

# HE7 Honer/Edger

## Operator's Manual



Please read all instructions carefully before operating this machine. You are then ready to hone/edge cutlery.

10/2018

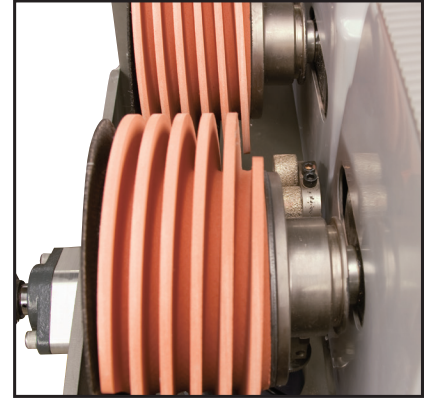
PRIMEEdge, Inc.  
1281 Arthur Ave. • Elk Grove Village, IL 60007  
(877) 322-EDGE (3343) • Fax: (224) 265-6638  
[www.primeedge.com](http://www.primeedge.com) • [contact@primeedge.com](mailto:contact@primeedge.com)

**PRIMEEdge®**  
COZZINI CUTTING EDGES  
AND SHARPENING SOLUTIONS

# The PRIMEdge HE7 Series Honing & Edging Machines

“Edging and Honing a knife is an art”. It is a job that should be performed by a person who has mechanical ability and good hand-eye coordination. It is not the type of job that can be done satisfactorily by everyone. The knife sharpener’s skill is as valuable in producing high-yield finished products as is the skill of the people that use the knives every day on the production floor of a processing plant, in a supermarket or in a restaurant kitchen.

In a central knife sharpening production line, the edging and honing machines are used to finish the knife sharpening operation. The edging machine grinds a fresh beveled edge along the entire contour of the blade in seconds and prepares the blade for the honing process, which applies a razor-sharp cutting edge in a few seconds. The spiral cut, interdigitating grinding wheels create a burr-free edge that will withstand many hours of production cutting, periodically requiring only a few strokes on a steel to dress the edge and maintain a fine sharp cutting knife.



The grinding wheels interdigitate or interleave with each other, and through minor adjustments of the wheels, the exact desired cutting edge bevel is pre-set and maintained throughout the life of the wheels.

Grinding is done under a flow of liquid coolant which aids in preventing scorched or burned edges.

A truly sharp edge will cut with less resistance, and the strain on the hand, wrist and arm muscles and tendons will be minimized. The **PRIMEdge** Edger/Honer will produce such an edge and thereby help to reduce CTD (Carpal Tunnel Syndrome) and tendinitis problems.

**O.S.H.A.** As part of its obligation and commitment to each of its consumers, PRIMEdge, Inc. has taken every step available to make the HE7 Honer/Edger as free as possible from any recognized hazards which may cause harm or injury to anyone who may operate this unit. At any time and for any reason this machine is being worked on, the main electrical disconnect switch should be in the off position and the proper O.S.H.A. lock-out procedures should be followed. Every effort has been made to comply with the applicable sections of the occupational safety and health standards published by the Department of Labor.

# Table of Contents

## Introduction

|                                                       |   |
|-------------------------------------------------------|---|
| The <b>PRIME</b> Edge HE7 Honing/Edging machines..... | 2 |
| O.S.H.A. statement.....                               | 2 |

## Installation

|                                         |      |
|-----------------------------------------|------|
| HE7 Honer/Edger schematic.....          | 4    |
| List of items shipped with the HE7..... | 4    |
| List of controls.....                   | 5    |
| Machine location suggestion.....        | 6    |
| Setting up the Honer/Edger.....         | 7, 9 |

## Operation

|                                                            |        |
|------------------------------------------------------------|--------|
| How to hone and edge knives.....                           | 9, 10  |
| Mounting and timing new grinding wheels.....               | 10, 11 |
| Care of grinding wheels/safety tips.....                   | 12     |
| Setting honing and edging angles.....                      | 12, 13 |
| Procedure for setting the indexer wheel.....               | 15     |
| Removing worn wheels.....                                  | 16     |
| When and how to dress wheels after honing/edging.....      | 16, 17 |
| Turning dressing diamonds and installing new diamonds..... | 18     |

## Maintenance

|                                                        |        |
|--------------------------------------------------------|--------|
| Cleaning the machine.....                              | 18     |
| Lubrication greasing/oiling.....                       | 19, 20 |
| Adjusting the timing belts.....                        | 20     |
| Replacing timing and v-belts.....                      | 21, 23 |
| Replacing slide end bearings.....                      | 23     |
| Replacing spindles.....                                | 24     |
| Adjusting slide gib screws.....                        | 25     |
| Replacing dresser mechanism and dresser assembly.....  | 25, 26 |
| Dresser spline mechanism drawing and part numbers..... | 26     |
| Troubleshooting guidelines.....                        | 27, 29 |
| Maintenance frequency schedule.....                    | 29     |

## Machine Schematics

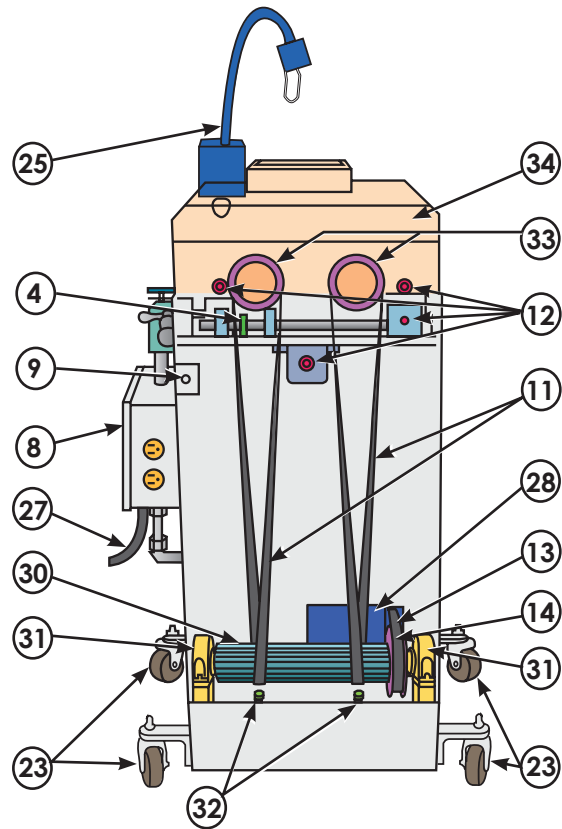
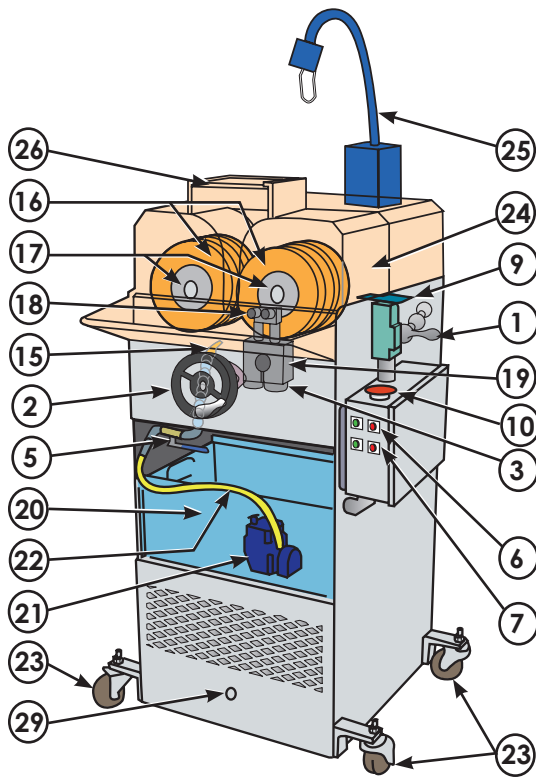
|                                          |        |
|------------------------------------------|--------|
| Drive roller assembly exploded view..... | 30     |
| Spindle assembly exploded view.....      | 31     |
| Dresser assembly exploded view.....      | 32     |
| Slide assembly parts diagram.....        | 33     |
| Electrical diagrams.....                 | 34, 38 |

## Reference Pages

|                                                        |        |
|--------------------------------------------------------|--------|
| Proper technique for use of sharpening steels.....     | 39     |
| Proper technique for use of PRIMEEdge Ergo Steels..... | 40     |
| Recommended spare parts list.....                      | 41     |
| HE7 Master Parts lists.....                            | 42, 49 |
| HE7 Accessories Shipped With The Machine.....          | 50     |
| Diamond Dresser Wheel Raiser Assembly Parts.....       | 51     |
| Electrical Parts.....                                  | 52, 60 |
| Fasteners.....                                         | 61-63  |
| Parts Lists for Individual Assemblies.....             | 64, 67 |
| Parts Drawing.....                                     | 68     |

# Installation

## HE7 Honer/Edger Schematic



### No. Description

1. Honing Wheel Crank
2. Dresser Handwheel
3. Diamond Adjustment Knobs
4. Indexer Locating Wheel
5. Coolant Valve
6. On/Off Switch (machine)
7. On/Off Switch (coolant pump)
8. Electrical service Box
9. Front/Rear Cover Safety Switch
10. Emergency Stop Switch
11. Timing Belts
12. Zerk Grease Fittings

### No. Description

13. V-Belt (motor)
14. V-Belt Pulley
15. Coolant Spray Nozzle
16. Spiral Grooved Wheels
17. Retaining Flanges & Center Pointers
18. Diamond Dressers
19. Dresser Assembly
20. Coolant Tank
21. Coolant Pump
22. Plastic Hose
23. Wheel Casters (4)

### No. Description

24. Top Front Wheel Cover
25. Lamp
26. Plexiglas Window
27. Power Cord
28. Motor
29. Motor Slide Adjust
30. Drive Roller
31. Pillow Block
32. Timing Belt Tensioner
33. Timing Belt Pulley
34. Top Rear Cover

The Schematic numbers will be referred to throughout this manual for references to adjustments and controls.

## List Of Items Shipped For New Machine Installation

- |                                                                                                |                                    |                                   |
|------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|
| 1. Honing/Edging Machine                                                                       | 5. (1) Lamp with bulb              | 12. (1) V-belt                    |
| 2. (1) Set 7" Spiral grinding wheels (mounted)                                                 | 6. (1) Manual                      | 13. (4) Casters, 4 washers & nuts |
| 3. (1) Set center pointers                                                                     | 7. (1) Replacement parts list      | 14. Vinyl mats (covers)           |
| 4. (1) Set tools: 3/16" and 1/4" Allen T wrenches, 5/16" ball driver, 3/8" offset Allen wrench | 8. (1) Coolant fluid tank          | 15. Safety glasses                |
|                                                                                                | 9. (1) Coolant pump                |                                   |
|                                                                                                | 10. (1) 48" length of plastic hose |                                   |
|                                                                                                | 11. (1) Plexiglas window           |                                   |

# List Of Controls For Honing/Edging Machines



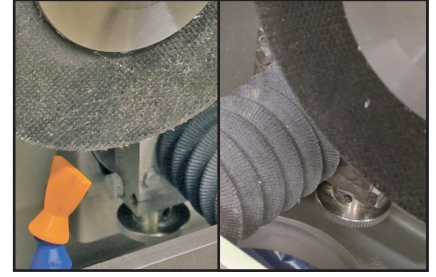
## 1. Honing Wheel Crank:

This crank controls movement of the honing wheels towards and away from each other. Turning the crank to the right (clockwise) moves the wheels together (closes). Turning the crank to the left (counterclockwise) moves the wheels apart (opens).



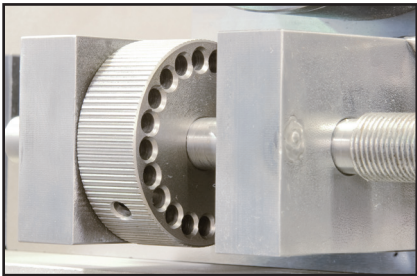
## 2. Dresser Handwheel:

This hand wheel controls the movement of the diamond wheel dresser assembly. Turning the handwheel to the right moves the dresser backward (away from the operator). Turning the handwheel to the left moves the dresser forward (toward the operator)



## 3. Diamond Adjustment Knob:

These knobs control the raising and lowering of the diamonds that dress the wheels. Turning the knobs to the right raises the diamonds. Turning the knobs to the left lowers the diamonds. There is a separate adjustment knob for both the right and left diamonds.



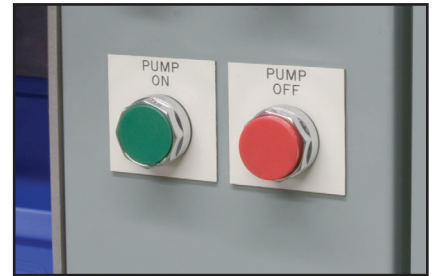
## 4. Indexer Wheel:

This wheel acts as a stop to position the honing wheels to provide the preset edge angle when the wheels are closed.



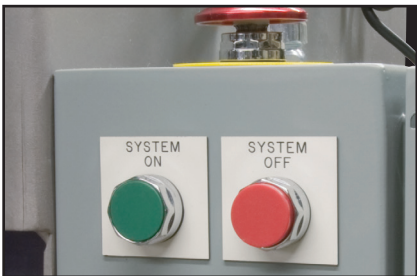
## 5. Coolant Valve:

This valve controls the flow of coolant to the grinding wheels.



## 6. Coolant Pump Switch:

This switch turns the coolant pump on and off.



## 7. On-Off Switch:

This switch starts and stops the motor and rotation of the wheels.



## 8. Electrical Service Box:

This box houses the on-off switch, coolant pump switch, an electrical outlet for the work lamp and an electrical outlet for the coolant pump.



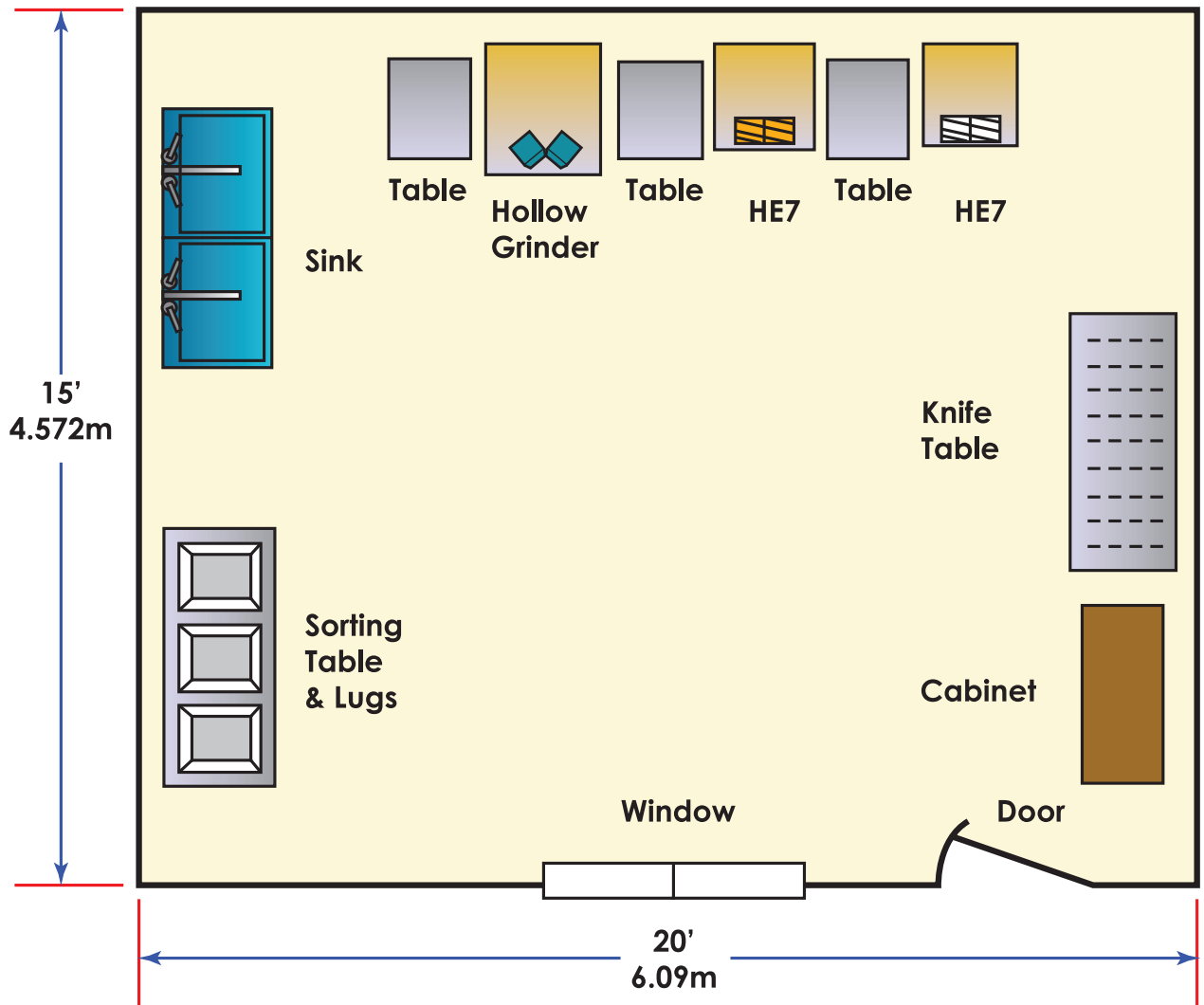
## 9. Safety Switches:

This switch is activated when the top cover is removed and it will switch off the power to the machine. A safety switch is also activated when the back cover is removed.

## Machine Location

Locate the Honer/Edger where it will feed the next operation in the knife sharpening system, and where it can be fed from the previous operation. The machine must be located near the power source for the electrical starter box (#10). It is also convenient to have a sink or source of water nearby for filling the coolant tank.

## Suggested Central Cutting Room Layout



This layout allows the knives to be exchanged at the window and placed in lugs by size and type of knife on the sorting table. Any cleaning can be done at the sink in preparing for grinding. The Hollow Grinder, Edging Machine and Honing Machine are against the back wall. Finished knives are placed in the knife table, which should be on wheels so it can be moved close to the window for knife distribution. 150 to 200 square feet is an adequate size to allow enough space to operate the machinery safely and to provide ample room for maintenance procedures.

# Setting Up The Honer/Edger



## **Carefully remove the machine from the shipping crate**

- 1. Install the casters:** Install the four casters (#23) on the machine feet. Put casters through holes in feet, put on a washer and bolt then tighten securely. Casters are shipped inside the coolant tank.
- 2. Remove hex screw:** Remove the hex screw that secures the top cover in place and remove the front cover.
- 3. Electric power:** Be sure the electric power supply sources are wired for the electrical specifications of the machine. The machines are wired according to the customer's choice of electricity specifications. There is no plug attached to the power cord due to the variety of plugs used. You must attach the correct type of plug for your application to the power cord when you set up the machine. We strongly suggest that you have a qualified electrician perform your electrical hookups. Always follow O.S.H.A. electrical codes.
- 4. Check motor rotation:** A machine wired for three-phase current is shipped with the motor V-belt off the pulleys. This is so you can check the motor rotation before putting the V-belt on the motor pulley. Open the wheels all the way by turning the honing wheel crank (#1) to the left (counterclockwise) to a stop. Remove the coolant tank (#20) to expose the motor (#28). An arrow on the motor shows the correct rotation of the motor. The motor must be turning in the direction of the arrow before installing the V-belt. Plug the machine into the power source and press the "On" button(#6). With the motor running, check the rotation of the motor pulley (#13). If it is not rotating in the correct direction, disconnect the power cord from the power source. Open the cover of the starter box (#10) and reverse the two lead wires on the power cord (red and black). Close the cover, reconnect the power source, turn the machine on and check the rotation of the motor pulley. It should now be turning in the correct direction. You can now install the V-belt by forcing it onto the motor pulley and the shaft pulley. Adjust the tension on the V-belt so there is about 1/4" movement up or down when the belt is depressed midway between the pulleys. The adjustment screw is accessible through the hole in the center front of the machine, about 5" from the floor (#29). Use a 9/16" socket wrench to make this adjustment.  
**Note: This procedure is not applicable for single phase motors.**
- 5. Coolant:** A coolant fluid is used to prevent the knives from scorching or burning. The honing and edging operations are done under the flow of a coolant. The coolant is a mixture of water and an anti-rust agent to prevent the machine and carbon steel from rusting. The coolant fluid also helps keep the grinding wheels clean and free of grit. The instructions for mixing the correct amount of coolant and water supplied by PRIMEEdge are 8 oz. (237 ml.) with 5 gallons (19 l.) of water. Place the coolant tank in it's proper place and pour the mixture of coolant and water into the tank. The ratio of water to coolant is 80 to 1. Read and follow the instructions on the coolant container. Too strong a mixture may cause skin irritation.

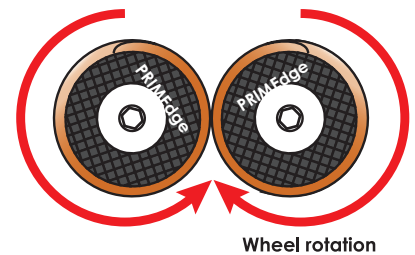
## Setting Up The Honer/Edger cont...

**6. Coolant pump:** Unpack the coolant pump and the length of plastic hose. Attach one end of the hose to the pump by forcing it over the threaded outlet of the pump. Put the pump in the coolant tank and slip the other end of the plastic hose over the connection on the coolant valve. Plug the coolant pump into the outlet marked "Pump" in the rear of the electrical service box (#8). The coolant pump and hose are packed in the coolant tank.

**7. Lighting fixture:** The lamp included with the machine is to be mounted on the bracket at the top rear of the machine (#25). Plug the lamp into the outlet on the electrical service box (#8). Position the lamp over the Plexiglas window (#26). Remove the paper protective coating on the plexiglas window.

Machines starting with serial number 327 are equipped with a high density lamp that mounts on the top cover with 4 screws. The new style lamp provides brighter illumination in the work area which is easier on your eyes.

**8. Checking grinding wheel rotation:** Turn off coolant valve. With the wheels in the open position, check to be sure that the grinding wheels (#16) are both rotating upward when they meet in the center. The right wheel must be rotating clockwise and the left wheel must rotate counterclockwise. Do not proceed until you have established that the wheels are rotating in the correct direction. When the correct wheel rotation has been established and the machine is running, turn the honing wheel crank (#1) to the right (clockwise) to its stop position. The wheels will now be in the closed position and interdigitated (overlapped). The amount of overlap has been set at the factory to form a 35° edge angle.



**9. Dressing new wheels:** Turn the honing wheel crank (#1) fully to the left (counterclockwise) to its stop position. The grinding wheels are now open and in the dressing position. Reach inside the machine under the coolant drain and locate the adjustment knobs (#3) on the bottom of the dresser assembly. Turn each knob to the left and lower the diamonds to their stop position. Replace the top front cover by lowering it down carefully over the wheels so that the "ear" on the right side rests on top of the front cover safety switch. Push the cover straight back. Check that the front cover is flush against the rear cover. Replace and tighten the hex screw that holds the cover in place. (Fiberglass covers have finger lift fasteners.)

Press the "On" button. Turn the dresser handwheel (#2) to the left (counterclockwise) until each diamond is beneath the rear threads of its wheel. Reach inside the machine through the coolant drain and raise each diamond until it is taking a light cut from the grinding wheels. Turn on the pump and adjust the coolant flow valve to spray coolant over wheels. Turn the dresser handwheel to the left (counterclockwise) slowly until the entire length of the wheels and the guard discs have been dressed. Now turn the dresser handwheel to the right (clockwise) slowly until it stops against the rear cover of the machine. New wheels may require several dressings to bring them into roundness.

**NOTE: To take another dressing cut from the spiral wheels, DO NOT RAISE THE DIAMONDS.** **DO** turn the honing wheel crank (#1) to the right (clockwise) until it stops. The wheels should now be closed and interdigitated.

## Setting Up The Honer/Edger cont...

### 9. Dressing new wheels cont.:

Next turn the honing wheel crank (#1) to the left (counterclockwise) to the stop position to open the wheels. The Index Wheel (#4) is activated each time the spiral wheels are fully opened or closed to the stop position. When the dressing diamonds have traveled across the wheels there will be .0025" (two and one half thousandths of an inch) dressed off the wheels. (The Indexer Wheel is adjusted .00125" for each full closing or opening of the spiral wheels). You must next return the dresser until it is all the way to the rear of the machine by turning the dressing handwheel to the right (clockwise) to its stop. Then turn the honing wheel crank to the right and close the spiral wheels as far as they will go. You have dressed the wheels and have returned them to the pre-set edging and honing angle. You are ready to begin edging or honing your knives.

**IMPORTANT:** Periodically measure the diameter of each grinding wheel to be sure they are identical. If they are not the same, dress the larger wheel down to the smaller wheel diameter.

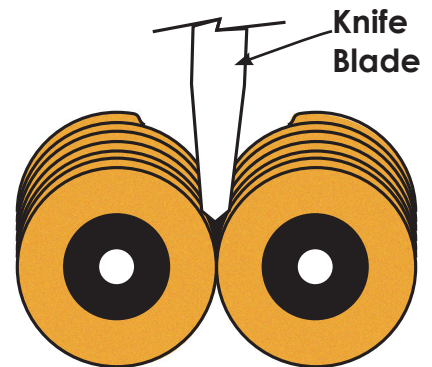
## How To Edge And Hone Knives: 2 - Machine Process

1. It is recommended to use 180 grit or 220 grit wheels for edging and 400 grit wheels for honing. There are other wheel grits available if a different coarseness of grind is desired. Standard wheel grits available are 80, 120, 180, 220, 280, 400 and 600.
2. Be sure wheels are in proper dress and are the same diameter. Re-check edge angle measurement.
3. Be sure coolant fluid is flowing onto wheels.



### **Always Wear Safety Glasses When Operating The machine**

4. Hold the knife securely and start at the tip of the blade. Enter the tip of the blade in the center of the grinding wheels and with a light steady pressure, move knife away from you the full length of the blade (up to the guard discs), then move knife back toward you, watching that the blade is at a 90° angle to the center of the spiral grinding wheels as you draw the knife toward you. Always watch to keep the edge steadily engaged with the grinding wheels. Usually three forward and three reverse strokes are sufficient to create an even edge on the blade. You will see a fine silver line from the tip to the heel of the blade on both sides of the knife. If the line is uneven (wider on one side) you may be tilting the knife to one side. Always try to straighten up the knife while grinding the edge. (Wheels of varying diameters will also cause an uneven grind.)



5. **Important:** When finishing the edging on the reverse stroke (drawing the knife toward you), you must raise your hand and arm to follow the contour of the blade to the tip. As you reach the tip, lift the knife from the wheels at the center area of the wheels. DO NOT drag the knife across the entire surface of the wheels and through the guard discs.

## How To Edge And Hone Knives: 2-Machine Process cont...

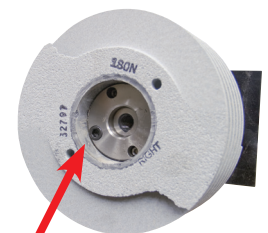
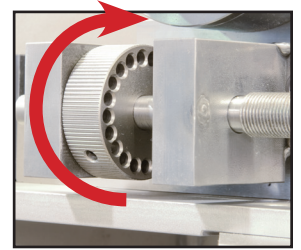
- Now repeat steps 4 and 5 on the honing machine. The 400 grit wheels on the honing machine will fine-tune and sharpen the edge. This process polishes the knife edge and seals the grind marks. Two forward and two reverse strokes are usually sufficient.
- You will now have a fully sharp blade to use for cutting. A few periodic strokes through a **PRIME**Edge Ergo Steel or sharpening steel at a 17.5° angle will refresh the edge again and again.

## Mounting And Timing New Grinding Wheels



### **Spiral wheels are fragile and should be handled with care**

- Important:** Before installing new wheels, you must adjust the edge angle index wheel on the compensator assembly. This is done by rotating the indexer wheel in an upward direction until the new wheels fit onto the machine in the full open position.
- Unpack the new wheels and guard disks and inspect them for damage. Never mount a cracked or broken wheel on the machine. Guard discs are used to protect the delicate threads on the spiral wheels. Without guard discs you may push the knife handle against the wheel and break the threads.
- Use a waterproof grease or anti-seize compound to lubricate the various parts as you install them. Use the 3/8" off-set wrench, provided with your tool kit, to tighten the retaining screws.
- Take the wheel marked "Left Side" and lubricate the inside of the wheel. (This wheel has right-hand retaining screw threads). Place a blotter on the back and slide the wheel onto the left spacing hub. Line up the pin on the hub with the hole in the wheel and guide the wheel to a snug position against the hub.
- Lubricate a retaining flange and put one blotter, one new guard disc and another blotter on the flange. Install the flange on the left spindle and secure it with the 3/8" Allen head retaining screw. Hold the grinding wheel firmly with your fingers and the palm of your hand to keep it from turning as you tighten the retaining screw. Be careful not to squeeze the lead threads too tightly. They are delicate and may break.
- Take the wheel marked "Right side" and lubricate the inside of the wheel. Place a blotter on the back and slide the wheel onto the right spacing hub and line up the pin in the timing lock disc with the hole in the wheel and guide the wheel to a snug position against the hub. Loosen the timing lock screw.
- Turn the honing wheel crank (#1) to the right (clockwise) until the threads of the wheels are almost touching each other. Rotate the right honing wheel on its hub by hand until the threads of both wheels appear to be lined up to mesh, without rubbing against each other when the wheels are rotated. Without moving the position of the right wheel on its hub, tighten the timing lock screw securely. The timing lock screw (1/4" Allen head) is located inside the right wheel hub. Use the 1/4" T wrench.



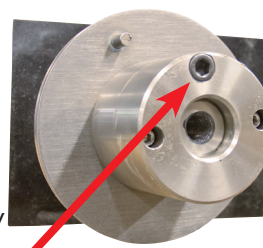
**Timing Lock screw**

## Mounting And Timing New Grinding Wheels cont...

**8.** Lubricate the right side retaining flange and put one blotter, one guard disc, a spacing disc, another blotter, a spacing disc and one more blotter on the flange. (Check again to be sure that the timing lock screw is tightened securely). Install the retaining flange on the right spindle and secure it with the 3/8" Allen head retaining screw. Remember, this screw has left-hand threads and is tightened by turning the screw to the left (counterclockwise). Hold the wheel firmly with your free hand as you tighten the retaining screw to keep the grinding wheel from turning. Tighten the screw securely with the 3/8" offset Allen wrench. (The spacing disc is used to allow clearance between the guard discs.)

**9.** Turn the honing wheel crank (#1) slowly to the right (clockwise) until the wheels "overlap" a small amount. Turn the wheels by hand to see if any part of the threads or guard discs are touching when the wheels are engaged and turning. There must be clearance between the threads and between the guard discs.

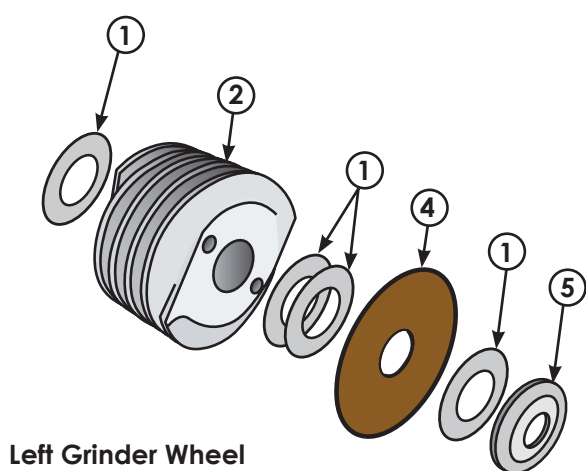
**10.** If the threads or guard discs are touching, you must turn the honing wheel crank to the left and open up the wheels. Remove the retaining flange from the right spindle and loosen the timing lock screw. Rotate the right grinding wheel on its hub slightly to allow for clearance between the threads. When it appears that you have clearance between the threads and the discs, securely tighten the timing lock screw securely. The wheels should now be timed correctly.



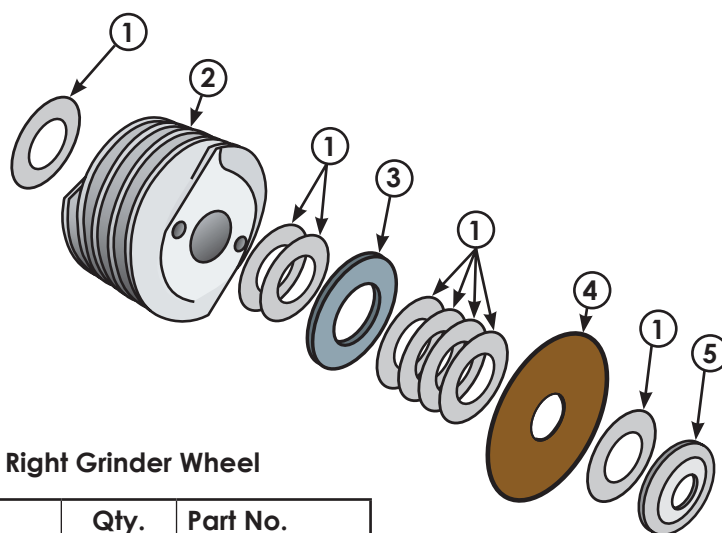
Timing Lock screw

**11.** Bring the grinding wheels together until they overlap and rotate the wheels by hand to see if there is clearance. If the threads are clear, you can now follow the instructions to obtain a 35° edge angle as outlined in the next section, entitled "Setting Edging and Honing Angles". (Page 13)

### Order of Installation – Grinding Stones HE7



Left Grinder Wheel



Right Grinder Wheel

| No. | Description               | Qty.  | Part No.   |
|-----|---------------------------|-------|------------|
| 1   | Paper Blotter             | 12    | HE7-423    |
| 2   | Spiral Stone              | 1 Pr. | HE7-7X400N |
| 3   | Spacer (Right Wheel Only) | 1     | HE7-510    |
| 4   | Guard Disc                | 2     | HE7-729    |
| 5   | Retaining Flange          | 2     | HE7-508    |

# Care Of Grinding Wheels-Safety Tips

---

## Do

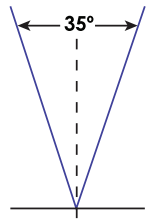
1. DO always handle and store wheels in a careful manner
2. DO visually inspect all wheels before mounting for possible damage.
3. DO check grinding wheels for equal and correct diameter.
4. DO use new mounting blotters which are supplied with new wheels.
5. DO allow newly mounted wheels to run at operating speed, with wheel guard cover (#24) in place, for at least one minute before grinding.
6. DO always wear safety glasses or some type of eye protection when grinding.
7. DO turn off coolant before stopping wheels to avoid creating an out-of-balance condition.
8. DO always use evenly matched sets of right and left wheels. The wheel diameters must be identical.

## DON'T

1. DON'T use a cracked wheel or one that has been dropped or become damaged.
2. DON'T force a wheel onto the machine or alter the size of the mounting hole-if wheel will not fit the machine, get one that will.
3. DON'T use mounting flanges on which the bearing surfaces are not clean, flat and free of burrs.
4. DON'T tighten the mounting nut excessively.
5. DON'T start the machine until the wheel guard (#24) is in place.
6. DON'T jam work into the wheels.
7. DON'T stand directly in front of a grinding wheel whenever a grinder is started.
8. DON'T force the grinding so hard that the motor slows noticeably or the knife blade gets hot.
9. DON'T use wheels of different diameters.

# Setting Edging And Honing Angles

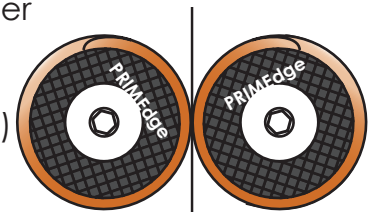
1. The recommended edge angle for edging is 30°, and 35° for honing. A cutting edge of 35° will have the strength to endure hard use during boning or cutting and will be easy to maintain when dressing the edge on a **PRIME**Edge Ergo Steel or butcher steel. However, other edge angles can be obtained if desired. (See **Pg. 13**)



**35° Included Edge Angle**

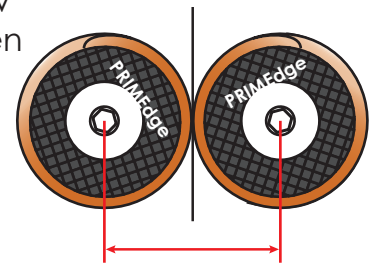
2. The angle of the edge is determined by the amount of overlap of the threaded wheels. This is referred to as interdigitating. The diameter of the wheels determines the distance required between wheel centers to form a specific included angle at the point of the overlap. Be sure that both wheels are identical in diameter. If one wheel is larger than the other you must dress it down to match the smaller wheel diameter.

3. With the grinding wheels open, insert a thin piece of paper between the wheels and bring the wheels together by turning the honing wheel crank (#1) to the right (clockwise) until the paper can moved up and down with a slight resistance. (**Fig. 1**)



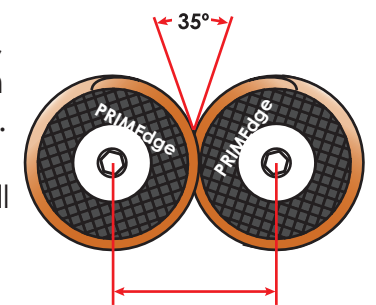
**Fig. 1**

4. Insert one of the “center pointers” into the retaining screw at the center of each wheel. Measure the distance between the center pointers as indicated in **Fig. 2, dimension A** and find that measurement in the left-hand **A** column of the setup chart on Page **14**.



**A**  
**Fig. 2**

5. The grinding wheels must be adjusted to overlap until the measurement between the wheel centers is as shown in **Fig. 3**, dimension **B** is the measurement listed on the set-up chart in the **B** column opposite the measurement used for dimension **A**. When the adjusted overlap measurement is achieved from center to center of the wheels, the included edge angle will be 35° (see **Fig. 3**). Remove the center pointers and store in a safe place.



**B**  
**Fig. 3**

6. When the wheels have worn down and the overlap causes the threads to bottom out, the wheels must be replaced. (Approximately 4 3/4" in diameter)

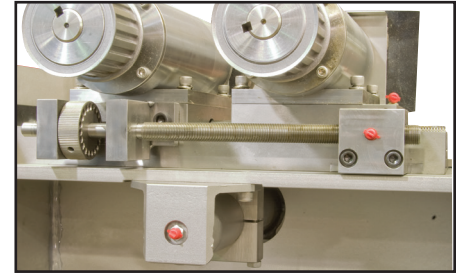
| <b>A</b>                                               | <b>B</b>                                                   |
|--------------------------------------------------------|------------------------------------------------------------|
| <b>If Fig. 2<br/>Dimension (A)<br/>Measurement is:</b> | <b>Adjust Fig. 3<br/>Dimension (B)<br/>Measurement to:</b> |
| 7 1/4"                                                 | 6 15/16"                                                   |
| 7 3/16"                                                | 6 7/8"                                                     |
| 7 1/8"                                                 | 6 13/16"                                                   |
| 7 1/16"                                                | 6 3/4"                                                     |
| 7"                                                     | 6 11/16"                                                   |
| 6 15/16"                                               | 6 5/8"                                                     |
| 6 7/8"                                                 | 6 9/16"                                                    |
| 6 13/16"                                               | 6 1/2"                                                     |
| 6 3/4"                                                 | 6 7/16"                                                    |
| 6 11/16"                                               | 6 3/8"                                                     |
| 6 5/8"                                                 | 6 5/16"                                                    |
| 6 9/16"                                                | 6 1/4"                                                     |
| 6 1/2"                                                 | 6 3/16"                                                    |
| 6 7/16"                                                | 6 1/8"                                                     |
| 6 3/8"                                                 | 6 1/16"                                                    |
| 6 5/16"                                                | 6"                                                         |
| 6 1/4"                                                 | 5 15/16"                                                   |
| 6 3/16"                                                | 5 7/8"                                                     |
| 6 1/8"                                                 | 5 13/16"                                                   |
| 6 1/16"                                                | 5 3/4"                                                     |

| <b>A</b>                                               | <b>B</b>                                                   |
|--------------------------------------------------------|------------------------------------------------------------|
| <b>If Fig. 2<br/>Dimension (A)<br/>Measurement is:</b> | <b>Adjust Fig. 3<br/>Dimension (B)<br/>Measurement to:</b> |
| 6"                                                     | 5 11/16"                                                   |
| 5 15/16"                                               | 5 5/8"                                                     |
| 5 7/8"                                                 | 5 9/16"                                                    |
| 5 13/16"                                               | 5 1/2"                                                     |
| 5 3/4"                                                 | 5 7/16"                                                    |
| 5 11/16"                                               | 5 3/8"                                                     |
| 5 5/8"                                                 | 5 5/16"                                                    |
| 5 9/16"                                                | 5 1/4"                                                     |
| 5 1/2"                                                 | 5 3/16"                                                    |
| 5 7/16"                                                | 5 1/8"                                                     |
| 5 3/8"                                                 | 5 1/16"                                                    |
| 5 5/16"                                                | 5"                                                         |
| 5 1/4"                                                 | 5 15/16"                                                   |
| 5 3/16"                                                | 4 7/8"                                                     |
| 5 1/8"                                                 | 4 13/16"                                                   |
| 5 1/16"                                                | 4 3/4"                                                     |
| 5"                                                     | 4 11/16"                                                   |
| 4 15/16"                                               | 4 5/8"                                                     |
| 4 7/8"                                                 | 4 9/16"                                                    |
| 4 3/16"                                                | 4 1/2"                                                     |
| 4 3/4"                                                 | 4 7/16"                                                    |

Charts are available to set up edge angles of 22°, 25°, 30°, 40° and 45° if so desired. These charts are available through from **PRIME**Edge customer service: **877-322 EDGE(3343)** • [sales@primedge.com](mailto:sales@primedge.com)

# Procedure For Setting The Indexer Wheel

The indexer is a patented, precision control device that will automatically compensate for honing wheel adjustment which will allow for a specific amount of material to be removed from the wheels during dressing. The indexer works in conjunction with the honing wheel crank (#1) and is activated when the wheels are fully opened or closed. The indexer must be adjusted when you install a new set of wheels or adjust to a new edge angle. When the desired edge angle measurement has



**Indexer Assembly**

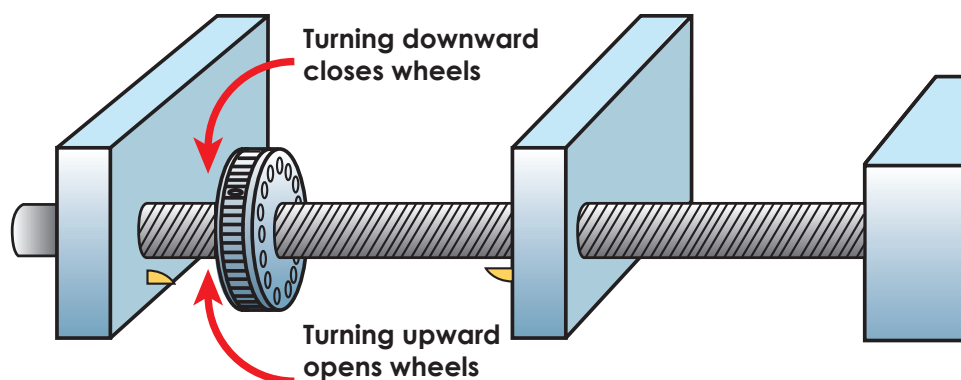
been achieved (**Fig. C**) you must be sure the Indexer Wheel is correctly set against the stop.

**Note: Adjustment is made while facing the machine from the back side with the back panel removed.**

- A. The Indexer wheel must rest against the stop on the left when the wheels are fully closed.
- B. If the Indexer is not resting against the stop when the wheels are fully closed you must turn the Indexer to the left by hand until it is against the stop.
- C. Be sure the pointer on the stop is fully inside one of the holes that is drilled in the side of the Indexer Wheel.
- D. Open the grinding wheels if necessary to allow for the rotation of the Indexer Wheel so the pointer will line up with one of the holes.
- E. Close the honing wheels and be sure that the pointer on the left stop fully enters one of the adjustment holes on the Index Wheel.
- F. Recheck the dimension from center to center of the honing wheels to be sure the desired measurement is correct when the wheels are fully closed.

The edge angle you have set will be maintained as long as the same pair of spiral wheels remains on the machine. Replace the back panel and you are ready to edge or hone knives.

**Remember!** Each time the honing wheels are fully opened or closed to a stop position, the Indexer will compensate for .00125" (one and one quarter thousands of an inch) to be dressed from the wheels. There will automatically be .0025" (two and one half thousands of an inch) ready for removal on the first dressing pass. This is usually sufficient to dress the wheels. If additional dressing is required you must move the dressing unit to the back of the machine and fully close the wheels, then open them fully to their stop. You then can move the dressing diamonds across the wheels and you will be removing .0025" (two and one half thousands of an inch) of material from the wheels. (.005" from the diameter of each wheel.)



PRIMEEdge, Inc.

## Removing Worn Wheels

### Wheels must be in the full open position.

Standing at the front of the machine, use the 3/8" offset Allen wrench to loosen the two screws holding the wheel retaining flanges (#17) in place. The screw in the left flange has a right-hand thread and loosens counterclockwise. The screw in the right hand flange has a left-hand thread and loosens clockwise (turn to the right to loosen). Remove the retaining flange screws and set them on the rear cover of the machine. Remove and discard the used guard discs. Remove the stainless steel spacing disc and set it on the rear cover of the machine. Remove and discard the used honing wheels and blotters. Remove and discard any blotters that adhere to any flanges or the timing lock disc.

### Removing the timing lock screw and removing the hubs.

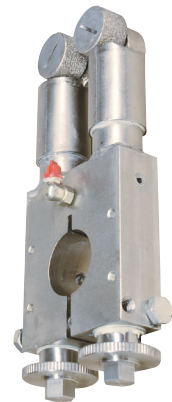
If you have difficulty removing the honing wheels from the stainless steel mounting hubs, or you cannot remove the hubs from the spindle shaft, use an Allen wrench to turn the two set screws in each hub clockwise to push the honing wheel and hub away from the flange. Remove the timing lock screw in the right side hub before turning Allen screws! Pull honing wheel and mounting hub off the spindle shaft. Use a piece of wood to push the hub out of the wheel. **BE careful: Do not let the hub fall to the floor.** Let the hub fall onto a surface which will not mar the hub. When the hubs have been removed from the used honing wheels, turn the two set screws in each hub counterclockwise until the set screws no longer protrude through the hub.

### Preparation before mounting new wheels.

Wipe the spindle shafts clean and lubricate them with anti-seize compound or grease. Remove the timing lock disc and lubricate the face that mounts against the flange. Replace the mounting hubs on the shafts. Locate the threaded hole in the right flange for the timing lock screw and start the screw on or two turns, but **do not** tighten it. The timing lock disc should move freely for now. Refer to **page 11**, Mounting and timing new wheels, and follow the procedure outlined.

## When And How To Dress Wheels After Honing Or Edging

As you edge or hone knives, the surface of the grinding wheels will become glazed and the wheels will not grind smoothly. The wheels may also feel a bit rough or bumpy. When this occurs, the wheels require dressing. There is no set amount of knives that can be edged or honed before dressing is required. If an operator is honing a large number of heavy-bladed knives, the wheels will need to be dressed more often than if the knives were boning knives. Greater pressure put on the knives while edging or honing will cause faster wear and increase the amount of wheel dressing required. In order to create a smooth, even edge, the wheels must be in proper dress.



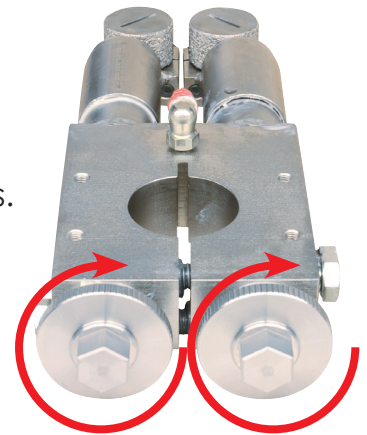
Diamond Dresser Assembly

# When And How To Dress Wheels After Honing Or Edging cont...

## Dressing the wheels

Turn the honing wheel crank (#1) fully to the left (counterclockwise) to its stop position. The grinding wheels are now open and in the dressing position. Reach inside the machine under the coolant drain and locate the adjustment knobs (#3) on the bottom of the dresser assembly. Turn each knob to the left and lower the diamonds to their stop position. Replace the top front cover by lowering it down carefully over the wheels so that the "ear" on the right side just clears the plate on which the "On-Off" switch is mounted. Push the cover straight back. Check that the front cover is flush against the rear cover. Replace and tighten the hex screw that holds the cover in place. (Fiber glass covers have finger lift fasteners.)

Press the "On" button. Turn the dresser handwheel (#2) to the left (counterclockwise) until each diamond is beneath the rear threads of its wheel. Reach inside the machine through the coolant drain and raise each diamond until it is taking a light cut from the grinding wheels. Turn on the pump and adjust the coolant flow valve to spray coolant over wheels. Turn the dresser handwheel to the left (counterclockwise) slowly until the entire length of the wheels and the guard discs have been dressed. Now turn the dresser handwheel to the right (clockwise) slowly until it stops against the rear cover of the machine.



Turn Diamond Adjuster Knobs Clockwise To Raise The Dressing Diamonds

**NOTE: To take another dressing cut from the spiral wheels,**

**DO NOT RAISE THE DIAMONDS.**

**DO** turn the honing wheel crank (#1) to the right (clockwise) until it stops. The wheels should now be closed and interdigitated.

Next turn the honing wheel crank (#1) to the left (counterclockwise) to the stop position to open the wheels. The Index Wheel (#4) is activated each time the spiral wheels are fully opened or closed to the stop position. When the dressing diamonds are traveled across the wheels there will be .0025" (two and one half thousandths of an inch) dressed off the wheels. (The Indexer Wheel is adjusted .00125" for each full closing or opening of the spiral wheels). You must next return the dresser until it is all the way to the rear of the machine by turning the dressing handwheel to the right (clockwise) to its stop. Then turn the honing wheel crank to the right and close the spiral wheels as far as they will go. You have dressed the wheels and have returned them to the pre-set edging and honing angle. You are ready to begin edging or honing your knives.

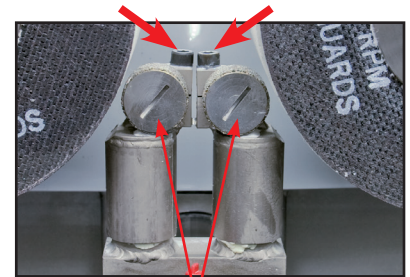
**IMPORTANT:** Periodically measure the diameter of each grinding wheel to be sure they are identical. If they are not the same, dress the larger wheel down to the smaller wheel diameter.

## Turning The Dressing Diamonds and Installing New Diamonds

After a number of dressings, the diamond dressers will begin to show wear and must be turned to a new position. Change the position of the diamond dressers frequently; Do Not wait until a flat area has been worn on the diamond wheels. Remove the front cover by pulling it forward, then straight up. Set the front cover aside. Turn the wheel crank (#1) counterclockwise to its stop to open the wheels. Reach inside the machine beneath the dresser crank and, reaching through the coolant drain, lower the diamonds by turning the adjustment knobs counterclockwise two or three turns. Turn the dresser crank one or two turns to bring the diamonds a small distance from the rear cover of the machine. Keep hands and tools clear of the honing wheels to avoid chipping the threads while changing the position of the diamond dresser.

Use the 3/16" T wrench provided with the machine to loosen the Allen screw which holds each diamond in place. Use the 5/16" ball driver wrench provided with the machine to turn the diamond to a new position. Late model machines have a slot in the diamond wheel and can be turned with a screwdriver instead of the hex head ball driver. Tighten the 3/16" Allen screw securely and check its tightness by attempting to turn the diamond wheel with the ball driver wrench or screwdriver. If the diamond wheel will not turn, the Allen screw is sufficiently tight.

**Loosen Allen Screws**



**Turn Dressing Diamonds Here**

Check that you have lowered the diamonds enough to clear the honing wheels, then turn the dresser crank until each diamond is beneath the rear threads of its wheel. Raise each diamond until they just touch the wheel threads. Return the dresser assembly to the rear of the machine.

To replace the diamond wheels you must first loosen the Allen screws that hold the diamonds in place. Remove the worn diamond wheels and replace with new ones.

## Cleaning The Machine

The machine should be cleaned daily and the coolant replaced once or twice a week as necessary. Remove the hex screw or finger fasteners holding the front cover in place. Remove the front cover by pulling it forward, then straight up. Set the front cover aside. Wipe the accumulated grinding grit into the coolant tank. Keep hands and tools clear of the honing wheels and bellows while cleaning. Rinse the inside of the machine with coolant, not fresh water. With the coolant pump switch off, remove the plastic coolant hose from the valve and use the hose to rinse out grit from inside the machine. Use "On-Off" coolant pump switch to control coolant flow. Drain coolant tank, clean out all sediment, and rinse the tank clean. Put the tank back into the machine and fill it with the proper amount of coolant and water (see pg. 7).

Replace the front cover by lowering it straight down over the wheels so that the "Ear" on the right side of the front cover rests on top of the front cover safety switch. Now push the front cover straight back and check that it is flush to the rear cover. Replace the hex screw which holds the front cover in place of fasten the finger latches. If you used any fresh water to rinse the machine, start the machine and coolant pump to distribute coolant. This will prevent rusting of machine parts. The exterior of the machine can be cleaned with a damp cloth. Install a new nylon filter securely over the drain.

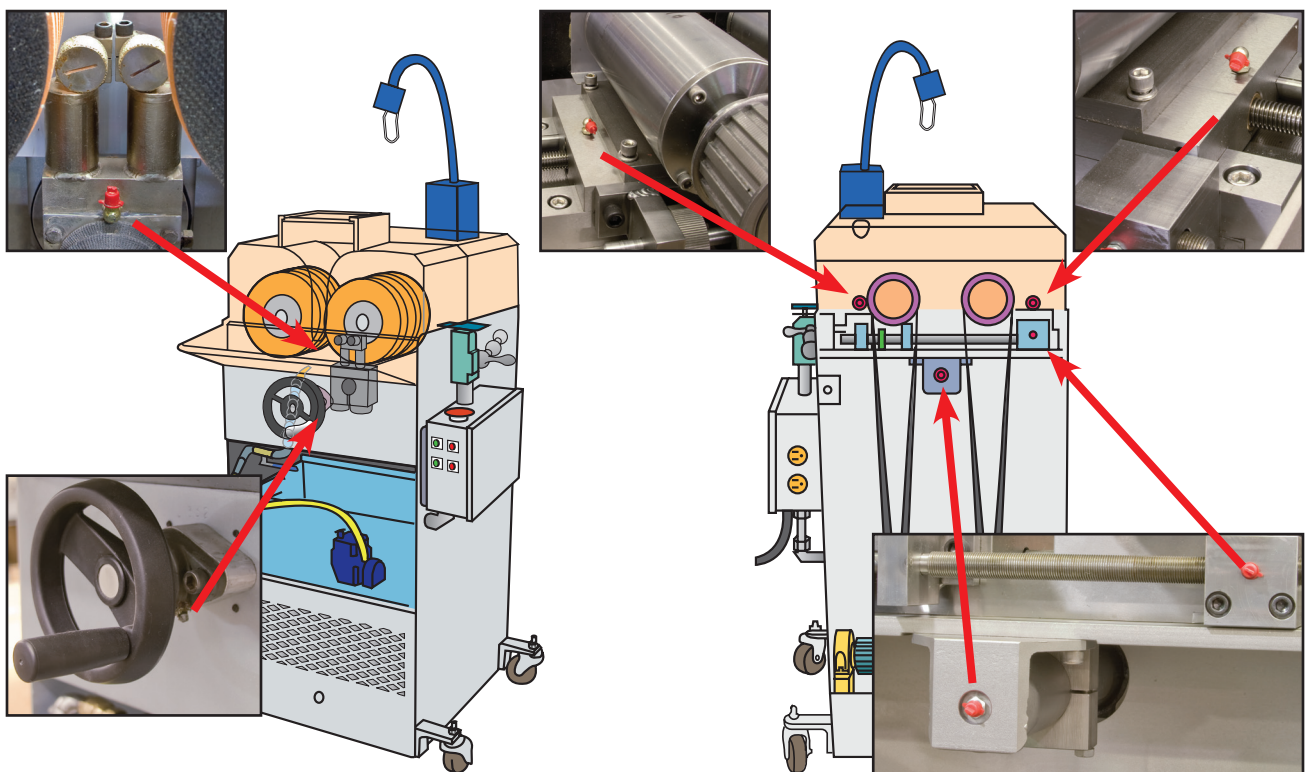
# Machine Maintenance Lubrication

## Greasing

There are six grease fittings (#12) on the HE7. Two or three pumps of quality water-resistant grease once per month is sufficient. Clean the grease fittings with a soft cloth before applying the grease gun.

It is important that the dresser unit is in the correct position before greasing the machine. The dresser unit must be against the back wall of the machine. This will prevent too much grease being built up in the grease lines which will cause the dresser to freeze up.

To lubricate the diamond dresser assembly, remove the front cover of the machine, open the wheels to a stop and lower both diamond wheels fully. Pump grease into the fitting in the center of the dresser assembly until grease is forced out below each diamond support post. Continue greasing until CLEAN grease is being forced out. Replace the front cover and reset the dresser by following the instructions for "Dressing After Edging or Honing" (**Pg. 17**). Grease the dresser handwheel (#2). Remove the rear door for access to the other grease fittings (#12). A grease fitting is located on each slide saddle, at the outside of each spindle. A grease fitting is located on the support block for the threaded shaft. The support block is located below the spindle on your right as you view the machine from the rear. The dresser spline assembly is located in the center of the machine, directly below the slide. Check to be sure that the diamond wheel dresser assembly is against the rear cover of the machine. The grease fitting for the dresser spline assembly is located in the center of the spline assembly.



Grease fitting locations

## Machine Maintenance Lubrication cont...

### Oiling

Since the HE7 uses a mixture of water and coolant fluid there may be rusting or corroding of certain parts. It is recommended that a light mineral oil (white oil) be sprayed or wiped onto the parts of the machine that are subject to rusting. This should be done daily after the machine cleanup is completed. The light coating of oil will also make cleanup easier. Be careful not to get oil on the timing belts or V-belt if you oil the inside of the rear of the machine.

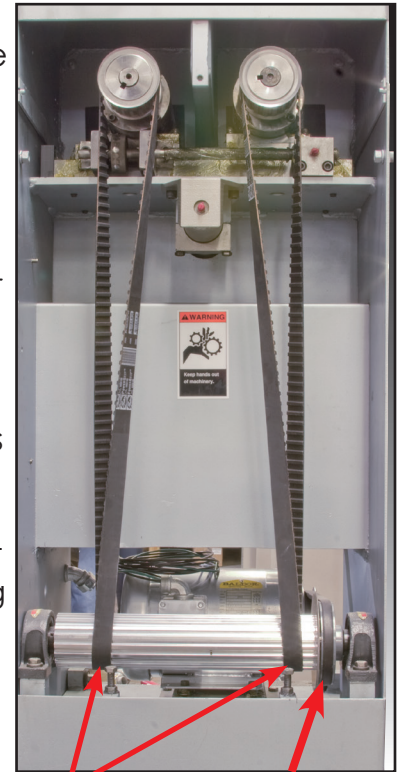
## Machine Maintenance Adjusting the Timing Belts

### Checking the timing belts.

The timing belts should be checked every week for possible wear or stretching which can occur during normal usage of the machine. Tautness must be maintained to keep the honing wheels in synchronization. By familiarizing yourself with the proper tension when the machine is new, you can ascertain when adjustment is necessary. Unplug the machine from the wall receptacle or cut power at the breaker box for safety. Open the rear access door. The timing belts must be properly located on the driver roller before you check their tension.

With the wheels open grasp the outside of one of the belts and pull downward, thus rotating the honing wheels in the correct operating direction. From behind the machine, take each timing belt between thumb and index finger at a point midway between the timing pulley and the drive roller. Using normal pressure pinch them together. There should be about a 1" space between the belts to have proper tension.

If the timing belts have stretched and lost their normal tension, the tension must be readjusted. If the timing belts show any signs of wear, such as cracks or fraying at the edges, they must be replaced. Keep the timing belts in good condition and replace them yearly to be assured that wheel breakage will not occur from a worn or badly stretched timing belt.



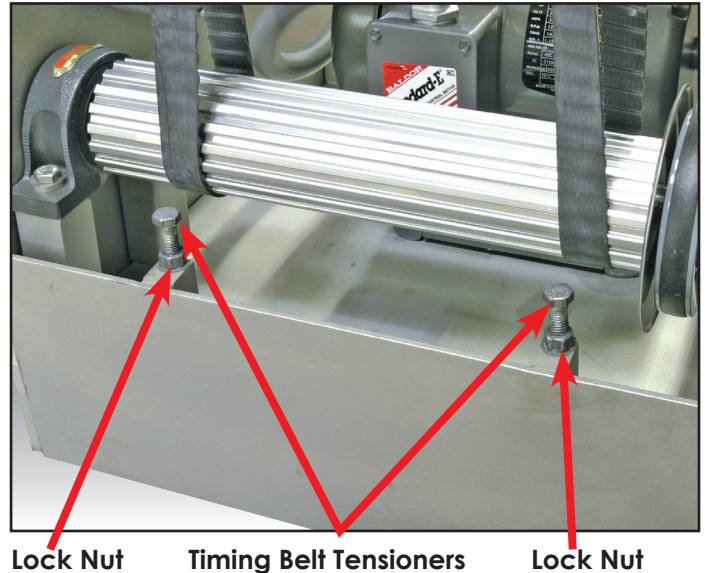
Timing Belts

V - Belt

# Replacing Timing And V-Belts

**! Unplug the machine from the wall receptacle or disconnect the power at the breaker box!**

1. The threads of the honing wheels must be disengaged before replacing the timing belts. Turn the wheel crank on the right side of the machine counterclockwise to its stop to open the wheels.
2. At the rear of the machine, with the back cover opened, loosen the hex nuts which lock the belt tensioners. Turn both tensioner screws (#32) to the left (counterclockwise) to a stop.

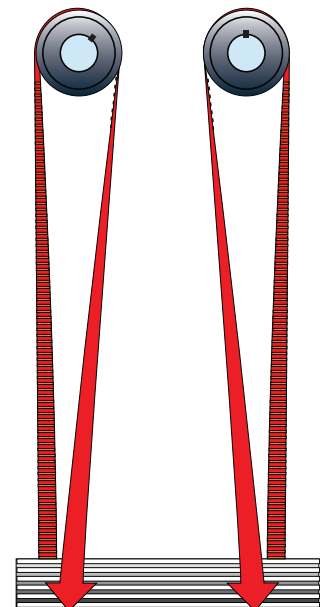


3. Take a piece of wood (2" x 4" x 24") and wedge it between the drive roller and the frame of the machine. Push down on the wedge with your foot to raise the drive roller. The belt tension will be released and you can proceed with the removal of the belts from the timing pulleys (#33).

Push Down Here

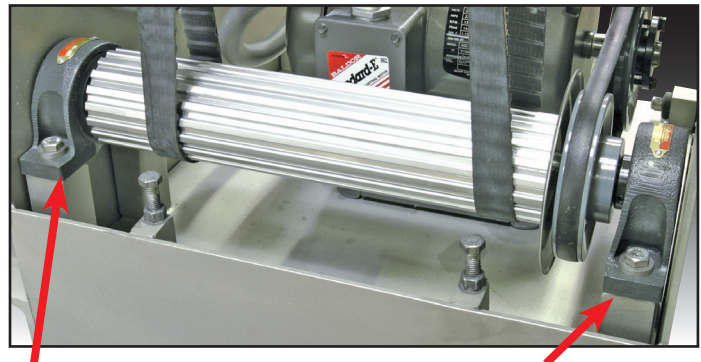


4. Take careful note of the twist in each timing belt so that you can correctly install the new belts when you reassemble. Lift the belts off the timing belt pulleys. (#33)



## Replacing Timing And V-Belts cont...

5. Remove the four hex screws which hold down the pillow blocks (#31). Loosen the motor V-Belt tension (#29).



Pillow Block

Pillow Block

6. Take the V-belt (#13) off the motor and drive pulleys (#14) and lift the drive roller (#30), and slide the timing belts and V-belt off the right end of the drive roller and discard the worn timing belts.
7. Clean the drive roller (#30) with a soft, dry cloth. Put on new timing belts and the V-belt over the roller shaft and lift the shaft into position with all three belts in place.
8. Start all four pillow block screws in their threaded holes but do not tighten them yet.
9. If there is not enough slack in the V-belt to force it onto the motor pulley, use a 9/16" socket to turn the motor slide adjuster screw counterclockwise several turns. The slide adjust screw is accessible through the hole in the center front of the machine, about five inches from the floor. (#29)



Motor Slide Adjuster Hole

10. Measure the spaces between the pillow blocks (#31) and the plate on which the tensioners (#32) are mounted. Move the drive roller assembly as necessary to make the spaces equal. Now tighten all four screws which hold down the pillow blocks, and check again that the pillow blocks are equidistant from the plate on which the tensioners are mounted.
11. Put the timing belts over the timing belt pulleys. The belts should be twisted as the same way as the old belts. Refer to the illustration on **page 21 step 4**.
12. If honing wheels are not installed on the machine while you are changing timing belts, proceed to step 13. If honing wheels are installed on the machine when you are changing the timing belts, you can find the correct cog on one of the belts so that the threads of the wheels will still be synchronized. Remove the front cover from the machine. At the rear of the machine, grasp one of the timing belts and lift the entire drive roller. This will put sufficient slack in the other timing belt to allow another person to rotate the free honing wheel until the threads are timed correctly. Let the shaft down and check that the honing wheels are correctly synchronized.

## Replacing Timing And V-Belts cont...

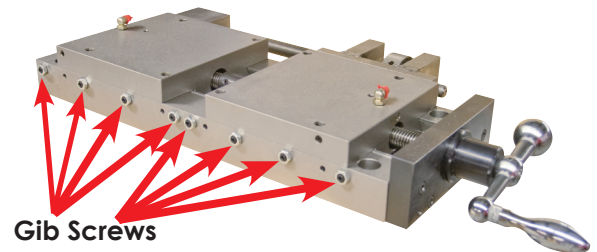
13. Locate the belts on the pulley shaft by grasping on of the belts near the timing belt pulley and pulling downward, thus rotating the honing wheels in the correct operating direction. Check that no part of the tensioners (#32) interferes with the movement of the belts and drive roller. If the belts or drive roller touch the tensioners, loosen the four screws which hold down the pillow blocks (#31) and relocate them farther away from the tensioners. Now follow the procedures above in step 10.
14. At the front of the machine, (#29) check and reset the tension of the V-belt. A V-belt should not be so tight as to be rigid, nor so loose as to be sloppy. At correct tension, the V-belt should move up or down about 1/4" rather easily when normal pressure is applied at the center of the belt.
15. Now adjust the tension of the timing belts as follows: Turn each tensioner screw (#32) clockwise until its belt is at the proper tension. (See page 20) Tighten the hex nuts to lock the tensioners in place. Pull the outside of the belts downward to locate the belts and recheck their tension. Replace the rear door.

## Replacing Slide End Bearings

1. Remove wheels, flanges, and top cover of machine to expose spindles and slide.
2. Turn crank (#1) at side of machine to bring saddles together.
3. Remove crank (#1) from slide.
4. If only one person is available, remove spindles from slides before lifting slide out of machine.
5. With slide out of machine, remove graduated dial from crank shaft.
6. Note the "spider" around the lock nut. Use a punch or similar tool to push the "legs" away from lock nut.
7. Remove lock nut and spider. Nut has right hand threads.
8. Push shaft through slide end plate. If it will not push through, gib screws on saddles must be loosened. **Loosen gib screws Only if necessary!**
9. Remove thrust washer and thrust races that may have remained in end plate.  
**Note the number of thrust washers used on each side of the plate!**
10. Clean area of all grease and dirt.
11. Install new thrust washers and race on shaft and push shaft through end plate.  
**Use the same number of washers!**
12. Install new thrust washers and race on shaft on outside of plate. **Use same number of washers!**
13. Install spider and lock nut. Tighten lock nut until there is about 1/8 turn of free play in shaft. Push spider legs around lock nut.
14. Install graduated dial.
15. Reinstall slide into machine. Reverse disassembly procedures 1, 2, 3, and 4.

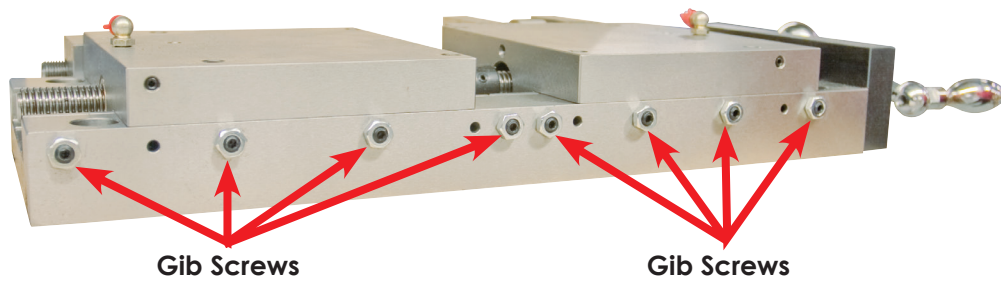
# Replacing Spindles

1. Open wheels fully and unplug the electrical cord or disconnect from power source.
2. Remove top front cover (#24) and rear cover from the machine.
3. Remove the honing wheels, hubs and flanges from the spindle shafts.
4. Move the dresser to the full forward position. (To the front of the machine.)
5. Move the top rear cover (#34) forward and remove it from the machine. (Newer machines with fiberglass covers will not allow top rear cover to be removed until spindle have been removed.)
6. Make a note of how the timing belts are strung, so that you can return them to the same position when you reassemble.
7. Loosen the timing belt tensioning devices (#32) at the rear of the machine and remove the timing belts from the pulleys at the rear of the spindles.
8. Remove timing pulley (#33) from the rear of each spindle by loosening the set screws and pulling the pulley off its shaft.
9. Now is a good time to check the slide for play. Grasping the spindle shaft, attempt to move the shaft up and down. If there is too much play or movement in the slide, adjust the slide's gib screws. (See **Pg. 25** for instructions for adjusting gibs.)
10. Remove the four socket head screws holding the spindle to the slide and remove the spindle from the machine..
11. Using a new spindle reverse the above instructions to reassemble the machine, but make sure that:
  - A. The spindle shafts are parallel to each other, and that the wheel flanges are even, front and rear. This is most important. If spindle shafts are not parallel to each other you will not be able to time the spiral wheels properly.
  - B. The wheels rotate in the proper direction. Both wheels turn upward when viewed from the front.
  - C. The wheels are in proper time with each other. Turn by hand to make sure that they interdigitate without interference.
  - D. The collar in the rear of the spindle must be pressed forward. It is held in position by the key, which must be secured by the set screw in the pulley.
12. To locate the rubber water guard on the front of each spindle:
  - A. Pull the rubber guards all the way forward toward the front of the machine.
  - B. Replace the top rear cover (#34) and push it all the way back into position. The rubber water guards should now be in position.
  - C. Remove the top cover (#34) and tighten the Allen screws at the top and bottom of each guard while holding the guard stationary.



## Adjusting Slide Gib Screws

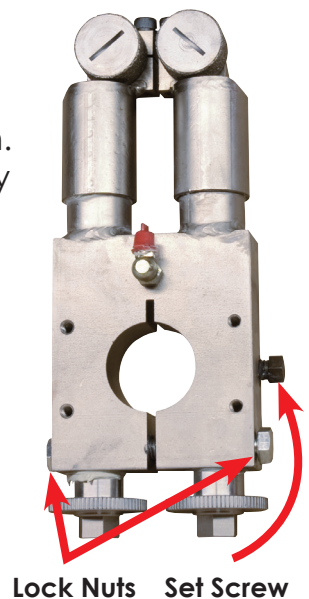
1. Below the spindle shaft on the slide you will find four small screws and nuts, which are used to adjust play in the slide.



2. Loosen the lock nut with the 3/8" box wrench, while holding the set screw with the 3/32" Allen wrench.
3. Work from one end to the other, holding the lock nuts with the 3/8" wrench and adjusting the set screws with the Allen wrench.
4. Adjust the set screws **IN** to remove play, and **OUT** to add play.
5. Make sure that you do not adjust the screws so tight that they bind the slide.
6. When you are satisfied with the adjustment, lock the set screws with the nuts by turning the nuts tight with the 3/8" box wrench while holding the set screws with the Allen wrench.
7. Make sure that when you are done that the slide still moves freely.

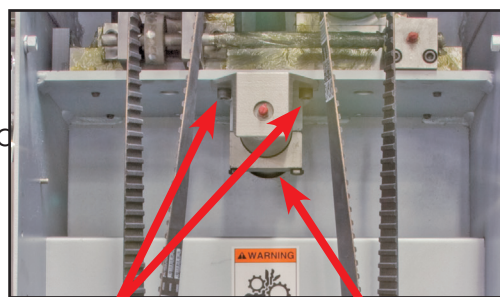
## Replacing Dresser Mechanism And Dresser Spline Assembly

1. Drive out the pin that holds the handwheel (#2) with a slender punch, holding a weight at the opposite end of the crank (to prevent bending the shaft).
2. Release the set screw and lock nuts on the dresser mechanism. Now slide the dresser mechanism forward and let it hang freely on the shaft of the driving screw.
3. Loosen the locking collar on the spline.  
(Newer machines do not have a locking collar.)

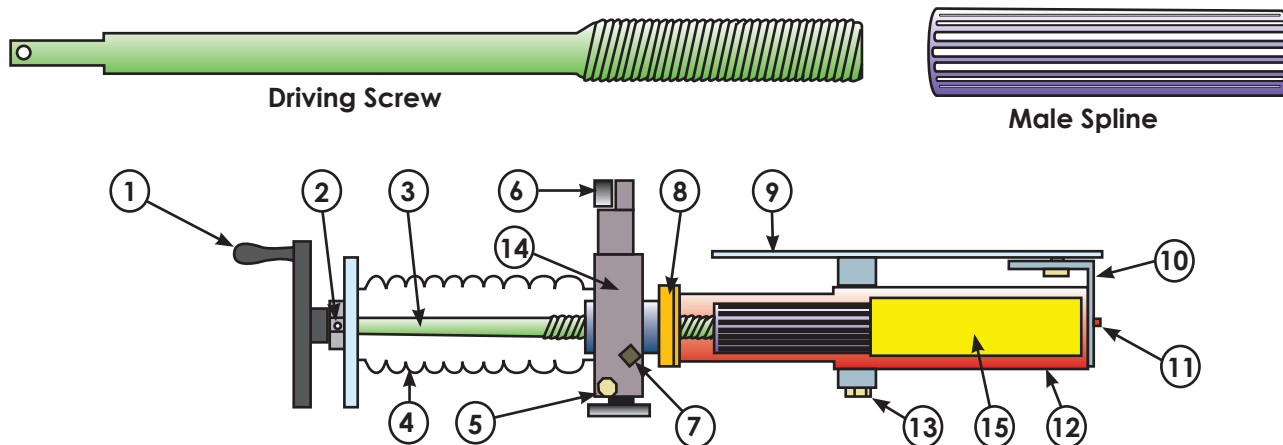


## Replacing Dresser Mechanism And Dresser Spline Assembly cont...

4. Remove the two hollow head bolts anchoring the spline to the frame of the machine.
5. Loosen the screws on the housing support. The spline assembly can now be retracted from the rear.
6. While the spline is being removed from the rear, someone should hold the dresser mechanism to prevent it from falling.
7. The male spline can be removed from its housing by pulling it forward. The driving screw can be turned out through the rear of spline (it is a left-handed screw).
8. By reversing the procedure the driving screw can be reinstalled into the new spline.
9. Refer to the drawing on this page to make sure that the dresser mechanism is put in the same position as it had been originally.
10. The dresser mechanism must be set vertically so that both of the diamond wheels are equidistant from the honing wheels.
11. The set screw is individually fitted. If it should happen that this set screw does not hold the dresser block perfectly vertical, then rely solely on the lock nuts which should be tightened very firmly.
12. Make sure when installing that the lock collar goes on first, followed by the dresser mechanism. Care must be taken not to strip the threads on the lock collar. Don't let any dirt get into the mechanism while installing. (Newer machines do not have a lock collar).



**Hollow Head Bolts      Housing Support**



**Side View Dresser Mechanism And Dresser Spline Assembly**

| No. | Description   | No. | Description     | No. | Description           |
|-----|---------------|-----|-----------------|-----|-----------------------|
| 1   | Handwheel     | 6   | Diamond Wheel   | 11  | Grease Fitting        |
| 2   | Pin           | 7   | Set screw       | 12  | Spline Housing        |
| 3   | Driving Screw | 8   | Lock Collar     | 13  | Anchor Bolts          |
| 4   | Bellows       | 9   | Machine Frame   | 14  | Dresser Mechanism     |
| 5   | Lock Nuts     | 10  | Housing Support | 15  | Male & Female Splines |

# Troubleshooting Guidelines

| Problem                                          | Causes and Remedies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Using too many wheels                            | <ul style="list-style-type: none"> <li>• Overdressing wheels:<br/>Dressing too often</li> <li>• Putting too much pressure on knives when grinding:<br/>Lighten up on pressure.</li> <li>• Not enough coolant flow on wheels:<br/>Increase coolant flow.</li> <li>• Uneven wear on wheels causing overdressing:<br/>Hold knife in upright (90°) position while grinding to avoid tilting the knife and wearing one wheel faster than the other.</li> <li>• Getting knife tip caught in threaded wheels causing wheel chipping and breaking of edge of threads:<br/>Start grinding at tip of knife at center of wheels and remove knife with tip at center of wheels.</li> <li>• Breaking wheels prematurely:<br/>Take less of a cut when dressing wheels. Check timing belts to be sure tension is correct.</li> </ul> |
| Knife bounces on wheels when in operation        | <ul style="list-style-type: none"> <li>• Wheels are worn and require dressing</li> <li>• Too much pressure applied when grinding, causing unevenness of wheel surface:<br/>Lighten up on pressure.</li> <li>• Wheels are not the same diameter:<br/>Dress larger wheel.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| One grinding wheel larger than the other         | <ul style="list-style-type: none"> <li>• Diamonds are not extended the same distance:<br/>Adjust diamonds.<br/>Dress the larger wheel down to the same diameter as the smaller wheel.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Knife edges chipping and breaking                | <ul style="list-style-type: none"> <li>• Knife blade too thin:<br/>Grind down the knife edge to thicken cutting edge and strengthen it.<br/>Check blade thickness on Go-No-Go Gauge.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Can't keep an edge on knives in the cutting line | <ul style="list-style-type: none"> <li>• Knife blade ground too thin and edge keeps rolling over:<br/>Put knife through honing machine and make blade narrower.<br/>Use back steeling procedure to straighten rolled edge.</li> <li>• Knife blade may be too thick near edge and there is not enough of a honed edge to work with on steel:<br/>Return knife to central sharpening for hollow grinding and edge honing.<br/>Use Go-No-Go Gauge for correct edge thickness.</li> <li>• Edge may be uneven due to different diameter spiral wheels:<br/>Dress the larger wheel down to the same diameter as the smaller wheel.<br/>Reset edge angle.</li> </ul>                                                                                                                                                         |

## Troubleshooting Guidelines cont...

| Problem                              | Causes and Remedies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coolant pump not pumping coolant     | <ul style="list-style-type: none"> <li>Coolant pump clogged with grit from grinding:<br/>Remove pump and pump clear water through it at a sink.<br/>Drain coolant tank and clean out grit.<br/>Clean coolant tank more often.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |
| Knife blade edges or tips are burned | <ul style="list-style-type: none"> <li>Knife is being drawn too slowly through the grinding wheels, or operator may be pausing and holding knife in one spot too long:<br/>Keep knife moving.</li> <li>Too much pressure is being applied while grinding:<br/>Lighten up on pressure.</li> <li>Not enough coolant flowing on grinding wheels:<br/>Increase coolant flow on wheels.</li> <li>Use light touch on tip of knife, which is very narrow and will burn much quicker than the wider parts of the blade:<br/>Use light pressure when grinding first inch of blade from the point.</li> </ul>                      |
| Unable to turn dresser hand wheel    | <ul style="list-style-type: none"> <li>Grease has been pumped into grease fittings on dressing spline assembly when dresser unit was not at the back of the machine:<br/>Remove grease fittings and work the handwheel back and forth until the old, caked up grease is pushed out of the grease line. When control is free, replace grease fittings and grease according to instructions on page 19.<br/>If excess grease cannot be worked out of lines then the dresser spline assembly must be removed and excess grease cleaned out of grease lines and male-female spline assembly, see pages 25 and 26.</li> </ul> |
| Grinding wheels jump time and break  | <ul style="list-style-type: none"> <li>Timing belts have stretched causing the machine to jump time:<br/>Check timing belts more often and adjust tension as needed.</li> <li>Timing belt pulleys (#33) came loose.<br/>Check pulleys often to be sure they are tight.</li> <li>Drive roller bearings are worn, creating movement of drive roller.<br/>Check bearings in pillow blocks (#31) and replace if worn.<br/>Pillow blocks are loose and must be tightened.</li> </ul>                                                                                                                                          |

## Maintenance Frequency Schedule

The recommended maintenance procedures are important in helping to keep your **PRIME**Edge **HE7** in good operating condition. Your **HE7** represent a sizable investment and following the recommended maintenance schedule will give you many years of satisfactory use.

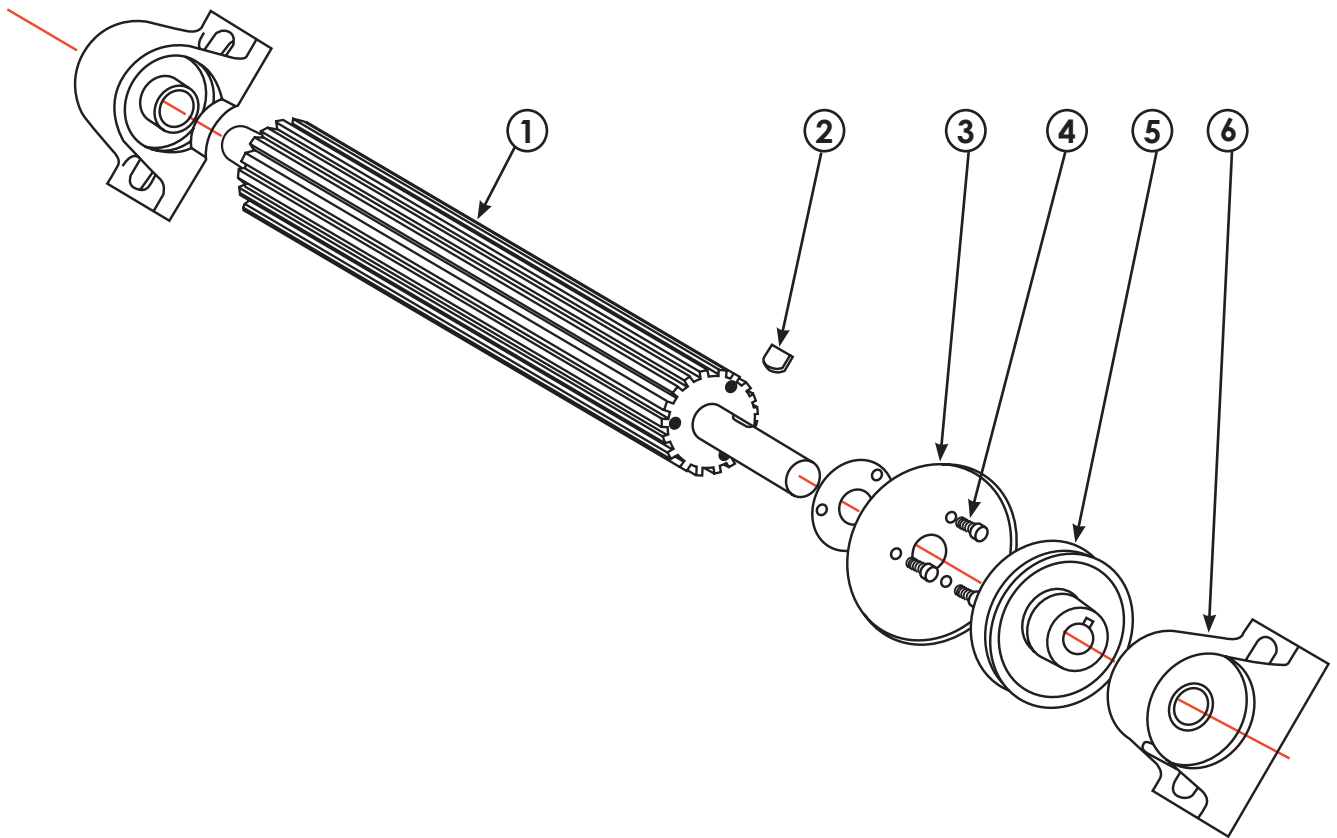
| Item                                                 | Daily | Weekly | Monthly | Quarterly |
|------------------------------------------------------|-------|--------|---------|-----------|
| Clean Machine & Oil<br>Inside and Outside of Machine | ▼     |        |         |           |
| Grease Dresser Wheel                                 |       |        | ▼       |           |
| Grease Diamond Wheel Support Assembly                |       |        | ▼       |           |
| Grease Slide Saddles                                 |       |        | ▼       |           |
| Grease Support Block Indexer                         |       |        | ▼       |           |
| Grease Dresser Spline Assembly                       |       |        | ▼       |           |
| Replace Coolant Fluid                                |       | ▼      |         |           |
| Check Edge Angles                                    |       | ▼      |         |           |
| Grease Honer Wheel Crank                             |       |        | ▼       |           |
| Check Timing Belts and Pulleys                       |       | ▼      |         |           |
| Check Pillow Blocks and Bearings                     |       | ▼      |         |           |

### PRIME

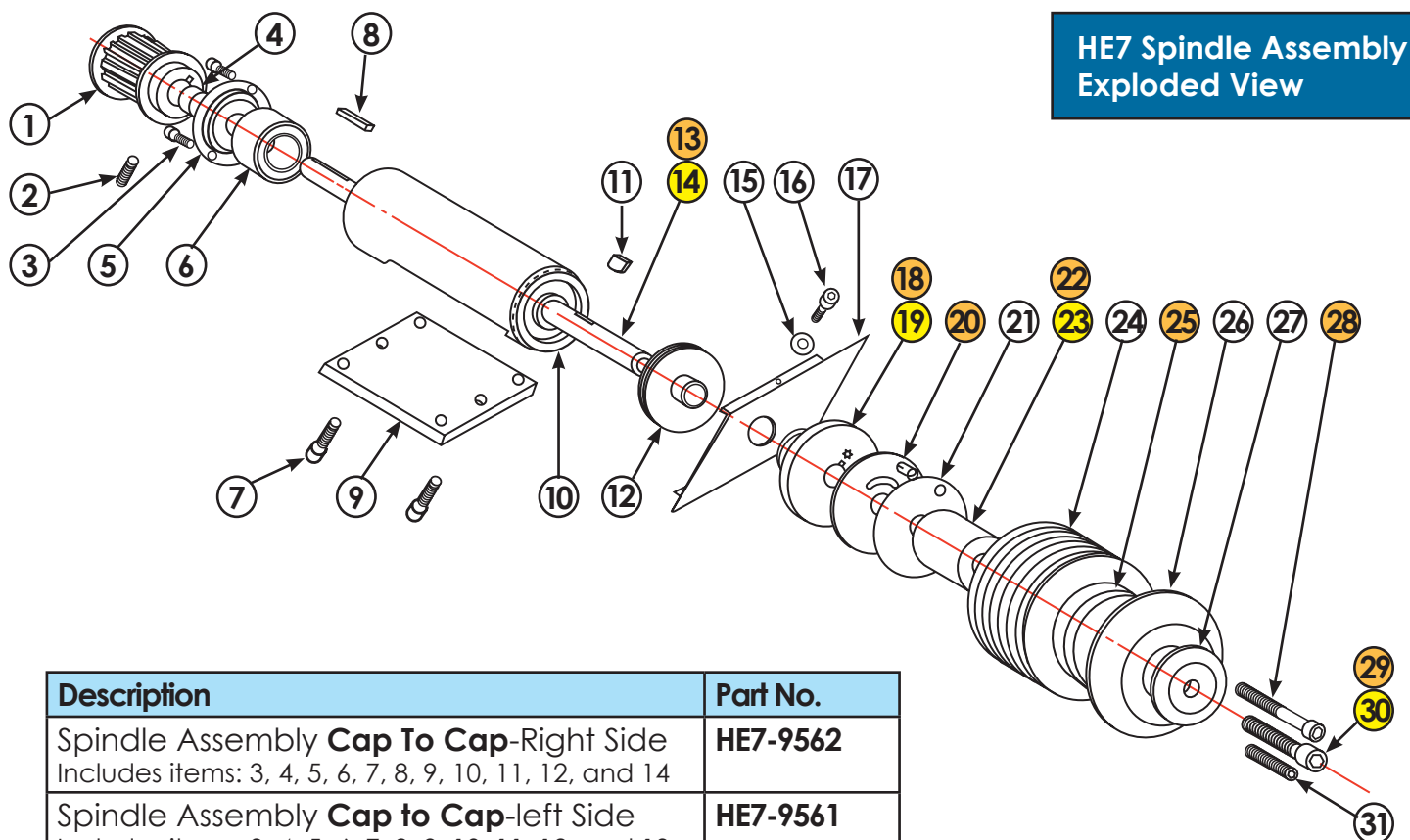
Edge, Inc.

1281 Arthur Avenue  
Elk Grove Village, IL 60007 U.S.A.  
877-322-EDGE (3343)  
Fax (224) 265-6638  
[www.primeedge.com](http://www.primeedge.com)  
email: [contact@primeedge.com](mailto:contact@primeedge.com)

## HE7-9502 Drive Roller Assembly



| No. | Description                      | Part No. | Qty. |
|-----|----------------------------------|----------|------|
| 1   | Honer Drive Roller 1/2P 18 teeth | HE7-502  | 1    |
| 2   | 1/4 x 1" Woodruff Key            | HE7-132  | 1    |
| 3   | Guard/Drive Roller               | HE7-523  | 1    |
| 4   | 10-32 x 1/2 RHMS                 | HE7104   | 3    |
| 5   | Drive Roller Pulley              | HE7-429  | 1    |
| 7   | Drive Roller Pillow Bearing 1"   | HE7-428  | 2    |



**HE7 Spindle Assembly  
Exploded View**

| Description                                                                                              | Part No.        |
|----------------------------------------------------------------------------------------------------------|-----------------|
| Spindle Assembly <b>Cap To Cap-Right Side</b><br>Includes items: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 14 | <b>HE7-9562</b> |
| Spindle Assembly <b>Cap to Cap-left Side</b><br>Includes items: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13  | <b>HE7-9561</b> |

| Description                                 | Part No.        |
|---------------------------------------------|-----------------|
| Spindle Assembly <b>Complete-Right Side</b> | <b>HE7-9516</b> |
| Spindle Assembly <b>Complete-left Side</b>  | <b>HE7-9517</b> |

**Used with HE7-9516 Right Side Spindle Only**

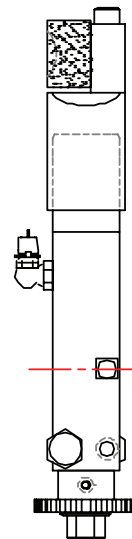
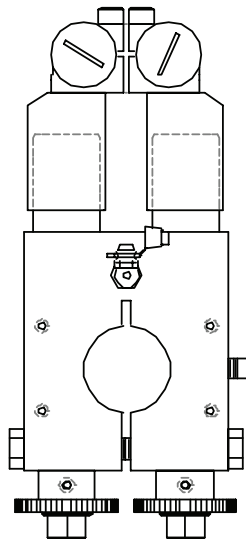
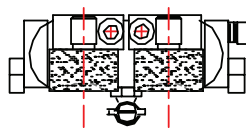
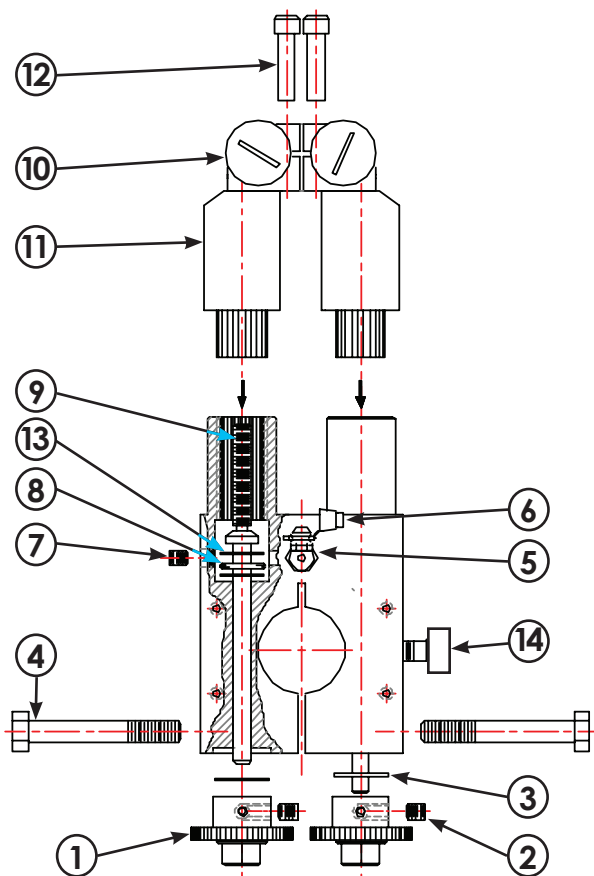
**Used with HE7-9517 Left Side Spindle Only**

| No. | Description                     | Part No.    | Qty. |
|-----|---------------------------------|-------------|------|
| 1   | Timing Belt Pulley              | HE7-501     | 1    |
| 2   | 5/16 - 18 x 3/8 SHSS BL. OX.    | HE7-112     | 2    |
| 3   | 1/4 - 28 x 3/4 SHCS SST         | HE7-110     | 4    |
| 4   | Rear Spindle Spacer Bushing     | HE7-542     | 1    |
| 5   | Rear Spindle Cover              | HE7-522     | 1    |
| 6   | Spindle Bearing                 | HE7-427     | 2    |
| 7   | 3/8 - 24 x 3/4 SHCS BL. OX.     | HE7-123     | 2    |
| 8   | 1/4 x 2-1/2 Square Key          | HE7-133     | 1    |
| 9   | Spindle Plate Mounting          | HE7-520     | 1    |
| 10  | Spindle Housing                 | HE7-521     | 1    |
| 11  | 3/16 x 3/4 Woodruff Key         | HE7-131     | 1    |
| 12  | Spindle Slinger Cover           | HE7-519     | 1    |
| 13  | Left Spindle Shaft (RH thread)  | HE7-517     | 1    |
| 14  | Right Spindle Shaft (LH thread) | HE7-516     | 1    |
| 15  | #10 Flatwasher Zinc Plt.        | HZ-129      | 2    |
| 16  | 10 - 32 x 3/8 SHCS              | 03-012-0600 | 2    |

| No. | Description                         | Part No. | Qty. |
|-----|-------------------------------------|----------|------|
| 17  | Spindle Splash Guard Assembly       | HE7-9518 | 1    |
| 18  | Rear Right Flange/Timing Lock       | HE7-515  | 1    |
| 19  | Left Flange                         | HE7-514  | 1    |
| 20  | Timing Lock Disc Assembly           | HE7-9513 | 1    |
| 21  | Paper Blotter                       | HE7-423  | 4*   |
| 22  | Mounting Hub W/Timing Lock RT.      | HE7-512  | 1    |
| 23  | Mounting Hub - Left                 | HE7-511  | 1    |
| 24  | Wheels (Not Included)               |          |      |
| 25  | Spacing Disc 3-3/4 OD x 2-1/2 ID    | HE7-510  | 1    |
| 26  | Thin Guard Disc (Not Included)      | HE7-729  |      |
| 27  | Front Retaining Flange/Spiral Wheel | HE7-508  | 1    |
| 28  | 5/16 - 18 x 2-1/2 SHCS BL. OX.      | HE7-119  | 1    |
| 29  | 1/2 - 20 x 1-1/2 - LHT SHCS SST     | HE7-125  | 1    |
| 30  | 1/2 - 20 x 1-1/2 SHCS SST           | HZ-155   | 1    |
| 31  | 5/16 - 18 x 2 SHSS SST              | HE7-117  | 2    |

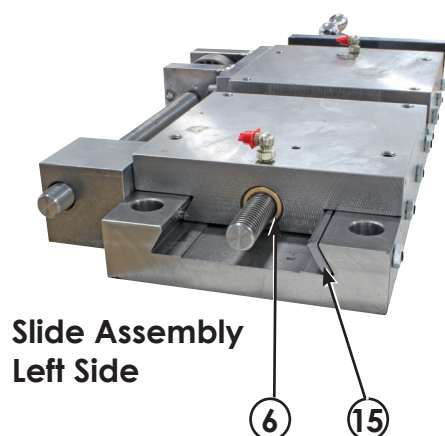
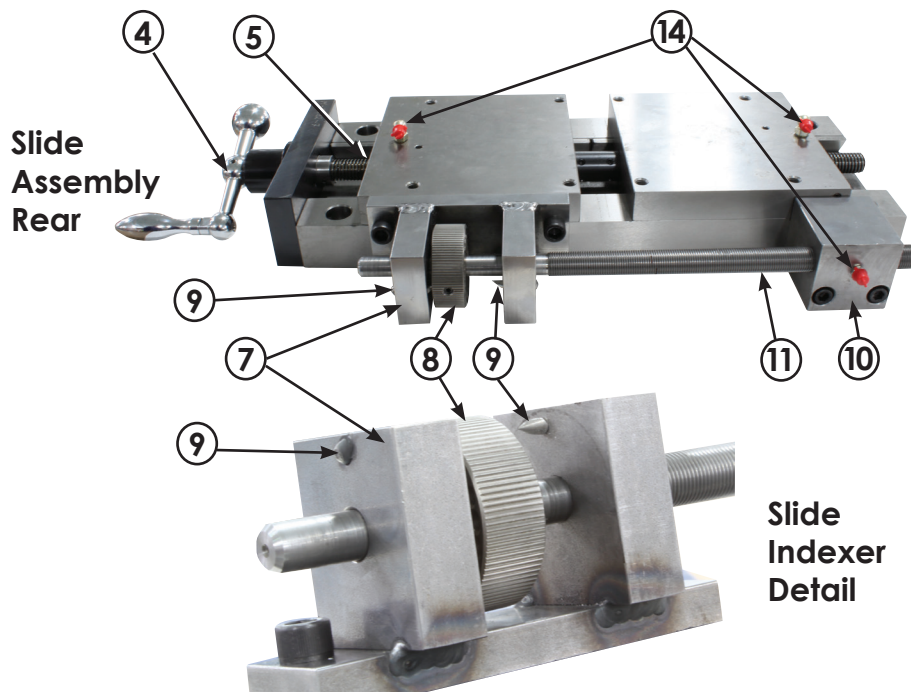
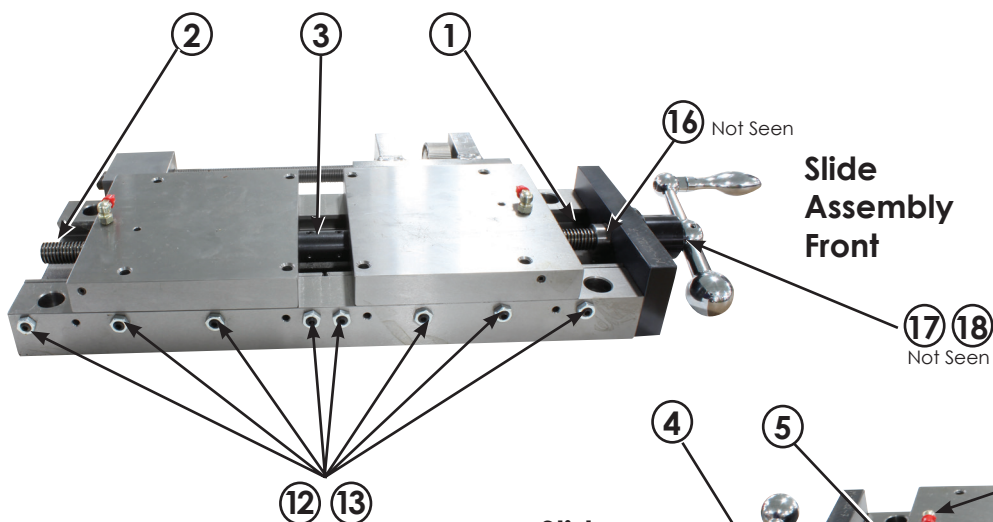
\* Left Side Spindle Uses 3 Paper Blotters-HE7-423

**HE7-9539**  
Dresser Assembly  
Exploded View



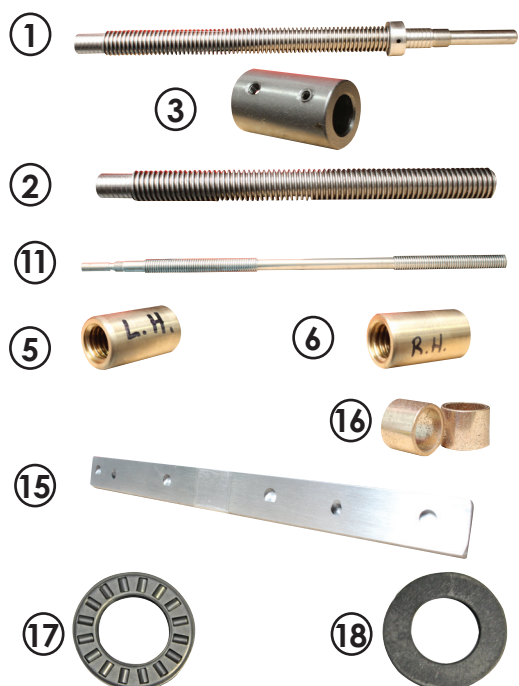
| No. | Description                             | Part No. | Qty.  |
|-----|-----------------------------------------|----------|-------|
| 1   | Adjustment Knob/Dresser                 | HE7-537  | 2     |
| 2   | 10 - 32 x 1/4 SHSS SST                  | HZS-118  | 4     |
| 3   | Thrust Bearing Race                     | HE7-442  | 2     |
| 4   | 5/16 - 18 x 2-1/4 HHCS GR5 Zinc         | HE7-146  | 2     |
| 5   | Diamond Raiser 90° Grease Fitting       | HE7-406  | 1     |
| 6   | Grease Fitting Cap                      | HZ-470   | 1     |
| 7   | 1/4 - 20 x 1/4 SHSS SST                 | HZ-149   | 1     |
| 8   | Thrust Bearing Diamond Raiser           | HE7-441  | 2     |
| 9   | Stainless Screw/Dresser                 | HE7-538  | 2     |
| 10  | Diamond Dresser Wheels / 30 Grit / Pair | HE7-731  | 1 Pr. |
| 11  | Dresser Diamond Holder Weldm.           | HE7-9536 | 1     |
| 12  | 1/4 - 28 x 1 SHCS BL OX                 | HE7-111  | 2     |
| 13  | Bearing Thrust Race Diamond Raiser      | HE7-440  | 4     |
| 14  | 5/16 - 18 x 1 SQHSS                     | HE7-115  | 1     |

## HE7 Slide Assembly Parts List



Slide Indexer Detail

### Parts Detail



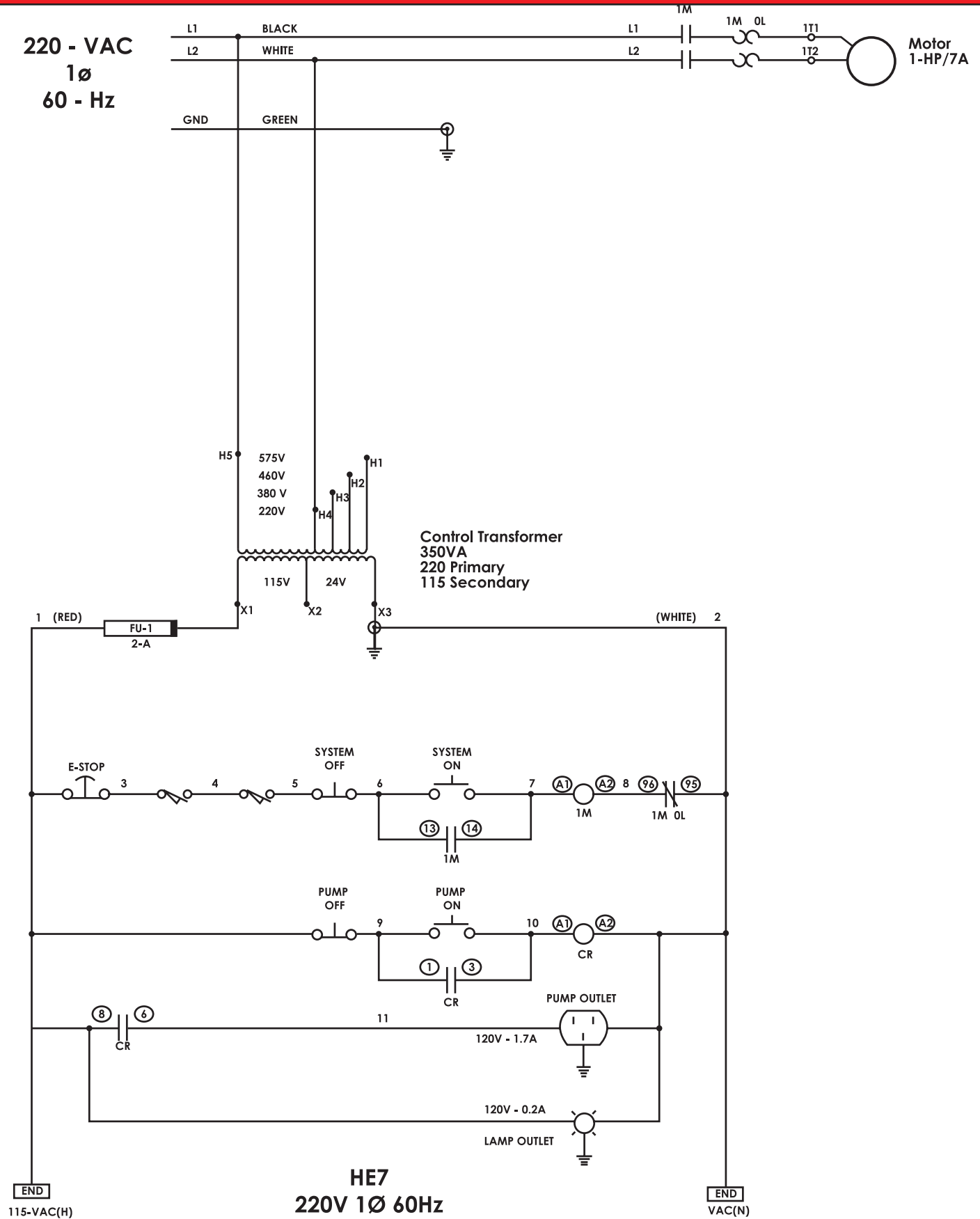
| No. | Description                            | Part No.    | Qty. |
|-----|----------------------------------------|-------------|------|
| 1   | Left Hand Thread Lead Screw            | HE7-424D    | 1    |
| 2   | Right Hand Thread Lead Screw           | HE7-424C    | 1    |
| 3   | Coupling for HE7 Slide                 | HE7-424E    | 1    |
| 4   | Slide Handle                           | HE7-424L    | 1    |
| 5   | Round Brass Bushing Right Hand         | HE7-424A    | 1    |
| 6   | Round Brass Bushing Left Hand          | HE7-424B    | 1    |
| 7   | Indexer Support (Goal Post)            | HE7-524     | 1    |
| 8   | Indexer Wheel                          | HE7-525     | 1    |
| 9   | Index Pin                              | HE7-526     | 2    |
| 10  | Index Block Support                    | HE7-528     | 1    |
| 11  | Threaded Shaft / Indexer               | HE7-527     | 1    |
| 12  | Gib Screw                              | HE7-159     | 8    |
| 13  | Gib Nut                                | HE7-160     | 8    |
| 14  | Grease Fitting                         | HE7-406     | 3    |
| 15  | Gib                                    | HE7-424F-1* | 2    |
| 16  | Bronze Busing for Left Hand Lead Screw | HE7-424R    | 1    |
| 17  | Spline Drive Screw Thrust Washer       | HZ-407      | 1    |
| 18  | Spline Drive Thrust Race               | HZ-408      | 2    |

PRIMEEdge, Inc.

\*HE7-424F-1 replaces old part number HE7-424F  
You must use 2 of part number HE7-424F-1 to  
replace the old style, longer part HE7-424F.

# HE7 Honer/Edger

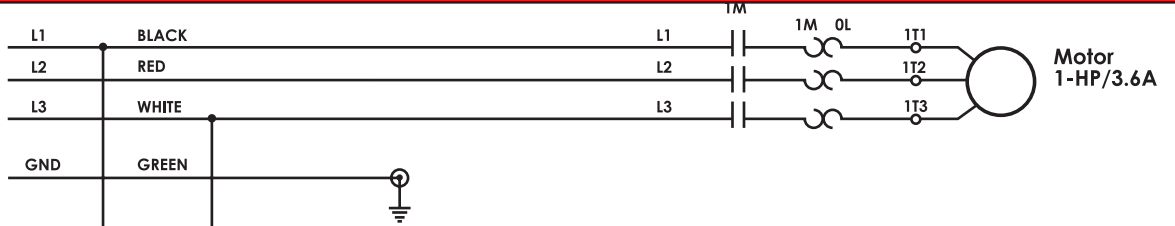
220V 1Ø 60Hz



# HE7 Honer/Edger

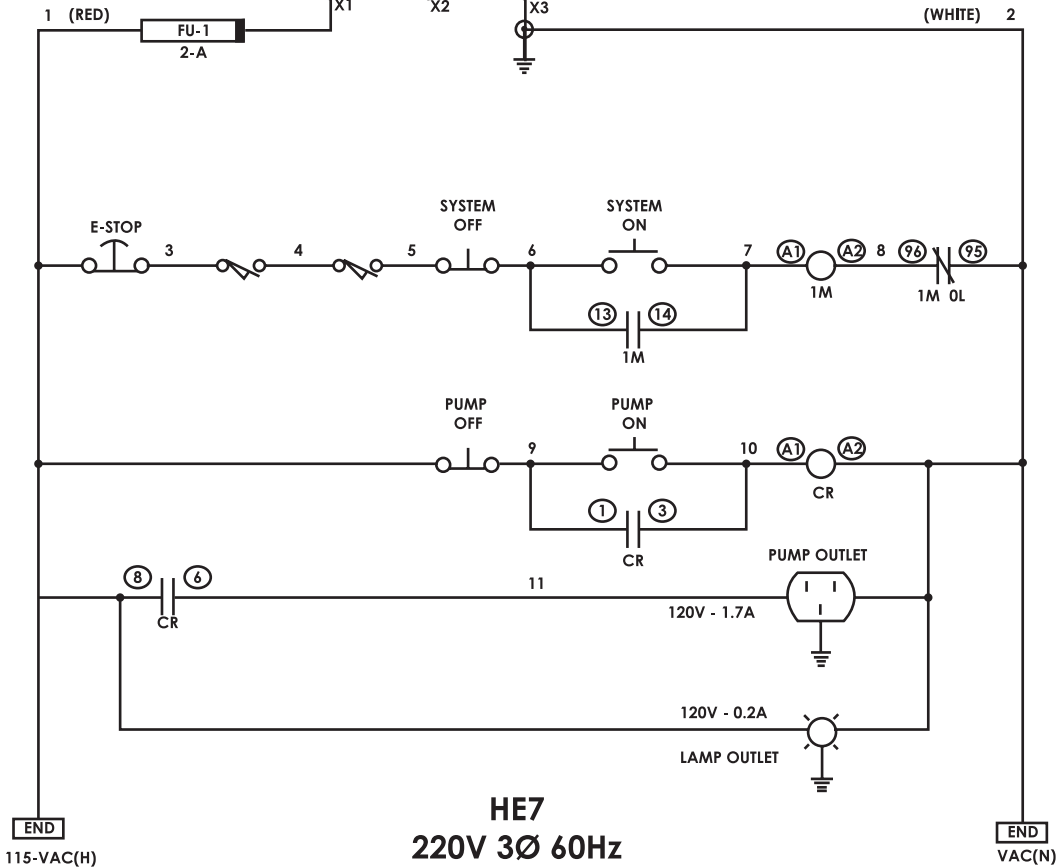
220V 3Ø 60Hz

220 - VAC  
3Ø  
60 - Hz



H5  
575V  
460V  
380 V  
220V

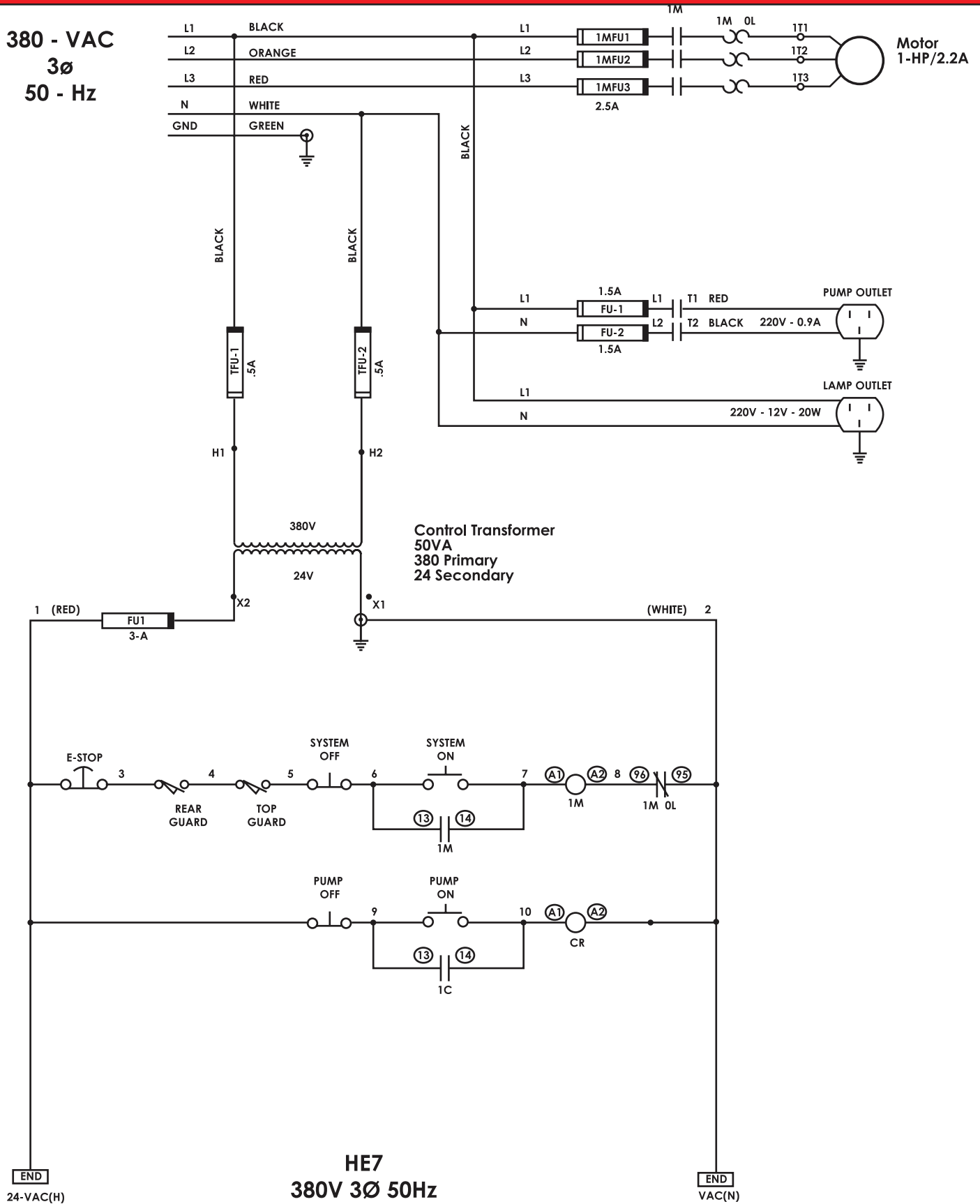
Control Transformer  
350VA  
220 Primary  
115 Secondary



# HE7 Honer/Edger

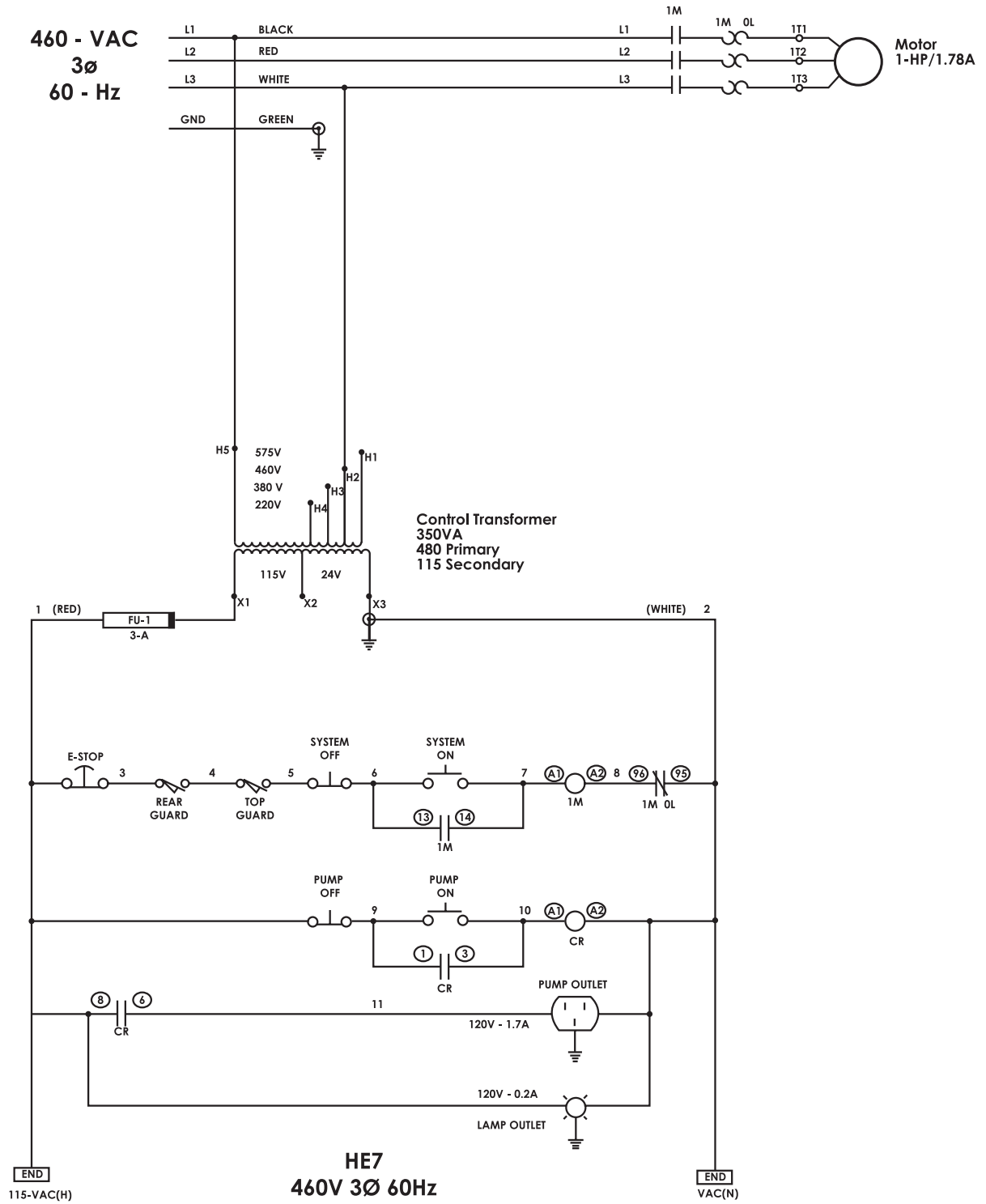
380V 3Ø 50Hz

380 - VAC  
3Ø  
50 - Hz



# HE7 Honer/Edger

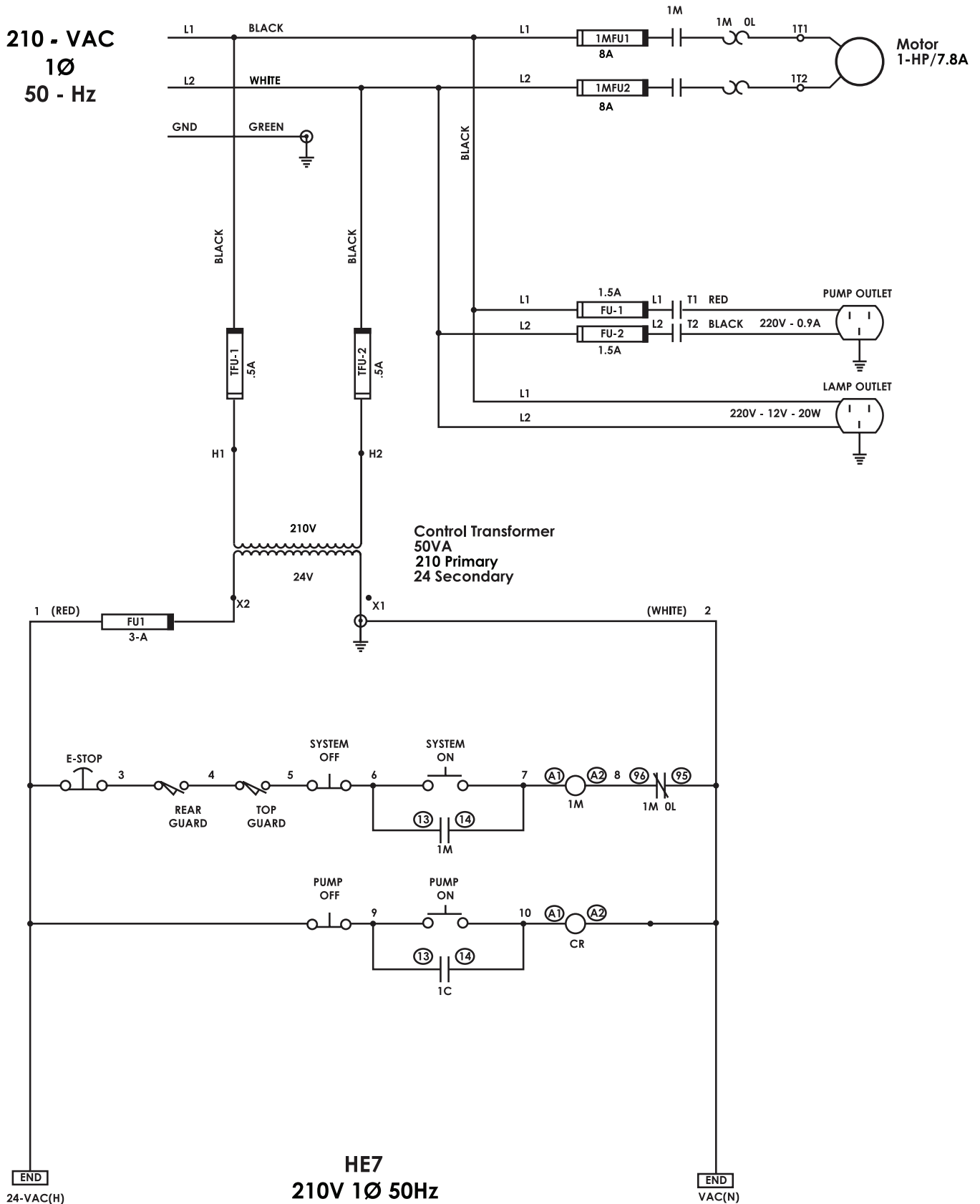
460V 3Ø 60Hz



# HE7 Honer/Edger

210V 1Ø 50Hz

210 - VAC  
1Ø  
50 - Hz

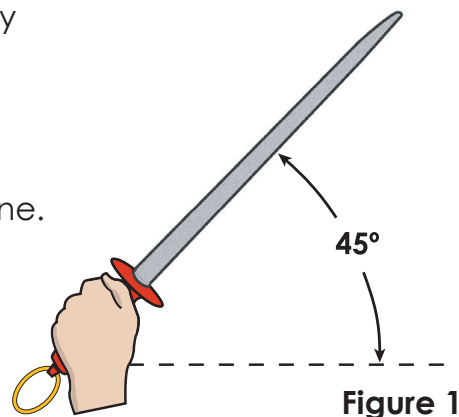


# Proper Technique For Use Of Sharpening Steels

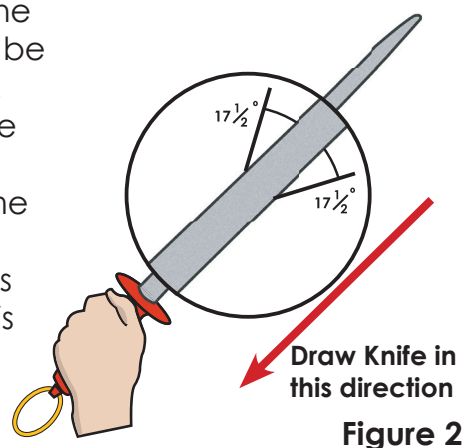
Right-handed people should hold the steel in the left hand and left-handed people should hold it in their right hand.

**Figure 1:** This illustration shows the correct way to safely hold the steel.

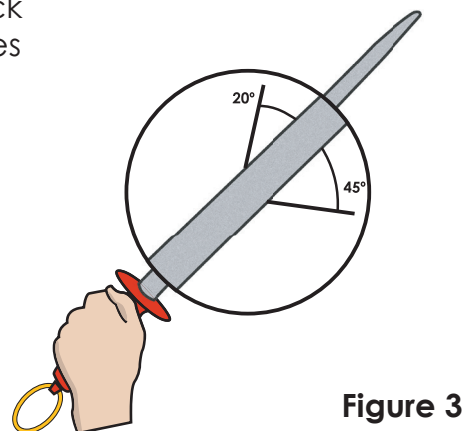
- A. Grip the handle firmly.
- B. Place your thumb on top and behind the guard.
- C. Hold steel at a 45° angle to your waist line.
- D. Your hand should be about waist high.



**Figure 2:** This illustration shows the angle of attack of the knife edge against the steel. The angle must be the same on both sides to produce an even, sharp cutting edge. Draw the knife across the steel, starting at the heel of the knife and ending at the toe, while maintaining the same angle. Repeat on the other side of the knife. Slight pressure must be applied continually as you steel a knife. 2 or 3 strokes on each side is usually sufficient to dress the edge. A 35° angle will be maintained by steeling at 17.5° on each side.



**Figure 3:** This illustration shows different angles of attack of the edge against the steel. Different angles will roll the edge and the knife will drag and feel dull.



**Back Steeling A Rolled Blade:** To back steel, put the point of the sharpening steel against a firm surface at a 90° angle. Pull the blade flat across the sharpening steel, moving in the opposite direction of normal cutting. You will feel resistance if the edge is rolled. Repeat the process on the other side of the knife-edge.

## Proper Technique For Using **PRIME**edge Ergo Steels

Newly hired and inexperienced knife users find steeling a blade on a butcher steel a difficult task to perform.



HES-2  
Ergo Steel II



HES-3  
Ergo Steel III



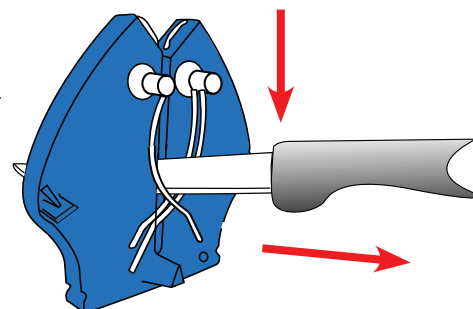
HES-S2  
Ergo Steel Stainless



HES-SB2  
Ergo Steel Stainless

**PRIME**edge has developed a simple-to-use edge maintenance tool, The Ergo Steel. There is no skill required to use the Ergo Steel. The guess work of holding the blade at a specific angle has been eliminated. Both sides of the blade are aligned simultaneously at a perfectly balanced angle.

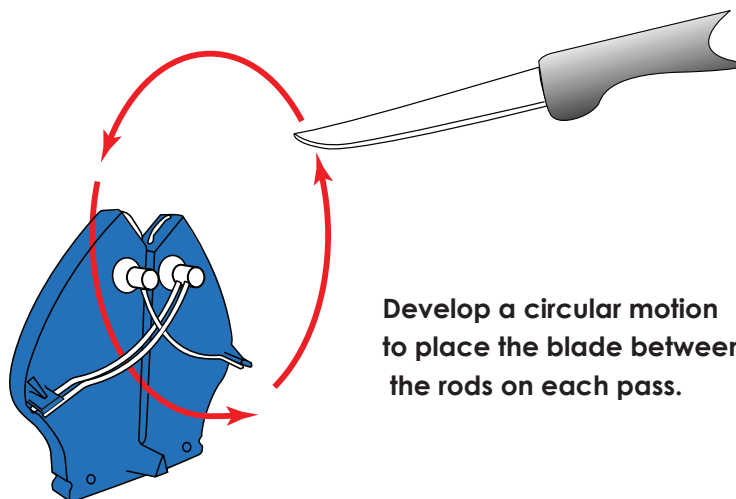
**To straighten a rolled edge:** Place the knife between the sharpening rods and bring the knife all the way down with light pressure until the rods are held against the center stop. Draw the knife between the rods for 2 or 3 passes and you will feel the rough edge become smooth.



**To align the edge:** Make 2 or 3 passes between the sharpening elements using light pressure.

**Do not press the rods fully down to the center stop on every pass,** only the first pass. Develop a circular motion to place the blade between the rods on each pass. Avoid striking the top of the base with the knife-edge.

**The Ergo Steel should be close at hand so it can be used frequently.**



Develop a circular motion  
to place the blade between  
the rods on each pass.

# Recommended HE7 Spare Parts

Model HE7 Honer/Edger

| Qty.  | Part No.   | Description                                                                                           |                                                                                       |
|-------|------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 PR. | HE7-7180N  | HE7 – 180 grit narrow thread edging stone                                                             |    |
|       | HE7-7220N  | HE7 – 220 grit narrow thread edging stone                                                             |                                                                                       |
|       | HE7-7X400N | X400 grit narrow honing stone                                                                         |                                                                                       |
| 1 PR. | HE7-729    | 7" honer guard disc / 6 <sup>3</sup> / <sub>4</sub> " / pair<br><i>To be replaced with new stones</i> |    |
| 1 PR. | HE7-731    | Diamond dresser wheels/300 grit                                                                       |    |
| 1 EA. | HE7-425    | HE7-Honer timing belt<br>(2 needed)                                                                   |   |
| 1 PR. | HE7-435    | HE7 V-belt A32 / standard<br>(1 needed)                                                               |  |
| 1 EA. | X109-1     | 1" x 1" x 6" wheel dresser stick                                                                      |  |
| 1 GA. | HZ-473-C   | 1 case (4 Gallons) of White Sol Coolant                                                               |  |

## PRIMEEdge, Inc.

1281 Arthur Avenue  
Elk Grove Village, IL 60007 U.S.A.  
877-322-EDGE (3343)  
Fax (224) 265-6638  
[www.primedge.com](http://www.primedge.com)  
email: [contact@primedge.com](mailto:contact@primedge.com)

# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |      |                                      |
|-----------------------|--------------------|------|--------------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                          |
| 1                     | HE2-431            | 1    | 16oz. Plastic Coolant Bottle         |
| 2                     | HE7-205            | 1    | Motor Slide Base                     |
| 3                     | HE7-238            | 1    | Front Cover Limit Switch             |
| 4                     | HE7-402            | 3    | Rotation Label                       |
| 5                     | HE7-403            | 2    | Black Rubber Grommet                 |
| 6                     | HE7-410            | 3    | Elbow, 1/4" NPT Street Galvanized.   |
| 7                     | HE7-411            | 1    | Nipple, Close 1/4" NPT Zinc Plated   |
| 8                     | HE7-417            | 5    | Catch                                |
| 9                     | HE7-418            | 5    | Latch                                |
| 10                    | HE7-421            | 1    | Window                               |
| 11                    | HE7-425            | 2    | 7" Honer Timing Belt/Each            |
| 12                    | HE7-435            | 1    | V-Belt A32 / Standard                |
| 13                    | HE7-449            | 1    | T-Handle Hex Key 3/16" x 9" Long     |
| 14                    | HE7-452            | 1    | Offset Hex Alan Wrench 3/8"          |
| 15                    | HE7-456            | 2    | Snubber Foot                         |
| 16                    | HE7-458            | 1    | Coolant Tank/Small                   |
| 17                    | HE7-529            | 1    | Seal Retaining Ring                  |
| 18                    | HE7-547            | 2    | Trunnion Bushing 1-1/2" Long         |
| 19                    | HE7-548            | 1    | Flange Bearing Aluminum Spacer       |
| 20                    | HE7-551            | 4    | Caster Mount Bracket/Stainless Steel |
| 21                    | HE7-553            | 1    | Rear Horizontal Cover Seal           |
| 22                    | HE7-555            | 1    | Dresser Seal                         |



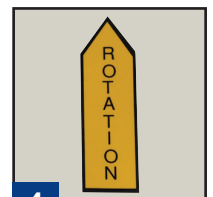
1



2



3



4



5



6



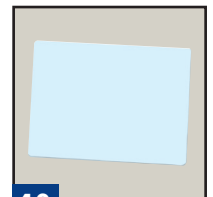
7



8



9



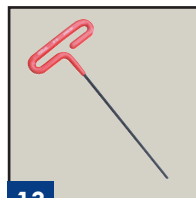
10



11



12



13



14



15



16



17



18



19



20



21



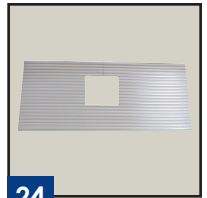
22

# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |        |                                      |
|-----------------------|--------------------|--------|--------------------------------------|
|                       | PRIMEEdge Part No. | Qty.   | Description                          |
| 23                    | HE7-561            | 1      | Angle Pointer - HE7/Pair             |
| 24                    | HE7-562            | 1      | Sink Mat Right Hand                  |
| 25                    | HE7-562A           | 1      | Sink MAT Left Hand                   |
| 26                    | HE7-563            | 1      | Sink Mat                             |
| 27                    | HE7-565            | 1      | Umbrella Limit Switch                |
| 28                    | HE7-568            | 1      | HE7 Coolant Pump Hanger              |
| 29                    | HE7-729            | 1 Pair | 7" Honer Guard Disc Pair             |
| 30                    | HE7-834            | 1      | Limit Switch Activator               |
| 31                    | HE7-9424           | 1      | Reciprocating Slide W/Indexer        |
| 32                    | HE7-9437           | 1      | Bellows Assembly W/Flanges           |
| 33                    | HE7-9502           | 1      | Honer Drive Roller Assembly          |
| 34                    | HE7-9516           | 1      | Spindle Assembly Complete Right Hand |
| 35                    | HE7-9517           | 1      | Spindle Assembly Complete Left Hand  |
| 36                    | HZ-237             | 2      | Front Cover Limit Switch Body        |
| 37                    | HZ-241             | 2      | Limit Switch Receptacle              |
| 38                    | HZ-246R            | 48"    | Extra Flexible Conduit               |
| 39                    | HZ-247             | 2      | Insulating Connector 1/2" 90°        |
| 40                    | HZ-248             | 1      | Insulating Connector 1/2" 45°        |
| 41                    | HZ-249             | 7      | Straight Insulating Connector        |
| 42                    | HZ-250             | 2      | Pulling Elbow 1/2" 90°               |
| 43                    | HZ-252             | 5      | Sealing Ring 1/2"                    |
| 44                    | HZ-256             | 11     | #10 Crimp On Ring Terminal           |



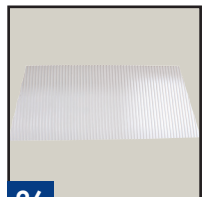
23



24



25



26



27



28



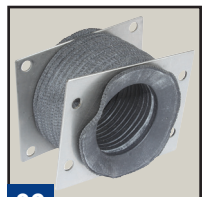
29



30



31



32



33



34



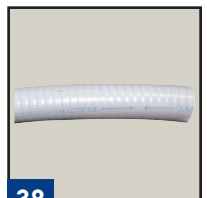
35



36



37



38



39



40



41



42



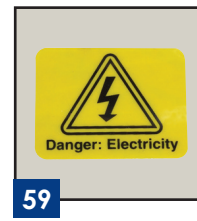
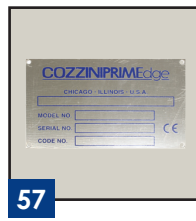
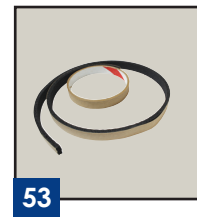
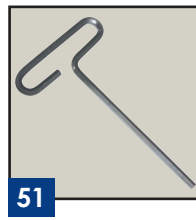
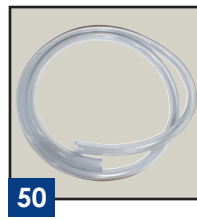
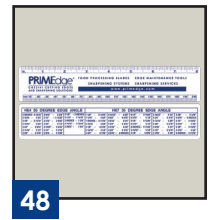
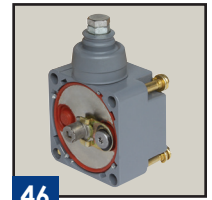
43



44

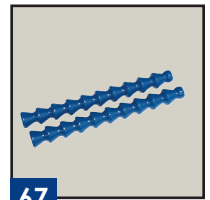
# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |      |                                          |
|-----------------------|--------------------|------|------------------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                              |
| 45                    | HZ-260             | 6    | Orange Wire nut                          |
| 46                    | HZ-285             | 1    | Access Door limit Switch                 |
| 47                    | HZ-415             | 1    | Drive Sprocket SFT. Front Flange Bearing |
| 48                    | HZ-417             | 1    | 8" PRIMEEdge Ruler                       |
| 49                    | HZ-439             | 1    | Grinding Stone Crank W/Handle            |
| 50                    | HZ-442R            | 48"  | Hose, 1/2" ID X 1/8" Wall AMACL          |
| 51                    | HZ-450             | 1    | T-Handle Hex Key 1/4" HW 6" LG           |
| 52                    | HZ-454             | 4    | Caster 3"D 7/16"-14 Stem                 |
| 53                    | HZS-422R           | 35"  | 1/2" X 5/32" Weather Strip Foam/Inch     |
| 54                    | HZ-470             | 3    | Grease Fitting Caps                      |
| 55                    | HZ-474             | 1    | 8oz. Measuring Cup – Plastic             |
| 56                    | HZ-476             | 1    | Caution Label – Eye/Ear Protection       |
| 57                    | HZ-477             | 1    | PRIMEEdge Name plate                     |
| 58                    | HZ-479             | 3    | Caution Label – Guards                   |
| 59                    | HZ-480             | 1    | Label – "Danger Electricity"             |
| 60                    | HZ-480-1           | 2    | Caution Label – "Hand Out Of Machine"    |
| 61                    | HZ-488             | 1    | Ear Plugs/Knife Machines                 |
| 62                    | HZ-489             | 1    | Safety Glasses/1 Pair                    |
| 63                    | HZ-546             | 1    | Lamp Base                                |
| 64                    | HZ-564             | 1    | Coolant Hose Fitting                     |
| 65                    | HZS-413            | 1    | Ball Valve, 1/4" NPT. Brass              |
| 66                    | X109-1             | 1    | 1" x 1" x 6" Wheel Dresser Stick         |



# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |       |                                                                |
|-----------------------|--------------------|-------|----------------------------------------------------------------|
|                       | PRIMEEdge Part No. | Qty.  | Description                                                    |
| 67                    | HZ-400             | 5.75" | Loc. Line Hose Segment / Inches                                |
| 68                    | HSR-411            | 1     | Spray Nozzle                                                   |
| 69                    | HZ-430             | 1     | 1/4" NPT Male Loc Line                                         |
| 70                    | HZS-157            | 10    | 1/8" Dia. x 1/4" Lng Aluminum Rivet                            |
| 71                    | HE7-9539           | 1     | Dresser Diamond Wheel Raiser Assembly                          |
| 72                    | HE7-9540           | 1     | Dresser Spline Assembly/Complete                               |
| 73                    | HE7-MANUAL         | 1     | Manual                                                         |
| 74                    | HV-LGMOM-DVD       | 1     | Large Sharpening System Video – DVD                            |
| 75                    | HV-LGMOM-FD        | 1     | Large Sharpening System Video – Flash Drive                    |
| 76                    | 02-007-0020        | 1     | Contactors 1/3-5HP NonRev 110V/50Hz – 120V/60Hz OR...          |
| 77                    | 02-007-0038        | 1     | Contactors 1/3-5HP NonRev 24V 50/60Hz                          |
| 78                    | 02-008-0253        | 1     | Overload Relay 193-ED 3.2-16 Amp (for 220V Single Phase) OR... |
| 79                    | 02-008-0252        | 1     | Overload Relay 193-ED 1.0-5.0 Amps (for 3 Phase Electrical)    |
| 80                    | HE7-287            | 1     | Electrical Enclosure                                           |
| 81                    | 02-015-0349        | 1     | Terminal Block End Cap                                         |
| 82                    | HZ-228             | 1     | Cord grip Enclosure                                            |
| 83                    | HZ-230R            | 1     | Power Cord 14-3 SO 1 Phase (Single phase models only)          |
| 84                    | HZ-261R            | 192"  | Stranded Machine Wire Black 14 ga.                             |
| 85                    | HZ-262R            | 20"   | Stranded Machine Wire White 14 ga.                             |
| 86                    | HZ-263R            | 110"  | Stranded Machine Wire Green 14 ga.                             |
| 87                    | HZ-265R            | 408"  | Stranded Machine Wire Red 14 ga.                               |
| 88                    | HZ-272             | 3     | N.C. Contact Block                                             |



67



68



69



70



71



72



73



74



75



76



77



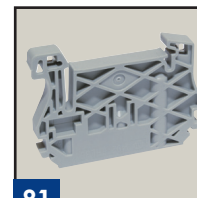
78



79



80



81



82



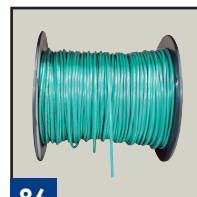
83



84



85



86



87



88

# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |      |                                   |
|-----------------------|--------------------|------|-----------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                       |
| 89                    | HZ-273             | 2    | N.C. Contact Block                |
| 90                    | HZ-274             | 2    | Red Extended Push Button 22 mm    |
| 91                    | HZ-275             | 2    | Green Flush Push Button 22 mm     |
| 92                    | HZ-276             | 1    | Red Mushroom Push Button 50 mm    |
| 93                    | HZ-277             | 1    | Yellow Legend Plate               |
| 94                    | HZ-278             | 1    | Legend Plate "SYSTEM ON"          |
| 95                    | HZ-278-2           | 1    | Legend Plate "LAMP"               |
| 96                    | HZ-278-3           | 1    | Legend Plate "PUMP"               |
| 97                    | HZ-279             | 1    | Legend Plate "SYSTEM OFF"         |
| 98                    | 02-018-0300        | 1    | XF 240/400/460/575 - 115/24 250VA |
| 99                    | HZ-289             | 2    | 120V 15 Amp Single Receptacle     |
| 100                   | HZ-295             | 2    | 2 Amp Quick Blow Fuse             |
| 101                   | HZ-299             | 12   | Spade Terminal                    |
| 102                   | HZ-501             | 1    | Din Rail 8" Long                  |
| 103                   | HZ-282             | 1    | Legend Plate, White, "PUMP ON"    |
| 104                   | HZ-283             | 1    | Legend Plate, White, "PUMP OFF"   |
| 105                   | 02-006-0011        | 1    | Relay, DPDT 120VAC , w/PL, 8 Pin  |
| 106                   | 02-006-0020        | 1    | Relay, Socket 8 Pin, Type HA      |
| 107                   | HZ-297             | 1    | Terminal Fuse Block 300V          |
| 108                   | HZ-298             | 1    | End Barrier-Fuse Block            |
| 109                   | HZ-443             | 1    | Pump/Coolant 115V                 |
| 110                   | HZ-445             | 1    | Lamp 60Hz Machines                |



89



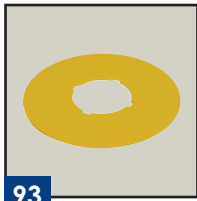
90



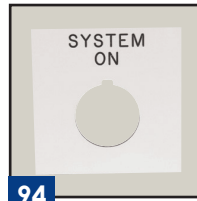
91



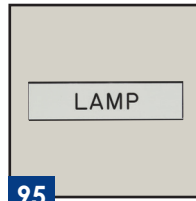
92



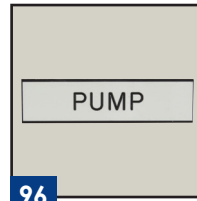
93



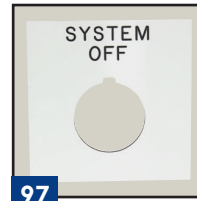
94



95



96



97



98



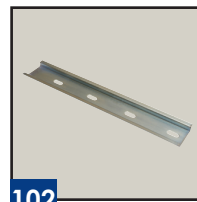
99



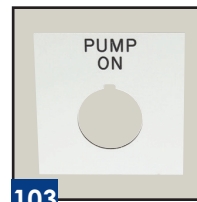
100



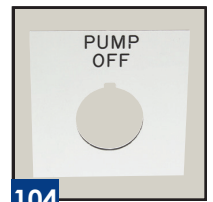
101



102



103



104



105



106



107



108



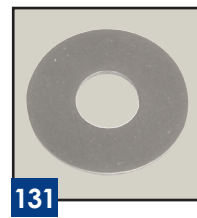
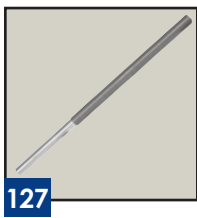
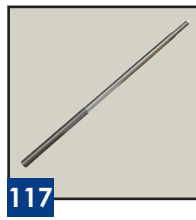
109



110

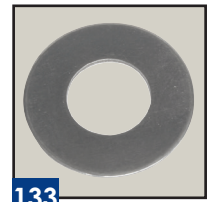
# PRIMEEdge HE7 Master Parts List

| HE7 Master Parts List |                    |      |                                    |
|-----------------------|--------------------|------|------------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                        |
| 111                   | HE7-445            | 1    | Motor Pulley                       |
| 112                   | HE7-9210           | 1    | 220V 1Phase Electrical Assembly    |
| 113                   | HE7-201            | 1    | Motor 1HP 1Phase 115/230V 60Hz.    |
| 114                   | HE7-566R           | 1    | Fiberglass Main Cover, Raw         |
| 115                   | HE7-567R           | 1    | Fiberglass Stone Cover, Raw        |
| 116                   | HE7-401            | 1    | Dresser Screw Grease Fitting       |
| 117                   | HE7-531            | 1    | Dresser Spline Drive Screw         |
| 118                   | HE7-504            | 1    | Male Spline Assembly               |
| 119                   | HE7-530            | 1    | Cap for Spline Dresser             |
| 120                   | HE7-549            | 1    | Dresser Spline Sleeve              |
| 121                   | HE7-534            | 1    | Female Spline Weld Cap / Dresser   |
| 122                   | HE7-540            | 1    | Female Dresser Spline              |
| 123                   | HE7-550            | 1    | Dresser Spline Bracket             |
| 124                   | HE7-524            | 1    | Indexer Support (Goal Posts)       |
| 125                   | HE7-525            | 1    | Indexer Wheel                      |
| 126                   | HE7-526            | 1    | Indexer Pin                        |
| 127                   | HE7-527            | 1    | Threaded Shaft, Indexer            |
| 128                   | HE7-528            | 1    | Indexer Block Support              |
| 129                   | HZ-469             | 1    | Slide Grease Fitting               |
| 130                   | HE7-406            | 1    | Diamond Raiser 90° Grease Fitting  |
| 131                   | HE7-440            | 4    | Bearing Thrust Race Diamond Raiser |
| 132                   | HE7-441            | 2    | Thrust Bearing, Diamond Raiser     |



# PRIMEEdge HE7 Master Parts List

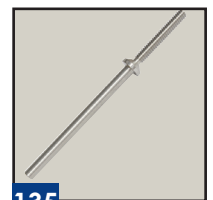
| HE7 Master Parts List |                    |      |                                                   |
|-----------------------|--------------------|------|---------------------------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                                       |
| 133                   | HE7-442            | 2    | Thrust Bearing Race                               |
| 134                   | HE7-537            | 2    | Adjustment Knob, Dresser                          |
| 135                   | HE7-538            | 2    | Stainless Screw/Dresser                           |
| 136                   | HE7-731            | 1    | Diamond Dresser Wheel/30 Grit/Pair                |
| 137                   | HE7-9536           | 1    | Dresser Diamond Holder - Weldment                 |
| 138                   | HE7-428            | 2    | Drive Roller pillow Bearing 1"                    |
| 139                   | HE7-429            | 1    | Drive Roller Pulley                               |
| 140                   | HE7-502            | 1    | Honer-Drive Roller 1/2 p 18 Teeth                 |
| 141                   | HE7-523            | 1    | Guard/Drive Roller                                |
| 142                   | HE7-9518 LH        | 1    | Spindle Splash Guard Assembly/Complete Left Hand  |
| 143                   | HE7-9518 RH        |      | Spindle Splash Guard Assembly/Complete Right Hand |
| 144                   | HE7-518            | 1    | Spindle Splash Guard                              |
| 145                   | HE7-554            | 1    | Spindle Splash Guard Seal                         |
| 146                   | HE7-9437           | 1    | Bellows Assembly w/Flanges/Complete               |
| 147                   | HE7-437            | 1    | Bellows 2-3/8" OD x 1-1/2" ID x 8"                |
| 148                   | HE7-532            | 1    | Rear Retainer Bellows                             |
| 149                   | HE7-533            | 1    | Front Retainer Bellows                            |
| 150                   | HE7-427            | 2    | Spindle Bearing                                   |
| 151                   | HE7-501            | 1    | Timing Belt Pulley                                |
| 152                   | HE7-508            | 1    | Front Retaining Flange/Spiral Wheel               |
| 153                   | HE7-510            | 1    | Spacing Disc, 3-3/4" OD x 2-1/2" ID               |
| 154                   | HE7-512            | 1    | Mounting Hub w/Timing Lock-RT                     |



133



134



135



136



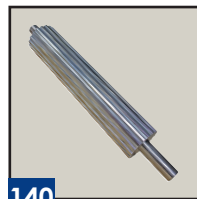
137



138



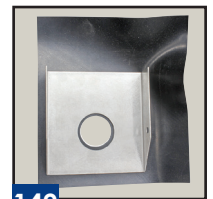
139



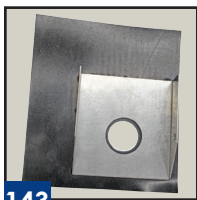
140



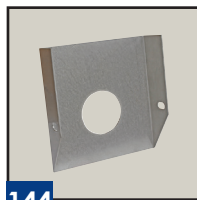
141



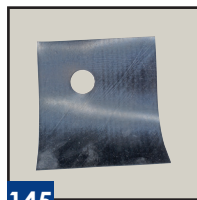
142



143



144



145



146



147



148



149



150



151



152



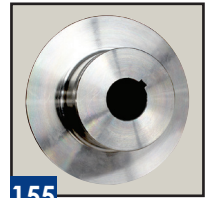
153



154

# PRIMEEdge HE7 Master Parts List

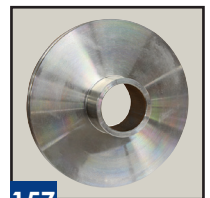
| HE7 Master Parts List |                    |      |                                           |
|-----------------------|--------------------|------|-------------------------------------------|
|                       | PRIMEEdge Part No. | Qty. | Description                               |
| 155                   | HE7-515            | 1    | Rear Right Flange/Timing Lock             |
| 156                   | HE7-516            | 1    | Right Spindle Shaft / LH Thread           |
| 157                   | HE7-519            | 1    | Spindle Slinger Cover                     |
| 158                   | HE7-520            | 1    | Spindle Mounting Plate                    |
| 159                   | HE7-521            | 1    | Spindle Housing                           |
| 160                   | HE7-522            | 1    | Rear Spindle Cover                        |
| 161                   | HE7-542            | 1    | Rear Spindle Spacer Bushing               |
| 162                   | HE7-9513           | 1    | Timing Lock Disc Assembly                 |
| 163                   | HE7-133            | 1    | 1/4" x 2-1/2" Square Key                  |
| 164                   | HE7-131            | 1    | 3/16" x 3/4" Woodruff Key                 |
| 165                   | HE7-132            | 1    | 1/4" x 1" Woodruff Key                    |
| 166                   | HE7-136            | 1    | 3/16" diameter x 1-1/2" Roll Pin          |
| 167                   | HE7-115            | 1    | 5/16" x 1" Square Head Bolt – Black Oxide |
| 168                   | HE7-112            | 2    | 5/16" – 18 x 3/8" shss Black Oxide        |
| 169                   | HE7-117            | 2    | 5/16" – 18 x 2" shss Stainless            |
| 170                   | HZS-118            | 1    | 10-32 x 1/4" shss Stainless               |
| 171                   | HZ-149             | 1    | 1/4" – 20 x 1/4" shss Stainless           |
| 172                   | HE7-466            | 2    | Hinge, rear door                          |



155



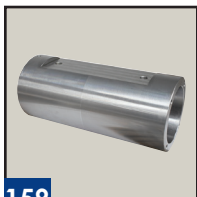
156



157



158



159



160



161



162



163



164



165



166



167



168



169



170



171



172

# PRIMEEdge HE7 Accessories Shipped with the HE7

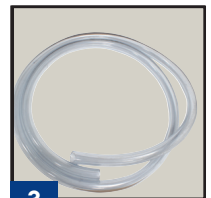
| HE7 Accessories Shipped with Unit |                    |       |                                                |
|-----------------------------------|--------------------|-------|------------------------------------------------|
|                                   | PRIMEEdge Part No. | Qty.  | Description                                    |
| 1                                 | HE7-561            | 1-Pr. | Angle Pointers (Pair)                          |
| 2                                 | HZ-445             | 1     | Lamp w/Plug 60Hz Machines                      |
| 3                                 | HZ-442R            | 48"   | Hose, 1/2" ID x 1/8" Wall                      |
| 4                                 | HZ-443             | 1     | Coolant Pump, 115V 60Hz                        |
| 5                                 | HE7-568            | 1     | Coolant Pump Hanger                            |
| 6                                 | HZ-454             | 4     | Caster, 3" Swivel                              |
| 7                                 | HZ-474             | 1     | Measuring Cup, 8oz. Plastic                    |
| 8                                 | HZ-450             | 1     | Hex Key, T-Handle, 1/4" HW 6" LG               |
| 9                                 | HE7-449            | 1     | Hex Key, T-Handle, 3/16" 9" LG                 |
| 10                                | HE2-431            | 1     | Coolant Bottle, 16oz. Plastic, w/Coolant Fluid |
| 11                                | HZ-488             | 1     | Ear Plugs                                      |
| 12                                | HZ-489             | 1     | Safety Glasses                                 |
| 13                                | HZ-417             | 1     | Ruler, 8" PRIMEEdge                            |
| 14                                | X109-1             | 1     | Wheel Dresser Stick, 1" x 1" x 6"              |
| 15                                | HE7-452            | 1     | Allen Wrench, Offset, 3/8"                     |
| 16                                | HE7-Manual         | 1     | Operation & Maintenance Manual                 |
| 17                                | HV-LGMOM-DVD       | 1     | Operation & Maintenance Video DVD              |
| 18                                | HV-LGMOM-FD        | 1     | Operation & Maintenance Video Flash Drive      |



1



2



3



4



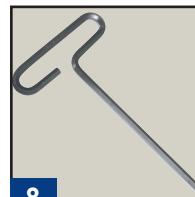
5



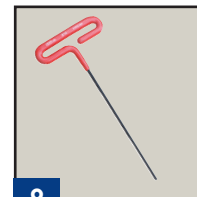
6



7



8



9



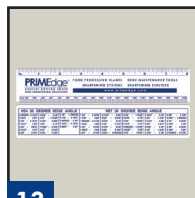
10



11



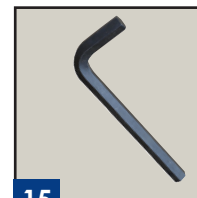
12



13



14



15



16



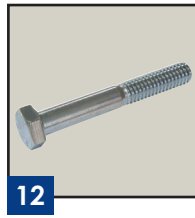
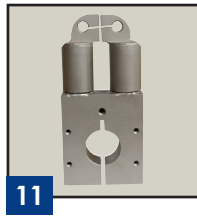
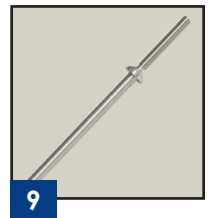
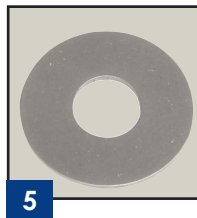
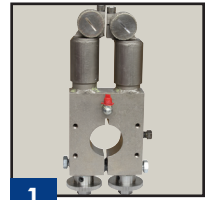
17



18

# PRIMEEdge HE7 Diamond Dresser Wheel Raiser Assembly

| Dresser Parts |                    |      |                                       |
|---------------|--------------------|------|---------------------------------------|
|               | PRIMEEdge Part No. | Qty. | Description                           |
| 1             | HE7-9539           | 1    | HE7 Diamond Dresser Assembly Complete |
| 2             | HE7-111            | 2    | 1/4"-28 shcs Stainless                |
| 3             | HE7-115            | 1    | 5/16"-18 x 1" sqhss                   |
| 4             | HE7-406            | 1    | Diamond Raiser 90° Grease Fitting     |
| 5             | HE7-440            | 4    | Bearing, Thrust Race, Diamond Dresser |
| 6             | HE7-441            | 2    | Thrust Bearing, Diamond Raiser        |
| 7             | HE7-442            | 2    | Thrust Bearing Race                   |
| 8             | HE7-537            | 2    | Adjustment Knob, Dresser              |
| 9             | HE7-538            | 2    | Stainless Screw, Dresser              |
| 10            | HE7-731            | 1    | Diamond Dresser Wheels/30 Grit/Pair   |
| 11            | HE7-9536           | 1    | Dresser Diamond Holder Weldment       |
| 12            | HZ-146             | 2    | 5/16"-18 x 2-1/4" hhcs gr.5 Zinc      |
| 13            | HZ-149             | 1    | 1/4"-20 x 1/4" shss Stainless         |
| 14            | HZ-470             | 1    | Grease Fitting Cap                    |
| 15            | HZS-118            | 1    | 10-32 x 1/4" shss Stainless           |



# PRIMEEdge HG6CU Electrical Parts

| Electrical Parts                                                                               |                    |      |                                           |
|------------------------------------------------------------------------------------------------|--------------------|------|-------------------------------------------|
|                                                                                                | PRIMEEdge Part No. | Qty. | Description                               |
| The Following Parts Are Included On Machines Ordered With 220V - 1Ph - 60Hz Electrical Systems |                    |      |                                           |
| 1                                                                                              | HZ-443             | 1    | Coolant Pump 115V                         |
| 2                                                                                              | HZ-445             | 1    | Lamp, 60HZ Machines                       |
| 3                                                                                              | HE7-201            | 1    | Motor 1HP, 1PH, 115/230V, 60HZ            |
| 4                                                                                              | HE7-9210           | 1    | 220V 1PH Electrical Assembly, Domestic    |
| 5                                                                                              | HE7-445            | 1    | Motor Pulley                              |
| The Following Parts Are Included On Machines Ordered With 220V - 3Ph - 60Hz Electrical Systems |                    |      |                                           |
| 6                                                                                              | HZ-443             | 1    | Coolant Pump 115V                         |
| 7                                                                                              | HZ-445             | 1    | Lamp, 60HZ Machines                       |
| 8                                                                                              | HE7-202            | 1    | Motor 1HP, 3PH, 230/460V, 50/60HZ         |
| 9                                                                                              | HE7-9211           | 1    | 220V 3PH Electrical Assembly, Domestic    |
| 10                                                                                             | HE7-445            | 1    | Motor Pulley                              |
| The Following Parts Are Included On Machines Ordered With 380V - 3Ph - 50Hz Electrical Systems |                    |      |                                           |
| 11                                                                                             | HZ-444             | 1    | Coolant Pump 220V                         |
| 12                                                                                             | HZ-446R            | 1    | Lamp, 220V/50HZ Machines                  |
| 13                                                                                             | HE7-202            | 1    | Motor 1HP, 3PH, 230/460V, 50/60HZ         |
| 14                                                                                             | HE7-9212           | 1    | 220V/380V 3PH Electrical Assembly, Europe |
| 15                                                                                             | HE7-443            | 1    | Motor Pulley, Europe                      |
| 16                                                                                             | HE7-444            | 1    | Motor Pulley Bushing, Europe              |
| The Following Parts Are Included On Machines Ordered With 440V - 3Ph - 60Hz Electrical Systems |                    |      |                                           |
| 17                                                                                             | HZ-443             | 1    | Coolant Pump                              |
| 18                                                                                             | HZ-445             | 1    | Lamp, 60HZ Machines                       |
| 19                                                                                             | HE7-202            | 1    | Motor 1HP, 3PH, 230/460V, 50/60HZ         |
| 20                                                                                             | HE7-9214           | 1    | 460V 3PH, Electrical Assembly, Domestic   |
| 21                                                                                             | HE7-445            | 1    | Motor Pulley                              |

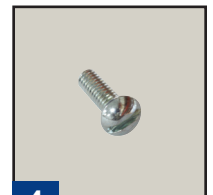


| HE7-9210 220V - 60Hz - 1 PH, Electrical Assembly |                    |         |                                    |
|--------------------------------------------------|--------------------|---------|------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty.    | Description                        |
| 1                                                | 02-007-0020        | 2       | Contactor 1/3-5HP Non Rev 120V     |
| 2                                                | 02-008-0253        | 1       | Overload Relay 193-ED 3.2-16 amp   |
| 3                                                | HE7-155            | 4       | 8-32 Hex Nut Zinc Plt.             |
| 4                                                | HE7-156            | 4       | 8-32 X 1/2 RHMS Slot Zinc Plt.     |
| 5                                                | HE7-157            | 4       | #8 Lock Washer Zinc Plt.           |
| 6                                                | HE7-287            | 1       | HE7 Electrical Enclosure           |
| 7                                                | HZ-101             | 7       | 10-32 x 1/4" rhms Stainless        |
| 8                                                | 02-015-0349        | 1       | Terminal Block End Cap             |
| 9                                                | HZ-228             | 1       | Cord Grip Enclosure, Single Phase  |
| 10                                               | HZ-230R            | 144 In. | Power Cord 1Ø                      |
| 11                                               | HZ-256             | 6       | #10 Crimp On Ring Terminal         |
| 12                                               | HZ-261R            | 636 IN. | Stranded Machine Wire Black 14 GA. |
| 13                                               | HZ-262R            | 10 IN.  | Stranded Machine Wire White 14 GA. |
| 14                                               | HZ-263R            | 120 IN. | Stranded Machine Wire Green 14 GA. |
| 15                                               | HZ-265R            | 264 IN. | Stranded Machine Wire Red          |
| 16                                               | HZ-272             | 3       | N.C. Contact Block                 |
| 17                                               | HZ-273             | 2       | N.O. CONTACT BLOCK                 |
| 18                                               | HZ-274             | 2       | Red Extended Push Button 25MM      |
| 19                                               | HZ-275             | 2       | Green Flush Push Button 25MM       |
| 20                                               | HZ-276             | 1       | Mushroom Push Button 50MM Red      |
| 21                                               | HZ-277             | 1       | Yellow Legend Plate                |
| 22                                               | HZ-278             | 1       | Legend Plate "SYSTEM ON"           |
| 23                                               | HZ-278-2           | 1       | Legend Plate "LAMP"                |
| 24                                               | HZ-278-3           | 1       | Legend Plate "PUMP"                |

For  
220V 60Hz 1PH  
U.S.  
Electrical  
Requirements

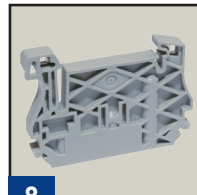

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

**10**

**11**

**12**

**13**

**14**

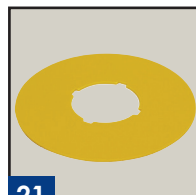
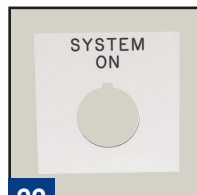
**15**

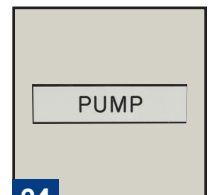
**16**

**17**

**18**

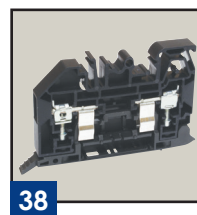
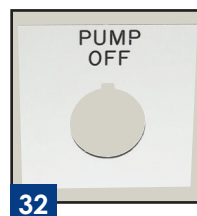
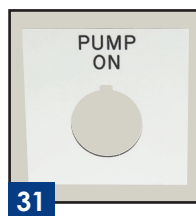
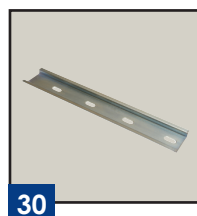
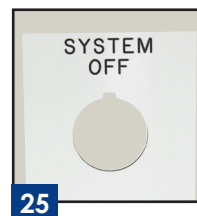
**19**

**20**

**21**

**22**

**23**

**24**

| HE7-9210 220V - 60Hz - 1 PH, Electrical Assembly |                    |      |                                   |
|--------------------------------------------------|--------------------|------|-----------------------------------|
|                                                  | PRIMEEdge Part No. | Qty. | Description                       |
| 25                                               | HZ-279             | 1    | Legend Plate "SYSTEM OFF"         |
| 26                                               | 02-018-0300        | 1    | XF 240/400/460/575 - 115/24 250VA |
| 27                                               | HZ-289             | 2    | 120V Single Receptacle            |
| 28                                               | HZ-295             | 2    | 2 Amp Quick Blow fuse             |
| 29                                               | HZ-299             | 12   | 120V #10 Spade Terminal           |
| 30                                               | HZ-501             | 1    | DIN Rail 8" Long                  |
| 31                                               | HZ-282             | 1    | Legend Plate "PUMP ON"            |
| 32                                               | HZ-283             | 1    | Legend Plate "PUMP OFF"           |
| 33                                               | 02-006-0011        | 1    | Relay, DPDT 120V AC w/PL, 8 Pin   |
| 34                                               | 02-006-0020        | 1    | Relay, Socket 8 Pin, Type HA      |
| 35                                               | HE7-104            | 4    | 10-32 x 1/2" rhms Stainless       |
| 36                                               | HZ-129             | 4    | #10 Flat Washer Zinc              |
| 37                                               | HZ-134             | 4    | #10 Lock Washer Zinc              |
| 38                                               | HZ-297             | 1    | Terminal/Fuse Block 330V          |
| 39                                               | HZ-298             | 1    | End Barrier-Fuse Block            |

For  
220V 60Hz 1PH  
U.S.  
Electrical  
Requirements



| HE7-9211 220V - 60Hz - 3 PH, Electrical Assembly |                    |         |                                    |
|--------------------------------------------------|--------------------|---------|------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty.    | Description                        |
| 1                                                | 02-007-0020        | 2       | Contactor 1/3-5HP Non Rev 120V     |
| 2                                                | 02-008-0252        | 1       | Overload Relay 193-ED 1.0-5.0 amp  |
| 3                                                | HE7-155            | 4       | 8-32 Hex Nut Zinc Plt.             |
| 4                                                | HE7-156            | 4       | 8-32 X 1/2 RHMS Slot Zinc Plt.     |
| 5                                                | HE7-157            | 4       | #8 Lock Washer Zinc Plt.           |
| 6                                                | HE7-287            | 1       | HE7 Electrical Enclosure           |
| 7                                                | HZ-101             | 7       | 10-32 x 1/4" rhms Stainless        |
| 8                                                | 02-015-0349        | 1       | Terminal Block End Cap             |
| 9                                                | HZ-229             | 1       | Cord Grip Enclosure, Three Phase   |
| 10                                               | HZ-231R            | 144 IN. | Power Cord 3Ø                      |
| 11                                               | HZ-256             | 6       | #10 Crimp On Ring Terminal         |
| 12                                               | HZ-261R            | 636 IN. | Stranded Machine Wire Black 14 GA. |
| 13                                               | HZ-262R            | 10 IN.  | Stranded Machine Wire White 14 GA. |
| 14                                               | HZ-263R            | 120 IN. | Stranded Machine Wire Green 14 GA. |
| 15                                               | HZ-265R            | 264 IN. | Stranded Machine Wire Red          |
| 16                                               | HZ-272             | 3       | N.C. Contact Block                 |
| 17                                               | HZ-273             | 2       | N.O. CONTACT BLOCK                 |
| 18                                               | HZ-274             | 2       | Red Extended Push Button 25MM      |
| 19                                               | HZ-275             | 2       | Green Flush Push Button 25MM       |
| 20                                               | HZ-276             | 1       | Mushroom Push Button 50MM Red      |
| 21                                               | HZ-277             | 1       | Yellow Legend Plate                |
| 22                                               | HZ-278             | 1       | Legend Plate "SYSTEM ON"           |
| 23                                               | HZ-278-2           | 1       | Legend Plate "LAMP"                |
| 24                                               | HZ-278-3           | 1       | Legend Plate "PUMP"                |

For  
220V 60Hz 3PH  
U.S.  
Electrical  
Requirements



1



2



2



4



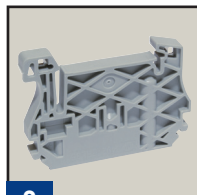
5



6



7



8



9



10



11



12



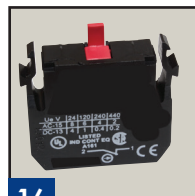
13



14



15



16



17



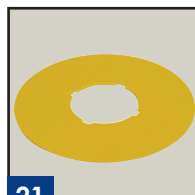
18



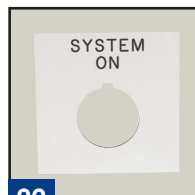
19



20



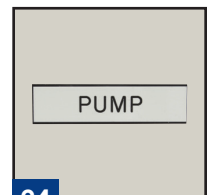
21



22



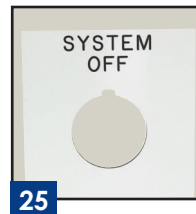
23



24

| HE7-9211 220V - 60Hz - 3 PH, Electrical Assembly |                    |      |                                   |
|--------------------------------------------------|--------------------|------|-----------------------------------|
|                                                  | PRIMEEdge Part No. | Qty. | Description                       |
| 25                                               | HZ-279             | 1    | Legend Plate "SYSTEM OFF"         |
| 26                                               | 02-018-0300        | 1    | XF 240/400/460/575 - 115/24 250VA |
| 27                                               | HZ-289             | 2    | 120V Single Receptacle            |
| 28                                               | HZ-295             | 2    | 2 Amp Quick Blow fuse             |
| 29                                               | HZ-299             | 12   | 120V #10 Spade Terminal           |
| 30                                               | HZ-501             | 1    | DIN Rail 8" Long                  |
| 31                                               | HZ-282             | 1    | Legend Plate "PUMP ON"            |
| 32                                               | HZ-283             | 1    | Legend Plate "PUMP OFF"           |
| 33                                               | 02-006-0011        | 1    | Relay, DPDT 120V AC w/PL, 8 Pin   |
| 34                                               | 02-006-0020        | 1    | Relay, Socket 8 Pin, Type HA      |
| 35                                               | HE7-104            | 4    | 10-32 x 1/2" rhms Stainless       |
| 36                                               | HZ-129             | 4    | #10 Flat Washer Zinc              |
| 37                                               | HZ-134             | 4    | #10 Lock Washer Zinc              |
| 38                                               | HZ-297             | 1    | Terminal/Fuse Block 330V          |
| 39                                               | HZ-298             | 1    | End Barrier-Fuse Block            |

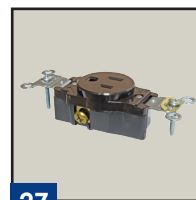
For  
220V 60Hz 3PH  
U.S.  
Electrical  
Requirements



25



26



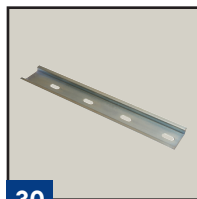
27



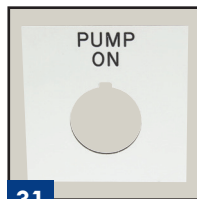
28



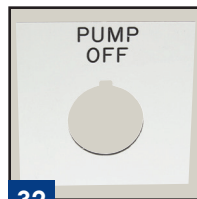
29



30



31



32



33



34



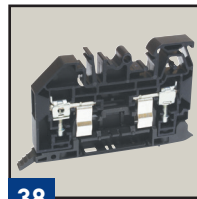
35



36



37



38



39

| HE7-9212 380V - 50Hz - 3 PH, Electrical Assembly |                    |         |                                     |
|--------------------------------------------------|--------------------|---------|-------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty.    | Description                         |
| 1                                                | 02-007-0038        | 2       | Contactor 1/3-5HP Non Rev 24VAC     |
| 2                                                | 02-008-0252        | 1       | Overload Relay 193-ED 1.0-5.0 amp   |
| 3                                                | 02-015-0098        | 2       | Fuse Block Indicator 2P 600V 30A CC |
| 4                                                | 02-015-0099        | 1       | Fuse Block Indicator 3P 600V 30A CC |
| 5                                                | 02-017-0018        | 4       | Fuse Class CC 600V 1.5A TD Reject   |
| 6                                                | 02-017-0027        | 4       | Fuse Class CC 600V 2.5A TD Reject   |
| 7                                                | HE7-155            | 4       | 8-32 Hex Nut Zinc Plt.              |
| 8                                                | HE7-156            | 4       | 8-32 X 1/2 RHMS Slot Zinc Plt.      |
| 9                                                | HE7-157            | 4       | #8 Lock Washer Zinc Plt.            |
| 10                                               | HZ-101             | 15      | 10-32 x 1/4" rhms Stainless         |
| 11                                               | HZ-230R            | 156 IN. | Stranded Machine Wire Green/Yellow  |
| 12                                               | HZ-261R            | 636 IN. | Stranded Machine Wire Black 14 GA.  |
| 13                                               | HZ-262R            | 10 IN.  | Stranded Machine Wire White 14 GA.  |
| 14                                               | HZ-263R            | 120 IN. | Stranded Machine Wire Green 14 GA.  |
| 15                                               | HZ-265R            | 264 IN. | Stranded Machine Wire Red           |
| 16                                               | 02-018-0310        | 1       | XF 380 - 24 50VA                    |
| 17                                               | HZ-256             | 9       | #10 Crimp On Ring Terminal          |
| 18                                               | HZ-272             | 3       | N.C. Contact Block                  |
| 19                                               | HZ-273             | 2       | N.O. CONTACT BLOCK                  |
| 20                                               | HZ-274             | 2       | Red Extended Push Button 25MM       |
| 21                                               | HZ-275             | 2       | Green Flush Push Button 25MM        |
| 22                                               | HZ-276             | 1       | Mushroom Push Button 50MM Red       |
| 23                                               | HZ-277             | 1       | Yellow Legend Plate                 |
| 24                                               | HZ-278             | 1       | Legend Plate"SYSTEM ON"             |

For  
380V 50Hz 3PH  
International  
Electrical  
Requirements



1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



17



18



19



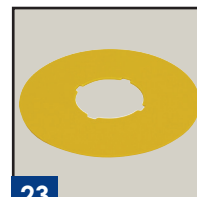
20



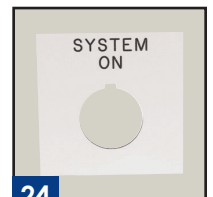
21



22



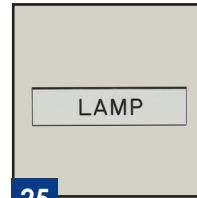
23



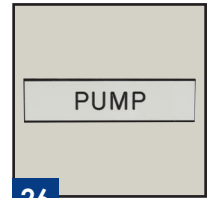
24

| HE7-9212 380V - 50Hz - 3 PH, Electrical Assembly |                    |      |                                    |
|--------------------------------------------------|--------------------|------|------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty. | Description                        |
| 25                                               | HZ-278-2           | 1    | Legend Plate "LAMP"                |
| 26                                               | HZ-278-3           | 1    | Legend Plate "PUMP"                |
| 27                                               | HZ-279             | 1    | Legend Plate "SYSTEM OFF"          |
| 28                                               | HE7-287            | 1    | HE7 Electrical Enclosure           |
| 29                                               | HZ-290             | 2    | 240V 20A Single Receptacle         |
| 30                                               | 02-017-0030        | 2    | Fuse Class CC 600V 3A TD Reject    |
| 31                                               | HZ-299             | 12   | #10 Spade Terminal                 |
| 32                                               | HZ-501             | 2    | Din Rail 8" Long                   |
| 33                                               | HZ-282             | 1    | Legend Plate "PUMP ON"             |
| 34                                               | HZ-283             | 1    | Legend Plate "PUMP OFF"            |
| 35                                               | 02-017-0007        | 3    | Fuse, Class CC 600V 0.5A TD Reject |
| 36                                               | HZ-297             | 1    | Terminal Fuse block 300V           |
| 37                                               | HZ-298             | 1    | End Barrier - Fuse Block           |
| 38                                               | HE7-509            | 1    | Din Rail, 4" Long                  |

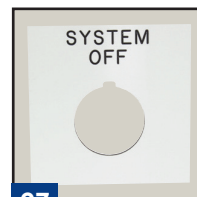
For  
380V 50Hz 3PH  
International  
Electrical  
Requirements



25



26



27



28



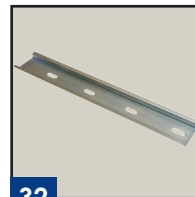
29



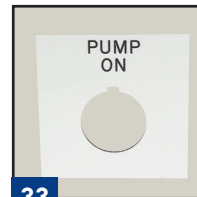
30



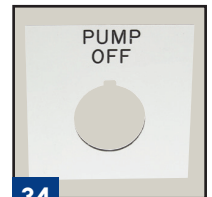
31



32



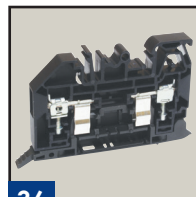
33



34



35



36



37



38

| HE7-9214 440V - 60Hz - 3 PH, Electrical Assembly |                    |         |                                    |
|--------------------------------------------------|--------------------|---------|------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty.    | Description                        |
| 1                                                | 02-007-0020        | 2       | Contactor 1/3-5HP Non Rev 120V     |
| 2                                                | 02-008-0252        | 1       | Overload Relay 193-ED 1.0-5.0 amp  |
| 3                                                | HE7-155            | 4       | 8-32 Hex Nut Zinc Plt.             |
| 4                                                | HE7-156            | 4       | 8-32 X 1/2 RHMS Slot Zinc Plt.     |
| 5                                                | HE7-157            | 4       | #8 Lock Washer Zinc Plt.           |
| 6                                                | HE7-287            | 1       | HE7 Electrical Enclosure           |
| 7                                                | HZ-101             | 7       | 10-32 x 1/4" rhms Stainless        |
| 8                                                | 02-015-0349        | 1       | Terminal Block End Cap             |
| 9                                                | HZ-229             | 1       | Cord Grip Enclosure, Three Phase   |
| 10                                               | HZ-231R            | 144 In. | Power Cord 3Ø                      |
| 11                                               | HZ-252             | 1       | 1/2" Sealing Ring                  |
| 12                                               | HZ-256             | 6       | #10 Crimp On Ring Terminal         |
| 13                                               | HZ-261R            | 636 IN. | Stranded Machine Wire Black 14 GA. |
| 14                                               | HZ-262R            | 10 IN.  | Stranded Machine Wire White 14 GA. |
| 15                                               | HZ-263R            | 120 IN. | Stranded Machine Wire Green 14 GA. |
| 16                                               | HZ-265R            | 264 IN. | Stranded Machine Wire Red          |
| 17                                               | HZ-272             | 3       | N.C. Contact Block                 |
| 18                                               | HZ-273             | 2       | N.O. CONTACT BLOCK                 |
| 19                                               | HZ-274             | 2       | Red Extended Push Button 25MM      |
| 20                                               | HZ-275             | 2       | Green Flush Push Button 25MM       |
| 21                                               | HZ-276             | 1       | Mushroom Push Button 50MM Red      |
| 22                                               | HZ-277             | 1       | Yellow Legend Plate                |
| 23                                               | HZ-278             | 1       | Legend Plate "SYSTEM ON"           |
| 24                                               | HZ-278-2           | 1       | Legend Plate "LAMP"                |

For  
460V 60Hz 3PH  
U.S.  
Electrical  
Requirements



1



2



2



4



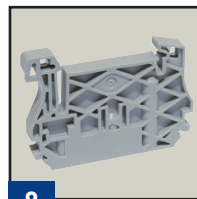
5



6



7



8



9



10



11



12



13



14



15



16



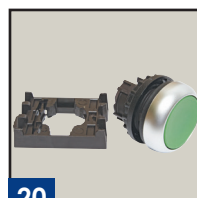
17



18



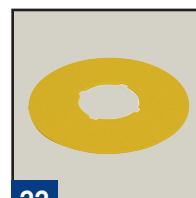
19



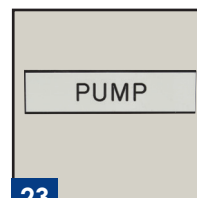
20



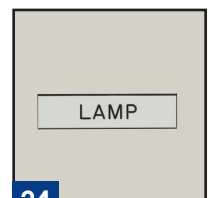
21



22



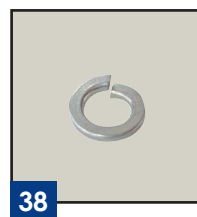
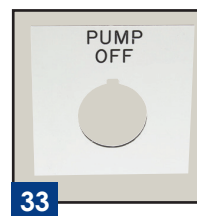
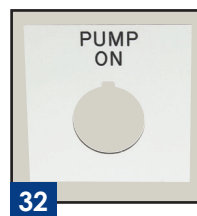
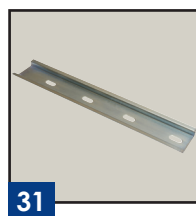
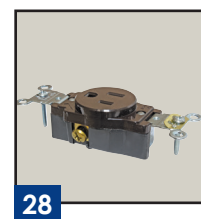
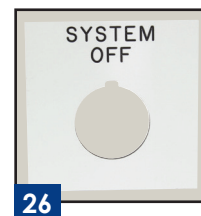
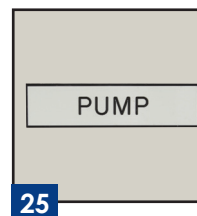
23



24

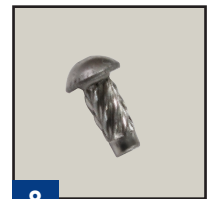
| HE7-9214 440V - 60Hz - 3 PH, Electrical Assembly |                    |      |                                     |
|--------------------------------------------------|--------------------|------|-------------------------------------|
|                                                  | PRIMEEdge Part No. | Qty. | Description                         |
| 25                                               | HZ-278-3           | 1    | Legend Plate "PUMP"                 |
| 26                                               | HZ-279             | 1    | Legend Plate "SYSTEM OFF"           |
| 27                                               | 02-018-0300        | 1    | XF 240/400/460/575 - 1 1/2/24 250VA |
| 28                                               | HZ-289             | 2    | 120V Single Receptacle              |
| 29                                               | 02-017-0030        | 2    | Fuse, Class CC 600V 3A TD Reject    |
| 30                                               | HZ-299             | 12   | 120V #10 Spade Terminal             |
| 31                                               | HZ-501             | 1    | DIN Rail 8" Long                    |
| 32                                               | HZ-282             | 1    | Legend Plate "PUMP ON"              |
| 33                                               | HZ-283             | 1    | Legend Plate "PUMP OFF"             |
| 34                                               | 02-006-0011        | 1    | Relay, DPDT 120V AC w/PL, 8 Pin     |
| 35                                               | 02-006-0020        | 1    | Relay, Socket 8 Pin, Type HA        |
| 36                                               | HE7-104            | 4    | 10-32 x 1/2" rhms Stainless         |
| 37                                               | HZ-129             | 4    | #10 Flat Washer Zinc                |
| 38                                               | HZ-134             | 4    | #10 Lock Washer Zinc                |
| 39                                               | HZ-297             | 1    | Terminal/Fuse Block 330V            |
| 40                                               | HZ-298             | 1    | End Barrier-Fuse Block              |

For  
460V 60Hz 3PH  
U.S.  
Electrical  
Requirements



# PRIMEEdge HE7 Fasteners

| HE7 Fasteners |                    |      |                                               |
|---------------|--------------------|------|-----------------------------------------------|
|               | PRIMEEdge Part No. | Qty. | Description                                   |
| 1             | 03-012-0021        | 4    | 5/16" - 18 Hex Head Screw Stainless           |
| 2             | 03-012-0258        | 4    | 5/16" Nut                                     |
| 3             | 03-012-0395        | 2    | 5/16" Flat Washer                             |
| 4             | 03-012-1723        | 19   | #8 Washer, Stainless                          |
| 5             | 03-012-1729        | 8    | 8-32 x .25 Screw, Stainless                   |
| 6             | 03-012-1731        | 2    | 10-32 x 1.5" Screw, Stainless                 |
| 7             | 03-012-1732        | 12   | 10-32 x .38" Hex Head Screw, Stainless        |
| 8             | EM-1042-25         | 4    | #4 x .25" Drive Screw, Stainless              |
| 9             | EM-1075-10         | 6    | 3/8" Flat Washer                              |
| 10            | EM-1075-73         | 8    | 3/8"-16 x 1" Hex Head Bolt                    |
| 11            | EM-1075-14         | 6    | 3/8"-16 Hex Nut, Stainless                    |
| 12            | EM-1075-55         | 15   | 8-32 x 1/2" Slot Head Bolt, Stainless         |
| 13            | EM-1075071         | 19   | 8-32 Hex Nut, Stainless                       |
| 14            | HE7-104            | 2    | 10-32 x 1/2" Slot Head Bolt, Stainless        |
| 15            | HE7-128            | 2    | 3/8" x 16 Nylock Nut                          |
| 16            | HE7-145            | 2    | 3/8" -16 x 4" Hex Head Screw                  |
| 17            | HE7-150            | 4    | .44 ID x .80 OD x 5/32" Thick Washer          |
| 18            | HE7-151            | 2    | 5/16"-18 x 2" Hex Head Bolt, Stainless        |
| 19            | HE7-153            | 4    | 8-32 x 1-1/4" Right Hand Slot Screw, Zinc     |
| 20            | HZ-110             | 2    | 3/8"-16 x 1-3/4" Socket Head Screw, Stainless |
| 21            | HZ-126             | 4    | 3/8"-16 x 1-1/4" Hex Head Screw, Stainless    |
| 22            | HZ-129             | 19   | #10 Flat Washer, Zinc                         |
| 23            | HZ-135             | 1    | 1/8" Diameter x 1-1/2" Roll Pin               |
| 24            | HZ-140             | 4    | 7/16" Hex Nut, Stainless                      |



# PRIMEEdge HE7 Fasteners

| HE7 Fasteners |                    |      |                                                 |
|---------------|--------------------|------|-------------------------------------------------|
|               | PRIMEEdge Part No. | Qty. | Description                                     |
| 25            | HZ-141             | 4    | 7/16" Lock Washer Stainless                     |
| 26            | HZ-145             | 2    | 3/8"-16 x 5/8" Socket Head Bolt, Stainless      |
| 27            | HZ-153             | 2    | 3/8"-16 x 2" Socket Head Bolt, Stainless        |
| 28            | HZ-162             | 4    | 1/4"-20 x 1/2" Socket Head Bolt, Stainless      |
| 29            | HZ-164             | 4    | 3/8"-16 x 1/2" Carriage Bolt                    |
| 30            | HZ-166             | 6    | 5/16"-18 x 1/2" Socket Head Bolt, Stainless     |
| 31            | HZ-188             | 4    | 1/4" Lock Washer, Stainless                     |
| 32            | HZ-189             | 4    | 1/4" Flat Washer, Stainless                     |
| 33            | HZ-192             | 4    | 3/8"-16 x 1-1/2" Socket Head Bolt, Stainless    |
| 34            | HZ-197             | 8    | 5/16"-18 x 1" Socket Head Bolt, Stainless       |
| 35            | HZ-198             | 8    | 5/16" Lock Washer, Stainless                    |
| 36            | HE7-143            | 2    | 5/16"-18 x 2-1/4" Socket Head Bolt, Stainless   |
| 37            | HZ-122             | 2    | 3/8"-16 x 1" Socket Head Bolt, Black Oxide      |
| 38            | HZ-146             | 2    | 5/16"-18 x 2-1/4" Hex Head Bolt, Grade 5 Zinc.  |
| 39            | HZ-149             | 1    | 1/4"-20 x 1/4" Set Screw, Stainless             |
| 40            | HZS-118            | 1    | 10-32 x 1/4" Set Screw, Stainless               |
| 41            | HE7-104            | 3    | 10-32 x 1/2" Slot Head Bolt, Stainless          |
| 42            | HE7-132            | 1    | 1/4" x 1" Woodruff Key                          |
| 43            | 03-012-0600        | 2    | 10-32 x .38" Socket Head Bolt, Stainless        |
| 44            | HE7-110            | 4    | 1/4"-28 x 3/4" Socket Head Bolt, Stainless      |
| 45            | HE7-112            | 2    | 5/16"-18 x 3/8" Set Screw, Black Oxide          |
| 46            | HE7-117            | 2    | 5/16"-18 x 2" Set Screw, Stainless              |
| 47            | HE7-119            | 1    | 5/16"-18 x 2-1/2" Socket Head Bolt, Black Oxide |
| 48            | HE7-123            | 2    | 3/8"-24 x 3/4" Socket Head Bolt, Black Oxide    |



25



26



27



28



29



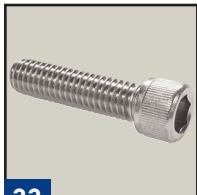
30



31



32



33



34



35



36



37



38



39



40



41



42



43



44



45



46



47



48

# PRIMEEdge HE7 Fasteners

| HE7 Fasteners |                    |      |                                              |
|---------------|--------------------|------|----------------------------------------------|
|               | PRIMEEdge Part No. | Qty. | Description                                  |
| 49            | HE7-125            | 1    | 1/2"-20 x 1-1/2" Socket Head Bolt, Stainless |
| 50            | HE7-131            | 1    | 3/16" x 3/4" woodruff Key                    |
| 51            | HE7-133            | 1    | 1/4" x 2-1/2" Square Key                     |
| 52            | HZ-129             | 2    | #10 Flat Washer, Zinc                        |
| 53            | HZ-155             | 1    | 1/2"-20 x 1-1/2" Socket Head Bolt, Stainless |



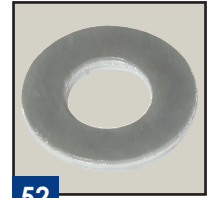
49



50



51



52



53

# PRIMEEdge HE7 Parts Lists For Assemblies

| HE7-9424 |                    | HE7 Honer/Edger Reciprocating Slide Assembly w/Indexer |                                       |
|----------|--------------------|--------------------------------------------------------|---------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                                   | Description                           |
| 1        | HE7-9424           | 1                                                      | Reciprocating slide assemble complete |
| 2        | HE7-136            | 1                                                      | 3/16" diameter x 1-1/2" roll pin      |
| 3        | HE7-143            | 2                                                      | 5/16" -18 x 2-1/4" shcs black oxide   |
| 4        | HE7-424            | 1                                                      | Reciprocating slide                   |
| 5        | HE7-524            | 1                                                      | Indexer support (goal posts)          |
| 6        | HE7-525            | 1                                                      | Index Wheel                           |
| 7        | HE7-526            | 2                                                      | Index pin                             |
| 8        | HE7-527            | 1                                                      | Threaded shaft, indexer               |
| 9        | HE7-528            | 1                                                      | Index block support                   |
| 10       | HZ-122             | 2                                                      | 3/8"-16 x 1" shcs black oxide         |
| 11       | HZ-469             | 1                                                      | Slide grease fitting                  |
| 12       | H470               | 1                                                      | Grease fitting cap                    |

| HE7-9437 |                    | HE7 Honer/Edger Bellows Assembly w/Flanges |                                             |
|----------|--------------------|--------------------------------------------|---------------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                       | Description                                 |
| 1        | HE7-9437           | 1                                          | HE7 Bellows assembly with flanges, complete |
| 2        | HE7-437            | 1                                          | Bellows 2-3/8" / 8" OD x 1-1/2" ID          |
| 3        | HE7-532            | 1                                          | Rear retainer, bellows                      |
| 4        | HE7-533            | 1                                          | Front retainer, bellows                     |

| HE7-9502 |                    | HE7 Honer/Edger Drive Roller Assembly |                                     |
|----------|--------------------|---------------------------------------|-------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                  | Description                         |
| 1        | HE7-9502           | 1                                     | HE7 Drive roller assembly, complete |
| 2        | HE7-104            | 3                                     | 10-32 x 1/2" rhms, stainless        |
| 3        | HE7-132            | 1                                     | 1/4" x 1" Woodruff key              |
| 4        | HE7-428            | 2                                     | Drive roller pillow bearing         |
| 5        | HE7429             | 1                                     | Drive roller pulley                 |
| 6        | HE7-502            | 1                                     | Honer-drive roller 1/2"p x 18 teeth |
| 7        | HE7-523            | 1                                     | Guard, drive roller                 |

| HE7-9516 |                    | HE7 Honer/Edger Spindle Assembly Complete-Right Side |                                             |
|----------|--------------------|------------------------------------------------------|---------------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                                 | Description                                 |
| 1        | HE7-9502           | 1                                                    | HE7 Spindler assembly, complete, Right side |
| 2        | 03-012-0600        | 2                                                    | 10-32 x .38" Sohc HD, stainless             |
| 3        | HE7-110            | 4                                                    | 1/4"-28 x 3/4" shcs. stainless              |
| 4        | HE7-112            | 2                                                    | 5/16"-18 x 3/8" shss. black oxide           |
| 5        | HE7-117            | 2                                                    | 5/16"-18 x 2" shss. stainless               |
| 6        | HE7-119            | 1                                                    | 5/16"-18 x 2-1/2" shcs. stainless           |
| 7        | HE7-123            | 2                                                    | 3/8"-24 x 3/4" shcs. black oxide            |
| 8        | HE7-125            | 1                                                    | 1/2"-20 x 1-1/2" lht shcs. stainless        |
| 9        | HE7-131            | 1                                                    | 3/16" x 3/4" woodruff key                   |
| 10       | HE7-133            | 1                                                    | 1/4" x 2-1/2" square key                    |
| 11       | HE7-427            | 2                                                    | Spindle bearing                             |
| 12       | HE7-501            | 1                                                    | Timing belt                                 |

# PRIMEEdge HE7 Parts Lists For Assemblies

| HE7-9516 |                    | HE7 Honer/Edger Spindle Assembly Complete—Right Side cont... |                                     |
|----------|--------------------|--------------------------------------------------------------|-------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                                         | Description                         |
| 13       | HE7-508            | 1                                                            | Front retaining flange/spiral wheel |
| 14       | HE7-510            | 1                                                            | Spacing disc, 3-3/4" OD x 2-1/2" ID |
| 15       | HE7-512            | 1                                                            | Mounting hub with timing lock—RT    |
| 16       | HE7-515            | 1                                                            | Rear right flange/timing lock       |
| 17       | HE7-516            | 1                                                            | Right spindle shaft/LH thread       |
| 18       | HE7-519            | 1                                                            | Spindle slinger cover               |
| 19       | HE7-520            | 1                                                            | Spindle mounting plate              |
| 20       | HE7-521            | 1                                                            | Spindle housing                     |
| 21       | HE7-522            | 1                                                            | Rear spindle cover                  |
| 22       | HE7-542            | 1                                                            | Rear spindle spacing bushing        |
| 23       | HE7-9513           | 1                                                            | Timing lock disc assembly           |
| 24       | HE7-9518           | 1                                                            | Spindle splash guard assembly       |
| 25       | HZ-129             | 2                                                            | #10 lat washer, zinc                |

| HE7-9517 |                    | HE7 Honer/Edger Spindle Assembly Complete—Left Side |                                           |
|----------|--------------------|-----------------------------------------------------|-------------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                                | Description                               |
| 1        | HE7-9517           | 1                                                   | HE7 Spindle assembly, left side, complete |
| 2        | 03-012-0600        | 2                                                   | 10–32 x .38" shhc. stainless              |
| 3        | HE7-110            | 4                                                   | 1/4"–28 x 3/4" shcss, stainless           |
| 4        | HE7-112            | 2                                                   | 5/16"–18 x 3/8" shss, stainless           |
| 5        | HE7-117            | 2                                                   | 5/16"–18 x 2" shss, stainless             |
| 6        | HE7-123            | 2                                                   | 3/8"–24 x 3/4" shcs, black oxide          |
| 7        | HE7-131            | 1                                                   | 3/16" x 3/4" woodruff key                 |
| 8        | HE7-133            | 1                                                   | 1/4" x 2-1/2" square key                  |
| 9        | HE7-427            | 2                                                   | Spindle bearing                           |
| 10       | HE7-501            | 1                                                   | Timing belt pulley                        |
| 11       | HE7-508            | 1                                                   | Front retaining flange/spiral wheel       |
| 12       | HE7-511            | 1                                                   | Mounting hub – Left                       |
| 13       | HE7-514            | 1                                                   | Rear left flange                          |
| 14       | HE7-517            | 1                                                   | Left spindle shaft ? RH threads           |
| 15       | HE7-519            | 1                                                   | Spindle slinger cover                     |
| 16       | HE7-520            | 1                                                   | Spindle mounting plate                    |
| 17       | HE7-521            | 1                                                   | Spindle housing                           |
| 18       | HE7-522            | 1                                                   | Rear spindle cover                        |
| 19       | HE7-542            | 1                                                   | Rear spindle spacer bushing               |
| 20       | HE7-9518           | 1                                                   | Spindle splash guard assembly             |
| 21       | HZ-129             | 2                                                   | #10 flat washer, zinc                     |
| 22       | HZ-155             | 1                                                   | 1/2"–20 x 1-1/2" shcs, stainless          |

## PRIMEEdge HE7 Parts Lists For Assemblies

| HE7-9518 |                    | HE7 Honer/Edger Spindle Splash Guard Assembly |                                             |
|----------|--------------------|-----------------------------------------------|---------------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                          | Description                                 |
| 1        | HE7-9518           | 1                                             | HE7 Spindle splash guard assembly, complete |
| 2        | HE7-518            | 1                                             | Spindle splash guard                        |
| 3        | HE7-554            | 1                                             | Spindle splash guard seal                   |

| HE7-9539 |                    | HE7 Honer/Edger Diamond Dresser Wheel Raiser Assembly |                                                 |
|----------|--------------------|-------------------------------------------------------|-------------------------------------------------|
|          | PRIMEEdge Part No. | Qty.                                                  | Description                                     |
| 1        | HE7-9539           | 1                                                     | Diamond dresser wheel raiser assembly, complete |
| 2        | HE7-111            | 2                                                     | 1/4"-28 x 1" shcs, black oxide                  |
| 3        | HE7-115            | 1                                                     | 5/16"-18 x 1" square head bolt                  |
| 4        | HE7-406            | 1                                                     | Diamond raiser 90° grease fitting               |
| 5        | HE7-440            | 4                                                     | Bearing thrust race, diamond raiser             |
| 6        | HE7-441            | 2                                                     | Thrust bearing, diamond raiser                  |
| 7        | HE7-442            | 2                                                     | Thrust bearing race                             |
| 8        | HE7-537            | 2                                                     | Adjustment knob, dresser                        |
| 9        | HE7-538            | 2                                                     | Stainless Screw/dresser                         |
| 10       | HE7-731            | 1                                                     | Diamond dresser wheels/30 grit/pair             |
| 11       | HE7-9536           | 1                                                     | Dresser diamond holder weldment                 |
| 12       | HZ-146             | 2                                                     | 5/16"-18 x 2-1/4" hhcs. ar.5, zinc              |
| 13       | HZ-149             | 1                                                     | 1/4"-20 x 1/4" shss, stainless                  |
| 14       | HZ-470             | 1                                                     | Grease fitting cap                              |
| 15       | HZS-118            | 1                                                     | 10-32 x 1/4" shss, stainless                    |

| HE7-9540 |                    | HE7 Honer/Edger Dresser Spline Assembly Complete |                                   |
|----------|--------------------|--------------------------------------------------|-----------------------------------|
|          | PRIMEEdge Part No. | Qty.                                             | Description                       |
| 1        | HE7-9540           | 1                                                | Dresser spline assembly, complete |
| 2        | HE7-401            | 1                                                | Dresser screw grease fitting      |
| 3        | HZ-470             | 1                                                | Grease fitting cap                |
| 4        | HE7-531            | 1                                                | Dresser spline drive screw        |
| 5        | HE7-504            | 1                                                | Male spline assembly              |
| 6        | HE7-530            | 1                                                | Cap for spline/dresser            |
| 7        | HE7-549            | 1                                                | Dresser spline sleeve             |
| 8        | HE7-534            | 1                                                | Female spline weld cap/dresser    |
| 9        | HE7-540            | 1                                                | Female dresser spline             |
| 10       | HE7-550            | 1                                                | Dresser spline bracket            |

## PRIMEEdge HE7 Parts Lists For Assemblies

| HE7 Honer/Edger Coolant Spray Sub Assembly |                    |      |                                    |
|--------------------------------------------|--------------------|------|------------------------------------|
|                                            | PRIMEEdge Part No. | Qty. | Description                        |
| 1                                          | HSR-411            | 1    | Spray nozzle                       |
| 2                                          | HZ-400             | 5.75 | Loc-Line hose segment/IN.          |
| 3                                          | HZ-430             | 1    | 1/4" NPT male Loc Line             |
| 4                                          | HE7-410            | 3    | 1/4" NPT Elbow, street, galvanized |
| 5                                          | HE7-411            | 1    | 1/4" nipple, zinc plate            |
| 6                                          | HZS-413            | 1    | 1/4" ball valve                    |
| 7                                          | HZ-564             | 1    | Coolant hose fitting               |