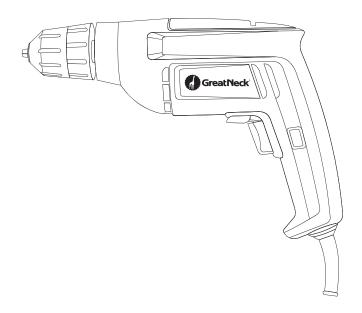
### **Owner's Manual**



## 3/8" Drill 80154



### **CAUTION:**

Before using this drill or any of its accessories, read this manual and follow all Safety Rules and Operating Instructions.

- General Safety Rules
- Specific Safety Rules and Symbols
- Functional Description
- Assembly
- Operation
- Maintenance
- Accessories

### **TABLE OF CONTENTS**

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### WARRANTY

### **GREATNECK® ONE YEAR LIMITED WARRANTY**

If within one year from date of purchase, this product fails due to a defect in materials or workmanship, return the product with proof of purchase, postage prepaid to Great Neck Saw Mfrs.Inc., Mineola, NY 11501, for replacement with an item of equal or greater value. This warranty excludes incidental/consequential damages and failures due to misuse, abuse or abnormal wear and tear.

This warranty gives you specific rights, and you may also have other rights, which vary from state to state.

This product is not guaranteed if used for industrial or commerical purposes.

**Customer Service 1-866-458-2472** 

### **SPECIFICATIONS**

Rating	120 V, 60 Hz, AC
Amperes	3.5 A
Motor speed	2500 RPM (no load)
Reversible	Yes
Chuck	<sup>3</sup> / <sub>8</sub> " keyless
Max. drilling capacity in metal	<sup>3</sup> / <sub>8</sub> " (10 mm)
Weight	3 lb 7 oz (1.57 kg)

**MARNING:** To avoid electrical hazards, fire hazards or damage to the drill, use proper circuit protection.

The drill is wired at the factory for 120 V operation. It must be connected to a 120 V, 15 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**

#### ALWAYS WEAR EYE PROTECTION THAT CONFORMS WITH CSA REQUIREMENTS or ANSI SAFETY STANDARD Z87.1



FLYING DEBRIS can cause permanent eye damage. Prescription eyeglasses ARE NOT a replacement for proper eye protection.



WARNING: Non-compliant eyewear can cause serious injury if broken during operation of a power tool.

#### **GENERAL SAFETY RULES**

WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

#### **WORK AREA**

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gas or dust. Power tools create sparks which may ignite the dust or fumes.

Keep bystanders, children and visitors away while operating the tool.

Distractions can cause you to lose control.

#### **ELECTRICAL SAFETY**

Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized plug only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three-prong grounded power cord and grounded power supply system.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is increased risk of electric shock if your body is grounded.

Don't expose power tools to rain or wet conditions. Water entering the power tool will increase the risk of electric shock

#### SAVE THESE INSTRUCTIONS FOR REFERENCE

### **POWER TOOL SAFETY**

**Do not abuse the cord.** Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce 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 the tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry.

Contain long hair. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can be caught in moving parts.

Avoid accidental starting. Be sure switch is OFF before plugging in.
Carrying tools with your finger on the switch or plugging in tools that have the switch turned ON invites accidents.

Remove adjusting keys or wrenches before turning the tool ON. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat or hearing protection must be used under applicable conditions.

#### **TOOL USE AND CARE**

Use clamps or other practical method to secure and support the workpiece on a stable platform. Holding the work by hand or against your body is unsafe and may lead to loss of control.

Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use the tool if the switch does not turn it ON or OFF. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

#### SAVE THESE INSTRUCTIONS FOR REFERENCE

### POWER TOOL SAFETY

Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

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.

#### **SERVICE**

Tool service must be performed only by qualified personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

### SPECIFIC SAFETY RULES

WARNING: For your safety, do not plug in your drill until you have carefully read and understood this Owner's Manual.

ALWAYS WEAR EYE PROTECTION THAT CONFORMS WITH CSA REQUIREMENTS or ANSI SAFETY STANDARD Z87.1



FLYING DEBRIS can cause permanent eye damage. Prescription eyeglasses ARE NOT a replacement for proper eye protection.

**Do not wear gloves**, neckties or loose clothing.

Do not drill material too small to be securely held.

Always keep hands out of the path of the drill bit. Avoid awkward hand positions where a sudden slip could cause your hand to move into the path of the drill bit. Do not install or use any drill bit that exceeds 7" (175 mm) in length or extends more than 6" (150 mm) beyond the chuck jaws. They can bend or break suddenly.

Before starting the operation, jog the drill switch to make sure the drill bit does not wobble or vibrate.

Do not use fly cutters or multiple-part hole cutters, as they can come apart or become unbalanced in use.

Make sure the spindle has come to a complete stop before touching the chuck or attempting to change the drill bit.

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

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

To avoid injury from accidental starting, always remove the battery from the tool before installing or removing a drill bit.

SAVE THESE INSTRUCTIONS FOR REFERENCE

### **EXTENSION CORD GUIDELINES**

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 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.

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

MINIMUM GAUGE (AWG) EXTENSION CORDS (120 V use only)					
Ampere	rating	T	otal ler	ngth in f	eet
More than	Not more than	25'	50'	100'	150'
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12		ot cable

### **SYMBOLS**

WARNING: 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.

V	volts	
Α	amperes	
Hz	hertz	
W	watt	
kW	kilowatts	
μF	microfarads	
L	litres	
kg	kilograms	
Н	hours	
N/cm <sup>2</sup>	newtons per square centimetre	
Pa	pascals	
Min	minutes	
S	seconds	
$\sim$	alternating current	
3	three-phase alternating current	

	three-phase alternating	
3N V	current with neutral	
===	direct current	
n <sub>。</sub>	no load speed	
$\overline{}$	alternating or direct current	
	class II construction	
	splash proof construction	
<b>&amp; &amp;</b>	watertight construction	
	protective earthing at earthing terminal, Class I tools	
/min	revolutions or reciprocations per minute	
Ø	diameter	
0	off position	
<b>→</b>	arrow	
$\triangle$	warning symbol	

HOMOLOGUÉ

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LISTED

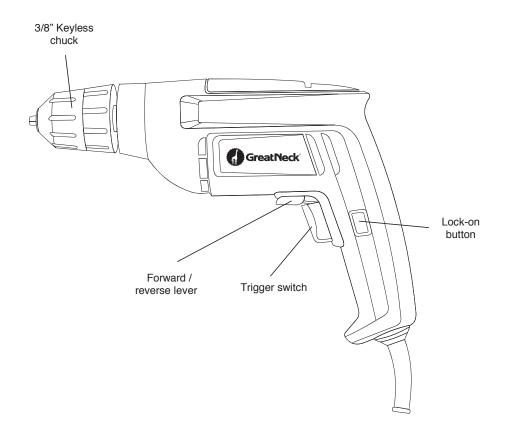
61TN

E213739

JD2009U

This symbol designates that this tool is listed with both Canadian and U.S. requirements by Underwriters Laboratories.

# KNOW YOUR DRILL



# ACCESSORIES & CARTON CONTENTS

#### **AVAILABLE ACCESSORIES**

WARNING: Use only accessories recommended for this drill. Follow instructions that accompany accessories. Use of improper accessories may cause injury to the operator or damage to the drill.

Do not use any accessory unless you have completely read the instructions or Owner's Manual for that accessory.

Drill bits Screwdriver bits

### **CARTON CONTENTS**

WARNING: If any part is missing or damaged, do not plug the drill into the power source until the missing or damaged part is replaced.

Carefully unpack the drill. Compare contents against the "Drill Components" chart below.

WARNING: To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner or similar highly volatile solvents to clean the tool.

DRILL COMPONENTS		
DESCRIPTION	QTY	
Drill	1	
Owner's manual	1	

### **ASSEMBLY & OPERATION**

#### FORWARD/REVERSE LEVER

The forward/reverse lever (1) is conveniently mounted above the trigger lever (2) (see Fig. 1). To make the drill rotate clockwise (for drilling) push the forward/reverse lever to the left. To make the drill rotate counter-clockwise for removing screws, push the forward/reverse lever to the right.

**NOTE:** Never change position of the forward/reverse lever while chuck is turning.

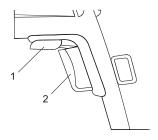


Fig. 1

#### TRIGGER SWITCH

This drill is equipped with a ON/OFF trigger switch.

- 1. To start drill, gently squeeze the trigger switch (1) (see Fig. 2).
- To stop the drill, release the trigger switch.

**NOTE:** Drilling for an extended period of time may cause the drill motor to overheat. If the drill motor gets hot, stop drilling and allow to cool for at least 15 minutes.

#### TRIGGER SWITCH - cont'd

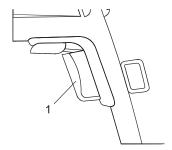
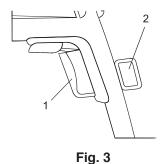


Fig. 2

#### TRIGGER SWITCH LOCK

The trigger switch lock-on feature allows the trigger switch to be locked in the ON position when continuous operation for extended periods of time is required (see Fig. 3).

To lock the trigger switch in the ON position, pull back on the trigger switch (1) to start the drill and push the trigger switch lock button (2) into the drill handle. Release the trigger switch while holding the trigger switch lock button into the drill handle. The drill will continue to run. To release the trigger switch lock button, pull trigger switch back and then release the trigger.



#### **INSTALLING DRILL BITS**

WARNING: Never hold the chuck body with one hand and use the drill power to rotate the drill body to loosen or tighten bits. Serious injury may result.

- To open the keyless drill chuck, grasp the chuck body (1) and the chuck collar (2) with the other hand. Rotate the chuck body in a counter-clockwise direction (3) until the chuck jaws (4) open wide enough to accept the bit (see Fig. 4).
- Insert bit (5) into the chuck the full length of the jaws (4). Raise the front of your drill slightly to prevent the bit from falling out of the chuck jaws.
- Tighten the chuck jaws onto the bit by holding the chuck collar (2) with one hand and turning the chuck body (1) in a clockwise direction.

**NOTE:** Make sure the bit is properly aligned in the jaws and NOT at an angle. An improperly aligned bit could be thrown from the chuck when the drill is started. Make sure the chuck jaws grasp the flat sides of a screwdriver bit.

#### INSTALLING DRILL BITS - cont'd

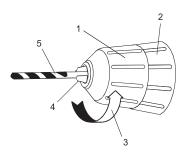


Fig. 4

 Finish tightening the chuck jaws. Firmly grasp the chuck body with one hand and the chuck collar with the other hand rotate the chuck body in a clockwise direction.

**NOTE:** Hand tighten chuck jaws. Do NOT use pliers.

WARNING: Do not insert drill bit into chuck and tighten as shown in Fig. 5. Drill bit MUST be properly inserted with all three chuck jaws holding the bit centred in the chuck. Failure to properly insert drill bit could cause the drill bit to be thrown from the chuck resulting in possible serious injury or damage to the chuck.



Fig. 5

#### **REMOVING BITS**

- To open the keyless drill chuck, grasp and hold the chuck collar with one hand and the chuck body with the other hand. Rotate the chuck body in a counter-clockwise direction until the chuck jaws open and release the bit.
- Remove the drill bit.



#### WARNING

Have you read "POWER TOOL SAFETY", "SPECIFIC SAFETY RULES", "EXTENSION CORD GUIDELINES" and "SYMBOLS" on pages 3, 4, 5, 6, 7 & 8 of this Manual? If not, please do so before you operate this drill. Your safety depends on it!

Every time you use the drill you should verify the following:

- 1. Chuck is tight.
- 2. Workpiece is properly secured.
- 3. Safety glasses are being worn.

Failure to adhere to these safety rules can greatly increase the chances of injury.

#### **DRILLING**

When drilling into smooth, hard surfaces such as metal, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off centre as the hole is started.

#### DRILLING - cont'd

The workpiece to be drilled should be secured in a vise or with clamps to keep it from turning as the drill bit rotates (see Fig. 6).

- Check drill bit to make sure it is firmly locked into the drill chuck and the forward/reverse switch is in the forward position.
- Hold the drill firmly with both hands whenever possible. Use one hand to grasp the handle and switch and the other to grasp the body of the drill.
   NOTE: Make sure the hand placed on the body of the drill does not cover the air vents. Covering these air vents will reduce the motor cooling and possibly lead to overheating the motor.

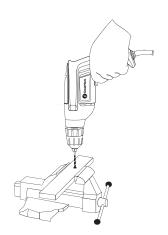


Fig. 6

- While holding the drill firmly, place the point of the drill bit at the point to be drilled. Depress the switch trigger to start the drill.
  - **NOTE:** Always use a higher drill speed when drilling small holes. Use a slower drill speed when drilling large holes.
- Move the drill bit into the workpiece applying only enough pressure to keep the bit cutting. Do not force the drill bit or apply sideways pressure to elongate the hole.

WARNING: Be prepared for binding and bit breakthrough. When these situations occur, the drill bit has a tendency to grab the workpiece. This action will kick the drill opposite to the direction of drill bit rotation and could cause loss of control when breaking through material as you complete drilling the hole. If you are not prepared, this loss of control can result in serious injury.

When drilling metals, use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the drill bit and improve the drill cutting action. If the bit jams in the workpiece or if the drill stalls, release the trigger switch immediately. Remove the bit from the workpiece and determine the reason for jamming.

#### **CHUCK REMOVAL**

To remove the chuck:

- Remove the plug from the power source.
- Remove the chuck screw using a #2 screwdriver (see Fig. 7).
   NOTE: Turn screw CLOCKWISE to remove it. This screw has a lefthanded thread
- Insert the hex key into the chuck and tighten jaws of chuck securely (see Fig. 8). Tap the hex key sharply with a mallet in a COUNTER-CLOCKWISE direction. This will loosen the chuck on the spindle. The chuck can now be unscrewed and removed from the spindle by hand.



Fig. 7

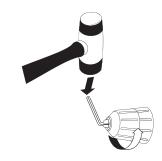


Fig. 8

#### RETIGHTENING LOOSE CHUCK

After installing the chuck once it has been removed, the chuck may become loose on the spindle and develop a wobble. Also, the chuck screw may become loose causing the chuck jaws to bind and prevent them from closing. To tighten the chuck, follow these steps:

- Insert hex key into chuck and tighten chuck securely.
- Tap hex key sharply with a mallet in a CLOCKWISE direction. This will tighten the chuck on the spindle.

- Open chuck jaws and remove the hex key.
- 4. Tighten the chuck screw using a #2 (\$\text{\$\cdot}\$) screwdriver.

**NOTE:** Turn screw COUNTER-CLOCKWISE to tighten it. This screw has a left-handed thread.

### **MAINTENANCE**

#### **GENERAL**

WARNING: When servicing, use only identical GreatNeck® replacement parts. Use of any other part 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 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.

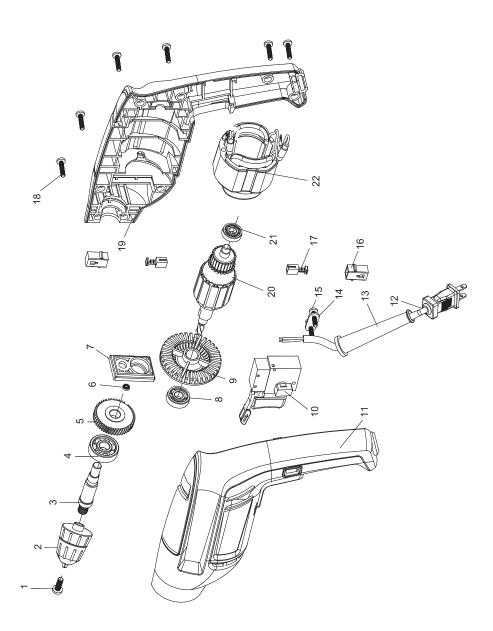
WARNING: DO NOT attempt to modify tools or create accessories not recommended. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury. It will also void the warranty.

#### 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.

# PARTS DIAGRAM - MODEL 80154

# Drill



### PARTS LIST - MODEL 80154

### Drill

WARNING: When servicing, use only Greatneck® replacement parts. Use of any other parts may create a HAZARD or cause damage to your power tool.

Any attempt to repair or replace electrical parts on this power tool may create a hazard unless repair is performed by a qualified technician.

### Always order by PART NUMBER.

	Part #	Part Name	Quantity
1	80154-1	Screw	1
2	80154-2	Chuck	1
3	80154-3	Shaft	1
4	80154-4	Bearing 6001	1
5	80154-5	Driven gear	1
6	80154-6	Bearing 687	1
7	80154-7	Abutment	1
8	80154-8	Bearing 608	1
9	80154-9	Fan	1
10	80154-10	Switch	1
11	80154-11	Left enclosure	1
12	80154-12	AC cord & plug	1
13	80154-13	Cord sleeve	1
14	80154-14	Strain relief	1
15	80154-15	Tapping screw	2
16	80154-16	Brush holder	2
17	80154-17	Carbon brush	2
18	80154-18	Tapping screw	8
19	80154-19	Right enclosure	1
20	80154-20	Rotor	1
21	80154-21	Bearing 607	1
22	80154-22	Stator	1