1/3 SHEET SANDER



PRODUCT SPECIFICATIONS

BENCHMARK 2.2AMP VS 1/3 SHEET SANDER

Rating	120 V, 60 Hz AC
Amperes	2.2 A
Speed	6,000-12,000 OPM (no load)
Sanding pad size	1/3 sheet 3-1/2" x 7-3/8" (90 x 187mm)
Weight	4.6 Lb. (2.1Kg)

NEED ASSISTANCE?

Call us on our toll- free customer support line:

1-866-349-8665 (Monday through Friday 9am-5 pm Eastern Standard Time)

- Technical questions
- Replacement parts
- Parts missing from package

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GENERAL SAFETY WARNINGS

WARNING:

Before using this tool or any of its accessories, read this manual and follow all Safety Rules and Operating Instructions. The important precautions, safeguards and instructions appearing in this manual are not meant to cover all possible situations. It must be understood that common sense and caution are factors which cannot be built into the product.

SYMBOL	MEANING
A DANGER	ALWAYS WEAR EYE PROTECTION THAT CONFORMS WITH CSA 294.3 or ANSI SAFETY STANDARD 287.1 FLYING DEBRIS can cause permanent eye damage. Prescription eyeglasses ARE NOT a replacement for proper eye protection. Non-compliant eyewear can cause serious injury if broken during the operation of a power tool.
WARNING	Use hearing protection, particularly during extended periods of operation of the tool, or if the operation is noisy.
M WARNING	 WEAR A DUST MASK THAT IS DESIGNED TO BE USED WHEN OPERATING A POWER TOOL IN A DUSTY ENVIRONMENT. Dust that is created by power sanding, sawing, grinding,drilling, and other construction activities may contain chemicals that are known to cause cancer, birth defects, or other genetic abnormalities. These chemicals include: Lead from lead-based paints Crystalline silica from bricks, cement, and other masonry products Arsenic and chromium from chemically treated lumber The level of risk from exposure to these chemicals varies, according to how often this type of work is performed. In order to reduce exposure to these chemicals, work in a well-ventilated area, and use approved safety equipment, such as a dust mask that is specifically designed to filter out microscopic particles.

ELECTRICAL SAFETY

🖄 WARNING:

To avoid electrical hazards, fire hazards or damage to the tool, use proper circuit protection.

This tool is wired at the factory for 120V AC operation. It must be connected to a 120V AC, 15 A circuit that is protected by a time-delayed fuse or circuit breaker. To avoid shock or fire, replace power cord immediately if it is worn, cut or damaged in any way.

POWER TOOL SAFETY

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.

WORK AREA SAFETY

Keep 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 residual current device (RCD) protected supply. Use of a ground fault circuit interrupter

(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 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 these are connected and properly used. Use of dust collection 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 safer 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 and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be **performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

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.

SPECIFIC SAFETY RULES FOR 1/3 SHEET SANDERS

WARNING:

Know your 1/3 sheet sander. Do not plug in the sander until you have read and understand this Instruction Manual.

Learn the tool's applications and limitations, as well as the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.



Always wear eye protection. Any power tool can throw foreign objects into your eyes and cause permanent eye damage. ALWAYS wear safety goggles (not glasses) that comply with ANSI safety standard Z87.1.

Everyday glasses have only impact resistant lenses. They ARE NOT safety glasses.

WARNING: Glasses or goggles not in compliance with ANSI Z87.1 could cause serious injury when they break.

NARNING: Always use a dust mask when sanding.

WARNING: Always use hearing protection when sanding, particularly during extended periods of operation.

WARNING: Always unplug the tool from the power source before changing the sandpaper and when cleaning the tool.

Do not wear gloves, neckties or loose clothing.

Secure the workpiece. Use clamps or a vise to hold the work when practical. It is safer than using your hand and it frees both hands to operate the tool.

Do not sand material too small to be securely held.

Make sure there are no nails or foreign objects in the part of the workpiece to be sanded.

Always keep hands out of the path of the sanding pad. Avoid awkward hand positions where a sudden slip could cause your hand to move into the path of the sanding pad.

To avoid injury from accidental starting, always remove the plug from the power source before installing or removing sandpaper or the vacuum adaptor.

GUIDELINES FOR EXTENSION CORDS

Make sure your extension cord is the proper size. When using an extension cord, be sure to use one heavy enough to carry the current the tool will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table on at right shows the correct size to use according to cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number the heavier the cord.

Be sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it. Protect your extension cord from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your power tools. This circuit must not be less than 14 gauge wire and should be protected with either a 15A time delay fuse or circuit breaker. Before connecting the power tool to the power source, make sure the switch is in the OFF position and the power source is the same as indicated on the nameplate. Running at lower voltage will damage the motor.

WARNING: Repair or replace damaged or worn extension cords immediately.

MINIMUM GAUGE (AWG) EXTENSION CORDS (120V USE ONLY)					
Amperage Rating		Total Length			
More than	Not more than	25' (7.5 m)	50' (15 m)	100' (7.5 m)	150' (7.5) m
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Applicable	

Select the appropriate extension cord gauge and length using the chart below.

SYMBOLS

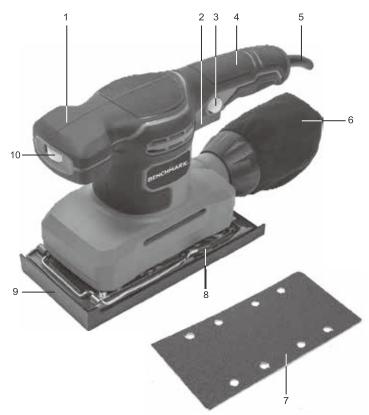
WARNING: Some of the following symbols may appear on the sander . Study these symbols and learn their meaning. Proper interpretation of these symbols will allow for mor efficient and safer operation of this tool.

V	Volts	3 ~	Three-phase alternating current
А	Amperes	3n ~	Three-phase alternating current with neutral
Hz	Hertz		direct current
W	Watts	n _o	No load speed
kW	Kilowatts	\sim	Alternating or direct current
μF	Microfarads		Class II construction
L	Liters		Splash-proof construction
kg	Kilograms		Watertight construction
Н	Hours		Protective grounding at terminal, Class I tools
N/cm ²	Newtons per square centimetre	/min	Revolutions or reciprocations per minute
Ра	Pascals	Ø	Diameter
OPM	Oscillation per minute	0	Off position
Min	Minutes		Directional arrow
S	Seconds	\wedge	Warning symbol
~ or AC	Alternating current		Wear safety glasses, hearing protection and dust mask



This symbol designates that this tool is listed with U.S. and Canadian requirements by cTUVus Testing Laboratories, Inc. UL62841-1, UL62841-2-4; CSA C22.2#62841-1, CSA C22.2#62841-2-4.

KNOW YOUR 1/3 SHEET SANDER



- 1. Front hand grip
- 2. On/Off trigger
- 3. Lock-On button
- 4. Rear handle
- 5. Power cable
- 6. dust bag
- 7. Sandpaper x 9
- 8. Clamping lever
- 9. Sandpaper punch/Base protector
- 10. Variable speed dial

ASSEMBLY AND OPERATING

WARNING: The tool should never be connected to a power supply when you are assembling parts, making adjustments, cleaning, performing maintenance, or when the tool is not in use. Disconnecting the tool will prevent accidental starting that could cause serious injury.

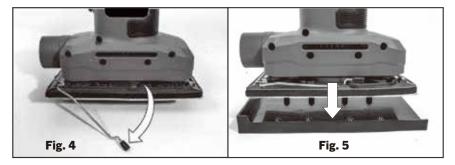
SANDING SHEET SELECTION

Selecting the correct size, grit and type of sand paper is extremely important step in achieving a high quality sanded finish. Aluminum oxide, silicon carbide, and other synthetic abrasives are best for power sanding.

Natural abrasives, such as flint and garnet are too soft for economical use in power sanding. In general, coarse grit will remove the most material and finer grit will produce the best finish in all sanding operations. The condition of the surface to be sanded will determine which grit will do the job. If the surface is rough, start with a coarse grit and sand until the surface is uniform. Medium grit may then be used to remove scratches left by the coarser grit and finer grit used for finishing of the surface. Always continue sanding with each grit until surface is uniform.

WARNING: Do not use sander without sandpaper, doing so will damage the cushion. For coarse-sanding, e.g. of rough, unplaned beams and boards: Coarse 40, 60 Grit. For face sanding and removing small irregularities : Medium 80, 100, 120 Grit. For finishing and fine sanding of all materials: Fine 150, 180, 240, 320, 400 Grit.

INSTALLING SANDPAPER



WARNING: Always disconnect the machine from the power supply before adjustment, changing accessories and maintenance.

- 1. Push the clamp lever inwards to clear the securing tag. The lever is under spring tension. Allow the lever to raise upwards and then manoeuvre outwards and downwards, Fig 4.
- 2. This allows the clamp to release its grip on the sander base. Repeat the operation for other side.
- 3. Select an abrasive paper with the correct grit corresponding to the work to be carried out. Inspect the sandpaper before use and do not use if broken or defective.

- 4. Position one end of the sandpaper under the clamp and re-secure.
- 5. The sandpaper should be pulled taught and follow the contours of the sander base. Ensure alignment of dust extraction holes with the holes in the sandpaper sheets. Position the other end of the sandpaper under the clamp and re-secure.

SANDPAPER PUNCH

A sandpaper punch template has been supplied with your sander for aligning and punching holes in sandpaper. The punched holes must align with the holes in the sander base.

Attach the sandpaper onto the sander. Align the sander base over the paper punch.

Push the sander down onto the paper punch, Fig 5.



TURNING THE SANDER ON & OFF

To turn the sander ON, depress the On/Off trigger, Fig.6 (6.1). Release the On/Off trigger to turn the sander OFF.

Lock-On Button

The sander is equipped with a continuous operation button, which is convenient when continuous cutting for extended periods of time is required. To lock-on, depress the On/Off switch, push in and hold the continuous operation button, Fig.6 (6.2), then release the On/Off switch.

- 1. Release the lock-on button and your sander will continue running.
- 2. To release the lock, depress the On/Off trigger and release.

NOTE: If you have the lock-on feature engaged during use and your sander becomes disconnected from power supply, disengage the lock-on feature immediately.

WARNING: Before connecting the sander to the power supply, always check to be sure it is not in lock-on position (depress and release On/Off trigger). Failure to comply could result in accidental starting and possible serious injury. Also, do not lock the trigger on jobs where the sander may need to be stopped suddenly.

VARIABLE SPEED CONTROL

The variable speed control allows the sander to develop a no load speed that can be adjusted from 6000 to 12000min-1. The variable speed dial is located on the front of the sander, Fig 7.

The speed can be set according to the sanding purpose or work-piece's surface you will be using.

FITTING THE DUST COLLECTION BAG

The dust collection bag provides a dust collection system for the sander. Sanding dust is drawn up through the holes of the sanding base and collected in the dust collection bag during sanding.

Unplug the sander.

Using a slight twisting motion, firmly slide the dust collection bag onto the blower exhaust on the sander.

EMPTYING THE DUST COLLECTION BAG

For more efficient operation, empty the dust collection bag when it is no more than half full. This will permit the air to flow through the dust collection bag better. Always empty and clean the dust collection bag thoroughly upon completion of a sanding operation and before placing the sander in storage.

WARNING: Collected sanding dust from sanding surface coatings such as polyurethanes, linseed oil, etc., can self-ignite in your sander dust collection bag or elsewhere and cause fire. To reduce the risk of fire always empty your dust collection bag frequently (10- 15 minutes) while sanding and never store or leave a sander without totally emptying its dust collection bag.

Unplug the sander. Remove the dust collection bag from the sander. Shake out the dust. Reattach the dust collection bag to the sander.

OPERATING THE SANDER

Secure the workpiece to prevent it from moving under the sander. Unsecured workpieces could be thrown towards the operator, causing injury.

WARNING: Keep your head away from the sander and the sanding area. Your hair could be drawn into the sander causing serious injury.

Place the sander on the workpiece so that all of the sanding sheet surface is in contact with the workpiece.

CAUTION: Avoid damaging the motor from overheating, be careful not to let your hand cover the air vents.

Turn on the sander and move it slowly over the workpiece.

NOTE: Hold the sander in front and away from you, keeping it clear of the workpiece. Start sander and let the motor build to its maximum speed, then gradually lower the sander onto the workpiece. Move the sander slowly across the workpiece using small circular motions.

Do not force. The weight of the unit supplies adequate pressure, so let the sanding disc and sander do the work. Applying additional pressure only slows the motor,

rapidly wears sanding sheet and greatly reduces sander speed. Excessive pressure will overload the motor causing possible damage from motor overheating and can result in inferior work. Any finish or resin on wood may soften from the frictional heat.

Do not allow sanding on one spot too long as the sander's rapid action may remove too much material, making the surface uneven.

Extended periods of sanding may tend to overheat the motor. If this occurs, turn sander off and wait until sanding sheet comes to a complete stop, unplug the sander, then remove it from workpiece. Allow the tool to cool down.

APPLICATIONS

You may use the sander for the purposes listed below:

- Sanding on wood surfaces.
- Removing rust from and sanding steel surfaces.
- Polishing and scrubbing porcelain and metal.

CAUTION: Keep the cord away from the sanding pad and position the cord so that it will not be caught on lumber, tools, or other objects during sanding.

WARNING: Always wear safety goggles or safety glasses with side shields when operating the products. Failure to do so could result in dust, shavings, or loose particles being thrown into your eyes, resulting in possible serious injury.

MAINTENANCE

GENERAL

MARNING: When servicing, use only identical replacement parts. Use of any other replacement parts may create a hazard or cause product damage.

DO NOT use solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use a clean cloth to remove dirt, dust, oil, grease etc.

WARNING: Do not at any time allow brake fluids, gasoline, petroleumbased products, penetrating oils, etc. to come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

DO NOT abuse power tools. Abusive practices can damage the tool as well as the workpiece.

WARNING: DO NOT attempt to modify tools or create accessories not recommended. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury. It will also void the warranty.

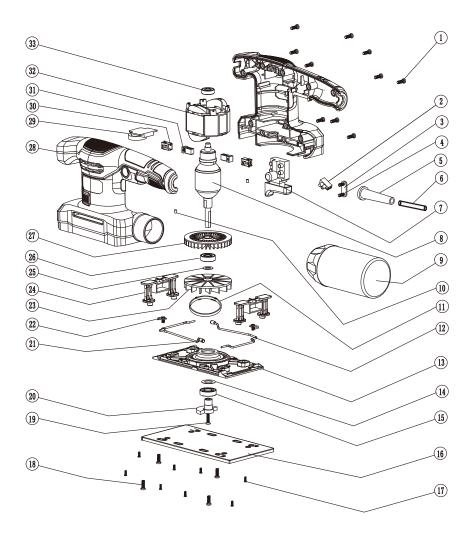
It has been found that electric tools are subjected to accelerated wear and possible premature failure when they are used on fiberglass boats and automotive parts, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electric tool parts such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compounds or plaster. During any use on these materials it is extremely important that the tool is cleaned frequently by blowing the dust out of the tool with an air jet.

WARNING: Always wear safety goggles or safety glasses with side shields during all sanding operations. It is critical that you also wear safety goggles or safety glasses with side shields and a dust mask while blowing dust out of the sander with an air jet. Failure to take these safety precautions could result in permanent eye or lung damage.

LUBRICATION

All of the bearings in this sander 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.

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 sander

Always order by PART NUMBER, not by key number.

Key #	Part #	Part Name	Quantity
1	4030010106	Screw ST3.9X19	10
2	1250010002	Block	1
3	2030050002	Cord clamp	1
4	4030010096	Screw ST3.9X12	2
5	3140010054	Cord guard	1
6	1190030073	UI cord	1
7	1061260001	Switch	1
8	1010050084	Rotor	1
9	3180060023	Holder+dust bag	1
10	3190110008	Buffer post	2
11	3140060002	Felt seal	1
12	3190010052	Clamp wire	2
13	2050080212	Aluminum plate	1
14	2020120048	Washer	1
15	2030170007	Bearing 6002 2RS	1
16	4010010159	PU plate	1
17	3150120105	Screw M4X8	10
18	4020010206	Screw ST3.9X14	1
19	4030010099	Screw M5X14	1
20	4020030031	Counter balance	1
21	2010130057	Wire cap	2
22	3120140001	Wire holddown	2
23	2030160015	Fan	1
24	3150010133	Support bar	2
25	2150110040	Washer	1
26	2030020160	Bearing 608 2RS	1
27	4010010158	Cooling fan	1
28	3150010029	Housing	1
29	3011050064	PCB	1
30	1130010286	Brush holder	2

Key #	2030070014	Part Name	Quantity
31	1230010170	Carbon brush	2
32	1020050079	Stator	1
33	4010010034	Bearing 607 2Z	1

WARRANTY

BENCHMARK 2.2AMP VS 1/3 SHEET SANDER 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.

1/3 SHEET SANDER



5 year limited warranty on tool



BENCHMARK TOOLS CANADA ST. JACOBS, ONTARIO NOB 2NO © 2021 Home Hardware Stores Limited

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



* This Benchmark™ product carries a five (5) year LIMITED warranty against defects in workmanship and materials. 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







1262-302

Made in China