

**Sears**

***Owner's  
Manual***

**MODEL NO.  
397.19360**

SERIAL  
NO. \_\_\_\_\_

MODEL AND SERIAL  
NUMBER MAY BE FOUND  
ON THE NAMEPLATE  
LOCATED ON THE  
FRONT OF THE TOOL.

YOU SHOULD RECORD  
BOTH MODEL AND  
SERIAL NUMBER AND  
RETAIN IN A SAFE  
PLACE FOR FUTURE  
USE.

**DANGER —**  
For Your Own  
Safety, Read  
and Understand  
this Manual  
Before  
Operating  
Grinder.



**CRAFTSMAN**

**1 H.P. GRINDER**

- Assembly
- Installation
- Operation
- Repair Parts

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

# ***RULES FOR SAFE OPERATION***

Read instructions before using grinder

## **— FOR BENCH GRINDERS —**

- 1. EXAMINE GRINDING WHEELS FOR CRACKS** or other damage before operating.  
**REPLACE CRACKED WHEEL IMMEDIATELY.**
- 2. DO NOT OVER-TIGHTEN WHEEL NUTS.**
- 3. USE ONLY WHEEL FLANGES FURNISHED WITH GRINDER.** Use of other flanges may cause damage or breakage to the grinding wheel and result in injury to the operator.
- 4. MOUNT THE GRINDER SECURELY** to prevent damage. See "INSTALLATION" page.
- 5. DO NOT FORCE WORK** against the grinding wheel! Excessive pressure may cause damage or breakage of the grinding wheel, resulting in injury to the operator or bystander.
- 6. STOP GRINDER BEFORE MAKING ADJUSTMENTS.**
- 7. ALWAYS USE GUARDS AND EYESHIELDS.**
- 8. ADJUST DISTANCE BETWEEN WHEEL AND WORK REST** to maintain 1/16 inch or less separation as the diameter of the wheel decreases with use.
- 9. READ ALL INSTRUCTIONS** pertaining to 115 volt and 230 volt operation before attempting to change connections.

## **— FOR ALL TOOLS —**

- 1. KEEP GUARDS IN PLACE** and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 3. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 4. AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
- 5. KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from work area.
- 6. MAKE WORKSHOP KID-PROOF** with padlocks, master switches or by removing starter keys.
- 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 tool or attachment to do a job it was not designed for.
- 9. WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 10. USE SAFETY GOGGLES** which comply with ANSI Z87.1-1968. Also use face or dust mask if cutting operation is dusty.
- 11. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- 12. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 14. DISCONNECT TOOLS** before servicing; when changing accessories such as blades, bits, cutters, etc.
- 15. AVOID UNINTENTIONAL STARTING.** Make sure switch is in "Off" position before plugging in.
- 16. USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.
- 17. NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 18. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to assure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breaking 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.
- 19. GROUND THE OUTLET BOX** to prevent possible fatal shocks. See "OPERATION" page.
- 20. NEVER LEAVE TOOL RUNNING UNATTENDED.**

### FULL ONE YEAR WARRANTY ON CRAFTSMAN GRINDER

If this Craftsman Grinder 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 replace it free of charge.

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

SEARS, ROEBUCK AND CO.  
BSC 41-3  
SEARS TOWER  
CHICAGO, IL 60684

### COMPARISON OF RATED HORSEPOWER AND DEVELOPED HORSEPOWER

A **RATED** horsepower motor normally has approximately **TWICE** the breakdown torque strength, **TWICE** the maximum momentary power output capability and **TWICE** the power output capability for prolonged operation without damage, when compared to a **DEVELOPED** horsepower motor of the same horsepower.

## CUSTOMER'S RESPONSIBILITIES

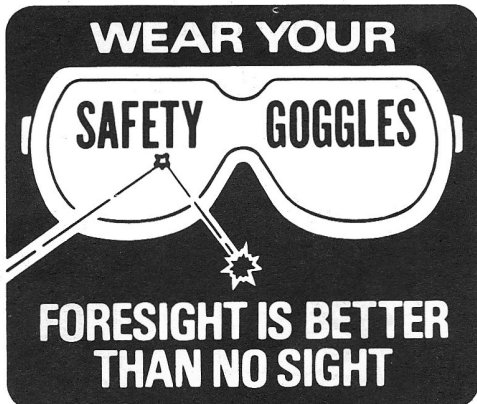
**WARNING: MAKE SURE RECEPTACLE BOX IS PROPERLY GROUNDED. OPERATION WITHOUT GROUNDING CAN CAUSE SERIOUS ELECTRICAL SHOCKS WHICH MIGHT BE FATAL.**

This grinder will start and operate on a 115 volt lighting circuit. Use a 15 ampere "delayed action" fuse.

Replace a damaged or worn cord immediately.

If necessary to use an extension, use only 3-wire cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tool's plug. The following chart of lengths and wire sizes must be followed for safe operation.

Length of Extension	Wire Size Required (American Wire Gauge No.)
15 feet or less	No. 14
50 feet or less	No. 12
100 feet or less	No. 10



THE OPERATION OF ANY POWER TOOL CAN RESULT IN FOREIGN OBJECTS BEING THROWN INTO THE EYES, WHICH CAN RESULT IN SEVERE EYE DAMAGE. ALWAYS WEAR SAFETY GOGGLES WHICH COMPLY WITH AMERICAN NATIONAL STANDARD (ANSI) Z87.1-1968 BEFORE COMMENCING POWER TOOL OPERATION.

Additional face protection is available by use of Wide-Vision Face Mask which may be obtained at your Sears Retail or Catalog Stores.

# ASSEMBLY

INSPECT GRINDING WHEELS FOR DAMAGE BEFORE USING.

## STEP 1

Attach wheel covers to wheel guards using eight screws furnished. See figure 1.

## STEP 2

Attach spark arresters to top front of wheel guards using flat washers and bolts — (5/16-18 x 3/8). Adjust spark arresters to 1/16 inch from wheel and tighten bolts. See figure 1.

## STEP 3

Fasten eyeshield to top of wheel guards using bolts — (1/4-20 x 2 1/4) and wing nuts. See figure 1.

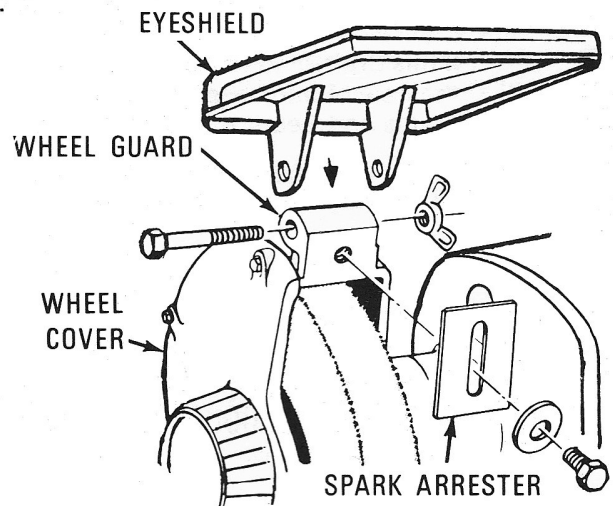


FIGURE 1

## STEP 4

Install four foot and screw assemblies in bottom of base furnished with your grinder. Mount grinder onto base using four screw and lockwasher assemblies. See figure 2.

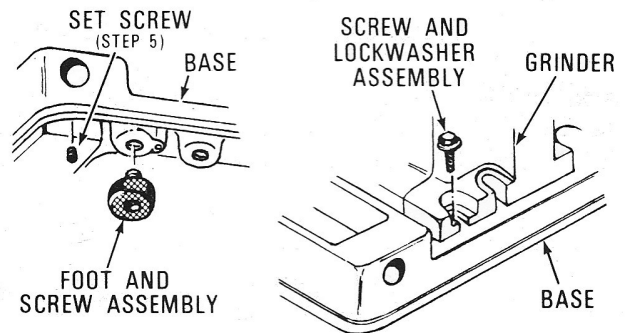


FIGURE 2

## STEP 5

Remove parts from tool rest package and assemble to grinder as shown in figure 3. Insert a tool rest shaft into each side of grinder base in holes provided and retain using set screws. Install set screws from bottom of base and tighten against flat in tool rest shaft. Slide lower tool rest arms onto shafts and clamp vertically using mounting bolts and nuts. Attach upper tool rest arms to top hole of lower tool rest arms using bolts, washers and nuts. Assemble tool rests to upper tool rest arms using bolts and nuts.

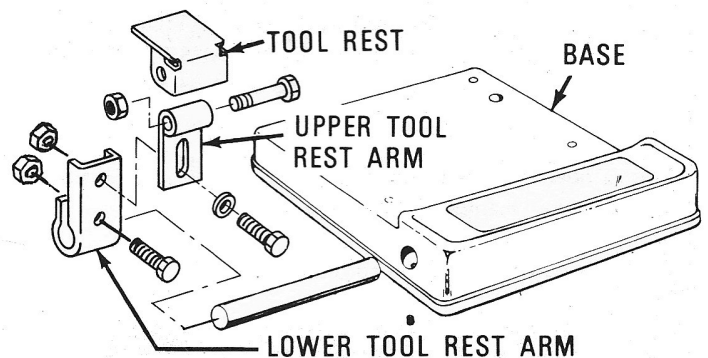


FIGURE 3

## STEP 6

Adjust the tool rest so that the material to be ground will contact the wheel slightly above center-line of shaft at the desired angle, as shown in figure 4. The tool rests should be positioned securely so that a clearance of approximately 1/16 inch can be maintained between wheel and tool rests.

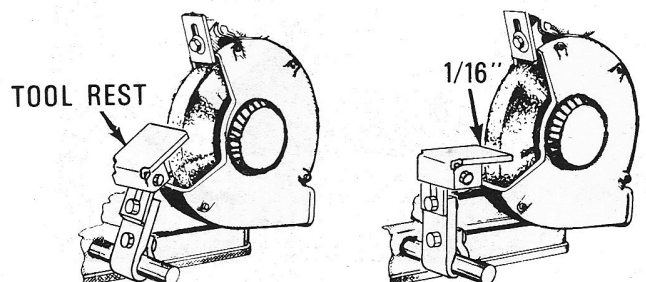


FIGURE 4

# ASSEMBLY-CONT'D

## STEP 7

Assemble lamp shade cover to metal lamp shade with screw (8-32 x ¼ pan hd). Clamp this assembly to lamp holder. See figure 5. We recommend either 40 watt "regular" or 50 watt "rough service" bulb in your grinder lamp.

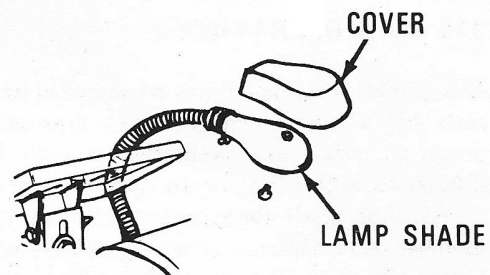


FIGURE 5

## STEP 8

The illustration shows how the washer spacers are assembled to your grinder when buffing wheels and other accessories are used. See figure 6. Spacer washers are not used or required with standard grinding wheels.

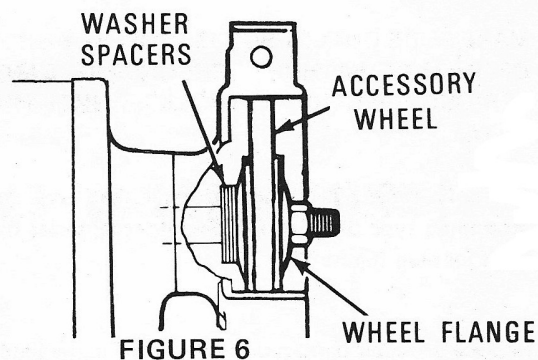


FIGURE 6

# INSTALLATION

## Grinder must be mounted on horizontal surface.

The Craftsman grinder pedestal available at Sears retail or catalog store is designed specifically for your grinder. Use of the pedestal will permit greater accessibility to your unit for grinding, buffing and many other uses.

To mount your grinder to the pedestal, align tapped holes in base with corresponding holes in table of the pedestal. Use two 5/16"-18 x 1-7/8" bolts (with flat washers beneath the heads) to secure the grinder. See figure 7.

A craftsman workbench provides a good mounting for your grinder, when drawer space is desired as well as surface space.

To mount your grinder to the bench top use 1/4 wood screws 3½ inches long with flat washers beneath the heads. See figure 8.

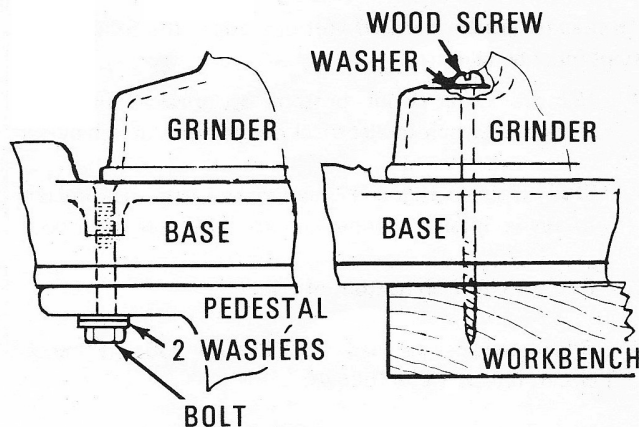


FIGURE 7

FIGURE 8

# INSTALLATION - CONT'D

## 115 VOLT OPERATION

This grinder is equipped with an approved three-conductor cord and a three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. An adapter, figures 10 and 11, is available for connecting figure 9 plugs to two-prong receptacles. The green-colored rigid grounding lug extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

**MAKE SURE OUTLET BOX IS PROPERLY GROUNDED. OPERATION WITHOUT GROUNDING CAN CAUSE SERIOUS ELECTRICAL SHOCKS WHICH MIGHT BE FATAL.**

Use only three-wire extension cords that have three-prong grounding type plugs and three-pole receptacles that accept the tool plug (figure 9).

Replace or repair damaged or worn cord immediately.

This grinder will start and operate on a 115 volt lighting circuit. Use a 15 ampere "delayed action" fuse.

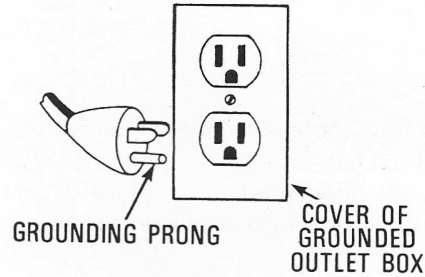


FIGURE 9

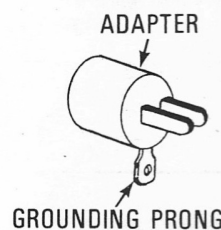


FIGURE 10

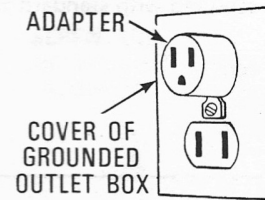


FIGURE 11

## 230 VOLT (SINGLE PHASE) OPERATION:

**WARNING: BEFORE CHANGING WIRING CONNECTIONS, READ INSTRUCTIONS REGARDING 115 VOLT AND 230 VOLT OPERATION. WRONG CONNECTIONS WILL DAMAGE MOTOR WINDINGS.**

To prepare grinder for 230 volt operation, the following 5 steps must be taken:

1. Remove cover from bottom of grinder. Read all instructions before electrical connections are changed.
2. Study diagram (figure 12) and make changes as directed to revise internal connection for 230 volt operation.
3. Replace cover on bottom of grinder.
4. Connection can be made to a 15 amp, 230 volt branch circuit receptacle as follows:

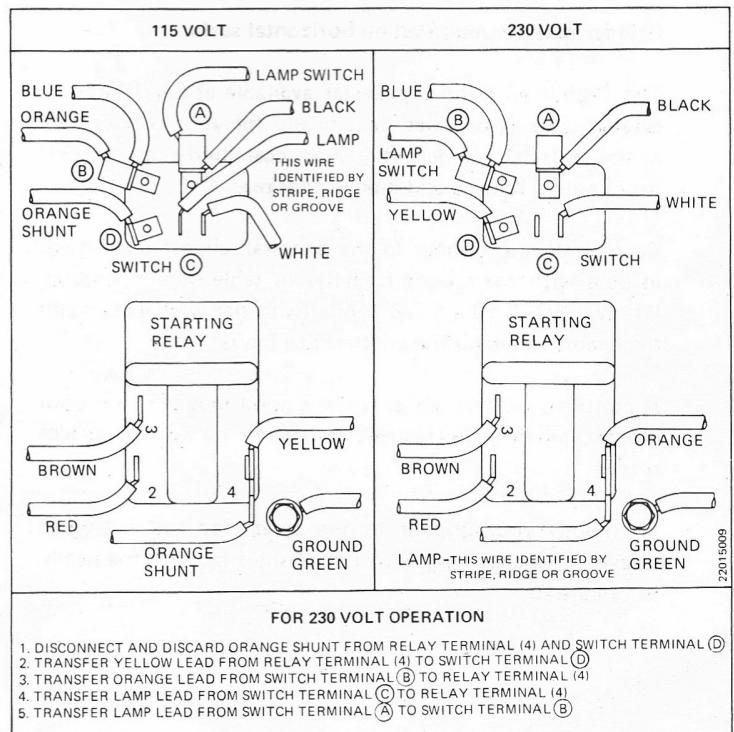


FIGURE 12

# INSTALLATION - CONT'D

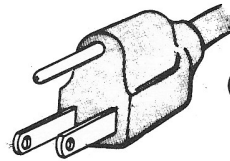
5. Cut off the plug cap attached to the cable (it is for 115 volt connections only). Obtain a 2 pole 3 wire grounding type plug cap rated 15 amp, 250 volt (see figure 13 — note arrangement of blades) and connect black and white wires to blade terminals.

## WARNING:

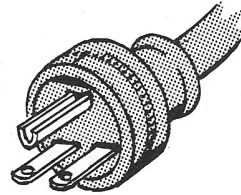
**THIS TOOL SHOULD BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

**BE SURE TO CONNECT GREEN WIRE FROM CABLE TO GREEN SCREW TERMINAL IN ATTACHMENT PLUG CAP FOR PROPER GROUND. IMPROPER GROUNDING CAN CAUSE SERIOUS ELECTRICAL SHOCKS WHICH MIGHT BE FATAL.**

No adapter is available for 230 V plugs (figure 13).



**115 VOLT PLUG CAP  
(AS FURNISHED ON GRINDER)**



**230 VOLT PLUG CAP**

**FIGURE 13**

# OPERATION

- Replace cracked wheel immediately.
- Always use guards and eye shields.
- Do not over-tighten wheel nut.
- Use only flanges furnished with this grinder.

## 1. WARNING:

**BE SAFE! PROTECT YOUR EYES, WEAR APPROVED SAFETY GOGGLES WHICH COMPLY WITH ANSI Z87.1-1968, AND ASSEMBLE EYE SHIELDS FURNISHED WITH YOUR GRINDER. STAND AWAY FROM FRONT OF GRINDER DURING FIRST MINUTE OF OPERATION.**

**THE OPERATION OF ANY POWER TOOL CAN RESULT IN FOREIGN OBJECTS BEING THROWN INTO THE EYES, WHICH CAN RESULT IN SEVERE EYE DAMAGE. ALWAYS WEAR SAFETY GOGGLES BEFORE COMMENCING POWER TOOL OPERATION.**

2. To start, pull switch to "ON" position. If grinder does not start immediately, disconnect power and check for voltage at power source.

If voltage is correct but the grinder will not start, return it to point of purchase for inspection.

3. The tool rests should be positioned securely so that a clearance of approximately 1/16 inch can be maintained between wheel and tool rests. Adjust the tool rests so that the material to be ground will contact the wheel slightly above center-line of shaft at the desired angle, as shown in figure 4.

**WARNING: ADJUSTMENTS SHOULD BE MADE ONLY WHEN GRINDER HAS STOPPED TO PROTECT AGAINST INJURY.**

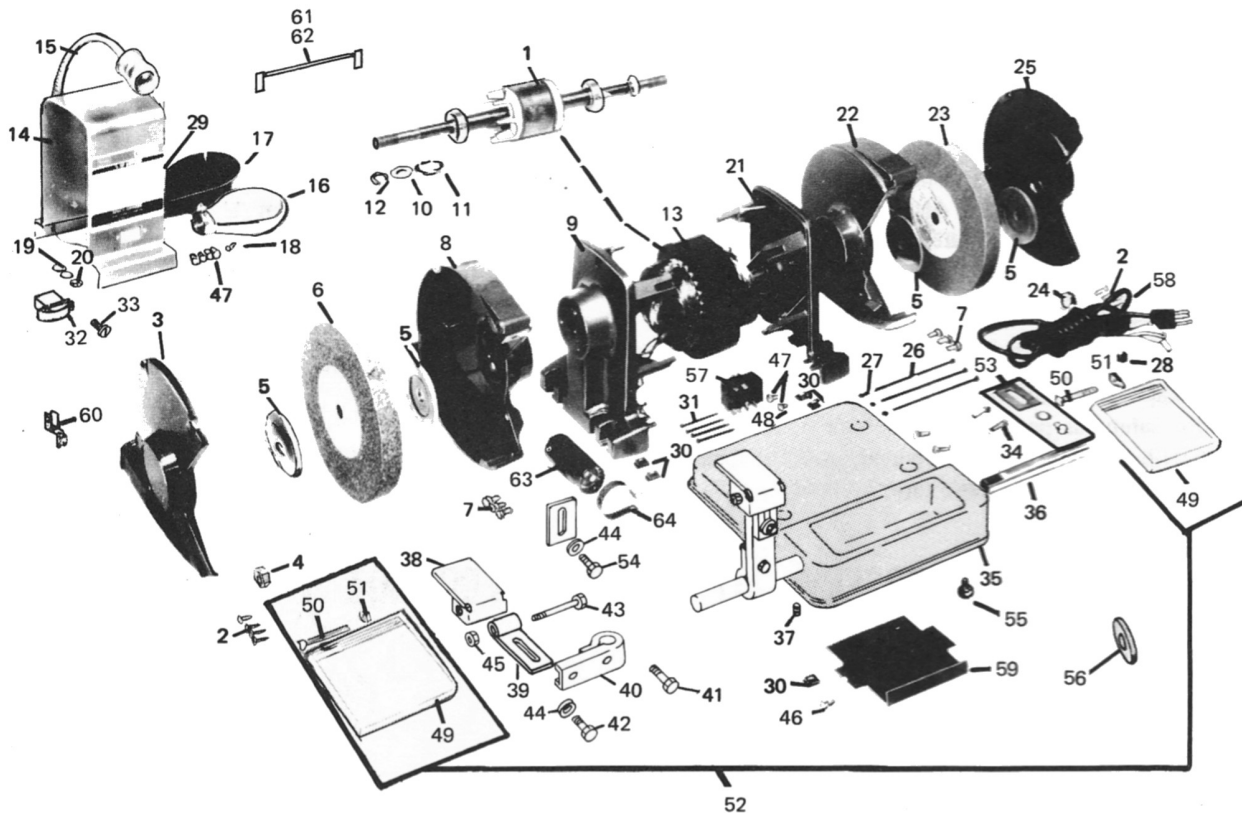
## 4. WARNING:

**DO NOT GRIND ON SIDE OF WHEELS!  
DO NOT FORCE WORK AGAINST THE GRINDING WHEEL! EXCESSIVE PRESSURE MAY CAUSE DAMAGE OR BREAKAGE OF THE GRINDING WHEEL, RESULTING IN INJURY TO THE OPERATOR OR BYSTANDER.**

**SEE CUSTOMER'S RESPONSIBILITIES ON PAGE 3**

CRAFTSMAN 1 H.P. GRINDER – MODEL NUMBER 397.19360

REPAIR PARTS



Key	Part No.	PART NAME	Qty.	Key	Part No.	PART NAME	Qty.
1	22013261	Rotor, Shaft & Bearings Assembly	1	35	4989452	Base	1
2	9437383	*Screw, 8-32 x 11/16 Pan Hd Self Tap	8	36	5219087	Tool Rest Shaft	2
3	4971613	Wheel Cover (L.H.)	1	37	STD503102	*Set Screw – (5/16-18)	2
4	192461	Nut – 5/8-18 (L.H. Thread)	1	38	22005398	Tool Rest	2
5	22001525	Wheel Flange	4	39	22005429	Tool Rest Arm (Upper)	2
6	5528314	*Grinding Wheel 8 "X1" (Coarse—36 Grit)	1	40	22005399	Tool Rest Arm (Lower)	2
7	5353426	*Screw, 1/4-20 x 1/2 Hex Head Self Tap	6	41	STD523110	*Bolt (Lower Arm) (5/16-18 x 1)	2
8	4971615	Wheel Guard – Inner (L.H.)	1	42	STD523107	*Bolt (Upper Arm) (5/16-18 x 3/4)	2
9	4988540	End Frame (L.H.)	1	43	STD523122	*Bolt (Tool Rest) (5/16-18 x 2 1/4)	2
10	3167424	Felt Washer	2	44	STD551031	*Washer (Upper Arm and Spark Arrester)	4
11	5211995	Ball Bearing Spring	2	45	STD 541031	Nut	6
12	9418441	Retaining Ring	2	46	22014035	*Screw, 8-15 x 1/2 Hex Head Self Tap	5
13	22013885	Stator and Coil Assembly	1	47	STD600803	*Screw, 8-32 x 3/8 Pan Hd Self Tap	3
14	4988538	Band	1	48	STD551108	*Lockwasher, No. 8 (Grounding Screw)	1
15	4978189	Gooseneck & Socket Assembly	1	49	4971778	Eyeshield	2
16	4971959	Lamp Shade – Metal	1	50	STD522522	*Bolt, 1/4-20 x 2-1/4 Hx Head	2
17	4971958	Cover - Lamp Shade	1	51	STD541625	*Wing Nut, 1/4-20 Thread	2
18	STD600802	*Screw, 8-32 x 1/4 Pan Hd Self Tap	1	52	4998798	Eyeshield Package (2 each)	1
19	3187112	Lockwasher (Internal tooth)	2	53	5538409	Spark Arrester Pack (2 each)	1
20	5219097	*Nut – 1/8-27 Pipe Thd	1	54	121817	*Bolt, 5/16-18 x 3/8 Hex Head	2
21	4988542	End Frame (R.H.) Cable End	1	55	5219033	Foot and Screw Assembly	4
22	4971612	Wheel Guard – Inner (R.H.)	1	56	STD551062	*Spacer – (Accessory) 5/8 I.D. Washer	4
23	5528315	*Grinding Wheel (Fine – 8 "X1" 60 Grit)	1	57	22013279	Starting Relay	1
24	124944	*Nut – 5/8-18 Hex	1	58	4978534	Cable Assembly	1
25	4971610	Wheel Cover (R.H.)	1	59	22015010	Cover	1
26	4971779	Thru Bolt, 10-32 Thread	3	60	4945969	Adaptor	1
27	STD541110	*Nut, 10-32 Thread	3	61	5558855	Lead (Red)	1
28	3169206	Bushing	1	62	4957357	Lead (Orange)	1
29	22013268	Name Plate	1	63	5539080	Capacitor	1
30	3161432	Spring Clip	5	64	5373379	Clamp	1
31	9437509	*Screw, 8-32 x 2-1/4 Hx Head Self Tap	4		22013257	Owner's Manual	1
32	4986704	Switch	1				
33	STD510602	Screw, 6-32 x 1/4 Pan Hd	2				
34	22004690	Screw & Lockwasher 10-32 x 1/2 Self Tap	4				

\* Standard Hardware Items – May be purchased locally.

# **MAINTENANCE**

1. When vitrified wheels become irregular or glazed from use, they may be trued and cleaned, returning them to near-new condition with the cutting face fresh and square. Use a Sears wheel dresser to keep your wheels in good condition. Available at Sears retail stores or through catalog.

**WARNING: WHEEL GUARD AND COVER MUST BE ASSEMBLED WHEN WHEEL DRESSER IS USED TO PROTECT OPERATOR FROM INJURY.**

2. Replace grinding wheel when diameter has been reduced 1" through wear. Undersize wheels are a hazard to operator safety as proper spark arrestor and tool rest adjustments cannot be maintained with undersize wheels. Replacement wheels are available at Sears retail or catalog stores.

3. Examine replacement grinding wheel for cracks or other damage before assembling to spindle.

4. Clean out any accumulation of cuttings and abrasive each time outer wheel cover is removed.

5. When replacing grinding wheels **DO NOT OVERTIGHTEN NUT. EXCESSIVE PRESSURE CAN DAMAGE WHEEL.** We recommend that wheel nuts be tightened to 75 inch pounds. Be sure flanges and wheel blotters are free of foreign particles. Be sure the maximum speed rating of your replacement wheel corresponds to or exceeds the rating of your grinder nameplate.

6. Lubrication was provided at the factory for the life of the ball bearings.

**BE SAFE—OBSERVE ALL THE RULES FOR SAFE OPERATION !**

**Sears**

***Owner's  
Manual***

**MODEL NO.  
397.19360**

**Sears  
SERVICE  
is at  
YOUR  
SERVICE**

**HOW TO ORDER REPAIR PARTS**

The Model Number will be found on the name plate attached to the front of the Cover Band of your Grinder. Always mention the Model Number when requesting service or repair parts for your CRAFTSMAN GRINDER.

All parts listed herein may be ordered from any Sears, Roebuck & Co. or Simpsons-Sears Ltd. retail or catalog store. If the parts you need are not stocked locally, your order will be electronically transmitted to Sears Repair Parts Distribution Center for expedited handling.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER  
397.19360
4. The NAME OF ITEM—  
GRINDER

Your Sears merchandise takes on added value when you discover that Sears has over 2,000 Service Units throughout the country. Each is staffed by Sears-trained, professional technicians using Sears approved methods.

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