

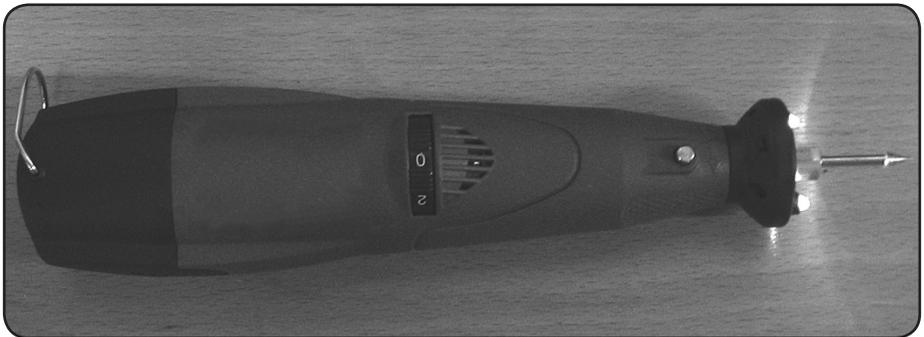
# CHICAGO

## Electric® Power Tools

# 9.6V CORDLESS ROTARY TOOL KIT

Model 92880

## SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

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**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

## Specifications

Construction	High-Impact Plastic Housing Brass Spindle & Collets Stainless Chuck Body	Tool Speed	Variable: 3,600 - 25,000 RPM
Power Required	9.6 VDC / NiCd Battery Pack	LED Source	(2) CR-927 3 VDC batteries
Battery Recharge	120 VAC to 12 VDC transformer	Features	Variable Speed, LED Light Attachment

## Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

## Safety Warnings and Precautions

**WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.**

**Read all instructions before using this tool!**

1. **Keep work area clean.** Cluttered areas invite injuries.
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 lit. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **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.
5. **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. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye and ear protection.** Always wear ANSI approved impact safety

goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.

8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
9. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect power.** Unplug battery from tool and charger/transformer from power outlet when not in use.
11. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
12. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in. Do not carry any tool with your hand on the power switch, whether it is energized or not.
13. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
14. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When cutting these materials extra care should be taken to avoid inhalation and minimize skin contact.
15. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
16. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.

18. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
19. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the charger without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the transformer or battery charger. This item requires use of an extension cord of 0 to 10 amps capability (up to 50 feet), with wire size rated at 18 AWG. Longer extension cords require larger size wire. If you are using the products outdoors, use an extension cord rated for outdoor use (signified by “WA” on the jacket).
20. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
21. **Pacemaker safety warning.** People with pacemakers should consult with their physician(s) before using this product; operation of equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
22. **WARNING:** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code 25249.5, *et seq.*)
23. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead-based paints
  - Crystalline silica from bricks and cement or other masonry products
  - Arsenic and chromium from chemically treated lumber(California Health & Safety Code 25249.5, *et seq.* )

**WARNING: Keep this tool and its attachments out of reach of children. Small parts can easily be swallowed by children.**

**Note:** Performance of the transformer and battery charger may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

**Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.**

## Unpacking

When unpacking, check to make sure the following parts are included.

9.6V Rotary Tool with Battery  
LED Light Attachment  
AC/DC Transformer  
9.6V Battery Charger Base  
3- piece Cutoff Wheel Set  
4-piece Sanding Drum Set  
36-piece Sanding Disc Set  
2-piece Buffing Wheel Set  
2-piece Brass Collet Set  
2-piece Drill Bit Set  
10-piece Mounted Stone Set  
2-piece Diamond Burr Set  
Flat Wrench  
Square Stone Dresser  
Plastic Carrying Case



If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

## Charging the Battery

### Charging the Battery Pack:

1. Battery packs are normally shipped with low or no charge to prevent potential problems during shipment. Before use, you must charge your new battery pack. **Note:** Time to charge battery is approximately 3 to 3-1/2 hours.



**NOTE:** Batteries will not reach full charge the first time they are charged. Allow several cycles (operation followed by recharging) before the battery will become fully charged.

*PHOTO: Rechargeable Battery in Battery Charger Base which is plugged into the Transformer.*

## Battery Temperature Warning:

**WARNING:** Battery explosion may cause serious personal or property injury including death. Charge the battery only within a 50° to 100° temperature range. Lower temperatures may inhibit charging. Higher temperatures increase chance of battery failure, including explosion.

2. Charge the battery pack only with the included Charger Base (25). Use of other chargers may cause battery failure including explosion.
3. Ensure that the Charger Base (25) is connected to a circuit breaker protected 120 VAC, 60 Hz power supply only.
4. Connect the Charger Base to the Transformer (24), by plugging it in as shown in the photo. Plug the Transformer (24) into a 120 VAC wall outlet.
5. Insert the battery pack into the Charger Base (25) by aligning the ribs on the battery pack with the grooves in the battery pack. Press the battery pack into place.

**NOTE:** The Battery has Release Tabs (19) on both sides. Press these in to release the battery from the Rotary Tool or from the Battery Charger Base (25).

6. Press down on the battery pack to make sure that the contacts on the battery pack are fully engaged with the contacts in the charger unit.
7. While being charged, the green LED will be lit, indicating that the charger is in operation. During recharging, the battery pack will become slightly warm to the touch. This is normal and not a cause for concern.
8. Do not place the battery and charger in an environment of extreme heat or cold. They will work best at room temperature.
9. **Note: The Charger Base (25) will not shut off automatically.** When the battery is fully charged (after 3 to 3-1/2 hours), unplug the battery charger and remove the battery pack. Do not leave the battery in the Charger Base (25) indefinitely.

Transformer (24)



## Installing the Battery Pack

1. Place the battery pack in the tool, aligning the arrows on the battery pack with the arrows on the tool.
2. Press the battery pack into the tool. Make sure that the battery pack snaps into place, and that the battery pack is secure in the tool before beginning use.



## Removing the Battery Pack

1. Press the Release Tabs (19) on both sides of the battery pack to release the battery from the tool.
2. Remove the battery pack from the tool by pulling straight out.

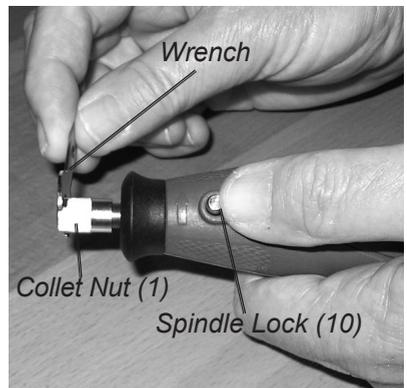
## Inserting or removing a bit from the tool.

Note: Only use accessories that are rated at or above the RPM rating of the Cordless Rotary Tool.

**WARNING:** Always allow the motor to come to a complete stop before engaging the spindle lock.

**WARNING:** Always remove the battery pack before making any adjustments or changing bits, to prevent accidental starting of the tool. Accidental starting of the tool may result in serious personal or property injury.

1. Depress the Spindle Lock (10). Rotate collet until shaft is engaged by the lock.
2. Loosen the Collet Nut (1) by turning it counterclockwise, using the Wrench provided.

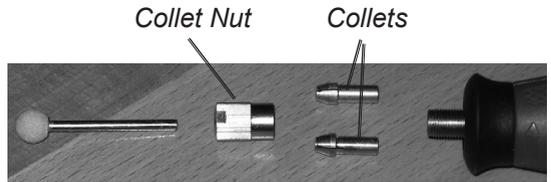


**WARNING:** If you are changing a bit immediately after use, be careful not to touch the bit. It may be very hot from use, possibly causing injury. Allow the bit time to cool before handling it.

3. **To remove a bit:** Pull the bit straight out of the Collet once the Collet Nut is loose. **To insert a bit:** Insert the shank end of the bit into the Collet once the Collet Nut is loose.

**NOTE:** Your tool is provided with two collets, 1/8" and 1/4" diameter. These are precision manufactured to fit comparably sized bits. Do not force a bit into the wrong sized collet, nor do not modify a mismatched collet or bit.

**Severe personal or property damage may result from using mismatched collets or bits.**



*Collet size must match tool shaft diameter.*

4. Tighten Collet Nut securely using the provided wrench. Ensure that the spindle lock is released before turning on the tool.

**WARNING:** Be sure the Collet Nut is tight before turning on the tool. Bits may be ejected from a tool if the Collet Nut is loose, potentially causing severe personal or property damage.

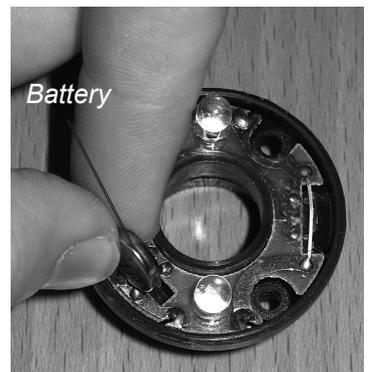
### Installing or Removing the LED Collar

1. The Front Collar (3) is interchangeable with the LED Lighted Attachment (23). To install the LED Lighted Attachment, remove the standard collar by turning counterclockwise, and install the LED Lighted Attachment by turning clockwise.
2. When installing or removing, use only hand pressure and tighten firmly by hand. Do not overtighten, as this may damage the part.
3. To change the batteries in the LED Lighted Attachment, first remove it from the Rotary Tool.



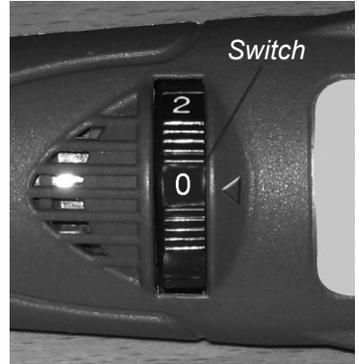
4. Using a phillips screw driver, open the battery compartment.

5. Replace the batteries with the same type as originally installed (Two CR-927 3 VDC batteries). Be sure to match the polarity marking in the battery compartment.



## Operation

1. Charge the Battery Pack (18) and insert it in the tool, as described in the previous section.
2. Select an appropriate bit or attachment for the job. Insert the bit or attachment as described in the previous section.
3. The LED Lighted Collar may be turned on by moving the switch on the collar.



4. Rotate the Switch (8) to the ON position.  
**NOTE:** This is a variable speed switch. The tool bit speed is dependent on the position of the Switch. Use a speed appropriate to the bit and the material being worked on. In general harder materials require faster speeds and softer materials require slower speeds. Relative speeds are indicated by the numbers on the Switch.
5. Apply the tool bit to the work material as needed.
6. When the task has been completed, stop the tool by rotating the Switch (8) to the OFF ("O") position. If the LED Collar light is ON, switch it OFF. Unplug the rechargeable battery. Remove the bit or attachment as discussed in the previous section.
7. Store the tool, its battery, and its bits and attachments in their case in a safe location.
8. Dispose of used batteries properly. Consult your local hazardous waste authority for disposal guidelines.

## Maintenance

1. A plastic storage case has been provided for safe storage of your Rotary Tool and its bits, parts and accessories. Always store your tool and its accessories in the case provided.
2. Protect the tool and its parts and accessories from moisture and damp or corrosive atmospheres.
3. Keep this tool out of reach of children and other unauthorized persons.
4. Protect this tool from damage. Do not leave it in a place where it can be banged around, such as a truck bed or vehicle trunk.
5. Some of the bits provided are "grinding bits" using stone abrasives. During use, these may clog up with removed material or lose their shape. To clean and reshape these bits, run them against the provided Dressing Stone. The Dressing Stone will abrade away the clogging materials and will reshape the Grinding Bits as appropriate.

## Parts List

Part	Description	Qty.
1	Collet Nut	1
2	Collet	1
3	Front Collar	1
4	Driver Shaft	1
5	Bearing	1
6	Sleeve	1
7	Motor	1
8	Switch	1
9	Shaft Lock Spring	1
10	Shaft Lock Button	1
11	Left Cover	1
12	Left Cover Label	1
13	Rubber Buffer	1
14	Right Cover	1
15	Screw	4
16	Right Cover Label	1
17	Battery Cover	1
18	Battery	1
19	Release Tab	2
20	Back - Moving Spring	2
21	End Cover	1
22	Hanger	1
23	LED Light Attachment	1
24	Transformer	1
25	Charger Base	1

**Note:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

# Assembly Drawing

