

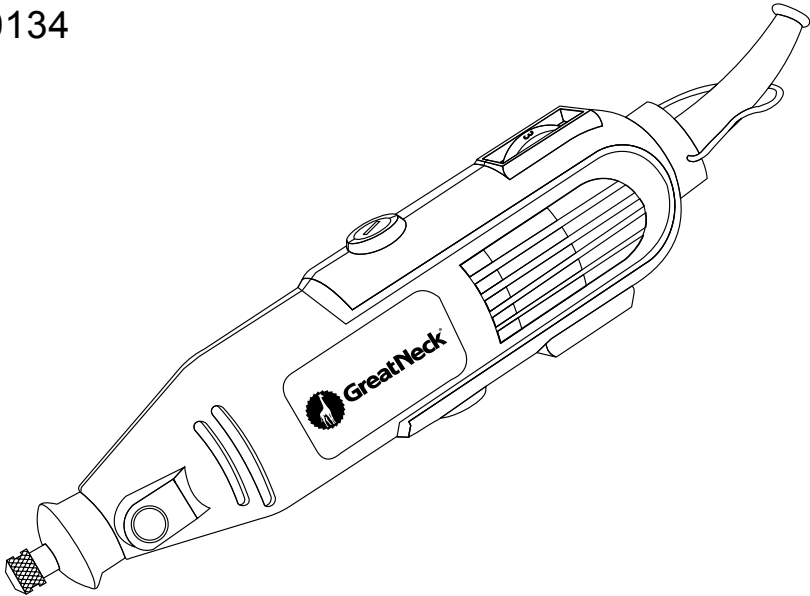
Owner's Manual



GreatNeck®

ROTARY TOOL

80134



CAUTION:
Before using this rotary tool or any of its accessories, read this manual and follow all its Safety Rules and Operating Instructions.

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

GreatNeck Tools, LLC Mineola, NY 11501

Rev 0 09/15

TABLE OF CONTENTS

SECTION	PAGE	SECTION	PAGE
Warranty	2	Accessories	7
Product specifications	2	Carton contents	7-9
Power tool safety	3-4	Accessory description & use ..	10-11
Rotary tool safety	4-5	Assembly & operation	11-13
Symbols	5	Maintenance	13
Know your rotary tool	6	Parts & service	14-15

WARRANTY

ONE YEAR LIMITED WARRANTY

For one year from the date of purchase of this GreatNeck® product you find any defect in material or workmanship, through normal usage, either return it to the place of purchase, or send it to GreatNeck® Tools LLC. for repair or replacement at our discretion. In order to obtain this service send your tool and proof of purchase, transportation pre-paid, to GreatNeck® Tools LLC Q.A. Dept, 3580 E. Raines Rd. #3, Memphis, TN 38118. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

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

Please see our website for full warranty information.

TOLL FREE HELPLINE: 1-866-458-2472

SPECIFICATIONS

Motor rating	120 V, 60 Hz
Amp.	1.2 A
RPM (no load)	10000-33000 RPM



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

The rotary tool is wired at the factory for 110-120 V operation. It must be connected to a 110-120 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

GENERAL SAFETY RULES



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 welllit.

Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gasses 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-wire 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.

Do not expose power tools to rain or wet conditions. Water entering the power tool will increase the risk of electric shock.

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 jewellery.

Contain long hair. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewellery 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 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 for appropriate conditions.

POWER TOOL SAFETY

TOOL USE AND CARE

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable 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.

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.

ROTARY TOOL SAFETY

SERVICE

Tool service must be performed only by qualified personnel. Service or maintenance performed by unqualified personnel could result in risk of injury. For more details, call 1-866-458-2472.

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

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

Always make sure the work surface is free from nails and other foreign objects. Cutting into a nail can cause the bit and the tool to jump and damage the bit.

Never hold the workpiece in one hand and the tool in the other hand when in use. Never place the hands near or below the cutting surface. Clamping the material and guiding the tool with both hands is much safer.

Never lay workpiece on hard surfaces like concrete, stone, etc. Protruding cutting bit may cause tool to jump.

Always wear safety goggles and dust mask. Use only in well-ventilated area. Using personal safety devices and working in a safe environment reduces risk of injury.

After changing the bits and accessories or making adjustments, make sure the collet nut and any other adjustment devices are securely tightened. Loose adjustment devices will be violently thrown.

ROTARY TOOL SAFETY

SPECIFIC SAFETY RULES – cont'd

Always use the correct collet size If the collet size is larger than the accessory shank size it will not grip the shank properly, leading to possible injury to the operator or damage to the tool.

Always check accessory bits, grinding stones, cut-off wheels etc. for damage before each use. Damaged accessories can break during use and cause serious injury.











Never use dull or damaged bits. Sharp bits must be handled with care.

Damaged bits can snap during use. Dull bits require more force to push the tool, possibly causing the bit to break.

Never touch the bit during or immediately after use. After use the bit is too hot to be touched by bare hands.

SYMBOLS

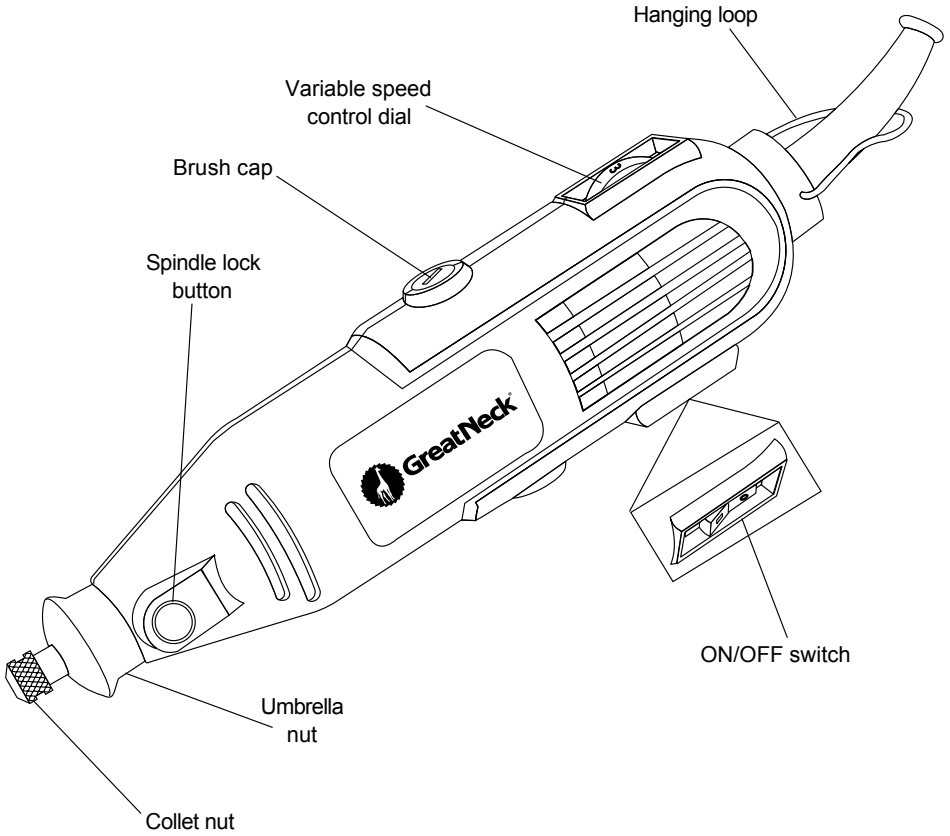
V	volts
A	amperes
Hz	hertz
W	watt
kW	kilowatts
μF	microfarads
L	litres
Kg	kilograms
N/cm ²	newtons per square centimeter
Pa	pascals
H	Hours
Min	minutes
S	seconds
	alternating current
	three-phase alternating current

	three-phase alternating current with neutral
	direct current
n_0	no load speed
	alternating or direct current
	class II construction
	splash proof construction
	watertight construction
	protective earthing at earthing terminal, Class I tools
.../min	revolutions or reciprocations per minute
∅	diameter
0	off position
	arrow
	warning symbol
	wear your safety glasses



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

KNOW YOUR ROTARY TOOL












ACCESSORIES & CARTON CONTENTS

AVAILABLE ACCESSORIES



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

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

-  Grinding stones
-  Cut-off wheels
-  Polishing wheels
-  Wire brushes
-  Bristle brushes
-  Sanding drums
-  Cutting bits
-  Drill bits
-  Dressing stones

NOTE: Most commonly used bits and accessories with 1/8" and 3/32" shanks will fit this tool. Rotary tool accessories such as a drill press designed for other rotary tools may not fit this tool.



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

ROTARY TOOL COMPONENTS		
KEY	DESCRIPTION	QTY
A	Rotary tool	1
B	Blow moulded case	1
C	General-purpose accessory set (see Page 9 for contents)	1
	Owner's manual	1

CARTON CONTENTS

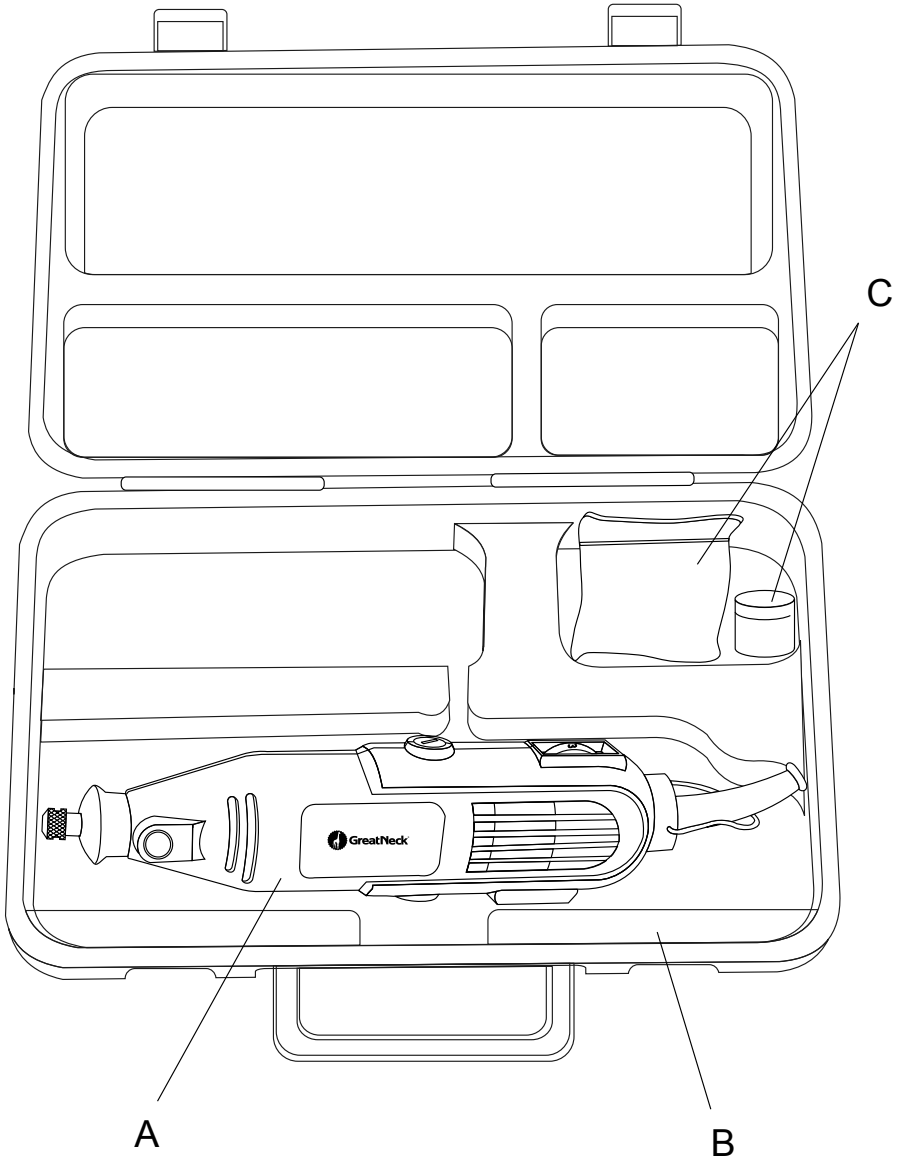


If any part is missing or damaged, do not plug the rotary tool into the power source until the missing or damaged part is replaced.

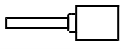

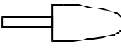

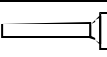









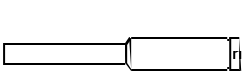
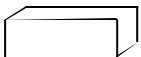



Carefully unpack the rotary tool and all its components. Compare against the "Rotary Tool Components" chart.

NOTE: See illustration of rotary accessories on Page 9.

CARTON CONTENTS



ACCESSORY KIT CONTENTS

Illustration	Description	Shape	Qty
	Aluminum oxide grinding stone	Cylinder 3/8"	1
	Aluminum oxide grinding stone	Cone 5/8"	1
	Aluminum oxide grinding stone	Parabolic 3/8"	1
	Aluminum oxide grinding stone	Cylinder 13/32"	1
	Aluminum oxide grinding stone	Cylinder 25/32"	1
	Felt polishing wheel	1/2"	2
	Felt polishing wheel	1"	2
	Mandrel	1/8" for felt polishing wheels	1
	Bristle brush	3/4" radial	1
	Sanding band	1/2" 60-grit	3
	Drum sander	1/2" with 1/8" shank	1
	Sanding disc	3/4" 60-grit	3
	Heavy-duty Cut-off wheel	15/16" x 0.031"	6
	Regular-duty cut-off wheel	15/16" x 0.025"	6
	Screw mandrel	1/8" for sanding discs, cut-off wheels, cloth wheels & grinding wheels	1
	Dressing stone	3/8" x 1" square	1
	Collet	1/8" (packed in tool)	1
	Collet	3/32"	1
	Wrench	For collet nut, drum sander & screw mandrel	1

ACCESSORY DESCRIPTION & USE

Accessory Description	Accessory Use
Aluminum oxide <i>☞</i> Grinding stones <i>☞</i> Grinding wheels <i>☞</i> Abrasive wheels	Use on metals, castings, welded joints, rivets and rust. Ideal for sharpening, de-burring, rust removal and general-purpose grinding of most materials.
Cut-off wheel	Ideal for cutting, grooving and trimming all kinds of materials—including metal, wood and ceramics. You can use it to cut screws and rusted bolts, make slots in screw heads, trim castings and more.
Polishing wheel <i>☞</i> Felt & cloth	Ideal for polishing most metal surfaces and plastics. Can be used with polishing compound.
Bristle brush	Use for light de-burring, cleaning and polishing of silverware, jewellery and other precious metals. Can be used with polishing compound.
Sanding band	For rough shaping and smoothing wood and fiberglass; removing rust from metal surfaces; shaping rubber surfaces. Sanding bands are easily replaceable on drums.
Sanding wheel	Ideal for rough-shaping and smoothing wood and fiberglass—as well as removing rust from metal surfaces, shaping rubber surfaces and more.
Screw mandrel	Use with sanding discs, felt wheels, polishing, grinding and cut-off wheels.
Mandrel for cloth wheel	Use with sanding discs and polishing, grinding and cut-off wheels.
Collet	For use with accessories.
Collet wrench	For tightening & loosening collet nut, screw of drum sanders
Dressing stone	Cleans grinding wheels and stones. Shapes or reshapes stones for desired applications.

NOTE: This GreatNeck rotary tool will accept all 1/8" and 3/32" shanked accessories offered by leading brands, however, attachments such as drill press stands etc. may not be compatible. Please consult your retailer before purchasing.

ASSEMBLY & OPERATION

SPEED SELECTION

Set rotary tool speed by rotating the variable speed control dial (1) to the appropriate speed (see Fig. 1). Position speed control dial at "1" for slowest speed, "3" for medium speed and at "MAX" for the highest speed.

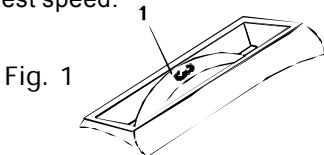


Fig. 1

ON/OFF SWITCH

To turn the switch ON, push on the lower part of the ON/OFF switch (1) (see Fig. 2). To turn the switch OFF, push on the upper part of the ON/OFF switch (2).

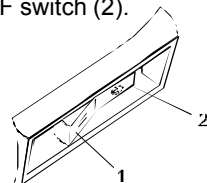


Fig. 2

ASSEMBLY & OPERATION

CHANGING THE COLLET (see Fig. 3)

Some accessories require the use of different sized collets. Collet sizes can be 1/16", 3/32" and 1/8". It is important to ensure that the collet size matches the accessory.

NOTE: This tool includes two of the most commonly used collets: 3/32" and 1/8".



WARNING

Using a collet that is too large for the accessory will result in the accessory possibly being thrown from the tool causing serious injury.

1. Turn the tool switch OFF and remove the plug from the power source.
2. Depress the spindle lock button (1) and slowly turn the collet nut (2) until the spindle lock button locks the spindle.
3. While holding the spindle lock button down, turn the collet nut counter clockwise until it is removed.
4. Remove the collet (3) by pulling it out of the spindle (4).
5. Insert the replacement collet into the spindle and replace the collet nut by turning it clockwise while holding the spindle lock button down.

NOTE: Do not tighten the collet nut without an accessory installed in the collet. You will damage the collet.

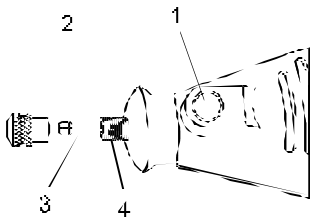


Fig. 3

INSTALLING ACCESSORIES (see Fig.4)

1. Turn the switch OFF and disconnect the tool from the power source.
2. Depress the spindle lock button (1) and slowly turn the collet nut (2) until the spindle lock button locks the spindle.
3. While holding the spindle lock button down, turn the collet nut counter clockwise until the collet is loose inside the collet nut.

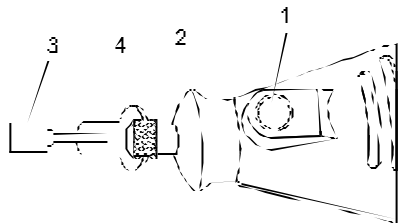


Fig. 4

4. Insert accessory (3) into collet

NOTES:

- a) Make sure the correct collet is used for the accessory. If collet is too large, replace the collet with the next smaller size.
 - b) Insert accessory at least 3/4" into the collet.
5. Press the spindle lock button and engage it in the spindle. While holding the spindle lock button down, hand-tighten the collet by turning it clockwise.
NOTE: Do not use pliers to tighten the collet nut. Use the small wrench (4) supplied. Over tightening will cause damage to the tool.
 6. Pull on the accessory to ensure it is securely in place.

OPERATION & MAINTENANCE

OPERATION

WARNING

Have you read “POWER TOOL SAFETY” and “ROTARY TOOL SAFETY” on pages 3, 4 and 5 of this manual? If not, please do it now before you operate this rotary tool. Your safety depends on it!

Every time you use the rotary tool you should verify the following:

1. Accessory is in good condition and not damaged in any way.
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.

SELECTING PROPER SPEEDS

Different speeds are required depending upon the type of operation being performed. The following chart outlines those basic speeds:

OPERATION	SPEED
Cutting metal	5-MAX
Sanding wood	5-MAX
Cutting hard metal	5-MAX
Engraving metal	4-5
De-burring	4-5
Drilling holes	4-5
Removing rust	3-4
Sharpening	3-4
Polishing	1-2

MAINTENANCE

GENERAL

WARNING

When servicing, use only identical GreatNeck® 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, petroleum-based 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.

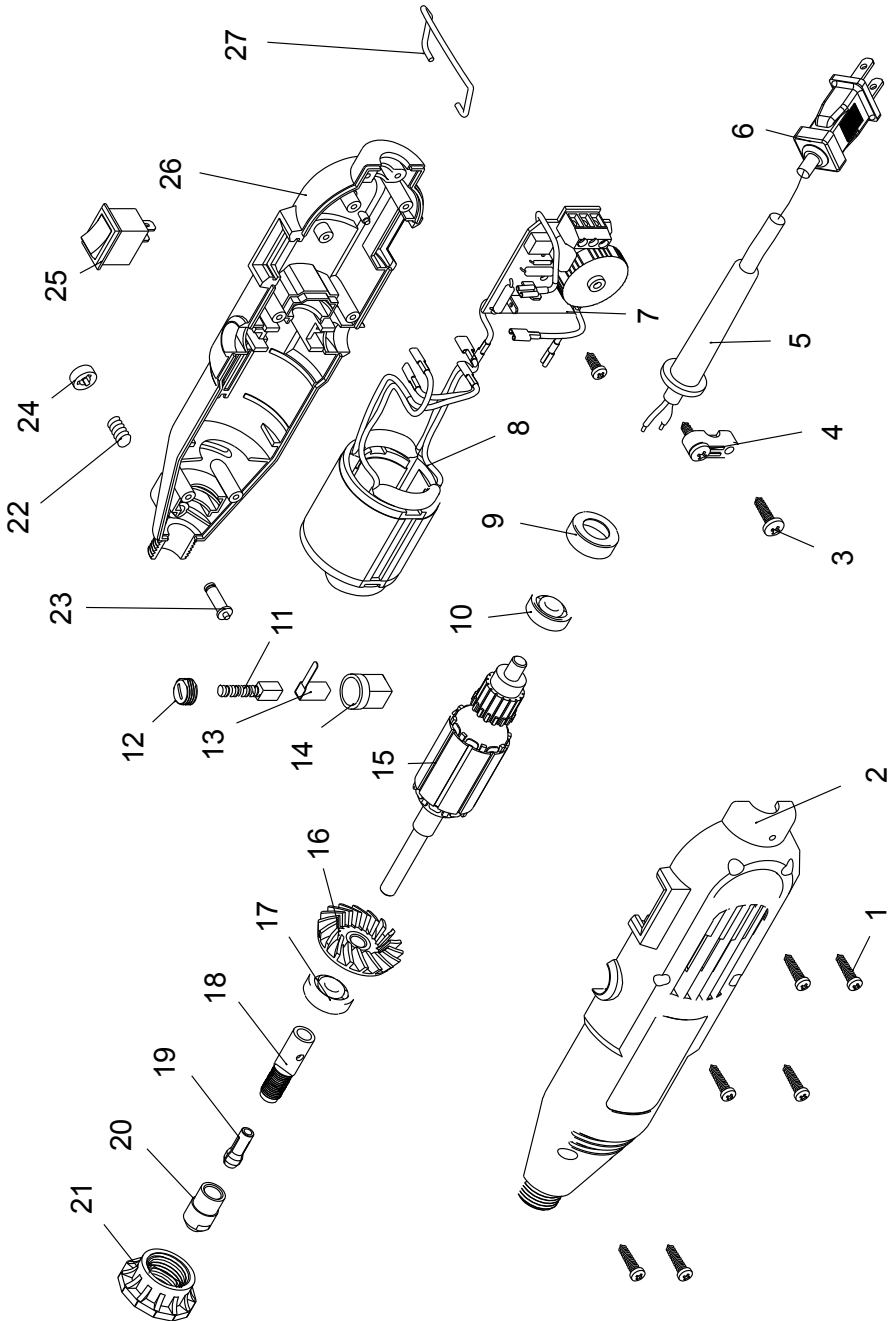
WARNING

DO NOT attempt to modify this rotary tool or create accessories not recommended for use. 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 rotary 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



PARTS LIST



WARNING

When servicing, use only GreatNeck® replacement parts. Use of any other parts may create a HAZARD or cause damage to your rotary tool.

Any attempt to repair or replace electrical parts on this rotary tool may create a hazard unless repair is performed by a qualified technician. For more information, call 1-866-458-2472.

Always order by PART NUMBER, not by key number.

Key #	Part #	Part Name	Quantity
1	500001	Screw	6
2	300036	Left enclosure	1
3	500201	Screw	2
4	315001	Cord clamp	1
5	322004	Cord guard	1
6	160203	Power plug	1
7	162822	Variable speed PCB	1
8	110038	Stator	1
9	321006	Bearing sleeve	1
10	520007	Bearing 606-2Z	1
11	342003	Carbon brush	2
12	314502	Carbon brush cap	2
13	222803	Brush holder	2
14	341503	Brush holder support	2
15	100038	Rotor	1
16	314009	Fan	1
17	520008	Bearing 626-2Z	1
18	213016	Output shaft	1
19	216506	Collet	1
20	215065	Collet nut	1
21	312824	Head nut	1
22	241506	Shaft lock spring	1
23	215014	Shaft locking pin	1
24	312816	Shaft lock button	1
25	163612	Switch	1
26	300036	Right enclosure	1
27	242529	Hook	1