Wood-Mizer Re•Sharp™

Safety, Operation, Maintenance & Parts Manual

CBN-AC Sharpener rev. A.00

Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

December 2000

Form #942

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SECTION 1 SAFETY & GENERAL INFORMATION

This symbol calls your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions. This symbol accompanies a signal word. The word **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. **WARNING** suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury. **CAUTION** refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury to persons or equipment. Read all safety instructions before operating this equipment and observe all safety warnings!

Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

Read and observe all safety instructions before operating this equipment! Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

Always properly dispose of all by-products, including debris, coolant and oil.

Safety instructions are listed in this section by the following operations:

- Electrical Safety
- Blade Handling
- Machine Operation

1.1 Electrical Safety

DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

DANGER! HAZARDOUS VOLTAGE can cause shock, burns, or death. SHUT OFF & LOCK OUT POWER before performing service in any area of this machine. DO NOT restore power until all access panels are replaced and secured.



WARNING! Always turn off and disconnect power at control console AND at main supply circuit breaker before performing any service to the machine.

1.2 Blade Handling

WARNING! Always wear gloves and eye protection when handling bandsaw blades. Keep all persons away from area when coiling or carrying a blade.

1.3 Machine Operation

DANGER! Make sure all guards and covers are in place and secured before operating the sharpener. Failure to do so may result in serious injury.

DANGER! Keep all persons away from moving parts when operating this machine. Failure to do so will result in serious injury.

DANGER! Always keep hands away from moving bandsaw blade. Failure to do so will result in serious injury.



WARNING! Always wear eye, ear, respiration, and foot protection when operating this machine. Failure to do so may result in serious injury.

WARNING! Secure all loose clothing and jewelry before operating this machine. Failure to do so may result in serious injury or death.



1.4 Sharpener Components

See Figure 1-1. The major components of the Industrial Sharpener are shown below.

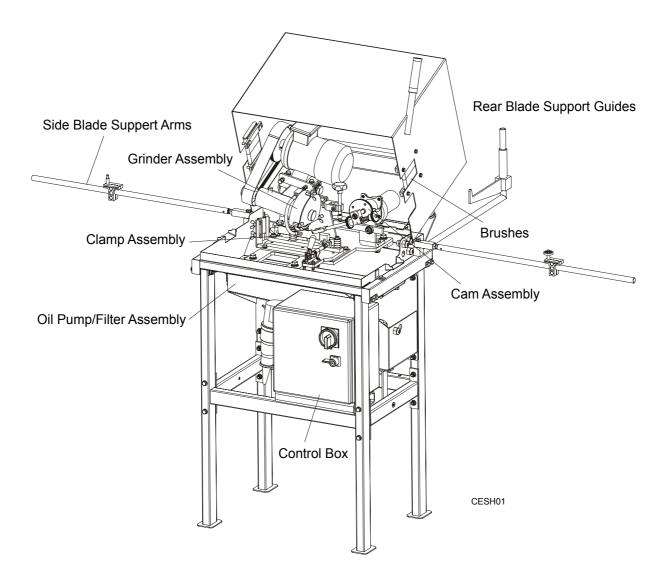
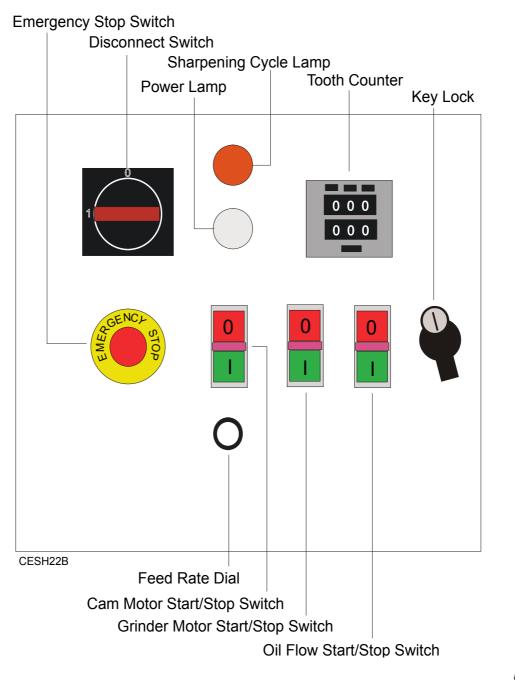


FIG. 1-1

1.5 Control Panel Components

See Figure 1-2. The control panel components and their descriptions are shown below.





Disconnect switch Disconnects/connects power to equipment.

Turn switch to the "0", or vertical, position to lock out all electrical power during service or when equipment is not in use. NOTE: The Disconnect Switch must be in the "0" position before the control box door can be opened.

To reconnect power to equipment, turn switch to the "1", or horizontal, position.

Sharpening Cycle Lamp

Lights up when the blade has been sharpened completely.

Feed Rate Dial Controls cam speed.

Rotate dial as necessary to increase or decrease cam speed.

Tooth counter Sets/keeps track of number of teeth to be sharpened

The upper dial controls the number of teeth to be sharpened. To set, press the button above the appropriate number until the dial shows the total number of teeth on the blade to be sharpened.

The lower dial automatically keeps track of the number of teeth which have been sharpened. After reaching the number set by the upper dial, the lower dial must be reset before the sharpener can be operated again. To reset, push the reset button in and release.

Emergency Stop Switch Shuts off all machine operations.

To shut off all machine operations, press this switch. **NOTE**: After being activated, the Emergency Stop Switch must be reset before the sharpener can be operated again. To reset, rotate the switch counterclockwise and release.

- Oil Flow Start/Stop Switch Starts/Stops coolant pump motor
- Grinder Motor Start/Stop Switch Starts/Stops grinder motor
- Cam Motor Start/Stop Switches

Press the Cam Motor Start Switch to clamp the blade in place and start the cam motor. NOTE: Place the Feed Rate Dial in the "0" position before starting the cam motor.

Press the Cam Motor Stop Switch to turn the cam motor off and unclamp the blade.

SECTION 2 SETUP & OPERATION

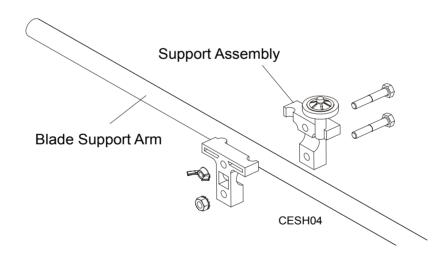
2.1 Blade Support Installation

The sharpener includes two blade support arms with guide assemblies.

To install the support arms, lubricate the threaded ends of the arms with grease. Insert one arm into the threaded holes on each side of the sharpener.

1. Each guide assembly includes a blade support with post, a blade support without post, two bolts, a self-locking nut, and a wing nut.

See Figure 2-1. To install the guide assemblies, join one of the guide assemblies around the end of the left blade support arm. Face the post outward as shown. Bolt from the hexed side of the guide assembly (these hex-shaped holes will keep the bolts from turning once in place). Secure the top bolt with a self-locking nut. Secure the bottom bolt with a wing nut.



- **2.** Assemble the remainingone guide assembly to the right blade support arm, posts facing outward.
- **3.** Tilt the guides on the left blade support arm slightly backward, toward the rear of the sharpener. Tilt the guides on the right support arm slightly forward, toward the front of the sharpener.

2.2 Blade Clamp Adjustment

The adjustable blade clamp allows you to sharp 1", 1 1/4", 1 1/2", 1 3/4", and 2" blades.

See Figure 2-2. The blade rests on two height adjustment pins. The pins insert into any of the rear clamp block's five sets of holes.

Place the blade height adjustment pins in the top set of holes to sharpen 1" blades, the next set to sharpen 1 1/4" blades, and so on.

To change pin location, remove the set screw from each side of the rear clamp block. Remove the pins from one set of holes and reinstall to desired set of holes. Reinstall the set screws to the appropriate holes in the sides of the block and tighten to secure the pins in place.

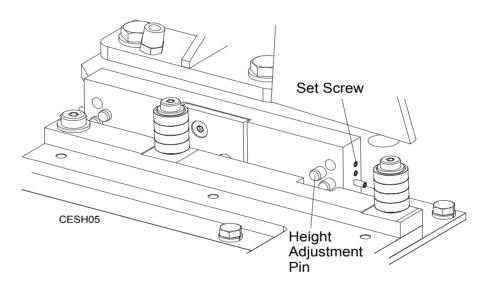


FIG. 2-2

2.3 Hook Angle Adjustment

An angled template, which includes angle for 15 degrees, is provided to check hook angle.

Note: Refer to the Wood-Mizer Blade Handbook for recommended hook angle specifications for your sawing application.

See Figure 2-3. To adjust sharpener head hook angle, set the straight part of the provided template on the clamping fixture. Loosen the depth adjustment and/or the depth stop knob until the sharpener head rests on the template.

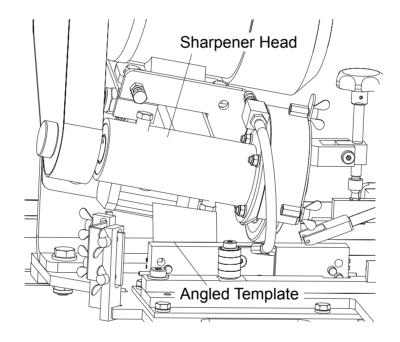


FIG. 2-3

See Figure 2-4. Next, loosen the sharpener head mounting bolt and nut in the motor mounting bracket. Loosen stop bolt and its jam nut. Tip the sharpener head until you reach the desired angle. Hold the sharpener head in place while retightening the sharpener head mounting bolt and nut. Tighten the stop bolt and secure it with the jam nut.

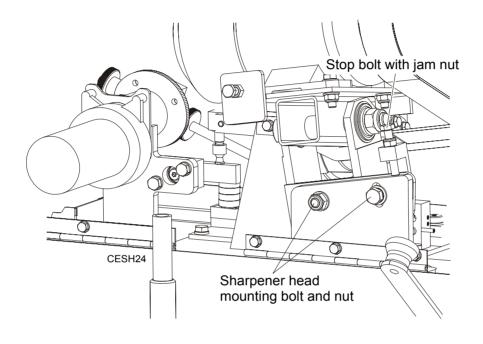
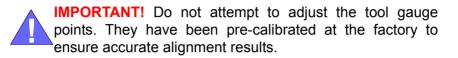


FIG. 2-4

2.4 Sharpener Alignment

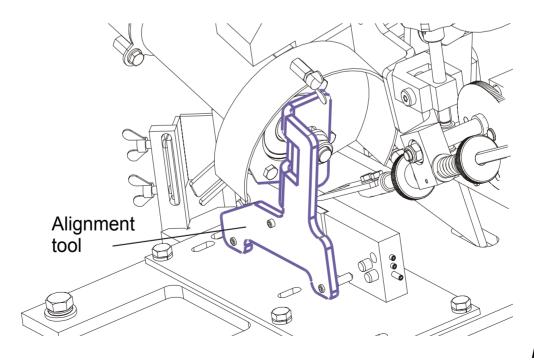
Use the Semi-industrial sharpener alignment tool as necessary to achieve accurate alignment between the blade clamp and the grinding wheel.



IMPORTANT! The grinding wheel must be 4" in diameter or larger. Do not align the sharpener if the grinding wheel is less than 4".

- 1. Make sure the grinder motor is OFF. Cycle the cam until the grinding wheel is at the tip of the tooth (about to begin face grind).
- **2.** Remove the plate with clamp assembly.
- 3. Remove the grinding wheel cover and sharpener arbor nut. Remove the grinding wheel.
- 4. Install the alignment tool to the grinder motor shaft as shown.

See Figure 2-5. Position the tool so all three gauge points are in line with the front clamp plate. Secure the tool in position with the sharpener arbor nut.





5. Install 12 flat washers to the motor shaft. Secure the alignment tool and spacer washers in position with the sharpener arbor nut.

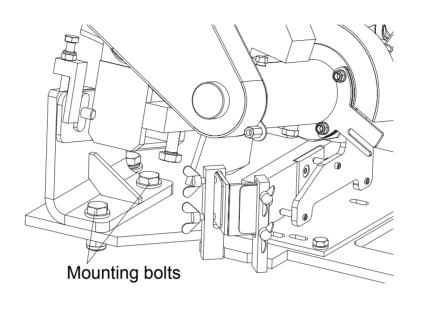


FIG. 2-5A

- 6. Use a 3/4" wrench to loosen the mounting bolts.
- **7.** Position the sharpener haed so the front clamp plate touches all three tool gauge points. Secure in position by tightening the bracket mounting bolts.

2.5 Grinding Wheel Installation

Use a Wood-Mizer approved grinding wheel. To install:

- **1.** Push the START button on the control box and turn the FEED RATE dial up to rotate the cam.
- **2.** Rotate the cam until the sharpener head is at its highest setting. Turn the FEED RATE all the way down and push the STOP button.
- **3.** Remove the grinding wheel cover.
- 4. Remove the nut and washer from the motor shaft.
- **5.** Slide a grinding wheel onto the shaft.
- 6. Reinstall the washer and nut and hand tighten. Reinstall the cover.



DANGER! Make sure all guards and covers are in place and secured before operating the wash station. Failure to do so may result in serious injury.

7. After installing the grinding wheel, hold the sharpener head up with your hand and turn the back/depth grind knob until you can lower the head and the grinding wheel will not contact the blade. Carefully lower the sharpener head.

2.6 Blade Installation

- **1.** Uncoil a blade and position inside the back support guides and between the guide posts of the appropriate side guide assemblies.
- 2. Insert the blade between the blade wipers and the blade clamp.
- **3.** Make any final adjustments to the support arms and guide assemblies to ensure the blade band rests evenly on both the right and left blade clamp assembly pins. Make sure the blade does not touch the bottom of either side guide assembly.

Make sure the guide assemblies lean slightly in the direction the blade travels through them.

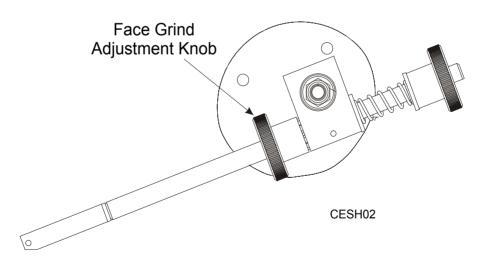
2.7 Face Grind Adjustment

As you operate the sharpener, the cam will rotate causing the index arm to contact a tooth and push it to a position under the grinding wheel. The index arm can be adjusted to leave the tooth closer to or further from the grinding wheel so the tooth face is ground lighter or heavier.

- **1.** Before adjusting the face grind, make sure the cam and grinder motors are off, the feed rate dial is set at "0" and the Sharpener head is raised.
- 2. Back the depth stop knob out.
- **3.** Turn on the cam motor and grinder motor. Slowly increase the FEED RATE until the next tooth is underneath the grinding wheel.
- **4.** Lower the Sharpener head and check to make sure the grinding wheel lightly contacts the entire face of the tooth all the way up to the tip.

See Figure 2-6. If the face grind is too light, turn the face grind adjustment knob out away from the other knob. If the face grind is too heavy, turn the adjustment knob in toward the other knob.

5. Recheck the face grind on the next tooth and adjust as needed.



2.8 Depth Grind Adjustment

Tooth height is determined by how much material is removed from the gullet of the blade. The depth/back grind knob controls how far the grinding head comes down and therefore controls the gullet grind.

- **1.** With the feed rate at "0", turn on the cam and grinder motors.
- **2.** Turn up the feed rate and check the depth grind. The grinding wheel should lightly touch the gullet of the blade and you should see clean metal across the entire gullet of the sharpened tooth.
- **3.** If adjustment is needed, turn the depth stop knob. Turn the knob in to lower the head, out to raise the head.

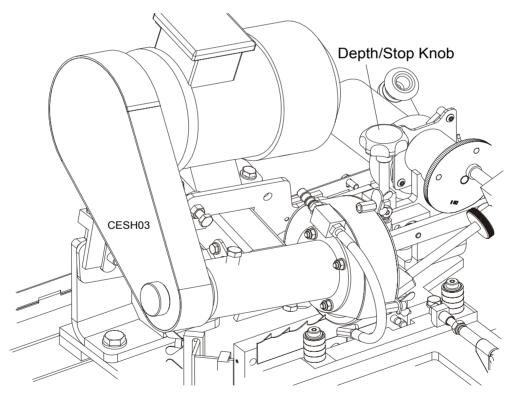


FIG. 2-6

- **4.** Recheck the depth grind.
- 5. Check the depth grind two to three times during the blade sharpening. Make sure you see clean metal across the entire gullet of sharpened teeth each time. If you do not see clean metal, stop the sharpener and adjust the depth grind as necessary.

IMPORTANT! After any adjustment, always restart the blade and sharpen in its entirety to ensure symmetry.

NOTE: Depth grind may be affected as the grinding wheel passes over blade welds.

2.9 Oil Flow Adjustment

To start the oil flow, press the oil flow start switch.

2.10 Feed Rate Adjustment

The Feed Rate Dial controls cam speed. During the sharpening cycle, adjust cam speed to have as fast of a feed rate as possible without "burning" the blade.

NOTE: All machines should be adjusted by maintenance to a maximum speed of 60 revolutions per minute. <u>See Section 4.2</u>.

2.11 Blade Rejection

Sometimes blades cannot be resharpened. Reasons to reject blades for resharpening include:

- the blade is coil set (the blade is over-stressed and will fold on itself),
- the blade is missing 2 or 3 teeth or more in a row,
- the blade band has been twisted,
- the blade band is too low for the grinder (the blade has been sharpened too many times/too much material has already been ground from the blade),
- the blade has no set on one of its sides,
- severe rust is present,
- or the blade has tooth spacing uncommon to Wood-Mizer blades (i.e., a competitor's blade).

2.12 Operation Overview

Use the following steps to guide you through sharpener operation.

- 1. Adjust the blade clamp for the blade you will be sharpening by in stalling the blade hieght pins in the proper holes.
- 2. Install a grinding wheel if necessary, then install the blade.
- **3.** Set the upper dial on the tooth counter for the number of teeth in the blade you will be sharpening. Be sure to close the lower dial cover when done.
- **4.** Adjust face grind and depth grind.
- 5. Push the tooth counter reset button to start the upper dial at "0".
- 6. Turn on the oil flow.
- 7. Increase the feed rate to a moderate speed. How fast you can grind will be determined by how much material you are removing from the blade. If a heavy grind is required, it is best to go around the blade lightly twice rather than try to grind heavily once.
- **8.** Check the depth grind two to three times during the blade sharpening. Adjust as necessary.

IMPORTANT! After any adjustment, always restart the blade and sharpen in its entirety to ensure symmetry.

2.13 Shutoff

The sharpener will automatically shutoff when blade has been entirely sharpened.

Inspect the blade. Repeat sharpening process if necessary. Blades with a bad profile or those which are badly in need of sharpening may have to be ground more than once.

SECTION 3 MAINTENANCE

3.1 Grinding Wheel Replacement

Check the grinding wheel often and change as necessary. Wheels approved for use with the industrial sharpener are available from Wood-Mizer.

The grinding wheel should be in good condition. Replace if worn, the edges look shiny, and/or the wheel is "burning" the blades. **NOTE:** The grinding wheels have a CBN (Cubic Boran Nitride) coating. If this is not worn through and there is no damage to the wheels, the wheels can be replated approximately three to four times.

- **1.** To replace, shut down and lock out all power to the machine.
- 2. Remove the grinding wheel cover.
- **3.** Remove the grinding wheel nut, washer plate and grinding wheel.
- **4.** Install the new grinding wheel. Reinstall the washer plate and nut.
- 5. Reinstall the grinding wheel cover.

3.2 Oil Level

Periodically check the oil level and refill with oil as necessary. The oil level should be kept between 4.5 and 5 litres. Use only Wood-Mizer approved grinding oil.

Filter the oil to remove metal shavings before reusing.

3.3 Bearing/Shaft Replacement

Check the bearings periodically for wear and replace as necessary. To replace:

- **1.** Shut off and lock out all power to the machine.
- 2. From the front of the machine, remove the front guard cover and grinding wheel.

See Figure 3-1.

3. From the rear of the machine, remove the belt guard weldment and belt.

Remove the rear nut and washer.

Remove the lower gearbelt pulley.

Remove the both oil seal bearings and rear ring.

- **4.** Remove the grinder shaft. (Use a brass or rubber mallet to gently tap the shaft towards the front of the machine until the shaft can be removed.)
- **5.** Remove the front roller bearing.
- 6. Remove the rear roller bearing from the shaft housing.
- 7. Clean the grinder shaft.
- **8.** Install the new front roller bearing to the grinder shaft. Secure the front roller bearing with the front ring.

Install the new rear roller bearing to the grinder shaft.

Reinstall the front rings and oil seal bearing.

Reinstall the grinder shaft to the grinder shaft. Secure the rear roller bearing with the rear ring.

Reinstall both oil seal bearings.

Reinstall the gearbelt pulley and rear washer and nut

Reinstall the belt and belt guard weldment.

9. Once bearing replacement is complete, be sure to check head alignment.

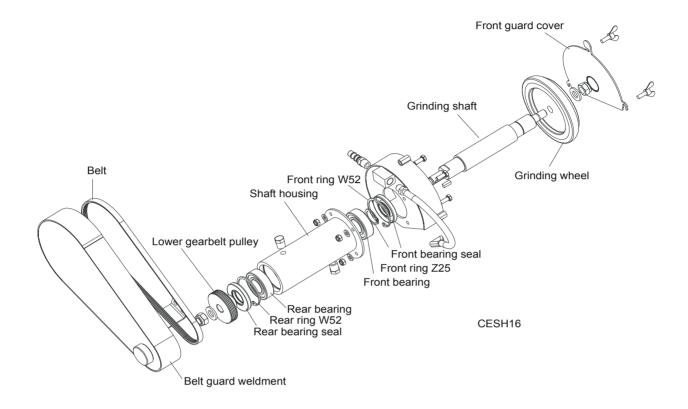


FIG. 3-1

SECTION 4 MAINTENANCE & TROUBLESHOOTING

4.1 Sharpener Maintenance

- Wipe the sharpener dry after each day's use.
- Keep clean of dirt, rust, and metal filings.
- Regularly clean out any buildup that might cause the blade not to be clamped firmly.
 If the clamp wear plate is loosened, unbolt it, remove any buildup and reinstall. Be sure the wear plate is flat against the back clamp block.
- Clean sediment from the oil pan and filter magnets as needed.



4.2 Blade Sharpening Tips

This section covers some of the common problem areas of blade sharpening.

Before removing from the saw, clean the blade by running the waterlube on the blade for 15 seconds. This will remove most of the sap buildup that would otherwise have to be scraped off when it dries. Wipe with a clean dry rag.

Make sure the flow of oil through the oiler assembly is strong.

Sharpen the blade when it first shows signs of dullness. If the blade is extremely dull, due to hitting a rock or some form of foreign matter, sharpen the blade twice lightly, instead of trying to remove too much in one grind. Grinding too much material at once may cause the circuit breaker in the control box to kick out. If this happens, wait 15 seconds. Then turn it on (push circuit breaker down).

SECTION 5 ALIGNMENT

Align the sharpener monthly to ensure quality performance. Also realign the sharpener as necessary (i.e., after the grinding wheel has been impacted by the index pawl).

5.1 Roller Bearing Alignment

- **1.** Raise the sharpener head.
- 2. Install a blade.
- **3.** Check to see that each of the four clamp roller bearings are touching the blade. If they are not, loosen the three set screws on the blade clamp mounting plate (see figure 5-1). Adjust the set screws to move the front of the plate as necessary to align the clamp roller bearings to the blade.
- 4. Retighten the set screws to secure them in place.

See Figure 5-1.

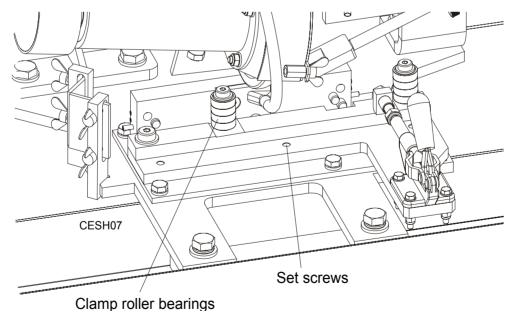


FIG. 5-1



Alignment Roller Bearing Alignment



Alignment Roller Bearing Alignment

SECTION 6 PARTS

6.1 How To Use The Parts List

- Use the table of contents or index to locate the assembly that contains the part you need.
- Go to the appropriate section and locate the part in the illustration.
- Use the number pointing to the part to locate the correct part number and description in the table.
- Parts shown indented under another part are included with that part.
- Parts marked with a diamond (

 are only available in the assembly listed above the part.

See the sample table below. Sample Part #A01111 includes part F02222-2 and subassembly A03333. Subassembly A03333 includes part S04444-4 and subassembly K05555. The diamond (♦) indicates that S04444-4 is not available except in subassembly A03333. Subassembly K05555 includes parts M06666 and F07777-77. The diamond (♦) indicates M06666 is not available except in subassembly K05555.

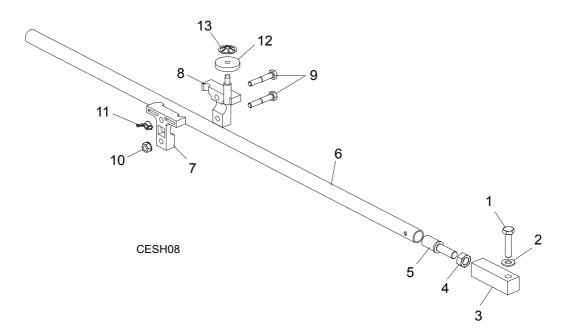
| 6.2 | Sample Assembly | | | |
|-----|--|-----------|------|---|
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
| | SAMPLE ASSEMBLY, COMPLETE (INCLUDES ALL INDENTED PARTS BELOW) | A01111 | 1 | |
| 1 | Sample Part | F02222-22 | 1 | |
| | Sample Subassembly (Includes All Indented Parts Below) | A03333 | 1 | |
| 2 | Sample Part (Indicates Part Is Only Available With A03333) | S04444-4 | 1 | • |
| | Sample Subassembly (Includes All Indented Parts Below) | K05555 | 1 | |
| 3 | Sample Part (Indicates Part Is Only Available With K05555) | M06666 | 2 | • |
| 4 | Sample Part | F07777-77 | 1 | |

To Order Parts:

- From Europe call our European Headquarters and Manufacturing Facility in Kolo, Poland at +48-63-2610233. From the continental U.S., call our toll-free Parts hotline at 1-800-448-7881. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.



6.3 Side Blade Support Arms

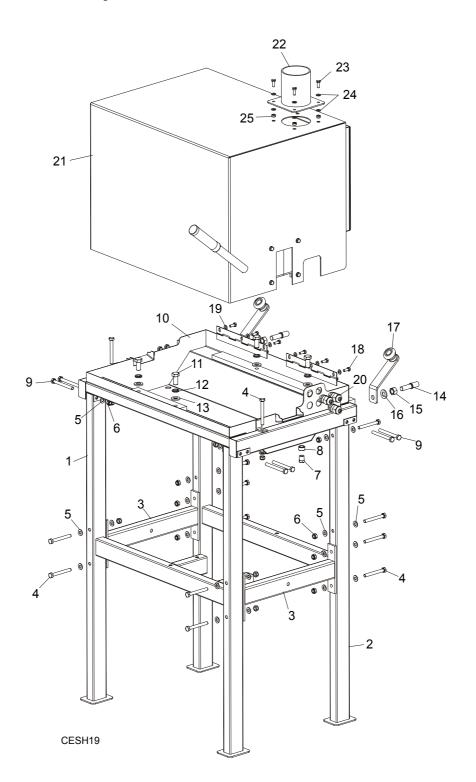


| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| 1 | BOLT, M8 X 35 HEX HEAD | F81002-13 | 2 | |
| 2 | WASHER, 8.4 FLAT | F81054-1 | 2 | |
| 3 | ARM, BLADE MOUNTING | 087828 | 2 | |
| 4 | NUT, M10-8 HEX | F81033-3 | 2 | |
| | BLADE SUPPORT ASSEMBLY, SHORT | 087518-1 | 3 | |
| 5 | Plug, Tube Support | 087506 | 1 | |
| 6 | Tube, Short Support | 087514 | 1 | |
| | SUPPORT ASSY, BLADE REPLACEMENT | A10617 | 1 | |
| 7 | Guide w/Post Blade Support | S10611 | 2 | |
| 8 | Guide w/o Post Blade Support | S10612 | 2 | |
| 9 | Bolt, 1/4-20 x 1 1/2" Hex Head Grade 2 | F05005-5 | 2 | |
| 10 | Nut, 1/4-20 Self-Locking | F05010-9 | 1 | |
| 11 | Nut, 1/4-20 Wing | F05010-13 | 1 | |
| 12 | WHEEL, BLADE GUIDE | S10539 | 1 | |
| 13 | NUT, 1/4" | P10614 | 1 | |

 Parts

 Stand Assembly

6.4 Stand Assembly



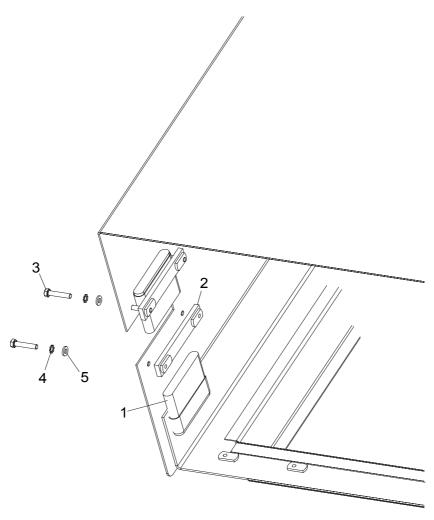
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|--------|------|--|
| | STAND ASSEMBLY | N/A | 1 | |



| 1 | Stand Weldment, Sharpener Front | 087578-1 | 1 | |
|----|---------------------------------|-----------|----|--|
| 2 | Stand Weldment, Sharpener Back | 087595-1 | 1 | |
| 3 | Stand Weldment, Sharpener Side | 087800 | 2 | |
| 4 | Bolt, M8 X 70-8.8 Hex Head | F81002-71 | 14 | |
| 5 | Washer, 8.4 Flat | F81054-1 | 32 | |
| 6 | Nut, M8-8 Hex Nylon lock | F81032-2 | 22 | |
| 7 | Plug, 1/4" | 087605 | 1 | |
| 8 | Seal, Plug | 087609 | 2 | |
| 9 | Bolt, M8 X 80-8-8 Hex Head | F81002-18 | 8 | |
| 10 | Pan Weldment, Drain | 087569-1 | 1 | |
| 11 | Bolt, M12 X 25-8.8 Hex Head | F81004-31 | 4 | |
| 12 | Washer, Z12.2 Split Lock | F81056-2 | 4 | |
| 13 | Washer, 13 Flat | F81056-1 | 4 | |
| 14 | Plug, Pipe Support | 087585 | 2 | |
| 15 | Nut, M12-8 Hex | F81034-1 | 2 | |
| 16 | Washer, 13 Flat | F81056-1 | 2 | |
| 17 | Bracket, Cover Weldment | 087824 | 2 | |
| 18 | Bolt, M6 X 16-88 Hex Head | F81001-15 | 6 | |
| 19 | Washer, 6.4 Flat | F81053-1 | 6 | |
| 20 | Seal, Gland | 085388 | 3 | |
| | Sharpener Head Cover Assembly | 087602 | 1 | |
| 21 | Cover Weldment, Head | 087601-1 | 1 | |
| 22 | Housing, Cover | 087974 | 1 | |
| 23 | Bolt, M6 X 16-88 Hex Head | F81001-15 | 4 | |
| 24 | Washer, 6.4 Flat | F81053-1 | 4 | |
| 25 | Nut, M6-8 Hex | F81031-1 | 4 | |



6.5 Brush

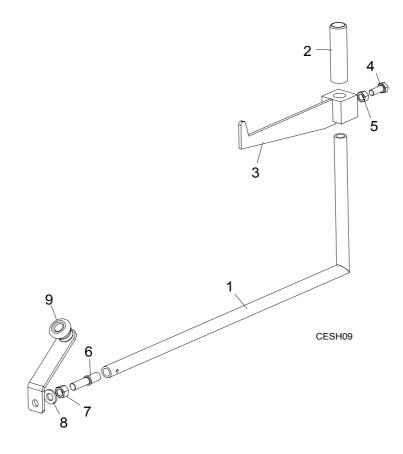


CESH12

| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| 1 | BRUSH, 2" FLAT CHIP | 087603 | 4 | |
| 2 | BAR, BRUSH MOUNT | 087606-1 | 4 | |
| 3 | SCREW, M6 X 30-5.8 HEX HEAD | F81001-13 | 8 | |
| 4 | WASHER, 6.4 EXTERNAL RING | F81053-2 | 8 | |
| 5 | WASHER, 6.4 FLAT | F81053-1 | 8 | |



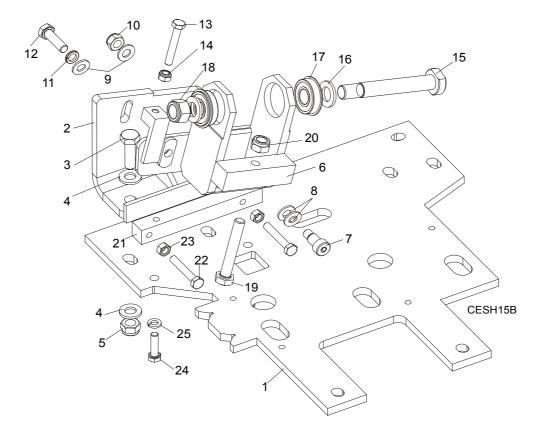
6.6 Rear Blade Support Guides



| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| | REST ASSEMBLY, BLADE | N/A | 1 | |
| 1 | Pipe, Support | 087584-1 | 1 | |
| 2 | Pipe, Blade Wear | 087590 | 1 | |
| 3 | Rest Weldment, Blade | 087589-1 | 1 | |
| 4 | Bolt, M10 X 25-8.8 Hex Head | F81003-11 | 1 | |
| 5 | Nut, M10-8 Hex | F81033-3 | 1 | |
| 6 | Plug, Pipe Support | 087585 | 1 | |
| 7 | Nut, M12-8 Hex | F81034-1 | 1 | |
| 8 | Washer, 13 Flat | F81056-1 | 1 | |
| 9 | Support, Head Cover | 087824 | 1 | |



6.7 Motor Mount



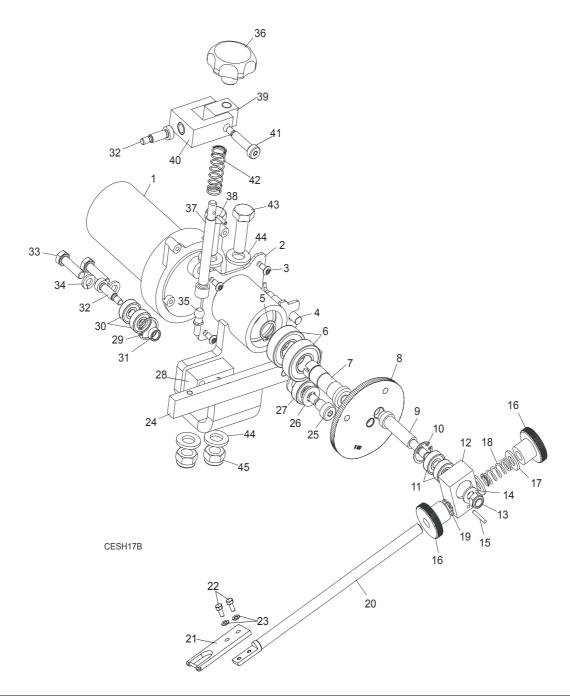
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| 1 | PLATE, BASE | 087607-1 | 1 | |
| 2 | SHARPENER HEAD MOUNT PTD | 087566-1 | 1 | |
| 3 | BOLT, M12 X 40-8.8 HEX HEAD | F81004-4 | 2 | |
| 4 | WASHER, 13 FLAT | F81056-1 | 4 | |
| 5 | NUT, M12-8 HEX HEAD | F81034-2 | 2 | |
| 6 | MOUNT WELDEMENT, MOTOR | 087707-1 | 1 | |
| 7 | BOLT, SOCKET HEAD | F81003-64 | 1 | |
| 8 | WASHER, 13 FLAT | F81056-1 | 2 | |
| 9 | WASHER, 10.5 FLAT | F81055-1 | 2 | |
| 10 | NUT, M10-8 HEX HEAD | F81033-1 | 1 | |
| 11 | WASHER, 10.2 SPLIT LOCK | F81055-2 | 1 | |
| 12 | BOLT, M10 X 20-5.8 HEX HEAD | F81003-1 | 1 | |
| 13 | BOLT, M8 X 40 HEX HEAD | F81002-19 | 1 | |
| 14 | NUT, M8-8 HEX NYLON LOCK | F81032-2 | 1 | |
| 15 | BOLT, MOTOR MOUNT | 086404 | 4 | |
| 16 | WASHER, 17 FLAT | F81058-1 | 2 | |
| 17 | BEARING, 6203-2RS W/RING | 086395 | 2 | |
| 18 | NUT, M16-8 HEX NYLON LOCK | F81036-2 | 1 | |



| 19 | BOLT, M12X75-8.8-ZINC, HEX HEAD | F81004-10 | 1 | |
|----|---------------------------------------|-----------|---|--|
| 20 | NUT, M12-8 ZINC, NYLON LOCK, HEX HEAD | F81034-2 | 1 | |
| 21 | SHARPENER HEAD ADJUSTMENT BLOCK | 089600-1 | 1 | |
| 22 | BOLT, M8X50-8.8-ZINC, HEX HEAD | F81002-19 | 2 | |
| 23 | NUT, M8-8-B-ZINC, HEX HEAD | F81032-1 | 2 | |
| 24 | BOLT M8X30-8.8-B-ZINC, HEX HEAD | F81002-7 | 2 | |
| 25 | WASHER, 8,2 ZINC, SPLIT LOCK | F81054-4 | 2 | |



6.8 Cam



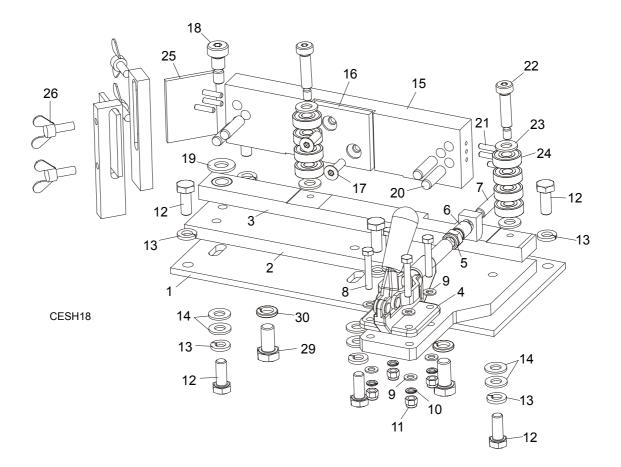
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| | INDEXER ASSEMBLY | N/A | 1 | |
| | Cam Assembly | 087369 | 1 | |
| 1 | Motor, Cam | P09698-1 | 1 | |
| 2 | Index Motor Mount | 087371 | 1 | |
| 3 | Screw, Motor Mount | F05004-56 | 4 | |



| | Canada Taath Caustan | 007700 | 4 | 1 |
|----|-------------------------------------|-----------|---|---|
| 4 | Sensor, Tooth Counter | 087709 | 1 | |
| 5 | Ring, Z17 Retaining | F81090-21 | 1 | |
| 6 | Bearing, 6203-2RS | 086114 | 2 | |
| 7 | Shaft, Index Motor | 087366 | 1 | |
| 8 | Cam, Index Heat Treated | 010741 | 1 | |
| 9 | Shaft, Index Cam | 087372 | 1 | |
| 10 | Ring, W22 Retaining | F81090-7 | 1 | |
| 11 | Bearing, 608-2RS Roller | 086197 | 2 | |
| 12 | Block, Index | 087373 | 1 | |
| 13 | Nut, M8-8 Hex Nylon Lock | F81032-2 | 1 | |
| 14 | Washer, 8.4 Flat | F81054-1 | 1 | |
| 15 | Pin, 6 X 20 Roll | F81048-2 | 1 | |
| 16 | Knob, Push Pawl | 087375 | 1 | |
| 17 | Washer, 10.5 Flat | F81055-1 | 2 | |
| 18 | Spring | 087376 | 1 | |
| 19 | Washer, 10.5 External Ring | F81055-3 | 1 | |
| 20 | Pawl Weldment, Blade Index | 087374-1 | 1 | |
| 21 | Sharpener Blade Follower - zink | 088602-1 | 1 | |
| 22 | Bolt M5x12-5.8-Fe/Zn5 PN-M/82105 | F81000-5 | 2 | |
| 23 | Washer 5,3 Fe/Zn5 PN-M/82005 | F81052-1 | 2 | |
| | Block Assembly | 087472 | 1 | |
| 24 | Block, Cam | 087470-1 | 1 | |
| 25 | Bolt, M8 X 12-12.9 Socket Head | F81003-62 | 1 | |
| 26 | Washer, 10.5 Flat | F81055-1 | 2 | |
| 27 | Bearing, 608-2RS Roller | 087471 | 1 | |
| 28 | Block, Bearing Mounting | 087473-1 | 1 | |
| 29 | Ring, W22 Retaining | F81090-7 | 1 | |
| 30 | Bearing, 608-2RS | 086197 | 2 | |
| 31 | Spacer, Index Cam | 088260 | 1 | |
| 32 | Bolt, 8/M6 X 20 12.9 Socket Head | F81001-25 | 2 | |
| 33 | Bolt, M8 X 30-5.8 Hex Head | F81002-2 | 2 | |
| 34 | Washer, 8.2 Split Lock | F81054-4 | 2 | |
| 35 | Bolt, 10/M6 Pivot Head | 087476 | 1 | |
| | Depth Knob Assmebly | 087482 | 1 | |
| 36 | Knob, Index Cam | 087485 | 1 | |
| 37 | Rod, Index Cam | 087484 | 1 | |
| 38 | Pin, 3 X 14 Roll | F81044-4 | 1 | |
| 39 | Block, Small Index Cam Rod Mounting | 087481-1 | 1 | |
| 40 | Block, Big Index Cam Rod Mounting | 087483-1 | 1 | |
| 41 | Bolt, 8/M6 X 30-12.9 Socket Head | F81001-18 | 1 | |
| 42 | Spring, 1.2 x 11.5 x 45 Zinc-plated | 099624-1 | 1 | |
| 43 | Bolt, M12 X 40-8.8 Hex Head | F81004-4 | 2 | |
| 44 | Washer, 13 Flat | F81056-1 | 4 | |
| 45 | Nut, M12-8 Hex | F81034-2 | 2 | |



6.9 Clamp



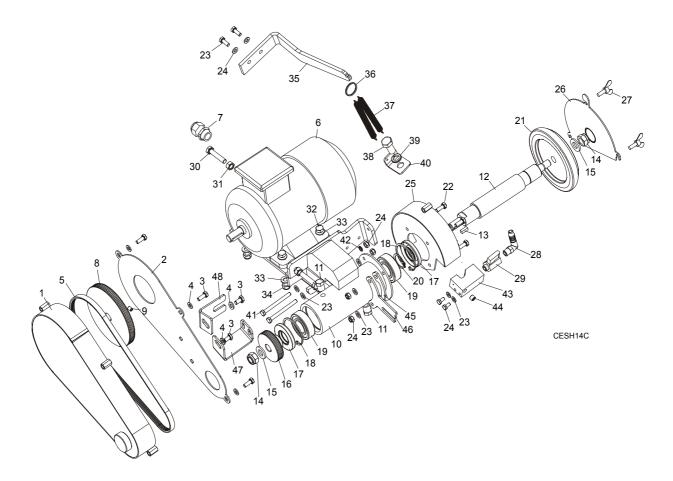
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| | CLAMP ASSEMBLY | N/A | 1 | |
| 1 | Plate, Clamp Mount | 087461 | 1 | |
| 2 | Plate, Clamp Mount Adjust | 087464 | 1 | |
| 3 | Arm, Clamp | 087467 | 1 | |
| 4 | Clamp Assembly | 087468 | 1 | |
| 5 | Nut, M8-8 Hex Nylon Lock | F81032-2 | 1 | |
| 6 | Spring, Clamp | 086849 | 1 | |
| 7 | Bolt, M8 X 45-8.8 Hex Head | F81002-17 | 1 | |
| 8 | Bolt, M5 X 30-5.8 Hex Head | F81000-9 | 4 | |
| 9 | Washer, 5.3 Flat | F81052-1 | 8 | |
| 10 | Washer, 5.1 Split Lock | F81052-2 | 4 | |
| 11 | Nut, M5-8 Hex | F81030-2 | 4 | |
| 12 | Bolt, M8 X 20-8.8 Hex Head | F81002-4 | 7 | |
| 13 | Washer, 8.2 Split Lock | F81054-4 | 7 | |
| 14 | Washer, 8.4 Flat | F81054-1 | 6 | |
| 15 | Block, Back Clamp | 087462 | 1 | |



| | | | | r 1 |
|----|-----------------------------------|-----------|---|-----|
| 16 | Plate, Clamp Wear | 087463 | 1 | |
| 17 | Screw, M6 X 20-10.9 | F81001-17 | 2 | |
| 18 | Bolt, 10/M8 X 12-12.9 Socket Head | F81003-62 | 1 | |
| 19 | Washer, 10.5 Flat | F81055-1 | 1 | |
| 20 | Pin, 8h6 X 28 | F81048-4 | 4 | |
| 21 | Screw, M4 X 20-45H | F81000-16 | 6 | |
| 22 | Bolt, 8/M6 X 30-12.9 Socket Head | F81001-18 | 2 | |
| 23 | Washer, 8.4 Flat | F81054-1 | 4 | |
| 24 | Bearing, 608-2RS | 086197 | 8 | |
| 25 | Wiper, Blade | 087608 | 2 | |
| 26 | Screw, M6 X 16 Thumb | F81001-16 | 4 | |
| 27 | Bolt, M10 X 20-5.8 Hex Head | F81003-1 | 2 | |
| 28 | Washer, 10.2 Split Lock | F81055-2 | 2 | |

Parts Grinder 6

6.10 Grinder



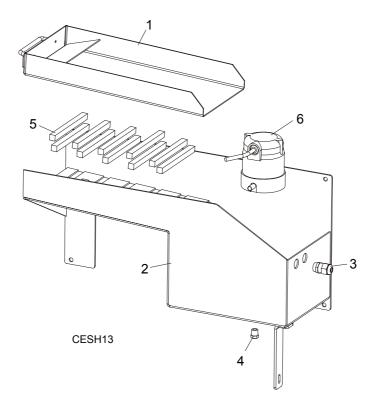
| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|-----------|------|--|
| | GRINDER ASSEMBLY | N/A | 1 | |
| 1 | Guard Weldment, Belt Grinder | 087494-1 | 1 | |
| 2 | Guard Weldment, Side Belt Grinder | 088099-1 | 1 | |
| 3 | Bolt, M6x16 8.8 Zinc, Hex Head | F81001-15 | 5 | |
| 4 | Washer 6,4 Flat | F81053-1 | 5 | |
| 5 | Belt, OPTIBELT 4PJ711Gear | 087559 | 1 | |
| 6 | Motor, Grinder | 087691 | 1 | |
| 7 | Seal, Gland | 085388 | 1 | |
| 8 | Pulley, Gearbelt | 087364 | 1 | |
| 9 | Screw, M6 X 8 | F81013-1 | 1 | |
| 10 | Spindle Head Weldment | 087360-1 | 1 | |
| 11 | Plug, 1/4" | 087605 | 2 | |
| 12 | Shaft, Grinder | 087352 | 1 | |
| 13 | Key, Spindle | 087365 | 1 | |
| 14 | Nut, M12-8 Hex Nylon Lock | F81034-2 | 2 | |
| 15 | Washer, 13 Flat | F81056-1 | 2 | |



| 16 | Pulley, Gearbelt | 087363 | 1 | |
|----|---|-----------|---|--|
| 17 | Bearing, 25 X 52 X 7 Retaining | 087354 | 2 | |
| 18 | Ring, W52 Retaining | F81090-6 | 2 | |
| 19 | Bearing, SKF 6205-2RS Roller | 087353 | 2 | |
| 20 | Ring, Z25 Retaining | F81090-8 | 1 | |
| 21 | WHEEL, 10/30 LTAGA GRINDING CBN PROFILE | 030381 | 1 | |
| 22 | BOLT, M6 X 16-8.8 HEX HEAD | F81001-15 | 6 | |
| 23 | WASHER, 6.4 FLAT | F81053-1 | 6 | |
| 24 | NUT, M6-8 HEX | F81031-2 | 4 | |
| 25 | WRAP, WHEEL WELDMENT | 087489-1 | 1 | |
| 26 | COVER, FRONT GUARD | 087806-1 | 1 | |
| 27 | SCREW, M6 X 16 THUMB | F81001-14 | 3 | |
| 28 | FITTING WES 10/R 1/4 ELBOW | 088379 | 1 | |
| 29 | SHUT-OFF VALVE FP60.KIT 28 G1/4 | 088380 | 1 | |
| 30 | BOLT, M8 X 40-8.8HEX HEAD | F81002-15 | 1 | |
| 31 | NUT, M8-8 HEX | F81032-1 | 1 | |
| 32 | BOLT, M8 X 30-8.8HEX HEAD | F81002-7 | 4 | |
| 33 | WASHER, 8.4 FLAT | F81054-1 | 4 | |
| 34 | NUT, M8-8 HEX | F81032-2 | 4 | |
| 35 | LEVER, GRINDER HEAD CLAMP | 088210 | 1 | |
| 36 | WHEEL, SPRING/LEVER | 085410 | 1 | |
| 37 | SPRING, 3/8 X 4.5 X 1/32 | P12437 | 2 | |
| 38 | BOLT, M12 X 25-8.8 HEX HEAD | F81004-31 | 1 | |
| 39 | WASHER, Z12.2 SPLIT LOCK | F81056-2 | 1 | |
| 40 | BRACKET, CLAMP SPRING | 088211 | 1 | |
| 41 | BOLT, M6 X 65-8.8 HEX HEAD | F81001-81 | 2 | |
| 42 | WASHER, Z6.1 SPLIT LOCK | F81053-3 | 2 | |
| 43 | OLIER | 088239 | 1 | |
| 44 | PLUG M10X1 DIN 906 BN40 "BOSSARD" | F81015-3 | 1 | |
| 45 | OILER WASHER | 088351-1 | 1 | |
| 46 | BRACKET, OILER MOUNT | 088353-1 | 1 | |
| 47 | BRACKET, CBN-AC BELT COVER MOUNT | 087560-1 | 1 | |
| 48 | BRACKET, BELT COVER MOUNT | 088366-1 | 1 | |

Parts
Drip Pan/Pump

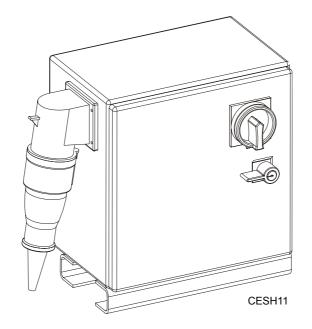
6.11 Drip Pan/Pump



| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|---|----------|------|--|
| 1 | PAN WELDMENT, FILTER | 087925 | 1 | |
| 2 | TANK ASSEMBLY, OIL | 087916-1 | 1 | |
| 3 | SEAL, GLAND | 085388 | 1 | |
| 4 | PLUG, 1/4" | 087605 | 1 | |
| 5 | MAGNET, OIL FILTER | P31347 | 10 | |
| 6 | PUMP, SUMP OIL GRIDER | P09836 | 1 | |



6.12 Control Panel/Box

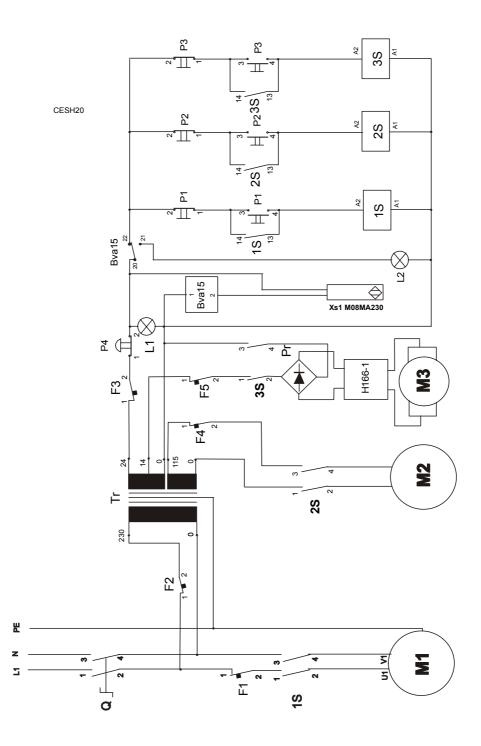


| REF | DESCRIPTION (Indicates Parts Available In Assemblies Only) | PART # | QTY. | |
|-----|--|--------|------|--|
| | BOX ASSEMBLY, SHARPENER CONTROL WITH COMPONENTS (See Section 7) | 087690 | 1 | |



SECTION 7 ELECTRICAL INFORMATION

7.1 Electrical Symbol Diagram, Industrial Sharpener





7.2 Electrical Component List

| Component | Manufacturer Part No. | Manufacturer | Wood-Mizer Part No. | Description |
|------------|--------------------------|--------------|------------------------|------------------------|
| Q | VCCF01 | Schneider | | Main Disconnector |
| 1S, 2S, 3S | LC1K0910 B7 | Schneider | 084451 | Contactor |
| M1 | STg71X-2C | BESEL | | Motor, Grinding |
| F1, F2 | C60N 24336 10A | Schneider | | Switch |
| F3, F4, F5 | | Schneider | | Switch |
| M2 | | USA | P09836 | Motor, Coolant Pump |
| Tr | | | | Transformer |
| L1 | XB6AV1BB | Schneider | 087398 | Lamp, Start |
| Pr | GBPC3510 | | 084318 | Bridge-Rectifier |
| M3 | | USA | P09698-1 | Motor, Index |
| P1 | XB4 BS542 | Schneider | 086556 | Switch, Emergency Stop |
| P2, P3, P4 | XB4BW84B5 | Schneider | 087349 | Switch, Start-Stop |

7.3 Component Layout Diagram

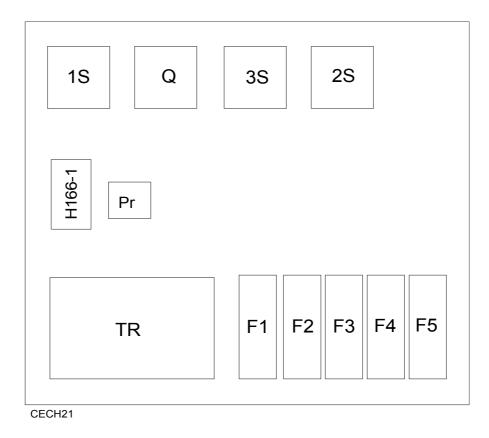


FIG. 7-2