LIST

⚠ **WARNING:** When servicing, use only original equipment replacement parts. The use of any other parts may create a safety hazard or cause damage to the tool. Any attempt to repair or replace electrical parts on this tool may create a safety hazard unless repairs are performed by a qualified technician. For more information, call the Toll-free Helpline, at 1-866-349-8665.

Always order by part number.

Key #	Part #	Part Name	Quantity
1	05.02.24.0006-01	Sanding pad	1
2	03.02.02.055.016	Main shaft	1
3	03.02.02.002.011	Retainer ring	1
4	03.02.02.055.020	Bearing washer	1
5	03.05.02.011	Bearing	1
6	03.02.02.057.002	Drive shaft	1
7	03.02.01.027.023	Woodruff key	1
8	03.02.02.032.001	Lock ring	1
9	03.05.01.188	O-ring 37.5x3.55	1
10	03.05.02.117	Bearing 6001ZZ	1
11	03.02.02.055.014	Front cover	1
12	03.02.01.059.020	Rotor	1
13	03.02.02.002.016	Rotor blade	5
14	03.05.04.151	Pin 3x28	1
15	03.05.01.256	O-ring 6.7x1.8	1
16	03.02.02.055.002	Cylinder	1
17	03.02.02.055.005	Rear cover	1
18	03.05.02.051	Bearing 6000ZZ	1
19	03.05.03.047	Retainer ring 10	1
20	03.02.02.056.005	Protective shield	1
21	03.02.02.055.013-05	Housing	1
22	03.02.02.055.001	Housing sheath	1
23	03.05.04.046	Pin 3x20	2
24	03.02.02.055.004	Trigger	1
25	03.05.01.067	O-ring 14x1.6	2
26	03.02.02.056.003	Vacuum suction joint	1
27	03.02.02.056.001	Lock pipe	1
28	03.02.02.056.002	Vacuum suction straight pipe	1
29	03.02.02.056.004	Vacuum suction bend pipe	1

Key #	Part #	Part Name	Quantity
30	03.02.02.055.007	Switch plug	1
31	03.02.02.055.010	Switch pin	1
32	03.02.02.055.009	Switch spring	1
33	03.05.01.043	O-ring 11.5x1.8	1
34	03.02.02.055.008-01	Air inlet	1
35	03.05.01.197	O-ring 4.2x1	1
36	03.02.02.055.006	Switch pole	1
37	03.05.01.284	O-ring 8.5x1.5	1
38	03.02.02.055.011	Adjust knob	1
39	03.02.02.055.021	Retainer ring 12	1

WARRANTY

BENCHMARK WARRANTY

If this Benchmark tool fails due to a defect in material or workmanship within five years from the date of purchase, return it to any Home Hardware store with the original bill of sale for exchange. 3-year warranty for the battery and charger. This warranty does not include expendable parts including but not limited to blades, brushes, belts, light bulbs. This warranty covers defects in material or workmanship only. It does not cover normal wear and tear, failure due to abuse/misuse, or defects caused by careless or accidental mishandling. If this Benchmark product is used for commercial or rental purposes, this warranty does not apply.

6" ORBITAL PNEUMATIC SANDER

*5 year limited warranty on tool

BENCHMARK™MC

BENCHMARK TOOLS CANADA
ST. JACOBS, ONTARIO N0B 2N0

CUSTOMER SERVICE/TECH SUPPORT
1-866-349-8665

1282 006
Made in China

LIMITED 5 YEAR* WARRANTY

* This Benchmark™ product carries a five (5) year LIMITED warranty against defects in workmanship and materials. The charger and batteries carry a three (3) year LIMITED warranty. See Owner's Manual for full details.

READ ALL INSTRUCTIONS BEFORE FIRST USE. KEEP THIS MANUAL FOR FUTURE REFERENCE. KEEP AWAY FROM CHILDREN.

WEAR CSA APPROVED EYE PROTECTION

WEAR EAR PROTECTION

WEAR A FACE MASK