

# VARIABLE SPEED DRILL

Item Number W50086

## OWNER'S MANUAL



Performance Tool®

### **▲WARNING:**

*It is the owner and/or operators' responsibility to study all WARNINGS, operating, and maintenance instructions contained on the product label and instruction manual prior to operation of this product. The owner/operator shall retain product instructions for future reference.*

*The owner and/or operator are responsible for maintenance, maintaining all decals or warning labels and while in use, maintaining the unit in good working order. If the owner and/or operator are not fluent in English, the product warnings and instructions shall be read and discussed with the operators' native language by the purchaser/owner or his designee. Make sure that the operator comprehends its contents. Safety information shall be emphasized and understood prior to usage. The product shall be inspected per the operating instructions.*

*Users of this product must fully understand these instructions. Each person operating this product must also be of sound mind and body and must not be under the influence of any substance that might impair their vision, dexterity or judgment.*

*Protect yourself and others by observing all safety information.*

*Failure to comply with instructions could result in personal injury and/or property damage!*

**PT**  
Performance Tool®

## SAFETY GUIDELINES / DEFINITIONS

This instruction manual is intended for your benefit. Please read and follow the safety, installation, maintenance and troubleshooting steps described within to ensure your safety and satisfaction. The contents of this instruction manual are based upon the latest product information available at the time of publication. The manufacturer reserves the right to make product changes at any time without notice.

**▲ WARNING:** Read and understand this entire instruction manual before attempting to assemble, install, operate or maintain this product. Failure to comply with the instructions may result in serious personal injury and/or property damage!

The following signal words are used to emphasize safety warnings that must be followed when using this product:

**▲ DANGER** Indicates an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.

**▲ WARNING** Indicates a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.

**▲ CAUTION** Indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury.

**▲ NOTICE** Indicates important information, which if not followed, MAY cause damage to equipment.

## UNPACKING AND INSPECTION

After opening the carton, unpack your new product and related parts & accessories. Please inspect it carefully for any damage that may have occurred during transit.

**▲ WARNING:** DO NOT operate this product if damaged during shipment, handling or misuse. Do not operate the product until the parts have been replaced or the fault rectified. Failure to do so may result in serious personal injury or property damage. All damaged parts must be repaired or replaced as needed prior to operating this product. Check to see that all nuts, bolts and fittings are secure before putting this product into service.

Please have the serial number, model number, and date of purchase available for reference when calling.

## SPECIFICATIONS

Input Voltage .....	120V ~60Hz
Rated Current .....	3.2A
No-Load Speed .....	0-3000 RPM
Chuck Capacity (MAX) .....	3/8"

**Specifications are subject to change without notice.**

## IMPORTANT SAFETY INFORMATION

**▲ WARNING:**  
**READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE OPERATING THIS PRODUCT. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID WARRANTY.**

1. Always use common sense and pay particular attention to all the DANGER, WARNING, CAUTION and NOTICE statements of this manual. The safety instructions provided are not intended to cover all possible conditions and practices that may occur when operating, maintaining and cleaning power tools.
2. Observe work area conditions. Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids. Do not bring combustible materials near the tools. Power tools create sparks, which may ignite the dust or fumes. Keep work area clean and well lit. Cluttered work areas invite accidents.
3. Use personal protective equipment. Wear ANSI approved safety goggles. Protective equipment such as dusk mask, non-skid safety shoes, hard hat, heavy duty work gloves or hearing protection used for appropriate conditions will reduce personal injuries.
4. Keep bystanders, children and visitors away while operating this product. Distractions can cause you to lose control.
5. Stay alert. Watch what you are doing, and use common sense when operating this product. Do not use this product while tired or under

# IMPORTANT SAFETY INFORMATION

- the influence of drugs, alcohol, or medication. A moment of inattention while operating this product may result in serious personal injury. Keep proper footing and balance at all times. Do not reach over or across running machines, hoses, cords, etc.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
  - Work Safe. Operate tool a safe distance from yourself and others in the work area. Keep proper footing and balance at all times. Do not overreach, especially on ladders. Be certain ladders being used are sturdy, stable, on a firm surface and erected as safe working angles. Do not reach over or across running machines, hoses, cords, etc.
  - Inspect before every use; do not use if parts are loose or damaged.
  - Do not alter this product in any way.
  - Use the right tool for the job. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. Don't use a tool whose performance is not adequate for your work. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
  - 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.
  - People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
    - Avoid operating alone.
    - Do not use with power switch locked on.
    - Properly maintain and inspect to avoid electrical shock.
    - Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
  - Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
  - Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
  - Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
  - When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
  - If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock. Use power tool ONLY on adequately rated circuits to avoid overheating of electrical systems.
  - Prevent accidental starting. Ensure 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.
  - 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.
  - 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. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.
  - Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the power tool accidentally.
  - 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

## IMPORTANT SAFETY INFORMATION

those intended could result in a hazardous situation.






25. Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children and other untrained persons. Switch off all unused electrical tools when stored. Disconnect plug from power source. Tools are dangerous in the hands of untrained users.

**⚠ WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**⚠ WARNING:** This product and its packaging contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

## SYMBOL DEFINITIONS

**IMPORTANT:** Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Name	Explanation
V	Volts	Voltage (Potential)
A	Amperes	Current
Hz	Hertz	Frequency (Cycles per Second)
W	Watt	Power
Kg	Kilograms	Weight
	Alternating Current	Type of Current
	Direct Current	Type of Current
	Alternating or Direct Current	Type of Current
	Earthing Terminal	Grounding Terminal
	Class II Construction	Denotes Double Insulation
min	Minutes	Time
s	Seconds	Time
∅	Diameter	Size of Drill Bits, Grinding Wheels, etc.
$n_0$	No load speed	No-load Rotational Speed
.../min	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute
1,2,3,...	Ring Selector Settings	Speed, Torque or Position Settings

# CONTROLS AND COMPONENTS

1. Keyless Chuck
2. Chuck Grip
3. Belt Hook
4. Grip
5. Lock on Button
6. Trigger
7. Forward/Reverse Lever



# OPERATION

**⚠ WARNING:** Always unplug the tool before changing accessories.

## OPERATING THE DRILL

### OPERATING THE ON/OFF SWITCH

**⚠ WARNING:** Never tape the trigger switch down to provide continuous high speed. The tool may fail under such conditions causing fire or personal injury.

Squeeze the trigger switch to turn the tool “ON”. Release the trigger switch to turn the tool “OFF”. The amount of pressure put on the trigger will vary the speed of the drill. Fully pressing the trigger will increase the rpm to maximum.

When drilling for extended periods, the “Lock-On” switch may be used, but do not use this switch in situations where the drill is likely to bind or kickback. If kickback does occur, the sudden motion of the tool may make it difficult to release the “Lock-On” switch and turn the drill off.

### REVERSING SWITCH LEVER

**⚠ NOTICE:** Be sure the trigger is released when changing the position of the lever. Always check the direction of the Drill’s rotation before use.

The reversing switch lever reverses the rotation of the drill bit. It is located just above the trigger switch. ALWAYS turn the

motor off and let the bit come to a complete stop before moving the switch. Move the switch to the right for a forward rotation of the bit. Move the switch to the left to put the bit into reverse.

**⚠ CAUTION:** Do not change the direction of a moving bit. Make sure the bit comes to a complete standstill before moving switch. Changing direction while the bit is moving can cause damage to the drill.

## INSTALLING ACCESSORIES

### BIT INSERTION

- Unplug the drill. Never change bits on a live drill.
- Make sure the bit is undamaged, sharp and free from wood or metal shavings. Foreign material on the bit may keep the chuck from tightening fully. A loose bit may cause injury.
- Push the bit into the chuck as far as it will go.
- Make sure the bit is in the center of the chuck. If the bit is off-center, it will not be held securely and may fly loose during use causing serious injury.
- Rotate the keyless chuck clockwise until tight while holding the chuck grip to lock the bit in place.

# OPERATION

## BIT REMOVAL

- Unplug the drill.
- Rotate the keyless chuck counterclockwise while holding the chuck grip to unlock the bit.
- Remove the bit

**▲ WARNING:** In certain situations, the bit may bind and the drill will kickback in the opposite direction. This sudden reaction could lead to loss of control and possible serious injury. Always be prepared for the possibility of kickback, especially when breaking through material to complete a hole.

## DRILLING METAL

Use an even pressure, hard enough to keep the drill biting, but not so hard that the bit spins in the hole. Spinning the bit will dull it quickly. Soft metals like copper, cast iron, brass or aluminum will take less pressure than harder materials like steel. When drilling harder metals, use lubricating oil on the tip of the bit.

## DRILLING MASONRY

**▲ NOTICE:** Always use carbide tip bits for drilling masonry.

Use an even pressure, hard enough to keep the drill biting, but not so hard that the bit spins in the hole. Spinning the bit will dull it quickly. Bricks and similar soft materials will take less pressure than a hard material like concrete.

## DRILLING WOOD

**▲ WARNING:** Always clamp the work piece to a steady base. Never hold in your hand or across your legs.

Apply pressure in line with the bit. Applying pressure at an angle could cause the bit to bind or break. Thin materials that may splinter should be drilled with another piece of wood placed underneath. Twist bits can be used for wood drilling but will overheat if the flutes are not cleared of wood chips periodically. To prevent splintering when finishing holes, stop drilling just before the hole breaks through and complete the hole from the other side.

## CARE & MAINTENANCE

**⚠ WARNING:** Unplug the drill before performing maintenance or cleaning.

**⚠ NOTICE:** This Drill is lubricated before it leaves the factory. This lubrication should last for the life of the tool. No further lubrication is required.

• Never immerse tool in liquid. Never let any liquid inside tool housing.

• Clean with a damp cloth and mild soap. Do not use solvents or harsh detergents.

• Check brushes periodically. Worn brushes should be replaced by qualified service personnel.

• Keep air vents clean and free from debris. Blocked air vents can lead to overheating

## ACCESSORIES

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

Always attach grounded (3-prong) extension cords to grounded (3-hole) outlets. If you must use an extension cord, be sure that the gauge is large enough to carry the amount of current necessary for your power tool. If not, your tool may experience a loss of power, excessive voltage drop or overheating. The smaller the gauge number, the heavier the cord (see table below).

<b>RECOMMENDED SIZES OF EXTENSION CORDS FOR 120 VOLT AC 60 HZ TOOLS</b>					
<b>CURRENT RATINGS IN AMPS</b>		<b>CONDUCTOR SIZE IN A.W.G.</b>			
<b>MORE THAN</b>	<b>MORE THAN</b>	<b>10 ft.</b>	<b>25 ft.</b>	<b>50 ft.</b>	<b>100 ft.</b>
3	6	18	18	18	18
6	8	18	18	18	16
8	10	18	18	18	14
10	12	16	16	14	14
12	16	14	14	12	<b>NOT RECOMMENDED</b>
16	20	12	12	12	

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