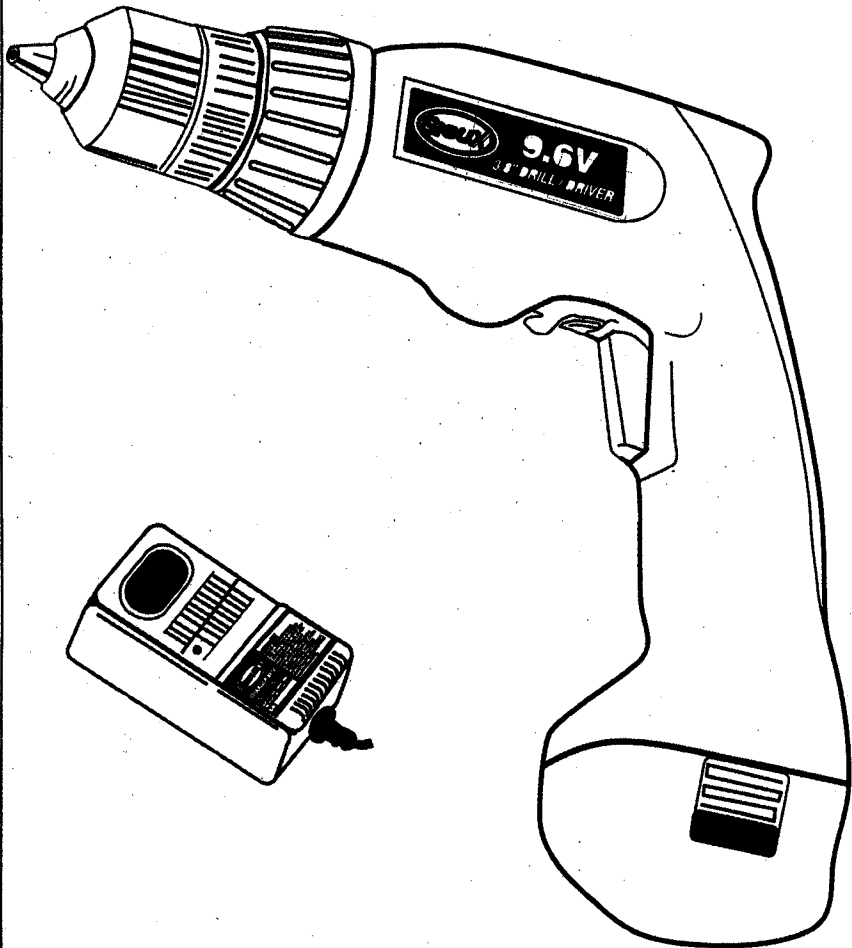




9310/9320

Cordless Drill/Driver



6096-606302

Engineered Performance

Z410



Safety Information

IMPORTANT SAFETY INSTRUCTIONS

This manual contains important safety and operating instructions for the **SIoux** 9310 and 9320 Cordless Drill/Drivers. Refer to the information in this manual often for safe operation.

Read All Instructions

Read, understand and follow all safety messages and instructions in this manual and on the test equipment. Safety messages in this section of the manual contain a signal word, a three-part message, and, in some instances, an icon.

General Drill/Driver Cautions

SIoux Tools Inc. cannot anticipate or provide safety warnings and cautions to cover every situation that may be encountered when operating, servicing or repairing this tool. It is the responsibility of operators and servicing technicians to be knowledgeable about the procedures, tools and materials used, and to satisfy themselves that the procedures, tools and materials will not compromise their safety.

Do not attempt to operate this tool until you have thoroughly read and completely understood all instructions, safety rules contained in this manual. Failure to comply can result in accidents involving fire, electric shock or serious personal injury. Save this manual and review it frequently for continued safe operation and to instruct others who may use this tool.

To reduce the risk of fire, electric shock and personal injury while using power tools always follow basic safety precautions, including the safety messages in this section.



Remember that this tool is always in an operating mode because it does not have to be plugged into an electrical outlet.

Safety Information

WARNING



Power tools can cause flying particles during use.

- **Wear safety goggles, user and bystander.**
- **Secure work with clamps or a vise whenever possible.**

Flying particles can cause eye injury.



Flammable vapors can cause explosion.

Do not use near flammable liquid, vapors or gases.
Explosion or flames can cause injury.



Power tools generate noise.

Wear hearing protection, user and bystander.

Prolonged exposure to noise can cause hearing loss.



Power tools vibrate during use.

Avoid prolonged exposure to vibration.

Prolonged exposure to vibration can cause injury.



Risk of electric shock.

- **Guard against electrical shock by preventing body contact with grounded surfaces.**
- **Do not use near flammable vapors.**
- **Be sure that there are no concealed power cables inside walls, ceilings, or floors before drilling.**
- **Store tools when not being used in a high, dry and locked area that can not be accessed by children.**
- **Do not allow bystanders to contact tool or extension cord.**

Electric shock can cause injury.



Improper use of power tools and accessories can cause broken tools.

Read instructions before operating power tools.

Broken tools can cause injury.



Risk of entanglement.

- Avoid starting tool unintentionally. Do not carry the tool with finger on the trigger. Be sure switch is off when installing battery pack or bits.
- Store tools when not being used in a high, dry and locked area that can not be accessed by children.
- Do not wear loose clothing and jewelry while operating tool. Loose clothes and jewelry can be caught in moving parts.
- Wear protective hair covering to contain long hair.
- Keep work area clean and well lit.
- Do not overreach. Keep proper footing and balance at all times.
- Stay alert and use common sense when operating tool. Do not operate tool when tired.
- When operating in heights, be aware of things below and around you.
- Do not allow bystanders to contact tool or extension cord.

Entanglement in moving parts can cause injury.

Battery

WARNING



Risk of electric shock and fire.

- Cover the battery pack terminals with heavy adhesive tape after removing the battery pack.
- Do not attempt to destroy or disassemble the battery pack or remove any of its components.
- Do not touch both terminals with metal objects or body parts, as short-circuit may occur.

Electric shock or fire can cause injury.



Risk of explosion or fire.

- Do not store the tool and battery in locations where the temperature may reach or exceed 104°F (40°C).
- Do not charge battery when temperature is below 50°F (10°C) or above 104°F (40°C).
- Do not incinerate the battery, even if severely damaged or completely exhausted. The battery may explode in fire.
- Do not charge using an engine generator or DC power source.

Explosion or flames can cause injury.

Safety Information



Risk of electric shock.

- Do not disassemble the battery.
- Do not short circuit the battery.
- Charge battery pack only with the charger provided.
- Disconnect battery pack when not in use, before servicing and when changing accessories.
- Do not charge using an engine generator or DC power source.

Electric shock or fire can cause injury.

Battery Recycling

WARNING

Risk of burn.

Battery leakage may occur under conditions of extreme usage or temperature.

- If liquid comes in contact with skin, wash quickly with soap and water, then lemon juice or vinegar.
- If liquid gets in eyes, wash with a boric acid solution and seek medical attention immediately.

Burns can cause injury.

Charger

WARNING



Risk of electric shock and fire.

- Use only the charger designated for the tool. Use:
 - 9312 for the 9310 Cordless Drill/Driver, and
 - 9322 for the 9320 Cordless Drill/Driver.
- Do not expose charger to rain or to snow.
- Do not allow vents of the charger housing to become covered or clogged during use.
- Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
- Never attempt to connect two chargers together.
- The charger operates on standard household electrical power. Do not use any other voltage.
- Consecutive charging may cause overheating. Wait 15 minutes for charger to cool when charging batteries consecutively.
- Do not insert foreign objects into hole for battery in charger stand.
- Pull by plug rather than cord when disconnecting charger.
- Be sure the cord is not stepped on, tripped over, damaged or stressed.

- Do not use an extension cord used unless absolutely necessary. If an extension cord must be used, make sure that the:
 - Pins on the plug of the extension cord are the same number, size and shape as those of the plug on the charger,
 - Extension cord is properly wired and in good electrical conditions, and
 - Wire size is large enough for AC ampere rating of charger as follows.

Ampere rating (on face plate)	0-2.0	2.1-3.4
Cord Length	Wire Size (AWG)	
25'	18	18
50'	18	18
100'	18	16

Recommended Minimum AWG Size for Battery Charger Extension Cords

- Do not operate charger with damaged cord or plug. Replace immediately.
- Do not operate charger after it is dropped, received a sharp blow or damaged. Take the charger to an Authorized Service Center.
- Do not disassemble charger. Take the charger to an Authorized Service Center when service or repair is required.
- Unplug charger from outlet before maintenance or cleaning. Turning off controls is not adequate to avoid hazard.
- Read all instructions and safety messages on battery and battery charger before use.

Electric shock or fire can cause injury.

SAVE THESE INSTRUCTIONS



9310/9320 Cordless Drill/Driver

Thank you for buying a **SIoux** tool. The 9310 and 9320 Cordless Drill/Drivers are manufactured to high standards for dependability and, with proper care, will provide years of trouble-free performance.

Functional Description

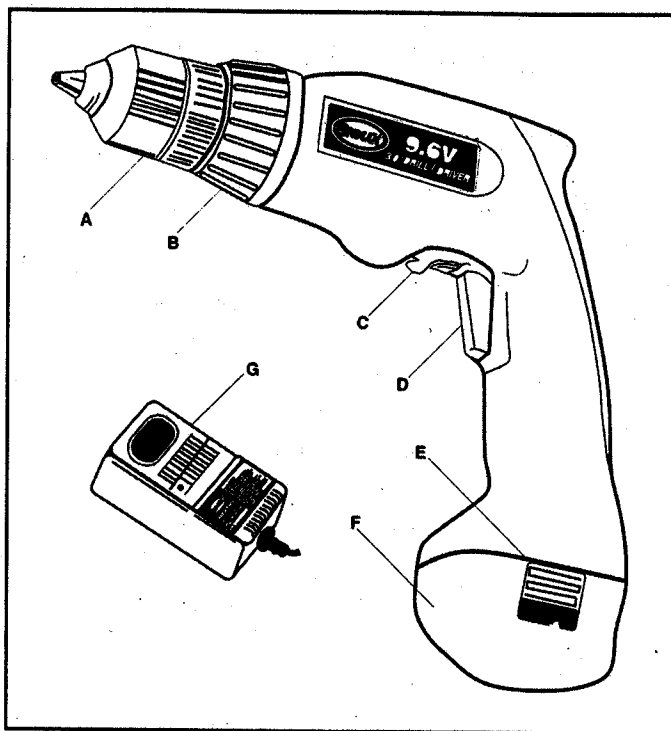


Figure 1: 9310/9320 Cordless Drill/Driver

- A - Chuck
- B - Torque Control
- C - Forward/Reverse Switch
- D - Trigger
- E - Battery Clip
- F - Battery Pack
- G - Battery Charger

Specifications

	9310	9320
Voltage	9.6V	12V
Chuck Capacity	3/8" (10 mm)	3/8" (10 mm)
Drilling Capacities		
Steel	5/16" (8 mm)	3/8" (10 mm)
Aluminum	3/8" (10 mm)	1/2" (12 mm)
Wood	1/2" (12 mm)	7/16" (16 mm)
Masonry	3/8" (10 mm)	3/8" (10 mm)
Weight	3 lbs (1.36 kg)	3.25 lbs (1.47 kg)
Motor—No Load Speed (RPM)		
	9.6V DC	12V DC
	850	850
Torque Setting Clutch Positions	8	8
Charger		
Model Numbers	9312	9322
Charging Voltage	9.6V DC	12V DC
Charging Current	1.5A DC	1.5A DC
Input (AC)	50-60 Hz	50-60 Hz
Noise Level		
Sound Level	70 dB or less	
Vibration Level	2.5 meters/sec ²	
Battery		
Model Numbers	9311	9321
Type	Nickel cadmium	

Tool Application

Use the 9310 or 9320 Cordless Drill/Driver to:

- Drill wood and metal resin boards,
- Drive and remove machine screws, wooden screws, tapping screws, and
- Drill masonry material.

✓ Use the level mounted in the top of the tool housing to ensure horizontal alignment.

Battery Charging

The battery for this tool is shipped in a low charge condition and must be charged prior to use.

1. Remove the battery from the drill by grasping both sides of the battery and depressing the battery clips.
2. Gently pull the battery from the housing.
3. Insert the battery into the charger, aligning the plus and minus terminals with the respective identification on the charger.

✓ Insert the battery fully into the port so the cartridge rests on the charger port floor.

4. Verify that the charging light is red.

✓ The charging light may not illuminate when a battery is inserted into the charger immediately after being used to operate a tool. Wait until the battery cools to charge. Allow 15 minutes between chargings when charging two batteries.

5. Remove the battery when the charging light turns off.

✓ Recycle or dispose of exhausted battery properly for safety and to preserve natural resources. This product contains a nickel-cadmium battery that must be disposed of according to local, state or federal laws. Consult your waste disposal authority for information regarding recycling or disposal directions.

Drilling Tips

- Pressing down too hard slows drilling performance, damages the bit and shortens service of the drill.
- Grasp the drill firmly and use care when the bit begins to break through a hole. Drill and bit are subject to tremendous force when breaking through a hole.
- Use only sharp drill bits. When drilling in:
 - Wood, use twist drill bits, spade bits, power auger bits or hole saws,
 - Metals, use high speed steel twist drill bits, or
 - Masonry, (brick cement, cinder block, etc.,) use carbide tipped bits.
- Always securely clamp or anchor material being drilled.
- When drilling thin materials or materials that are likely to splinter, back up the work piece with a wood block to prevent damaging the material.
- Always apply pressure in a straight line with the bit. Use enough pressure to keep the bit drilling, but not hard enough to stall the motor or deflect the bit.
- When drilling wood with a twist bit for metal, pull the bit out frequently to clear chips from the flutes. Let up on the pressure just before breaking through the material to get a good, clean hole.
- When drilling metal, mark the hole location with a center punch to prevent the drill bit from slipping off center when starting to drill the hole. Use a cutting lubricant, like sulfurized cutting oil, when drilling ferrous metals other than iron and brass which should be drilled dry.
- When drilling hard, smooth surfaces, use the lower speed to start holes without punching. Mark the hole location with a center punch to prevent the drill bit from slipping off center when starting to drill the hole.
- When drilling in masonry, use carbide tipped masonry bits. Keep even force on the drill. A smooth, even flow of dust indicates the proper drilling rate.

Using the 9310/9320 Drill/Driver

Installing and Removing Bits

This drill is fitted with a keyless chuck. No chuck key is required to secure the drill bits.

To install a drill bit:

1. Release the chuck jaws by grasping the rear half of the chuck with one hand. Use the other hand to turn the chuck counterclockwise until the chuck opens to the desired shaft diameter.
2. Insert the bit or accessory about three-fourths of the way into the chuck.
3. Tighten the chuck jaws securely by holding the rear half of the chuck with one hand. Use the other hand to turn the chuck clockwise until the chuck is securely tightened.

Forward/Reverse Switch

The forward/reverse switch determines the rotating direction of the chuck, either clockwise or counterclockwise.

To change the direction of chuck rotation:

1. Be sure the drill is stopped and not operating.
2. Push the lever to the right or the left. Switch positions viewed from the handle are:
 - Forward (F), the chuck rotates clockwise,
 - Reverse (R), the chuck rotates counterclockwise.



The switch must be in either the forward or the reverse position to operate.

Trigger

Depress the trigger to rotate the chuck. The lever must be in a forward or reverse position to operate. The trigger can be locked in the OFF position. Locking the trigger in the OFF position helps to reduce the possibility of accidental starting the drill when not in use. Place the lever in the center position to lock the trigger.



Lock the trigger when not in use.

Torque Control

Adjust the amount of torque by turning the torque adjustment dial. The torque control prevents the heads of smaller diameter screws from twisting off when correctly set. Fastening torque is greater as the numerals are larger. The drill has full torque when set in a drill position. Overloading and stalling the drill at any time can cause motor burnout and can also dramatically reduce battery life.

Drilling

1. Choose the appropriate bit for the task.
 2. Secure the material being drilled in a vise or with clamps to keep it from turning as the drill bit rotates.
 3. Set the appropriate speed for the task.
 4. Hold the drill firmly and place the bit at the drilling point.
 5. Depress the switch trigger to start the drill. Move the drill bit into the work piece. Apply only enough pressure to keep the bit cutting.
 6. Do not force or apply side pressure to elongate a hole.
- ✓ Release the switch trigger immediately if the bit jams in the work piece or the drill stalls. Remove the bit from the work piece and determine the reason for jamming.

Service

Service of a tool requires extreme care and knowledge. Service should be performed only by a qualified service technician. For service or repair contact an Authorized Service Center. For a list of Authorized Service Centers contact **SIOUX** Tools Inc., 2901 Floyd Boulevard, Sioux City, Iowa 51102-0507, U.S.A.

— Phone: 1-800-722-7290, U.S. and Canada
1-712-252-0525 Fax: 1-712-252-4267

- Always check tool for damaged parts before use.
- Replace or repair damaged parts before use. Check alignment of moving parts, binding, moving parts, broken parts, mounting, and any other conditions that may alter operation.
- Have damaged parts properly repaired or replaced by an Authorized Service Center.
- Do not use tool if switch does not turn it on and off.
- Maintain tools. Keep tools dry, clean and free of oil and grease for better and safer performance.

9310/9320 Cordless Drill/Driver

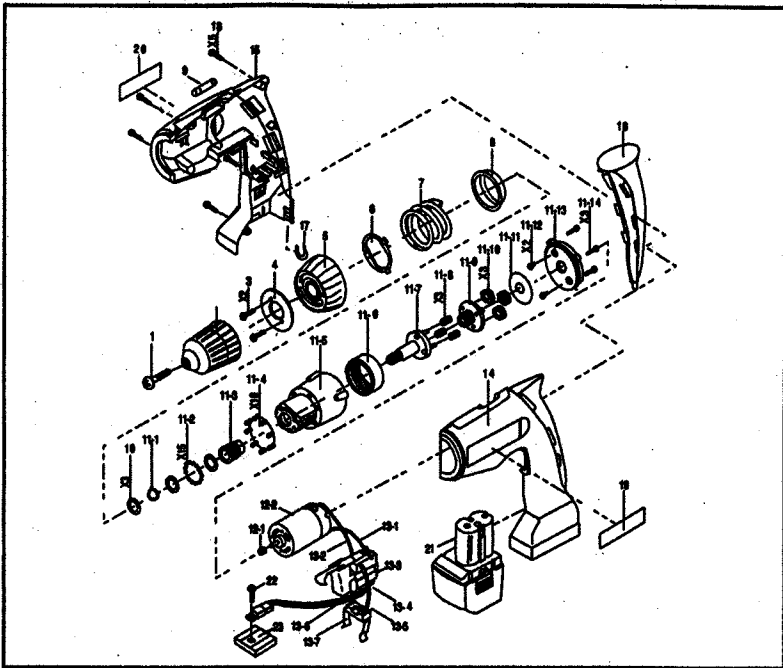


Figure 2: 9310/9320 Cordless Drill/Driver, Exploded View

Ref	Part No.	Description
1	67747	Chuck screw
2	67398	Keyless chuck
3	67746	Screw (2)*
4	67605	Torque ring plate
5	67606	Torque ring
6	67607	Torque plate
7	67608	Spring
8	67609	Steel ring
9	67610	Spirit level
10	67611	Collar (3)*
11	67612	Gear box assembly,(9310) (includes 11-1 through 11-14)
	67768	Gear box assembly, (9320) (includes 11-1 through 11-14)
12	67613	Motor assembly, (9310), (includes 12-1, 12-2)
	67614	Motor assembly, (9320), (includes 12-1,12-2)
13	67615	Switch assembly (includes 13-1 through 13-7)
14	67616	Housing set, left and right, (includes 15)

9310/9320 Cordless Drill/Driver

15	67616	Housing set, left and right, (includes 14)
16	67617	Soft grip
17	67618	Retaining ring
18	67619	Screw (5)*
19	67620	Nameplate (9310)
	67621	Nameplate (9320)
20	67622	Rating label (9310)
	67623	Rating label (9320)
21	9311	Battery (9310)
	9321	Battery (9320)
22	67624	Screw
23	67625	Cooling plate
Not shown		
	9312	Charger (9310)
	9322	Charger (9320)
	9313	Case (9310K, 9320K)
	67626	Battery label (9311)
	67627	Battery label (9321)
	67628	Charger label (9312)
	67629	Charger label (9322)
	67757	Ni-Cd battery label

*Order quantity as needed

SIOUX TOOLS INC.
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Z410

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3/97

This pdf incorporates the following model numbers:
9310, 9320