SEARS

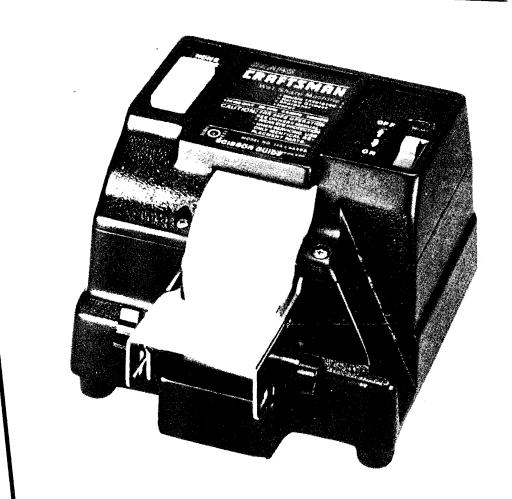
owner's manual SEARS / CRAFTSMAN WET SHARP MACHINE

CAT. NO. 146,669950

CAUTION:

Read Rules for Safe Operation and Instructions Carefully

- Introduction
- Operation



Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.

FULL ONE YEAR WARRANTY ON CRAFTSMAN WET SHARP MACHINE

If this Craftsman Wet Sharp Machine 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 the Wet Sharp Machine 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. 698/731A 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.

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 UNTIL YOU HAVE READ THOROUGHLY AND UNDERSTAND COMPLETELY ALL INSTRUCTIONS, RULES, ETC. CONTAINED IN THIS MANUAL. FAILURE TO COMPLY CAN RESULT IN ACCIDENTS INVOLVING FIRE, ELECTRIC SHOCK, OR SERIOUS PERSONAL INJURY. SAVE OWNER'S MANUAL AND REVIEW FREQUENTLY FOR CONTINUING SAFE OPERATION, AND INSTRUCTING POSSIBLE THIRD-PARTY USER.

READ ALL INSTRUCTIONS

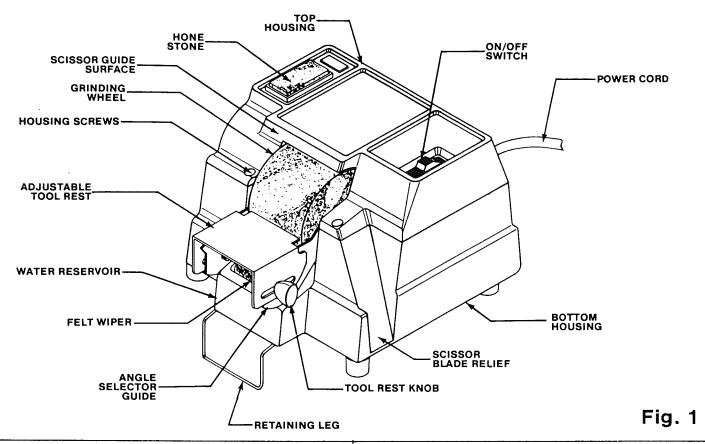
- KNOW YOUR POWER TOOL Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
- 2. KEEP GUARDS IN PLACE and in working order.
- 3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 4. AVOID DANGEROUS ENVIRONMENT. Don't use power tool in damp or wet locations or expose to rain. Keep work area well lit.
- 5. **KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from work area. Do not let visitors contact tool or extension cord.
- 6. STORE IDLE TOOLS. When not in use, tools should be stored in dry, high or locked-up place—out of reach of children.
- 7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. 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.
- 9. WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors. Also, wear protective hair covering to contain long hair.
- 10. USE SAFETY GLASSES with all tools. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses. Also face or dust mask if cutting operation is dusty.

- 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. It's safer than using your hand and it frees both hands to operate tool.
- 14. DON'T OVERREACH. Keep proper footing and balance at all times.
- 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 or before servicing.
- 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. NEVER USE IN AN EXPLOSIVE ATMOSPHERE. Normal sparking of the motor could ignite fumes.
- 20. INSPECT TOOL CORDS PERIODICALLY and if damaged, have repaired at your nearest Sears Repair Center.
- 21. INSPECT EXTENSION CORDS PERIODICALLY and replace if damaged.
- 22. KEEP TOOLS DRY, CLEAN, AND FREE FROM OIL AND GREASE. Always use a clean cloth when cleaning. Never use brake fluid, gasoline, or any strong solvents to clean your tool.
- 23. STAY ALERT. Watch what you are doing and use common sense. Do not operate tool when you are tired.
- 24. 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.
- 25. DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF. Have defective switches replaced by authorized service center.
- **26. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
- 27. REPLACE CRACKED WHEEL IMMEDIATELY.
- 28. WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.
- 29. THIS TOOL IS INTENDED FOR RESIDENTIAL USE ONLY.
- 30. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starting keys.
- 31. ADJUST DISTANCE BETWEEN WHEEL & TOOL REST. Maintain 1/16" or less clearance as the diameter of the wheel decreases with use.
- 32. SAVE THESE INSTRUCTIONS.



The operation of the Wet Sharp Machine can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation. We recommend Wide Vision Safety Mask for use over spectacles or standard safety glasses, available at Sears Catalog Order or Retail Stores.

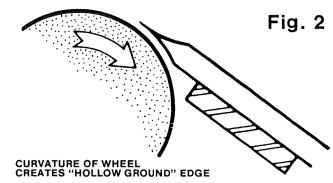
FEATURES AND ADJUSTMENTS



This unique design of the Wet Sharp Machine incorporates the features most desired in a wet grinding and sharpening machine.

HOLLOW GROUND EDGE:

A sharp tool makes any cutting job easier. Wet hollow grinding has been known to produce a superior, keen cutting edge. See Fig. 2.

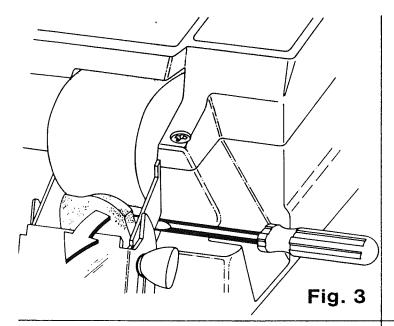


COOLING SYSTEM:

Friction produced in the grinding process generates heat which could ruin the temper of the blade or tool being sharpened. The unique wiper of the Wet Sharp Machine keeps the grinding wheel and cutting edge cool.

The grinding wheel is porous and will absorb the water like a sponge. Centrifugal force keeps the water on the wheel's surface which gives the wheel a wet sheen. Capillary attraction pulls water from reservoir through wiper which maintains an evenly wet grinding surface. The wiper also wipes the wheel clean of swarf, the gritty residue which grinding produces. Once wheel is soaked and reservoir full of water, the machine will stay wet and cool for hours of use.

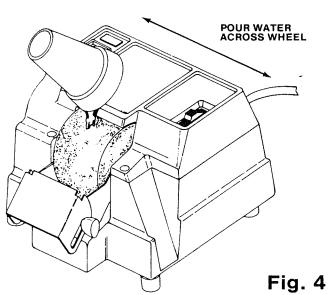
Fill with tap water or in areas where the water is extremely hard, use distilled water. Distilled water will reduce the amount of mineral deposits in the wiper (See MAINTENANCE—Care of Wiper).

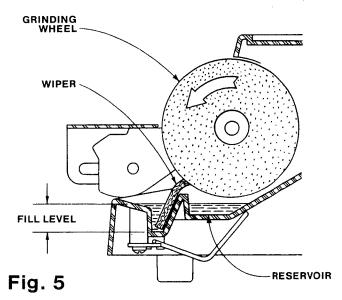


FILLING THE COOLING SYSTEM:

Loosen tool rest knobs and allow tool rest to hang down as shown in Fig. 4. Remove wiper as shown in Fig. 3, and soak with water. Replace wiper.

Take some water in a container and pour it "SLOWLY," directly on the wheel with a back and forth motion as shown in Fig. 4. IT IS IMPORTANT TO SOAK THE WHEEL: continue pouring water on the wheel until water level in the reservoir is about 3/4 full. Reservoir capacity is approximately 1/2 oz. Do not overfill. See Fig. 5.





RETAINING LEG

When extended and hooked over a table or bench edge the retaining leg prevents the Wet Sharp Machine from moving when doing heavy grinding. Folds up and out of the way when not required.

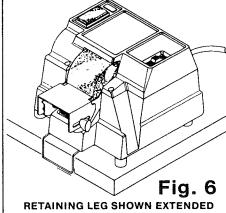
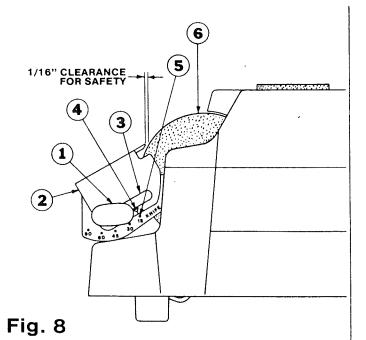


Fig. 7

RETAINING LEG FOLDS UP INTO HOUSING WHEN NOT REQUIRED

ADJUSTABLE TOOL REST

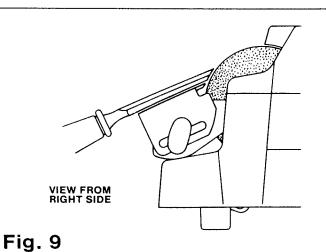
Using the angle selector guide as described below enables you to accurately position the tool's cutting edge to the grinding wheel at precisely the right angle for each job, and also maintains the proper clearance between the tool rest and grinding wheel.



GENERAL SHARPENING

Refer to Fig. 8. Make sure machine is turned "OFF" while making adjustments. Loosen both tool rest knobs (1). Slide tool rest (2) along the slot (3) until tip of angle selector arrow (4) is just touching the dot (5) of the angle selector guide for the desired angle. Be sure you maintain 1/16" clearance between grinding wheel (6) and tool rest (2) for safety.

IMPORTANT! ALWAYS TIGHTEN THE RIGHT KNOB FIRST TO MAINTAIN CORRECT SETTING.



CLOSE UP VIEW OF TOOL BEING SHARPENED

Fig. 10

VISUAL CHECK (BEFORE OPERATING)

Place item to be sharpened on tool rest and sight down it from right end as shown in Figs. 9 &10 to see if it is adjusted for the proper angle for that item. Adjust tool rest as required to match the cutting edge's original angle.

Securely tighten right tool rest knob first, then the left tool rest knob.

OPERATING INSTRUCTIONS

Please take time to read these along with the rest of your manual before attempting to operate your tool.

- 1. Always wear eye protection.
- 2. Always maintain 1/16" clearance between tool rest and grinding wheel.
- 3. Check water supply regularly.
- Add water when necessary.
- 5. Don't force—Hold the work firmly and gently ease into the grinding wheel.
- **6.** Follow all maintenance instructions as noted on page 9.
- 7. Turn machine "OFF" before making adjustments.
- 8. Clean wiper after each use as described in the maintenance section of this manual under "Care of Wiper."

HINTS

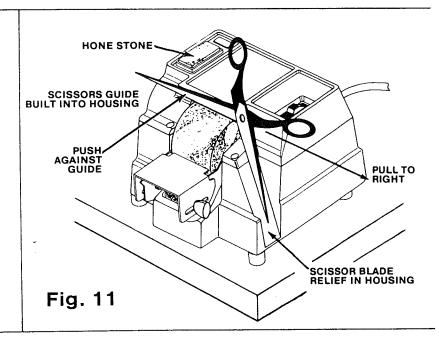
- 1. Check: While in "OFF" position, use the "visual check" procedure as described on page 6 for proper sharpening angle.
- 2. Practice: While still in "OFF" position practice procedures as described in the following instructions.
- 3. **Deburr:** After you are finished sharpening there may be a fine burr on the cutting edge. This may be removed by drawing the blade across the HONE STONE at approximately the same angle it was sharpened at. Hone both sides of the blade.

SHARPENING SCISSORS

Since some scissors may have long blades you will have to position the Wet Sharp Machine on corner of table or bench as shown in Fig. 11.

Open scissors. Lay one blade across top of grinding wheel and press it back against scissor guide as shown in Fig. 11. Gently but firmly apply pressure on blade into grinding wheel. Continue to apply same pressure on blade while slowly drawing blade to the right across grinding wheel to tip of scissors. Repeat as required.

Turn scissors around and repeat above procedure with other blade. Turn machine "OFF" and deburr as described above.



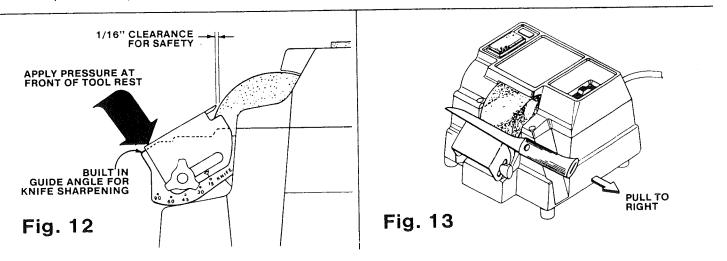
SHARPENING KNIVES

- 1. Loosen tool rest knobs.
- 2. Slide tool rest up along built in guide angle.
- 3. Apply pressure at front edge of tool rest.
- 4. Adjust tool rest for 1/16" clearance between tool rest and grinding wheel.
- 5. Maintain pressure at front of tool rest and tighten tool rest knobs.

Lay knife blade on tool rest until edge just touches grinding wheel. Turn on machine. Holding knife handle in right hand use left hand to apply pressure against tool rest as shown in Fig. 13.

Push into grinding wheel until contact is made. Apply firm steady pressure into grinding wheel while slowly drawing blade to the right.

Repeat as required.



If blade is curved at the end, rotate knife handle toward you when approaching knife's tip as shown in Fig. 14.

Sharpen the other side of the blade the . same way as described above except hold knife as shown in Fig. 15 & 16.

Deburr as described on page 7.

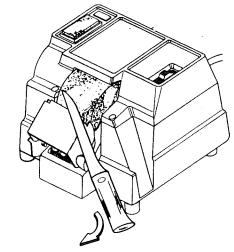
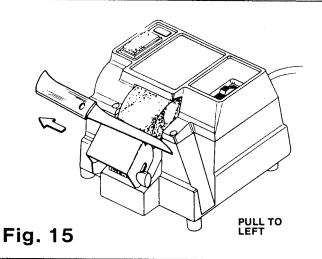


Fig. 14



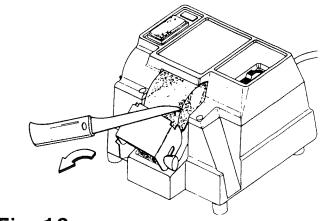
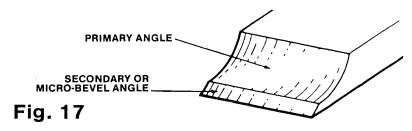


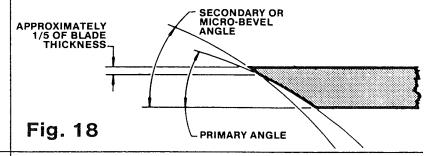
Fig. 16

SHARPENING TOOLS

Micro-Bevel—some tools such as chisels and plane blades require what is called a "micro-bevel" edge to improve tool performance and cutting edge strength.

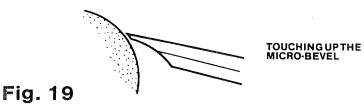


This is accomplished by grinding in a primary angle, 25°-30° for example, then grinding in a secondary angle, 30°-35° for instance, on the tip of the cutting edge. See Fig. 18.

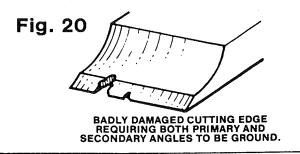


In most cases it is only necessary to touch up the secondary angle to keep edges keen. (Fig. 19)

Use "visual check" method described on page 6.



You will only need to grind in both angles if cutting edge becomes badly damaged. (Fig. 20)



Move the tool back and forth across grinding wheel to avoid wearing down the wheel unevenly. If this occurs "dress" the wheel as described in the maintenance section of this manual under "Care of Grinding Wheels."

MAINTENANCE

CARE OF WIPER

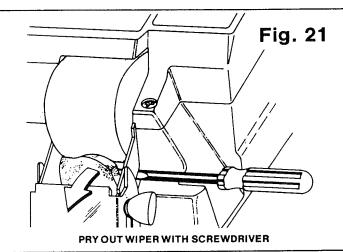
Clean wiper after each use to remove the grinding residue or "swarf."

Loosen tool rest knobs and allow tool rest to drop out of the way as shown in Fig. 4 on page 5.

With the aid of a screwdriver, as shown in Fig. 21 pry the wiper out of reservoir, to replace the wiper reverse the procedure.

Rinse wiper thoroughly under faucet to remove grinding residue.

Replace wiper when worn out.



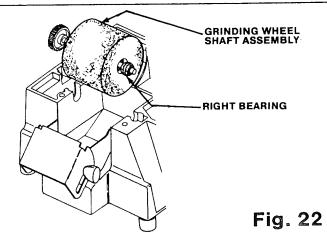
CARE OF GRINDING WHEELS

In normal usage grinding wheels may become grooved, out of true, and become "loaded." Loaded simply means that soft metals or other materials have filled up the pores of the wheel.

When this occurs, grinding action is greatly reduced. Grinding of soft metals such as aluminum, brass, copper, lead and the like should be avoided as much as possible. When any of the above conditions occur, the wheel may be put in good condition again by "dressing the wheel." Various tools and abrasive sticks are available in most hardware stores for this purpose. To "dress" the wheel, start the Wet Sharp Machine and work the dressing stone back and forth across the wheel until all grooves, etc., are gone. Be sure to use suitable eye protection for this purpose. Dressing stones are available at most hardware stores or may be ordered through Sears. See optional equipment in parts list.

IMPORTANT: Clean wiper after dressing wheel. WHEEL REPLACEMENT

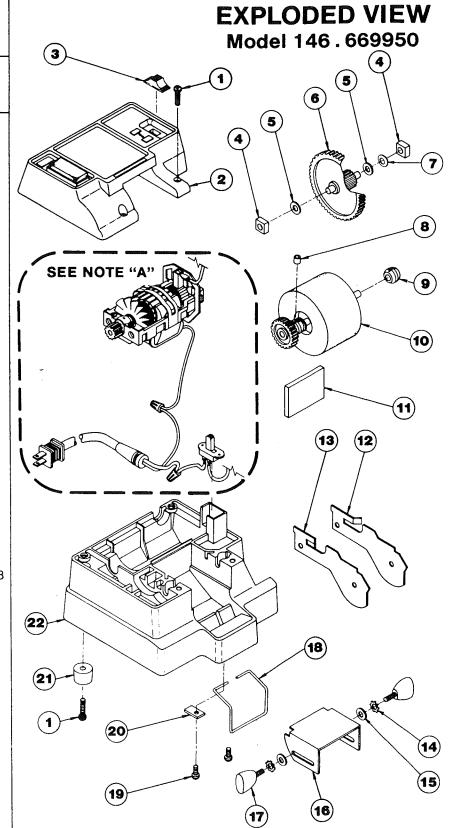
If wheel is cracked, chipped, or becomes worn or excessively grooved, it is necessary to replace it. Order part no. 2905B8 "grinding wheel shaft assembly." Disconnect Wet Sharp Machine from power source. Loosen all four top housing screws and lift off top housing. Grasp grinding wheel and lift out whole grinding wheel shaft assembly. Remove right bearing and slide on to new grinding wheel shaft assembly. Replace grinding wheel shaft assembly in bottom housing. Replace top housing and screws.



NOTES

PARTS LIST

DESCRIPTION	PART NO.
C (0)	050147.4
	953A17-1
	2905E2
·	2905A12
	2901A14
	500A18
Shaft Ass'y	2905A9
Spring Washer	96A63
Grommet (4)	2901A52
Spherical Bearing	2901A36
Grinding Wheel & Shaft Ass'y	2905B8
Filter (Wiper)	2905A15
Right Tool Rest	
Bracket Ass'y	2905A37
Left Tool Rest Bracket Ass'y	2905A38
External Lock Tooth Washer (2)	90A117
Washer (2)	1030A113
Tool Rest	2905A39
Knobs (2)	2900A79
Retainer Leg	2905B35
Screw (2)	953A17-2
Retainer Leg Bracket (2)	2905A47
Rubber Foot (4)	2901A25
Housing Bottom	2905E1
Manual	2905A56
	Screw (8) Housing - Top Switch Cap Bearing - Intermediate (2) Washer (2) Intermediate Gear & Shaft Ass'y Spring Washer Grommet (4) Spherical Bearing Grinding Wheel & Shaft Ass'y Filter (Wiper) Right Tool Rest Bracket Ass'y Left Tool Rest Bracket Ass'y External Lock Tooth Washer (2) Washer (2) Tool Rest Knobs (2) Retainer Leg Screw (2) Retainer Leg Bracket (2) Rubber Foot (4) Housing Bottom



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 Catalog Order or Retail Store.



OWNER'S **MANUAL**

SERVICE

MODEL ÑO. 146.669950

HOW TO ORDER REPAIR PARTS

owner's manual

SEARS / CRAFTSMAN

WET SHARP MACHINE

Now that you have purchased your Wet Sharp Machine 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 Wet Sharp Machine will be found on the plate attached to the top housing.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART DESCRIPTION
- MODEL NUMBER
 NAME OF ITEM 146.669950
 - WET SHARP MACHINE

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.