owners manual

CRAFTSMAN
1/3 H.P. GRINDER

MODEL NO.
397.19589

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

- Assembly
- Installation
- Operating
- Repair Parts

SEARS, ROEBUCK AND CO. U.S.A.
RULES FOR SAFE OPERATION.

1. Read instructions carefully before using. Children should not operate.

2. Ground the outlet box to prevent possible fatal shocks. SEE 'OPERATION' PAGE 3.

3. Be sure your voltage supply agrees with the voltage specified on the nameplate. Use the proper fuse and extension cord to prevent fires and wiring damage.

4. Examine grinding wheels for cracks or other damage before operating. When wheels are replaced, do not overtighten wheel nut.

5. All guards must be in place and all adjustments securely tightened before starting grinder. Protect your eyes and body by wearing shatterproof glasses and attaching the eyeshields and spark arresters to the grinder. Do not stand in front of grinder during first minute of operation.

6. Mount the grinder securely to prevent damage. SEE 'INSTALLATION' PAGE 3. Do not force work against the wheels, since thrown wheel chips may injure the operator or bystander.

7. Accessories usually include instructions. Read carefully before installing on grinder.

ASSEMBLY

The key numbers in the instructions refer to the adjacent assembly instructions.

INSPECT GRINDING WHEELS FOR DAMAGE BEFORE USING.

1. Attach wheel covers (4) to wheel guards (9) using six screws (3) furnished. See figure 1.

2. Fasten eyeshield (39) to top of wheel guards (9) using bolts - 3/8-20 x 2 (40) and wing nuts (42). Always place washer (41) between tab of eyeshield and inner side of wheel guard on both ends of grinder. See figure 1.

3. Attach spark arresters (44) to top front of wheel guards (9) as shown. Note that head of screw with lock-washer attached (45) slides into slot provided. Adjust spark arresters to 1/16 from wheel and tighten nuts (46). See figure 1.

4. Attach tool rests (32 & 33) to bottom front of wheel guards (9) inserting bolts - 5/16-18 x 3/4 (31) from inner side of guards as shown. Add washers (30) and wing nuts (29). See figure 2.

5. Insert 4 base bushings (27) in slots provided at each corner of base as shown in illustration. Thick section of bushing extends below grinder base. See figure 2.

6. The illustration shows how the washer spacers (19) are attached to your grinder when accessories are used. See figure 3.
INSTALLATION

Grinder must be mounted on horizontal surface.

The Craftsman grinder pedestal available at Sears retail or catalog store is designed especially 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 slots in base with corresponding holes in table of the pedestal. Use two 5/16 bolts 2 inches long with flat washers furnished with pedestal beneath the heads. Tighten nuts until space between grinder base and pedestal is 3/16 inch. See figure 4.

Using a second nut on each bolt, jam-tighten against the first to prevent loosening by vibration.

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 two 5/16 wood screws 2 inches long with flat washers beneath the heads. Tighten screws until clearance between base and surface of bench is 3/16 inch. See figure 4.

OPERATION

Before starting grinder, follow instructions for safe operation.

This grinder is equipped with a 3 conductor power cord having a fixed grounding conductor. Note the grounding pin in the attachment plug. If your wall receptacle does not have provisions for the grounding pin, a plug adapter is required. See figure 5.

WARNING: PROTECT THE OPERATOR AGAINST ELECTRICAL SHOCKS BY ALWAYS CONNECTING THE GROUND WIRE FROM THE ADAPTER TO A PERMANENT GROUND BEFORE PLUGGING IN THE POWER CORD. OPERATION WITHOUT GROUNDING CAN CAUSE SERIOUS ELECTRICAL SHOCKS WHICH MIGHT BE FATAL.

This connection can be made to the receptacle cover screw, IF THE OUTLET BOX IS PROPERLY GROUNDED, or to another suitable ground such as a water pipe.

FIGURE 5

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

If necessary to use an extension, the following chart of lengths and wire sizes must be followed for safe operation.

<table>
<thead>
<tr>
<th>Length of Two-Conductor Extension</th>
<th>Wire Size Required (American Wire Gauge No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 feet or less</td>
<td>No. 14</td>
</tr>
<tr>
<td>50 feet or less</td>
<td>No. 12</td>
</tr>
<tr>
<td>100 feet or less</td>
<td>No. 10</td>
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</tbody>
</table>

WEAR YOUR SAFETY GLASSES

Foresight is better than NO sight!

WARNING: BE SAFE! PROTECT YOUR EYES. WEAR APPROVED SAFETY GLASSES, 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 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 retail or catalog stores.

1. To start, move the toggle switch to "ON" position. (NOTE: The lamp is also controlled by this circuit.)

2. If grinder does not start immediately, disconnect power and check for lack of current at power source.

3. If, after verification of sufficient power at source, the grinder will not start, return it to point of purchase for inspection.

2. 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 rest so that the material to be ground will contact the wheel slightly above center-line of shaft at the desired angle.
repair parts

GUARANTEE

During the first year, we will replace the Grinder free of charge, if defective in material or workmanship. This guarantee service is available by simply returning the Grinder to any Sears store throughout the United States.

SEARS, ROEBUCK AND CO.
<table>
<thead>
<tr>
<th>Key</th>
<th>Part No.</th>
<th>PART NAME</th>
<th>Qty</th>
<th>Key</th>
<th>Part No.</th>
<th>PART NAME</th>
<th>Qty</th>
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<td>1</td>
<td>3179846</td>
<td>Rotor Assembly</td>
<td>1</td>
<td>26</td>
<td>5310072</td>
<td>Toggle Switch</td>
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<td>2</td>
<td>1069679</td>
<td>Shaft (shrink fit)</td>
<td>1</td>
<td>27</td>
<td>5537401</td>
<td>† Base Bushing</td>
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<td>3</td>
<td>9415319</td>
<td>† Screw, 8-32 x 3/8 Hex. Hd. Slotted</td>
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<td>28</td>
<td>3161748</td>
<td>Tool Rest Pack</td>
<td>1</td>
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<tr>
<td>4</td>
<td>3160353</td>
<td>† Wheel Cover</td>
<td>2</td>
<td>29</td>
<td>142745</td>
<td>† Wing Nut, 5/16-18</td>
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<td>Nut, 1/2-20 Hex. (L.H. Thread)</td>
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<td>120387</td>
<td>† Washer, 5/16 Flat</td>
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<td>Wheel Flange</td>
<td>4</td>
<td>31</td>
<td>149536</td>
<td>† Bolt, 5/16-18 x 3/4 Sq. Head</td>
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<td>Grinding Wheel (Fine – 60 Grit)</td>
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<td>† Tool Rest (L.H.)</td>
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<td>Wheel Guard</td>
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<td>Stator and Coil Assembly</td>
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<td>18</td>
<td>124934</td>
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<td>† Screw (Accessory) 1/2 I.D.</td>
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<td>442689</td>
<td>† Screw and L.W., 5/16-18 x 1/2 Pan Head</td>
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<td>21</td>
<td>3169218</td>
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<td>Bushing</td>
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<td>4958756</td>
<td>Instructions and Parts List</td>
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</tr>
</tbody>
</table>

* Standard Hardware Items – May be purchased locally.
† Items included in package but not assembled.

ACCESSORIES

To extend the range of operations compatible with your grinder, consult your Sears store or catalog for information on the use of available accessories.

1. Alternate Vitrified Wheels
   ... . General Grinding

2. Wheel Brushes and Buffers.
   Cleaning & Buffing
   (a) Wire . . . . . . . . Heavy Duty
   (b) Tampico . . . . . . . . . Light Duty
   (c) Muslin . . . . . . . . . Polishing

3. Resinoid Bonded . . . . . . . . . . . Cut-off
   (metal, masonry, wallboard, etc.)

4. Craftflex . . . . . . . . . . . . Cut-off and polishing

5. Flexible Shaft Extension

6. Drill Grinding Fixture

Before discarding packaging material, be certain all parts have been removed.
WARNING: ADJUSTMENTS SHOULD BE MADE ONLY WHEN GRINDER HAS STOPPED TO PROTECT AGAINST INJURY.

3. WARNING:
   DO NOT GRIND ON SIDE OF WHEELS!
   DO NOT FORCE WORK AGAINST THE GRINDING WHEEL! EXCESSIVE PRESSURE MAY CAUSE INJURY TO THE OPERATOR AND DAMAGE OR BREAKAGE TO THE GRINDING WHEEL.

MAINTENANCE

1. When vitrified wheels become irregular or glazed from use they may be trued and cleaned. Use a Sears wheel dresser to keep your wheels in good condition.

WARNING: WHEEL GUARDS (9) AND COVERS (4) MUST BE ASSEMBLED WHEN WHEEL DRESSER IS USED FOR OPERATOR'S PROTECTION.

2. When replacing grinding wheels DO NOT OVER-TIGHTEN NUT. EXCESSIVE PRESSURE COULD DAMAGE WHEEL. Be sure flanges and wheel blotters are free of foreign particles and tighten only sufficiently to drive the wheel. Be sure the maximum speed rating of your replacement wheel corresponds to the rating on your grinder nameplate.

3. Clean out any accumulation of cuttings and abrasive each time the wheel covers are removed.

4. Be sure the maximum speed rating of your replacement wheel corresponds to the rating on your grinder nameplate.

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

BE SAFE—OBSERVE ALL THE RULES FOR SAFE OPERATION!
Model No.
397.19589

How to order repair parts

Sears service is at your service wherever you live or move in the U.S.A.

The model number will be found on the name plate attached to the front of the Motor 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 through Sears, Roebuck and Co. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

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
   397.19589
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 parts and methods.