CAUTION:
Read Rules for Safe Operation and Instructions Carefully

SAVE THIS MANUAL FOR FUTURE REFERENCE

CRAFTSMAN
3/8 INCH ELECTRIC DRILL
DOUBLE INSULATED VARIABLE SPEED
ADJUSTABLE - REVERSIBLE
Warranty
Introduction
Operation
Maintenance
Repair Parts

Designed exclusively for and sold only by
SEARS, ROEBUCK AND CO. Dept 698/731A, Sears Tower, Chicago, IL 60684
FULL ONE YEAR WARRANTY ON CRAFTSMAN ELECTRIC DRILL

If this Electric Drill fails to give complete satisfaction within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT THROUGHOUT THE UNITED STATES and Sears will repair it, free of charge.

If this electric drill is used for commercial or rental purposes this warranty applies for only 90 days from the date of purchase.

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

SEARS, ROEBUCK AND CO.
DEPT. 731CR-W
SEARS TOWER
CHICAGO, IL 60684

INTRODUCTION

DOUBLE INSULATION is a concept in safety in electric power tools, which eliminates the need for the usual three wire grounded power cord and grounded supply system. Wherever there is electric current in the tool, there are two complete sets of insulation to protect the user. All exposed metal parts are isolated from the internal metal motor components with protecting insulation.

RULES FOR SAFE OPERATION

IMPORTANT — Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service we suggest you return the tool to your nearest Sears Store for repair. Always use original factory replacement parts when servicing.

READ ALL INSTRUCTIONS

1. KNOW YOUR POWER TOOL. — Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards related to this tool.

2. GUARD AGAINST ELECTRICAL SHOCK BY PREVENTING BODY CONTACT WITH GROUNDED SURFACES. For example: Pipes, radiators, ranges, refrigerator enclosures.

3. KEEP GUARDS IN PLACE and in working order.

4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.

5. AVOID DANGEROUS ENVIRONMENT. Don't use power tool in damp or wet locations or expose to rain. Keep work area well lit.

6. KEEP CHILDREN AWAY. All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or extension cord.

7. STORE IDLE TOOLS. When not in use, tools should be stored in a dry, high or locked-up place — out of the reach of children.

8. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.

9. USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool. Don't use tool for purpose not intended — for example — Don't use a circular saw for cutting tree limbs or logs.

10. WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Also, wear protective hair covering to contain long hair.

11. USE SAFETY GLASSES with all tools. Also face or dust mask if operation is dusty.
RULES FOR SAFE OPERATION (Continued)

12 DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.

13 SECURE WORK. Use clamps or a vise to hold work. Both hands are needed to operate the tool.

14 DON'T OVERREACH. Keep proper footing and balance at all times. Do not use on a ladder or unstable support.

15 MAINTAIN TOOLS WITH CARE. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16 DISCONNECT TOOLS. When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., all tools should be disconnected from power supply.

17 REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

18 AVOID ACCIDENTAL STARTING. Don't carry plugged-in tools with finger on switch. Be sure switch is off when plugging in.

19 OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords suitable for use outdoors. Outdoor approved cords are marked with the suffix W-A, for example — SJTW-A or SJOW-A.

20 KEEP BITS CLEAN AND SHARP. Sharp bits minimize stalling and kickback.

21 KEEP HANDS AWAY FROM DRILLING AREA. Keep hands away from bits. Do not reach underneath work while bit is rotating. Do not attempt to remove material while bit is rotating.

22 NEVER USE IN AN EXPLOSIVE ATMOSPHERE. Normal sparking of the motor could ignite fumes.

23 INSPECT TOOL CORDS PERIODICALLY and if damaged, have repaired at your nearest Sears Repair Center.

24 INSPECT EXTENSION CORDS PERIODICALLY and replace if damaged.

25 KEEP HANDLES DRY, CLEAN, AND FREE FROM OIL AND GREASE. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products or any strong solvents to clean your tool.

26 STAY ALERT. Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.

27 CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center.

28 DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF. Have defective switches replaced by an authorized service center.

29 DRILLING INTO ELECTRICAL WIRING IN WALLS CAN CAUSE DRILL BIT AND CHUCK TO BECOME ELECTRICALLY LIVE. Do not touch the chuck or metal housing when drilling into a wall; grasp only the insulated handle(s) provided on the tool.

30 Inspect for and remove all nails from lumber before drilling.

31 DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol, or any medication.

32 WEAR HEARING PROTECTION DURING EXTENDED PERIODS OF OPERATION.

33 SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct third party users. If you loan someone this tool, loan them these instructions also.
KNOW YOUR DRILL
Before attempting to use your drill, familiarize yourself with all operating features and safety requirements. See Figure 1.

Make sure power supply is 110-120 volts, 60 Hz, AC only.

REVERSIBLE
Your drill has the feature of being reversible. The direction of chuck rotation is controlled by a lever located above the trigger switch. See Figure 1. With drill held in normal operating position, the direction of rotation lever should be positioned to the right of the switch for drilling. The drill direction is reversed when the lever is to the left of the switch. THE DESIGN OF THE SWITCH WILL NOT PERMIT CHANGING DIRECTION OF ROTATION WHILE DRILL IS RUNNING. RELEASE THE SWITCH TRIGGER AND ALLOW THE DRILL TO STOP BEFORE CHANGING ITS DIRECTION. NOTE: YOUR DRILL WILL NOT RUN UNLESS THE SWITCH LEVER IS PUSHED FULLY TO LEFT TO RIGHT.

INSTALLING AUXILIARY HANDLE
An auxiliary handle is packed with your drill for ease of operation and to help prevent loss of control. To install, insert the hex head cap screw through the handle. Using a screwdriver, push on the head of the cap screw in order to seat it into the molded portion of the handle. Next, start the threads into the threaded hole in the gear housing and tighten securely. See Figure 1.

LOCK-ON SWITCH
The switch of your drill is equipped with a "lock-on" feature for added utility and convenience when drilling in soft woods or soft metals. To lock-on, depress the trigger of the switch, push in the lock button located on the side of the handle, then while holding the lock button pushed in, release the trigger. To release the lock, depress the trigger and release it.

WARNING: BEFORE CONNECTING YOUR DRILL TO POWER SUPPLY, ALWAYS CHECK TO BE SURE THE SWITCH IS NOT IN "LOCK-ON" POSITION. FAILURE TO DO SO COULD RESULT IN ACCIDENTAL STARTING OF YOUR DRILL RESULTING IN POSSIBLE SERIOUS INJURY. ALSO, DO NOT LOCK THE TRIGGER ON JOBS WHERE YOUR DRILL MAY NEED TO BE STOPPED SUDDENLY.

WARNING: DO NOT ALLOW FAMILIARITY WITH YOUR DRILL TO MAKE YOU CARELESS. REMEMBER THAT A CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFlict SEVERE INJURY.

OPERATION

AUXILIARY HANDLE
CHUCK
CAP SCREW
LOCK-ON BUTTON
FORWARD REVERSE
TRIGGER
VARIABLE SPEED CONTROL SELECTOR
TO INCREASE SPEED

Fig. 1

VARIABLE SPEED
Your drill has a variable speed control selector designed to allow operator control of speed and torque limits. See Figure 1. To increase the speed and torque of your drill, hold your drill in normal operating position and turn the variable speed control selector clockwise. Turn counterclockwise to decrease the speed and torque of your drill. If you desire to lock the switch on at a given speed, pull the trigger of the switch, push in the lock button located on the side of the handle, then while holding the lock button pushed in, release the trigger. Next, adjust the variable speed control selector until the desired speed is reached. NOTE: IF THE VARIABLE SPEED CONTROL SELECTOR IS FULLY TURNED IN THE COUNTERCLOCKWISE DIRECTION (ZERO SETTING), YOUR DRILL MAY NOT RUN.

IF YOU DESIRE TO USE THE VARIABLE SPEED CONTROL SELECTOR, TURN IT IN THE FULL CLOCKWISE DIRECTION. THIS WILL ALLOW THE SPEED OF YOUR DRILL TO BE FULLY CONTROLLED BY THE AMOUNT OF SWITCH TRIGGER DEPRESSION.
OPERATION (Cont.)

The following guidelines may be used in determining correct speed for various applications:

LOW speed is ideal when minimum speed and power is required. For example: starting holes without center punching, mixing paint, and drilling in ceramics.

MEDIUM speed is suitable for drilling hard metals, plastics, and laminates.

HIGH speed produces best results when maximum power is required. For example: drilling in wood; soft metals such as aluminum, brass, and copper; and when using driving accessories.

INSTALLING BITS
See Figures 2 & 3

1. UNPLUG YOUR DRILL.

**WARNING:** FAILURE TO UNPLUG YOUR DRILL COULD RESULT IN ACCIDENTAL STARTING CAUSING SERIOUS INJURY.

2. Insert drill bit into chuck the full length of the jaws as shown in Figure 2.

**WARNING:** DO NOT INSERT DRILL BIT INTO CHUCK JAWS AND TIGHTEN AS SHOWN IN FIGURE 3. THIS COULD CAUSE DRILL BIT TO BE THROWN FROM YOUR DRILL RESULTING IN POSSIBLE SERIOUS PERSONAL INJURY OR DAMAGE TO YOUR CHUCK.

3. Using the chuck key provided, tighten chuck jaws securely on drill bit. DO NOT USE A WRENCH TO TIGHTEN OR LOOSEN THE CHUCK.

4. Remove chuck key.

REMOVING BITS

1. UNPLUG YOUR DRILL.

**WARNING:** FAILURE TO UNPLUG YOUR DRILL COULD RESULT IN ACCIDENTAL STARTING CAUSING SERIOUS INJURY.

2. Using the chuck key provided, loosen chuck jaws from drill bit. DO NOT USE A WRENCH TO TIGHTEN OR LOOSEN THE CHUCK.

3. Remove drill bit from chuck jaws.

4. Remove chuck key.

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![Fig 2](image1.png)

![Fig 3](image2.png)
OPERATION (Cont.)

DRILLING

See Figure 4

1. Depress and release the switch trigger to be sure your drill is in the “Off” position before connecting it to power supply

2. Check the direction of rotation lever for correct setting (forward or reverse)

3. Secure the material to be drilled in a vise or with clamps to keep it from turning as the drill bit rotates

4. Plug your drill into power supply source

5. Hold your drill firmly and place the bit at the point to be drilled

6. Depress the switch trigger to start your drill. Do not lock the switch “On” for jobs where the drill may need to be stopped suddenly

7. Move the drill bit into the workpiece applying only enough pressure to keep the bit cutting. Do not force your drill or apply side pressure to elongate a hole. Let your drill and bit do the work. See Figure 4

WARNING: BE PREPARED FOR BREAKTHROUGH. DRILL BIT HAS A TENDENCY TO GRAB AND KICK IN THE OPPOSITE DIRECTION WHEN BREAKING THROUGH MATERIAL.

When drilling hard smooth surfaces use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off center as the hole is started. However, the variable speed feature allows starting holes without center punching if desired. To accomplish this, simply operate your drill at a low speed until the hole is started.

When drilling metals use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.

If the bit jams in the workpiece or if your drill stalls, stop the tool immediately. Remove the bit from the workpiece and determine the reason for jamming.

Avoid running your drill at low speeds for extended periods of time. At lower speeds under constant usage, your drill may become overheated. If this occurs, operate drill without a load and at full speed to cool it more quickly.
OPERATION (Cont.)

CHUCK REMOVAL
See Figures 5, 6 & 7

The chuck must be removed in order to use some accessories. To remove:

1. UNPLUG YOUR DRILL.

**WARNING: FAILURE TO UNPLUG YOUR DRILL COULD RESULT IN ACCIDENTAL STARTING CAUSING SERIOUS INJURY.**

2. Close the chuck jaws.

3. Line up hole in spindle with hole in gear housing and insert a 1/8 inch diameter nail or pin into hole in spindle shaft.

4. Insert chuck key into chuck and tap sharply with a mallet in a clockwise direction as shown in Figure 5.

5. Open the chuck jaws and remove the chuck screw by turning it in a clockwise direction. See Figure 6. NOTE: The chuck screw has left hand threads.

6. Insert chuck key in chuck and tap sharply in a counterclockwise direction to loosen it on spindle. It can now be unscrewed by hand. See Figure 7.

7. Unlock spindle by removing nail or pin from gear housing.

The chuck may at times 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, follow these steps:

1. UNPLUG YOUR DRILL

**WARNING: FAILURE TO UNPLUG YOUR DRILL COULD RESULT IN ACCIDENTAL STARTING CAUSING SERIOUS INJURY.**

2. Open the chuck jaws.

3. Line up hole in spindle with hole in gear housing and insert a 1/8 inch diameter nail or pin into hole in spindle shaft.

4. Insert chuck key in chuck and tap with a mallet in a clockwise direction.

5. Tighten the chuck screw. NOTE: The chuck screw has left hand threads.

6. Unlock spindle by removing nail or pin from gear housing.
OPERATION (Cont.)

CRAFTSMAN CHUCK KEY HOLDER

1. Form a loop by forcing end with round holes through slotted hole on opposite end. See Figure 8.
2. Place the loop over the cord and pull it tight. See Figure 9.
3. Mount the chuck key by inserting the geared end through the hole in the holder. Large keys in the larger hole, smaller keys in the small hole. See Figure 10.

**WARNING:**
The operation of any Drill can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before commencing power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over spectacles or standard safety glasses with side shields, available at Sears Catalog Order or Retail Stores.
**MAINTENANCE**

**GENERAL**

Only the parts shown on parts list, page eleven, are intended to be repaired or replaced by the customer. All other parts represent an important part of the double insulation system and should be serviced only by a qualified service technician.

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

**WARNING:** DO NOT AT ANY TIME LET BRAKE FLUIDS, GASOLINE, PENETRATING OILS, ETC. COME IN CONTACT WITH PLASTIC PARTS. THEY CONTAIN CHEMICALS THAT CAN DAMAGE, WEAKEN, OR DESTROY PLASTICS.

When electric tools are used on fiberglass boats, sports cars, etc., it has been found that they are subject to accelerated wear and possible premature failure, as the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutator, etc. Consequently it is not recommended that this tool be used for extended work on any fiberglass material. During any use on fiberglass it is extremely important that the tool is cleaned frequently by blowing with an air jet. ALWAYS WEAR SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS BEFORE BEGINNING POWER TOOL OPERATION OR BLOWING DUST.

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**EXTENSION CORDS**

The use of any extension cord will cause some loss of power. To keep the loss to a minimum and to prevent tool overheating, follow the recommended cord sizes on the chart below. When tool is used outdoors, use only extension cords suitable for outdoor use and so marked. Extension cords are available at Sears Catalog Order or Retail Stores.

<table>
<thead>
<tr>
<th>Extension Cord Length</th>
<th>Wire Size A W G.</th>
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<tbody>
<tr>
<td>25-50 Feet</td>
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<tr>
<td>50-75 Feet</td>
<td>16</td>
</tr>
<tr>
<td>75-100 Feet</td>
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</tbody>
</table>

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**LUBRICATION**

All the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions, therefore, no further lubrication is required.

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**THE FOLLOWING RECOMMENDED ACCESSORIES ARE CURRENT AND WERE AVAILABLE AT THE TIME THIS MANUAL WAS PRINTED.**

- High Speed Bits (For wood or metal) 3/8" Max. Drill Stand (9 25959)
- Masonry Bits 1/2" Max. Doweling Jig (9 4186)
- Wood Boring Bits 1-1/4" Max. Cord Lock (9 25959)
- Hole Saws 1-1/2" Max. Chuck Key Holder (9 2978)
- Hole Square (9 25968) Portalign Drill Guide (9 11227)
- Carrying Case (9 1477) Wood Boring Pilot Set (9 2598)

**WARNING:** The use of attachments or accessories not listed above might be hazardous.

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Page 9
SEE NOTE "A" PAGE 11
The Model Number will be found on a plate attached to the Motor Housing. Always mention the Model Number in all correspondence regarding your 3/8 INCH ELECTRIC DRILL or when ordering repair parts.

### PARTS LIST

<table>
<thead>
<tr>
<th>Key No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>1</td>
<td>612121-001</td>
<td>Logo Plate</td>
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<tr>
<td>2</td>
<td>604990-001</td>
<td>Sleeve and Bearing Assembly</td>
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<tr>
<td>3</td>
<td>604968-004</td>
<td>Spindle and Gear Assembly</td>
<td>1</td>
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<td>4</td>
<td>605479-005</td>
<td>Gear Housing (Includes Key No. 15)</td>
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<tr>
<td>5</td>
<td>617965-017</td>
<td>*Screws (#8-10 x 1-1/4&quot; T.F.)</td>
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<td>6</td>
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<td>614927-003</td>
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<td>622943-000</td>
<td>Chuck Key Holder (Cat. No. 9 2978)</td>
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<td>10</td>
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<td>Chuck Key (Cat. No. 9 2056)</td>
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<td>616776-003</td>
<td>Screw (Special)</td>
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**NOTE:** "A" — The assembly shown represents an important part of the Double Insulated System. To avoid the possibility of alteration or damage to the System, service should be performed by your nearest Sears Repair Center. Contact your nearest Sears Catalog Order or Retail Store.

"Standard Hardware Item — May Be Purchased Locally
**Available From Dir, 58 — Source 999.00
Now that you have purchased your Electric Drill, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Electric Drill will be found on the plate attached to the motor housing.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- MODEL NUMBER

PART DESCRIPTION
NAME OF ITEM
Electric Drill

All parts listed may be ordered from any Sears Service Center and most Sears stores.

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.