

PRINTED IN U.S.A.

FULL ONE YEAR WARRANTY ON CRAFTSMAN ELECTRONIC DRILL

If this Craftsman Electronic Drill fails to give complete satisfaction within one year from the date of purchase, **RETURN IT TO THE NEAREST SEARS STORE THROUGHOUT THE UNITED STATES** and Sears will repair it, free of charge.

If this electronic 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. 817 WA HOFFMAN ESTATES, IL 60179

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. 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.

RULES FOR SAFE OPERATION

WARNING: DO NOT ATTEMPT TO OPERATE THIS TOOL UNTIL YOU HAVE READ THOROUGHLY AND UNDERSTAND COMPLETELY ALL INSTRUCTIONS, SAFETY RULES, ETC. CONTAINED IN THIS MANUAL. FAILURE TO COMPLY CAN RESULT IN ACCIDENTS INVOLVING FIRE, ELECTRIC SHOCK, OR SERIOUS PERSONAL INJURY, SAVE OWNERS MANUAL AND REVIEW FREQUENTLY FOR CONTINUING SAFE OPERATION, AND INSTRUCTING OTHERS WHO MAY USE THIS TOOL.

READ ALL INSTRUCTIONS

- 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.
- 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.
- KEEP CHILDREN AND VISITORS 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.

- STORE IDLE TOOLS. When not in use tools should be stored in a dry and 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.
- 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 - A circular saw should never be used for cutting tree limbs or logs.
- 10. WEAR PROPER APPAREL. Do not wear loose clothing or jewelry that can get caught in tool's moving parts and cause personal injury. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair and keep it from being drawn into nearby air vents.
- 11. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses.

RULES FOR SAFE OPERATION (Continued)

- 12. **PROTECT YOUR LUNGS.** Wear a face mask or dust mask if operation is dusty.
- 13. **PROTECT YOUR HEARING.** Wear hearing protection during extended periods of operation.
- DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- SECURE WORK. Use clamps or a vise to hold work. Both hands are needed to operate the tool.
- DON'T OVERREACH. Keep proper footing and balance at all times. Do not use on a ladder or unstable support.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DISCONNECT TOOLS. When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., all tools should be disconnected from power supply.
- 19. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- AVOID ACCIDENTAL STARTING. Don't carry plugged-in tools with finger on switch. Be sure switch is off when plugging in.
- 21. MAKE SURE YOUR EXTENSION CORD IS IN GOOD CONDITION. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gage size (A.W.G.) of at least 16 is recommended for an extension cord 100 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
- 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.
- KEEP BITS CLEAN AND SHARP. Sharp bits minimize stalling and kickback.
- 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.
- 25. NEVER USE IN AN EXPLOSIVE ATMOSPHERE. Normal sparking of the motor could ignite fumes.

- INSPECT TOOL CORDS PERIODICALLY and if damaged, have repaired at your nearest Sears Repair Center. Stay constantly aware of cord location.
- 27. INSPECT EXTENSION CORDS PERIODICALLY and replace if damaged.
- 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.
- STAY ALERT. Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.
- 30. 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 unless indicated elsewhere in this instruction manual.
- 31. DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF. Have defective switches replaced by an authorized service center.
- 32. 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.
- 33. Inspect for and remove all nails from lumber before drilling.
- DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol, or any medication.
- 35. When servicing use only identical Craftsman replacement parts.
- 36. POLARIZED PLUGS. To reduce the risk of electric shock, this tool has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet 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 the proper outlet. Do not change the plug in any way.
- SAVE THESE INSTRUCTIONS. Review them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.

AWARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES CONTAINS CHEMICALS KNOWN 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 AND OTHER MASONRY
 PRODUCTS, AND
- ARSENIC AND CHROMIUM FROM CHEMICALLY-TREATED LUMBER.

YOUR RISK FROM THESE EXPOSURES VARIES, DEPENDING ON HOW OFTEN YOU DO THIS TYPE OF WORK. TO REDUCE YOUR EXPOSURE TO THESE CHEMICALS: WORK IN A WELL VENTILATED AREA. AND WORK WITH APPROVED SAFETY EQUIPMENT, SUCH AS THOSE DUST MASKS THAT ARE SPECIALLY DESIGNED TO FILTER OUT MICROSCOPIC PARTICLES.

WARNING:



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The operation of any drill can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning 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 eyeglasses or standard safety glasses with side shields, evailable at Sears Retail Stores.

OPERATION

AWARNING: ALWAYS WEAR SAFETY GOG-GLES OR SAFETY GLASSES WITH SIDE SHIELDS WHEN OPERATING YOUR ELECTRONIC DRILL. FAILURE TO DO SO COULD RESULT IN DUST, SHAVINGS, OR LOOSE PARTICLES BEING THROWN INTO YOUR EYES, RESULTING IN POSSIBLE SERIOUS INJURY

KNOW YOUR ELECTRONIC DRILL

Before attempting to use your drill, familiarize yourself with all operating features and safety requirements. See Figure 1.

AWARNING: IF ANY PARTS ARE MISSING DO NOT OPERATE YOUR TOOL UNTIL THE MISSING PARTS ARE REPLACED. FAILURE TO DO SO COULD RESULT IN POSSIBLE SERIOUS PER SONAL INJURY

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

REVERSIBLE

Your electronic drill has the feature of being reversible. The direction of rotation is controlled by a lever located above the trigger switch. See Figure 1. With drill held in normal operating position, the direction 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 TRIG-GER 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 OR RIGHT.

LOCK-ON SWITCH

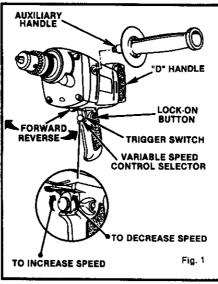
The switch of your electronic drill is equipped with a "lock-on" feature for added utility and convenience when drilling in soft woods or soft metals. To lockon, depress the trigger of the switch, push in the lock button located on the side of the handle, then while holding the lock button pushed in,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

AWARNING: BEFORE CONNECTING YOUR AWARNING: 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 STOP-PED SUDGENLY PED SUDDENLY

VARIABLE SPEED

Your electronic 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 electronic 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 electronic drill. If you declet be lock the of your electronic drill. If you desire to lock the switch on at a given speed, pull the trigger of the

AWARNING: DO NOT ALLOW FAMILIARITY WITH YOUR DRILL TO MAKE YOU CARELESS. REMEMBER THAT A CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFLICT SEVERE IN-JURY



switch, push in the lock button located on the side of switch, push in the lock button located on the side of the handle, then while the holding lock button push-ed in release the trigger. Next, adjust the variable speed control selector until the desired speed is reached. NOTE: IF THE VARIABLE SPEED CON-TROL SELECTOR IS FULLY TURNED IN THE COUNTERCLOCKWISE DIRECTION (ZERO SET-TING), YOUR DRILL MAY NOT RUN.

IF YOU DESIRE NOT TO USE THE VARIABLE SPEED IF TOU DESIME NOT TO USE THE VARIABLE SPEED CONTROL SELECTOR, TURN IT IN THE FULL CLOCKWISE DIRECTION. THIS WILL ALLOW THE SPEED OF YOUR ELECTRONIC DRILL TO BE FULLY CONTROLLED BY THE AMOUNT OF SWITCH TRIG-GER DEPRESSION.

The following guidelines may be used in determin-ing 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 ceramic

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.

OPERATION (Cont.)

INSTALLING AUXILIARY HANDLE See Figures 1 and 2.

AN AUXILIARY HANDLE IS PACKED WITH YOUR DRILL FOR EASE OF OPERATION AND TO HELP PREVENT LOSS OF CONTROL. To install, start the screw threads into the threaded hole in the gear housing and tighten securely. NOTE: For convenience the screw has been trapped inside the auxiliary handle.

To prevent thread damage and possible loss of control, auxiliary handle should be checked periodically for tightness. **DO NOT** operate drill with handle loose.

INSTALLING "D" SHAPED HANDLE See Figure 3.

A multi-position "D" shaped handle is also packed with your drill. It is used for maintaining proper balance and control of your drill. To install, place handle in desired position on star shaped mounting boss. Mounting boss is located on the end of your drill. Add washer then insert screw. To tighten screw, insert screwdriver through side of handle as shown in figure 3. Tighten screw securely, then remove screwdriver.

INSTALLING BITS See Figures 4 & 5.

1. UNPLUG YOUR DRILL.

AWARNING 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 4.

AWARNING: DO NOT INSERT DRILL BIT INTO CHUCK JAWS AND TIGHTEN AS SHOWN IN FIGURE 5. THIS COULD CAUSE DRILL BIT TO BE THROWN FROM YOUR DRILL RESULTING IN POSSIBLE SERIOUS PERSONAL INJURY OR DAMAGE TO YOUR CHUCK.

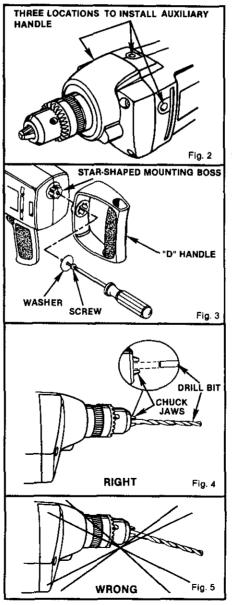
- 3. Using the chuck key provided, tighten chuck laws securely on drill bit. DO NOT USE A WRENCH TO TIGHTEN OR LOOSEN THE CHUCK.
- 4. Remove chuck key.

REMOVING BITS

1. UNPLUG YOUR DRILL.

AWARNING; 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 TIGHT-EN OR LOOSEN THE CHUCK.
- 3. Remove drill bit from chuck jaws.
- 4. Remove chuck key.



OPERATION (Cont.)

POWER CORD See Figure 6.

An added feature of your new electronic drill is an extra-long 10' power cord that stays soft and flexible in cold weather. The plug design is shaped so that it won't snag on your work during use. A molded cord clip on the plug makes cord storage easier.

DRILLING See Figure 7.

- Depress and release the switch trigger to be sure your drill is in the "Off" position before connecting it to power supply.
- Check the direction of rotation lever for correct setting (forward or reverse).
- 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.
- Hold your drill firmly and place the bit at the point to be drilled.
- 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.
- 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 7.

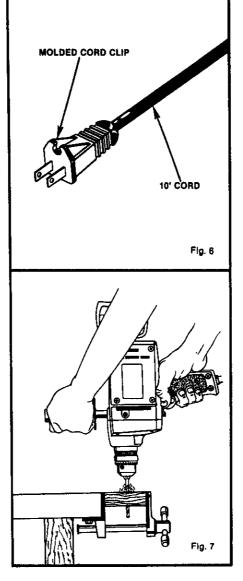
AWARNING: BE PREPARED FOR BREAKTHROUGH. DRILL BIT HAS A TENDENCY TO GRAB AND KICK IN THE OPPOSITE DIREC-TION WHEN BREAKING THROUGH MATERIAL.

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 8, 9, & 10.

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

1. UNPLUG YOUR DRILL.

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

- 2. Close the chuck Jaws.
- Insert chuck key into chuck and tap sharply with a mallet in a clockwise direction as shown in Figure 8.
- Open the chuck jaws and remove the chuck screw by turning it in a clockwise direction. See Figure 9. NOTE: The chuck screw has left hand threads.
- insert chuck key in chuck and tap sharply in a counterclockwise direction to loosen it on spindie. It can now be unscrewed by hand. See Figure 10.
- 6. Remove chuck key.

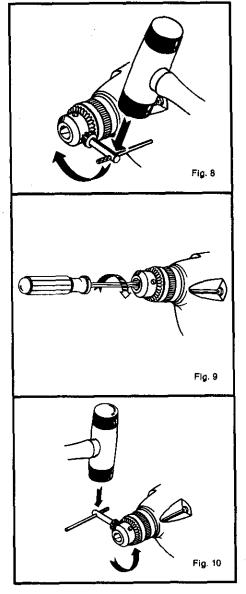
TO TIGHTEN CHUCK

The chuck may at times become loose on the spindie 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.

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

- 2. Open the chuck jaws.
- 3. Insert chuck key in chuck and tap with a mallet in a clockwise direction.
- 4. Tighten the chuck screw. NOTE: The chuck screw has left hand threads.
- 5. Remove chuck key.



MAINTENANCE

AWARNING: WHEN SERVICING USE ONLY IDENTICAL CRAFTSMAN REPLACEMENT PARTS. USE OF ANY OTHER PARTS MAY CREATE A HAZARD OR CAUSE PRODUCT DAMAGE.

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 on-ly 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.

AWARNING: 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 sub-ject 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 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 blow-ing with an air jet. ALWAYS WEAR SAFETY GOG GLES OR SAFETY GLASSES WITH SIDE SHIELDS BEFORE BEGINNING POWER TOOL OPERATION OR BLOWING DUST.

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 out-doors, use only extension cords suitable for outdoor use and so marked. Extension cords are available at Sears Retail Stores.

AWARNING: CHECK EXTENSION CORDS BEFORE EACH USE. IF DAMAGED, REPLACE IM-MEDIATELY, NEVER USE TOOL WITH A DAMAGE ED CORD SINCE TOUCHING THE DAMAGED AREA COULD CAUSE ELECTRICAL SHOCK RESULTING IN SERIOUS INJURY OR DEATH.

Extension Cord Length	Wire Size A.W.G.
25-50 Feet	18
50-75 Feet	16
75-100 Feet	14

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

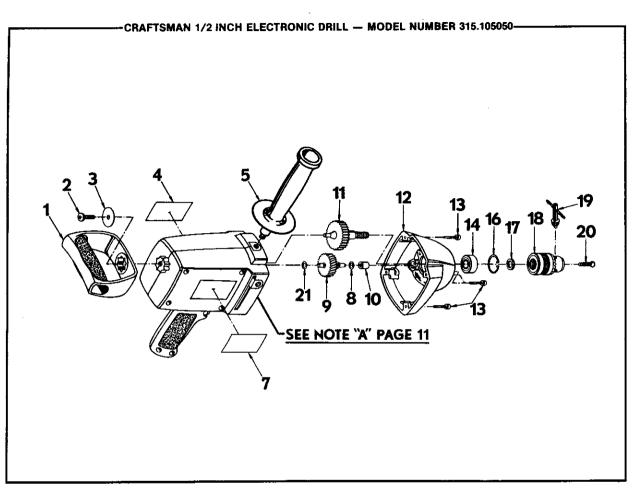
THE FOLLOWING RECOMMENDED ACCESSORIES ARE CURRENT AND WERE AVAILABLE AT THE TIME THIS MANUAL WAS PRINTED.

High Speed Bits (For wood or metal) 1/2 In. Max. Masonry Bits 3/4 In. Max. Wood Boring Bits 1-1/4 in. Max. Hole Saws 2-1/2 In. Max.

Drill Stand (9 - 25989) Doweling (9 - 4186)



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



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-CRAFTSMAN 1/2 INCH ELECTRONIC DRILL - MODEL NUMBER 315.105050-

The Model Number will be found on a plate attached to the Motor Housing. Always mention the Model Number in all correspondence regarding your 1/2 INCH ELECTRONIC DRILL or when ordering repair parts.

PARTS LIST

1

Key No.	Part Number	Description Quantity
1	972877-001	"D" Handle
2	617205-006	*Screw (#1/4-20 x 7/8 In. Pan Hd.)
3	706382-823	Washer
4	967464-001	Logo Plate
5	972895-002	Auxiliary Handle
7	967465-001	Data Plate
8	931744-825	Washer
9	999580-001	Gear w/Pinion
10	606298-002	Roller Bearing
11	967717-001	Gear w/Shaft
12	998694-207	Gear Housing w/Bearing (Includes Key No. 10)
13	940038-805	*Screw (#8-32 x 7/8 In. Fil. Hd.)
14	621007-002	Ball Bearing (NTN 6202 LBZ C3/1E)**STD315225
16	622167-001	Retaining Ring
17	622434-000	Chuck Spacer.
18	617517-001	Chuck (Cat. No. 9 2980)
19	622157-002	Chuck Key (Cat. No. 9 2059)
20	613150-003	Screw (Special) (#5/16-24 x 7/8 In. Fil. Hd.)
21	931744-006	Washer **STD551225
	612547-549	Owner's Manual

NOTE: "A" — The assembly shown represents an important part of the Double insulated System. To avoid the possibility of atter-ation or damage to the System, service should be performed by your nearest Sears Repeir Center. Contact your nearest Sears Retail Store.

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*Standard Hardware Item — May Be Purchased Locally **Available From Div. 88 — Source 980.00

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