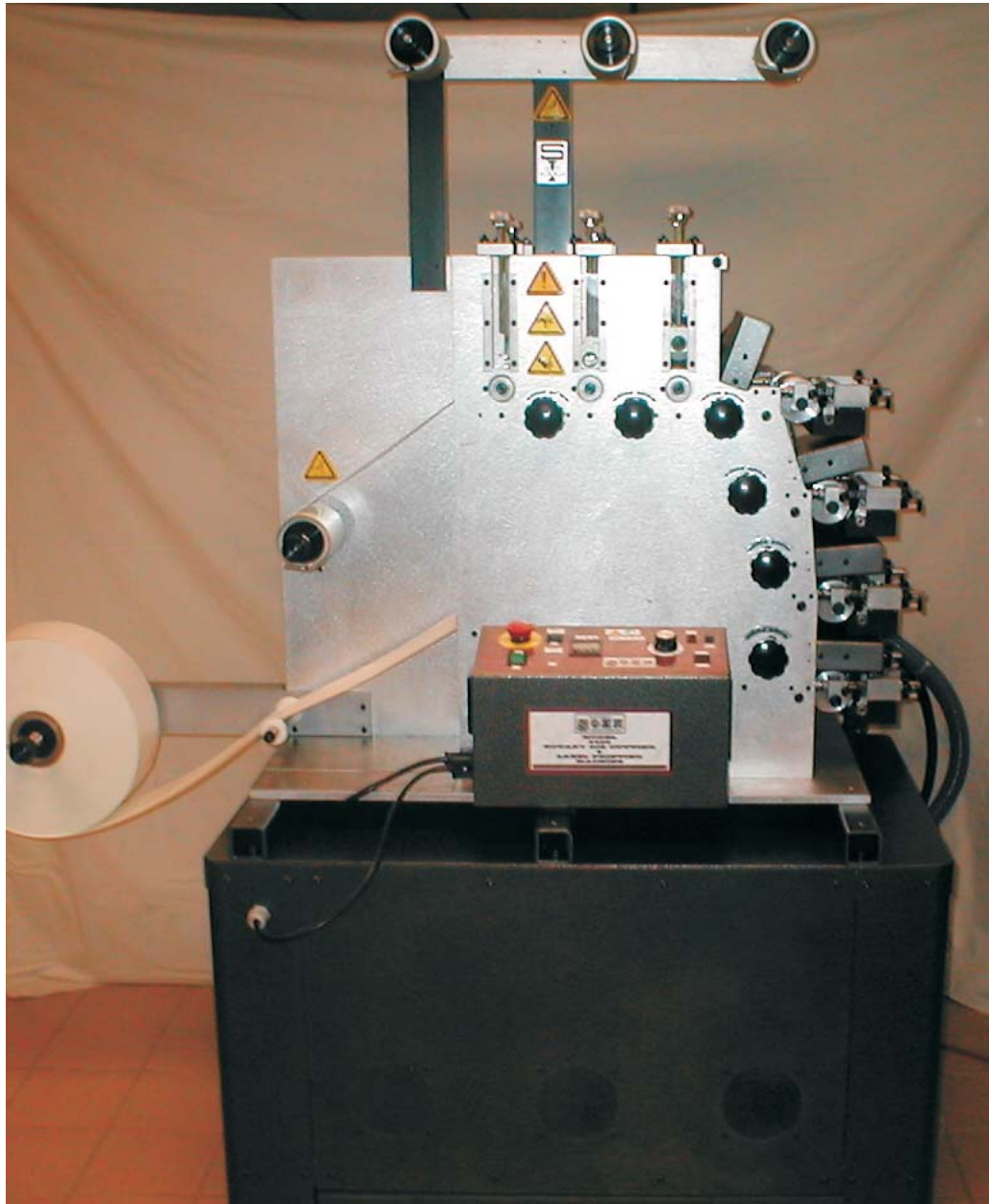


SOHN MODEL 4400 SERVICE MANUAL



P.O. BOX 427, ELKHART LAKE, WI 53020 USA
PH: (920) 876-3361 • FAX: (920) 876-2952
E-MAIL: sohn@sohnmanufacturing.com
WEB: www.sohnmanufacturing.com

THIS MACHINE IS FOR INDUSTRIAL USE ONLY IN AN INDUSTRIAL ENVIRONMENT

Sohn has supplied guarding to its best ability on all electrical components, shafts, power drives, pulleys, belts and on objects that are designed to be objects in motion or considered by Sohn to be obvious operator danger points. However, due to the variances in OSHA Codes, which allows OSHA Inspectors to determine OSHA violations in accordance to their interpretation of OSHA Codes.

Sohn does not warrant the machine to meet all OSHA requirements, which can vary in accordance to the location and OSHA Inspectors. It is agreed that in accepting this proposal, the meeting of final OSHA requirements for operation in their facility is the responsibility of the customer.



GENERAL WARNING

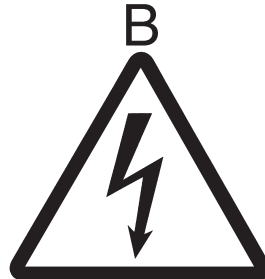
ATTENTION

These warning symbols are used throughout this manual and on the machine.

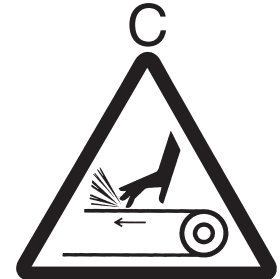
Know and understand their meaning.



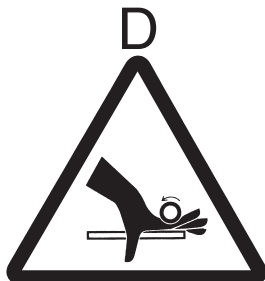
ENTANGLEMENT HAZARD (CHAIN DRIVE)



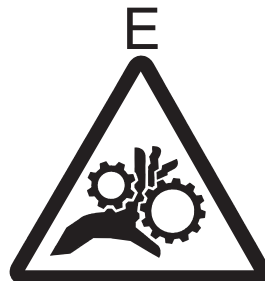
ELECTRIC SHOCK HAZARD



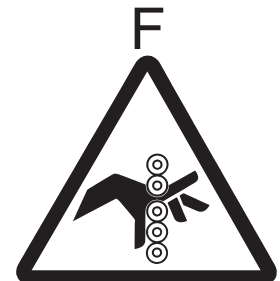
HAND ABRASION



HAND ENTANGLEMENT



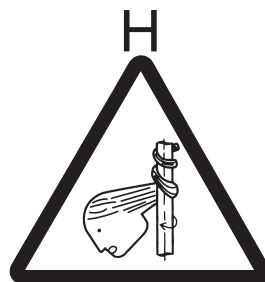
ENTANGLEMENT HAZARD (HAND IN GEARS)



PINCH POINT (HAND IN ROLLERS)



CUT / SEVER HAZARD



HAIR ENTANGLEMENT



DO NOT REMOVE GUARD



NO ACCESS FOR UNAUTHORIZED PERSONNEL



WEAR EYE PROTECTION



READ MANUAL



READ SERVICE MANUAL



ARM ENTANGLEMENT



NOT A LIFT POINT

GENERAL SAFETY RULES



READ THE FOLLOWING INSTRUCTIONS BEFORE OPERATING THIS MACHINE

This machine was designed for certain applications only. Sohn Manufacturing strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Sohn Manufacturing to determine if it can or should be performed on the machine. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, goggles and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattentiveness. Always use common sense and exercise caution in the workplace. **REMEMBER:** Your personal safety is your responsibility.



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. DO NOT OPERATE THIS MACHINE UNTIL it is assembled and installed according to the instructions. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Follow all wiring codes and recommended electrical connections. Learn the machine's application and limitations as well as the specific hazards peculiar to it. OBTAIN ADVICE from your supervisor, instructor, or another qualified person if you are not familiar with the operation of this machine.
2. DO NOT OPERATE MACHINE WITHOUT GUARDS IN PLACE.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents. NEVER START THE MACHINE before clearing the web of all objects (tools, scrap pieces, etc.)
4. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use this machine in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AND VISITORS AWAY. Children and visitors should be kept a safe distance from work area.
6. WEAR PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
7. KEEP ARMS, HANDS, FINGERS away from all moving parts of the machine. DON'T OVERREACH. Keep proper footing and balance at all times.
8. USE RECOMMENDED ACCESSORIES. The use of accessories and attachments not recommended by Sohn Manufacturing may cause hazards or risk of injury to persons.

9. NEVER STAND ON MACHINE. Serious injury could occur if the machine is tipped or if the rotary die is accidentally contacted.
10. CHECK DAMAGED PARTS. Before further use of the machine, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding or moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
11. TURN THE MACHINE “OFF” AND DISCONNECT THE MACHINE from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
12. NEVER LEAVE MACHINE RUNNING UNATTENDED. TURN POWER OFF. Don't leave machine until it comes to a complete stop.
13. CERTAIN MATERIALS will generate unusually high noise levels. When using such materials, test to determine the necessity of hearing protection.
14. CERTAIN DIES, i.e. dies with very deep engravings, could become a severing hazard.
15. STAY ALERT. WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING THIS MACHINE. DO NOT USE MACHINE WHILE TIRED OR UNDER MEDICATION. A moment of inattentiveness while operating machinery may result in serious personal injury.

SAVE THESE INSTRUCTIONS

Refer to them often and use them to instruct others.

**CALL SOHN MFG., INC. AT 920-876-3361
WITH QUESTIONS AFTER READING
THE GENERAL SAFETY RULES AND
THE OPERATING INSTRUCTIONS.**

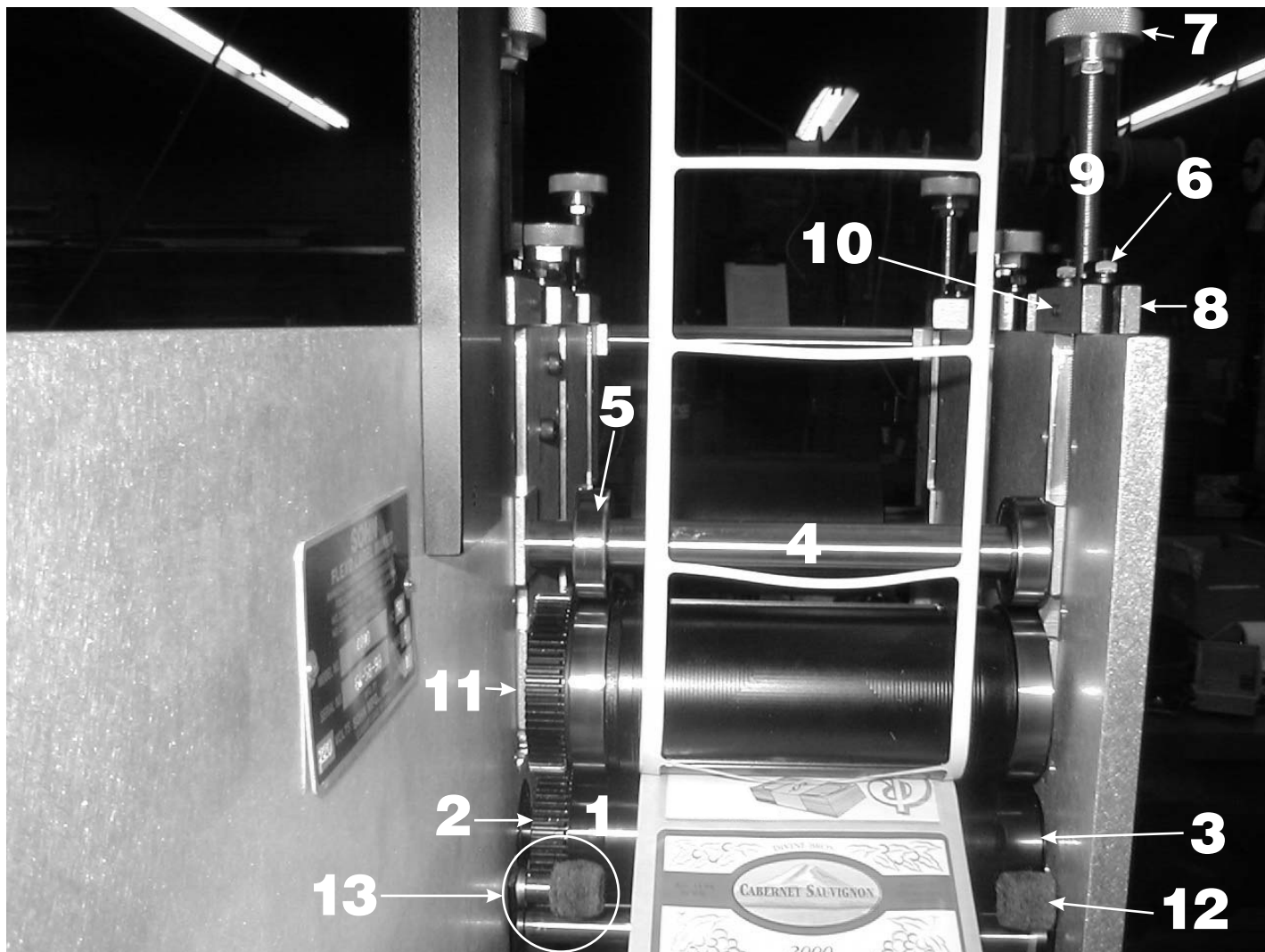


WARNING!

The following pages contain photographs and descriptions of replacement parts for the **Sohn Model 4400.**

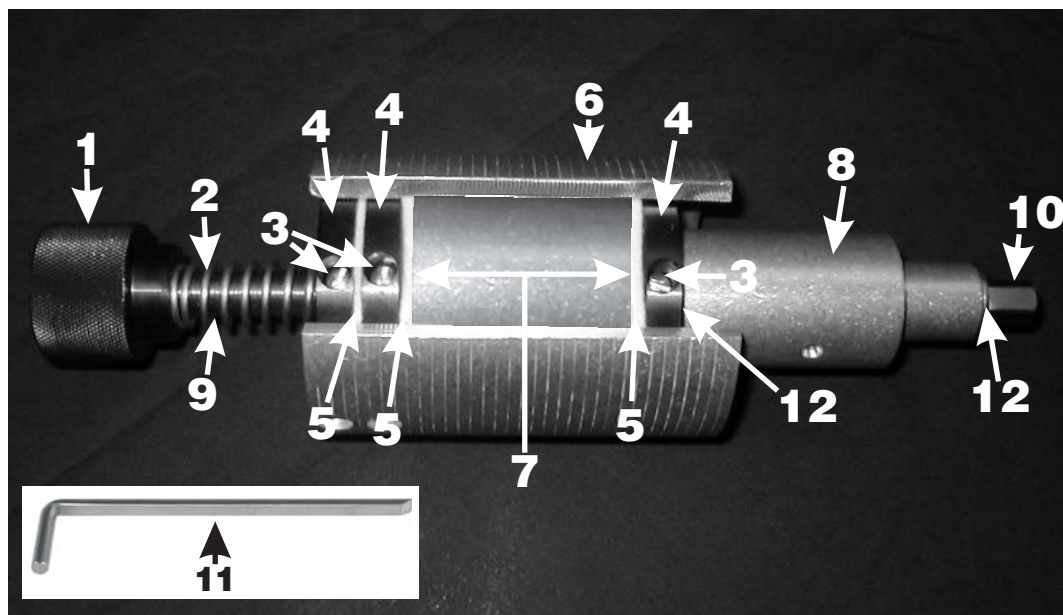
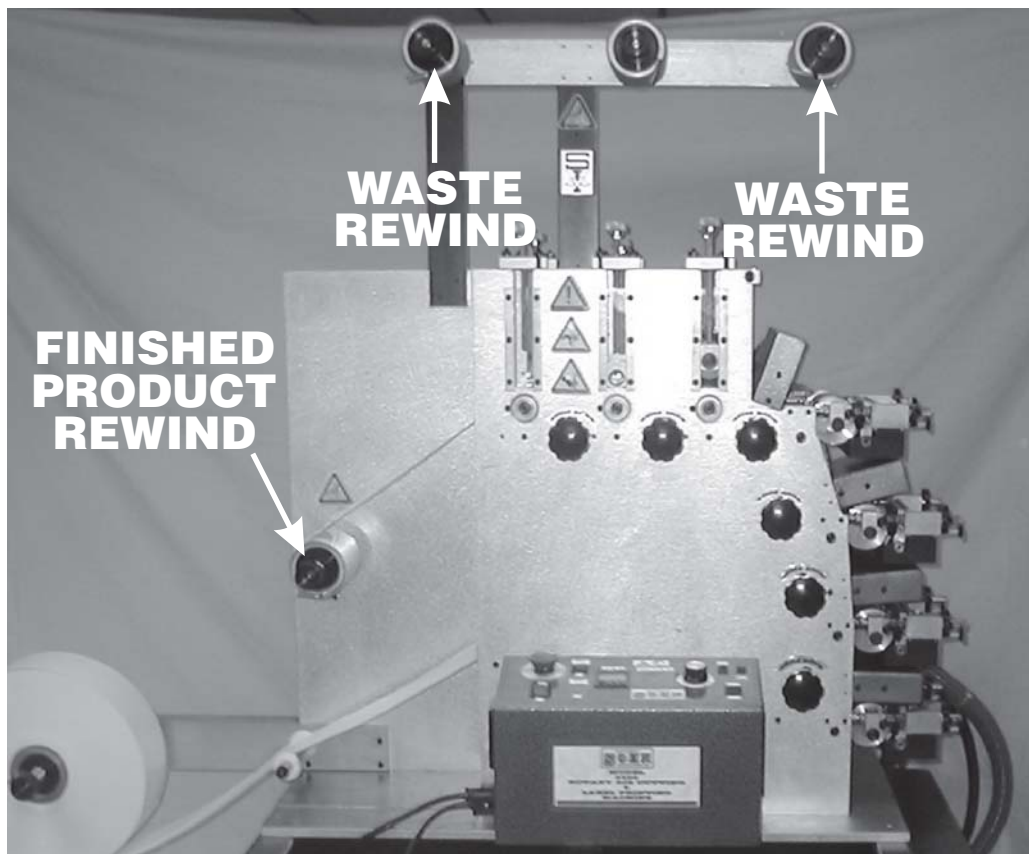
Only trained and authorized personnel should perform service.

***TURN THE MACHINE “OFF”
AND DISCONNECT THE MACHINE***
from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.



DIE STATION ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|----|----------|---|------|-------------|
| 1 | 44-125 | Die Anvil Shaft (1/8 Pitch)..... | 1 | |
| 2 | 44-160 | Die Anvil Gear (1/8 Pitch)..... | 1 | |
| 3 | 1001-37 | Bearing (Anvil)..... | 2 | |
| 4 | 44-137 | Bearer Shaft..... | 1 | |
| 5 | 1001-02 | Bearing (Die Bearer)..... | 2 | |
| | 44-137-C | Die Bearer Assembly Complete..... | 1 | |
| 6 | 2520 F | Flange Nut..... | 4 | |
| 7 | 65-707 1 | Pressure Knob..... | 2 | |
| 8 | 44-130 | Pressure Bar..... | 2 | |
| 9 | 44-902 | Adjusting Screw..... | 2 | |
| 10 | N 102425 | Set Screw..... | 2 | |
| 11 | 44-117-3 | Bearing Block Assembly..... | 2 | |
| 12 | 7110-2-C | Oil Wiper Assembly (Operator Side)..... | 1 | |
| 13 | 7110-1-C | Oil Wiper Assembly (Gear Side)..... | 1 | |

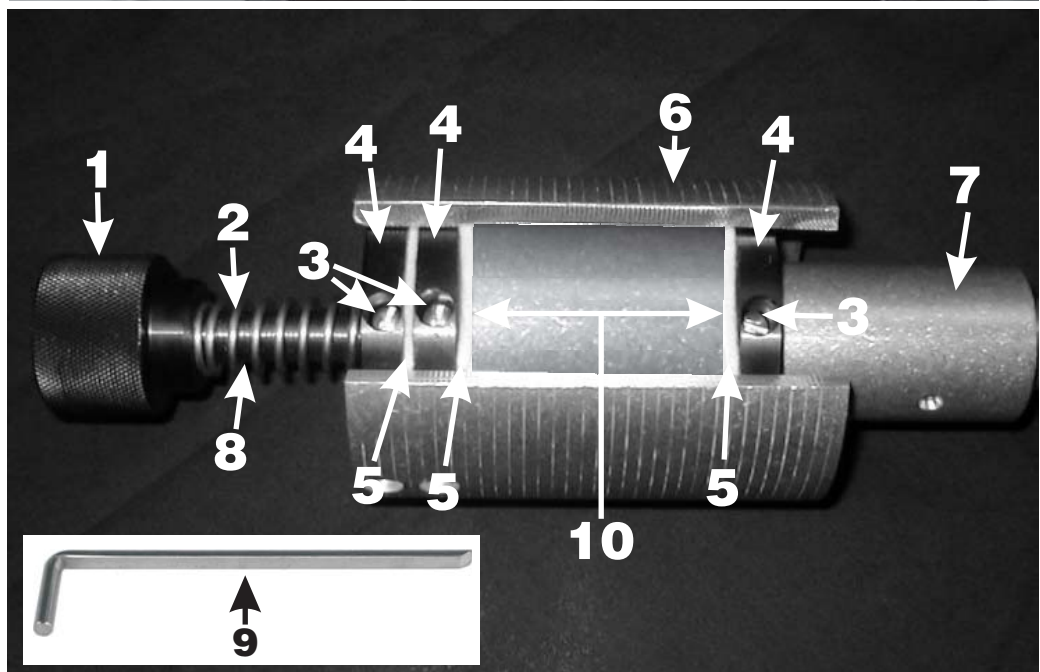
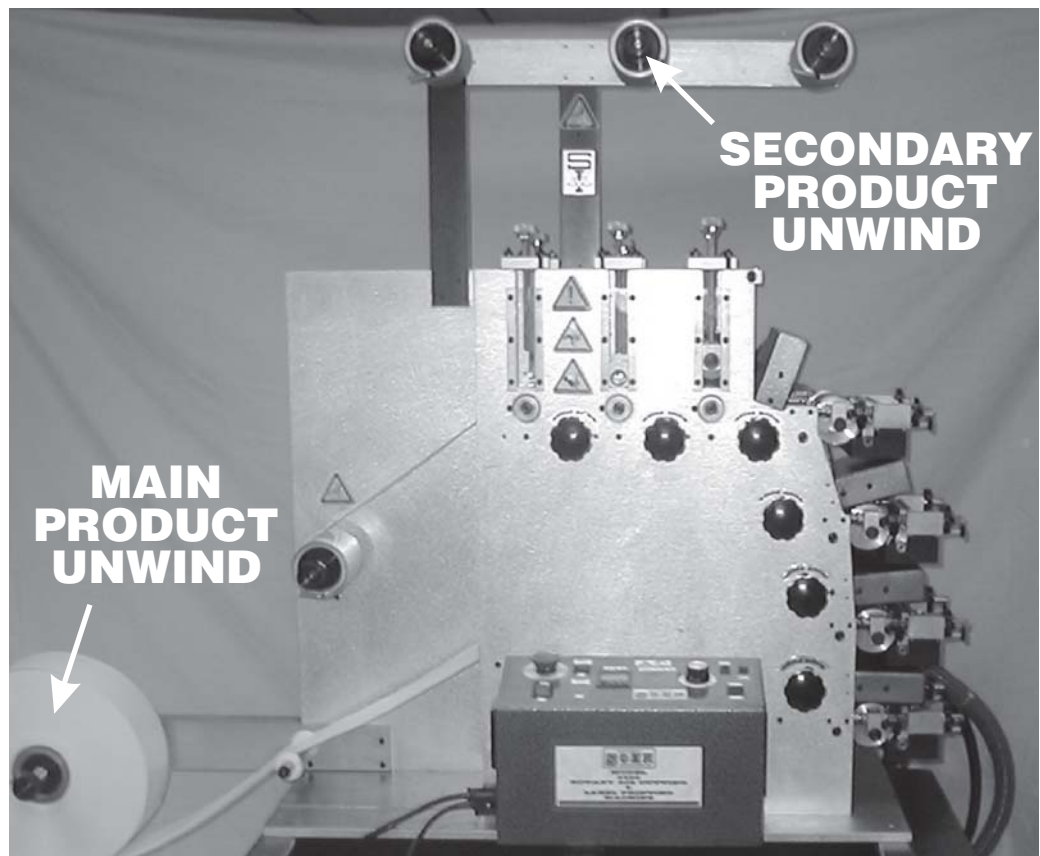


FINISHED PRODUCT REWIND ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. |
|----|------------|---|------|
| 1 | 65-687-1 | Tension Nut..... | 1 |
| 2 | 1004-06 | Spring..... | 1 |
| 3 | SL-302 | Tension Collar Screw..... | 3 |
| 4 | 65-735-2 | Clutch Collar..... | 3 |
| 5 | 7656-3 | Clutch Disk..... | 3 |
| 6 | 44-416-500 | Core Holder..... | 1 |
| 7 | 1000-10 | Bushing (Core Holder)..... | 2 |
| 8 | 44-189-5 | Rewind Shaft Housing..... | 1 |
| 9 | 44-188-500 | Rewind Shaft..... | 1 |
| 10 | | Sprocket (see drive assembly on pg. 14 for correct sprocket)... | 1 |
| 11 | 65-417 | Core Lock Pin..... | 1 |
| 12 | 1000-05 | Bushing (Rewind Housing)..... | 2 |

WASTE REWIND ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. |
|----|------------|---|------|
| 1 | 65-687-1 | Tension Nut..... | 1 |
| 2 | 1004-06 | Spring..... | 1 |
| 3 | SL-302 | Tension Collar Screw..... | 3 |
| 4 | 65-735-2 | Clutch Collar..... | 3 |
| 5 | 7656-3 | Clutch Disk..... | 3 |
| 6 | 44-416-500 | Core Holder..... | 1 |
| 7 | 1000-10 | Bushing (Core Holder)..... | 2 |
| 8 | 44-189-5 | Rewind Shaft Housing..... | 1 |
| 9 | 44-188-500 | Rewind Shaft..... | 1 |
| 10 | | Sprocket (see drive assembly on pg. 14 for correct sprocket)... | 1 |
| 11 | 65-417 | Core Lock Pin..... | 1 |
| 12 | 1000-05 | Bushing (Rewind Housing)..... | 2 |

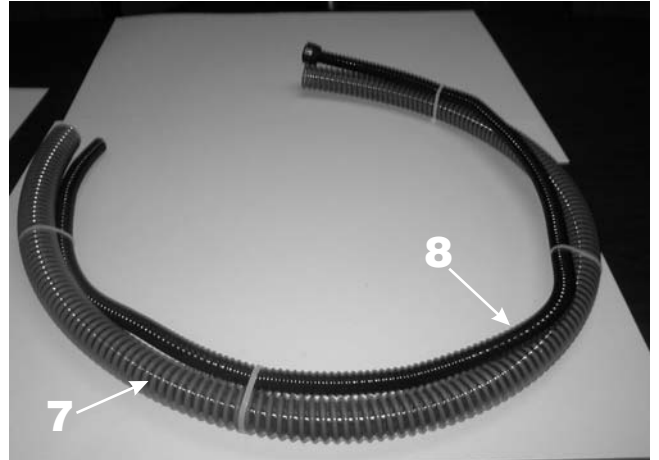
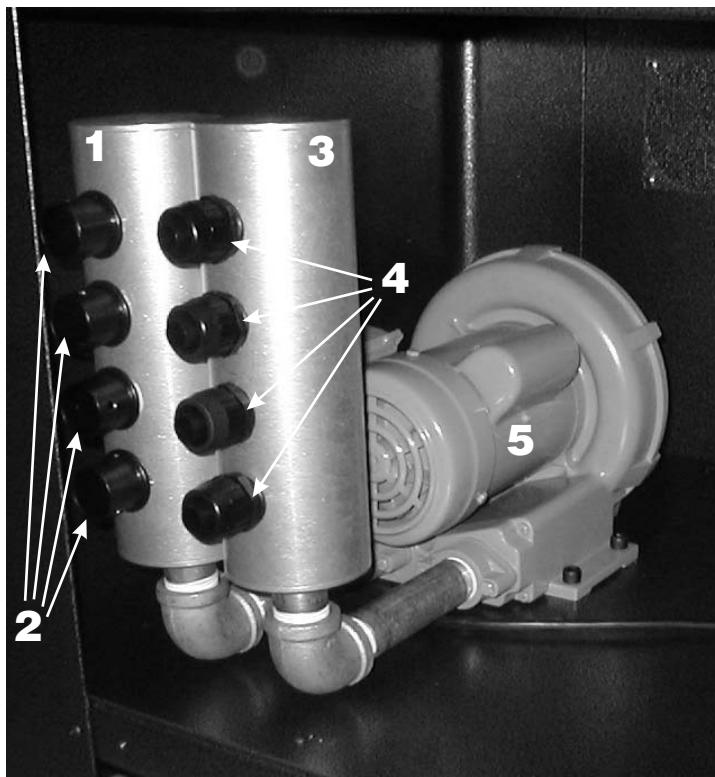


MAIN PRODUCT UNWIND ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. |
|----|------------|----------------------------|------|
| 1 | 65-687-1 | Tension Nut | 1 |
| 2 | 1004-06 | Spring | 1 |
| 3 | SL-302 | Tension Collar Screw..... | 3 |
| 4 | 65-735-2 | Clutch Collar..... | 3 |
| 5 | 7656-3 | Clutch Disk..... | 3 |
| 6 | 44-416-500 | Core Holder..... | 1 |
| 7 | 44-187-5 | Unwind Shaft Support..... | 1 |
| 8 | 44-186-500 | Unwind Shaft..... | 1 |
| 9 | 65-417 | Core Lock Pin | 1 |
| 10 | 1000-10 | Bushing (Core Holder)..... | 2 |

SECONDARY PRODUCT UNWIND ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. |
|----|------------|----------------------------|------|
| 1 | 65-687-1 | Tension Nut | 1 |
| 2 | 1004-06 | Spring | 1 |
| 3 | SL-302 | Tension Collar Screw..... | 3 |
| 4 | 65-735-2 | Clutch Collar..... | 3 |
| 5 | 7656-3 | Clutch Disk..... | 3 |
| 6 | 44-416-500 | Core Holder..... | 1 |
| 7 | 44-187-500 | Unwind Shaft Support..... | 1 |
| 8 | 44-186-500 | Unwind Shaft..... | 1 |
| 9 | 65-417 | Core Lock Pin | 1 |
| 10 | 1000-10 | Bushing (Core Holder)..... | 2 |



BLOWER ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|---|----------|------------------------------------|------|-------------|
| 1 | 44-918 | Vacuum Tube Assembly Complete..... | 1 | |
| 2 | 44-868 | Vacuum Tube Connector..... | 4 | |
| 3 | 44-918 1 | Blower Tube Assembly Complete..... | 1 | |
| 4 | 1003-05 | Blower Tube Connector..... | 4 | |
| 5 | 5134 | Ring Compressor..... | 1 | |
| 6 | 44-922 | Dryer Head Assembly Complete..... | 1 | |
| 7 | 44-900 1 | Vacuum Pressure Hose (Grey)..... | 1 | |
| 8 | 44-901 | Blower Hose (Black)..... | 1 | |



PACER NIP ASSEMBLY

| PART NO. | DESCRIPTION | QTY. |
|----------|----------------------------|------|
| 44-410-C | Nip Assembly Complete..... | 1 |



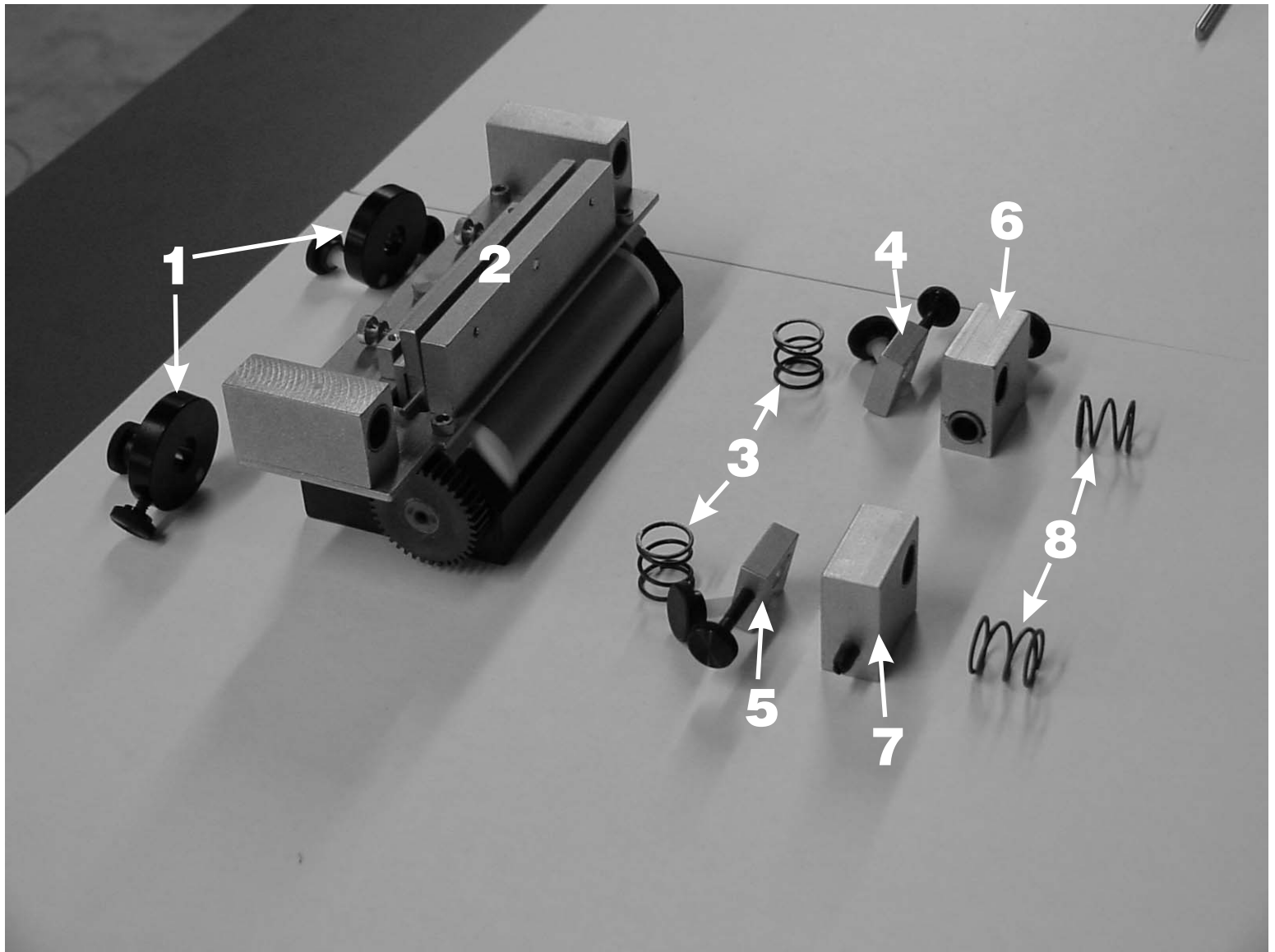
PAPER GUIDE ASSEMBLY

| PART NO. | DESCRIPTION | QTY. |
|----------|---------------------------|------|
| 65-754 | Paper Guide Assembly..... | 2 |



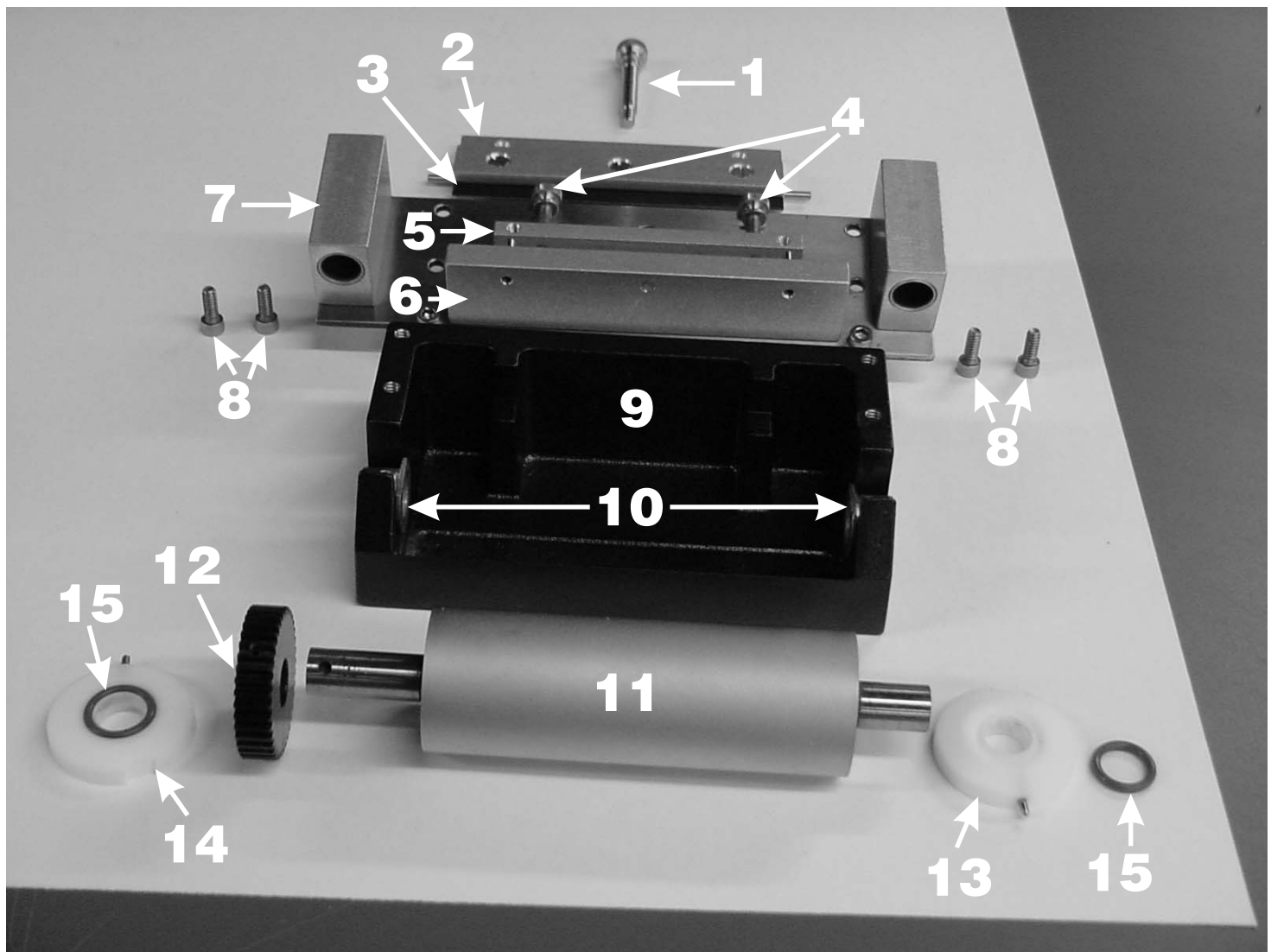
KNOB

| PART NO. | DESCRIPTION | QTY. |
|----------|-------------|------|
| 3020 | Knob..... | 6 |



PRINT PRESSURE ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|---|-------------|---|---------|-------------|
| 1 | 44-231-C | Fountain Adjusting Collar Assembly..... | 2 | |
| 2 | 44-200-91-C | Complete Ink Fountain Assembly..... | 1 | |
| 3 | 1004-20 | Spring..... | 2 | |
| 4 | 44-232-C | Print Pressure Block Assembly, LH..... | 4 | |
| 5 | 44-233-C | Print Pressure Block Assembly, RH..... | 4 | |
| 6 | 44-151-C-L | Bearing Block Assembly, LH..... | 4 | |
| 7 | 44-151-C-R | Bearing Block Assembly, RH..... | 4 | |
| 8 | 1004-04 | Spring..... | up to 8 | |

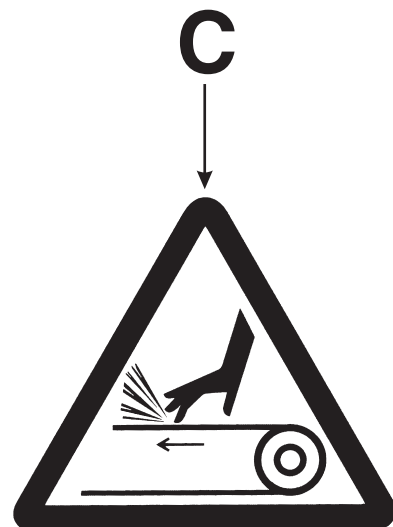
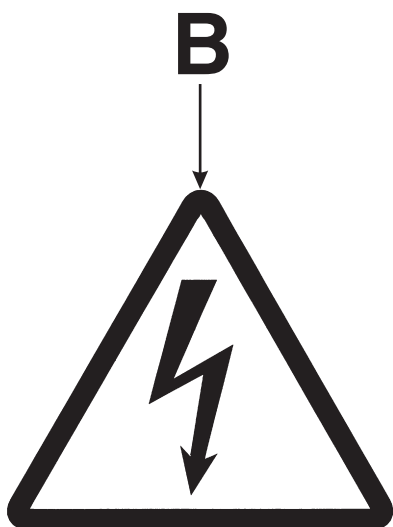
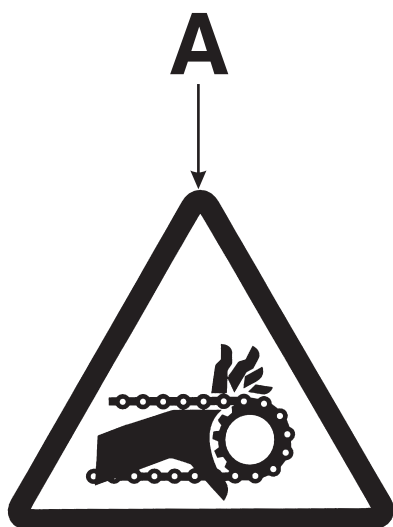
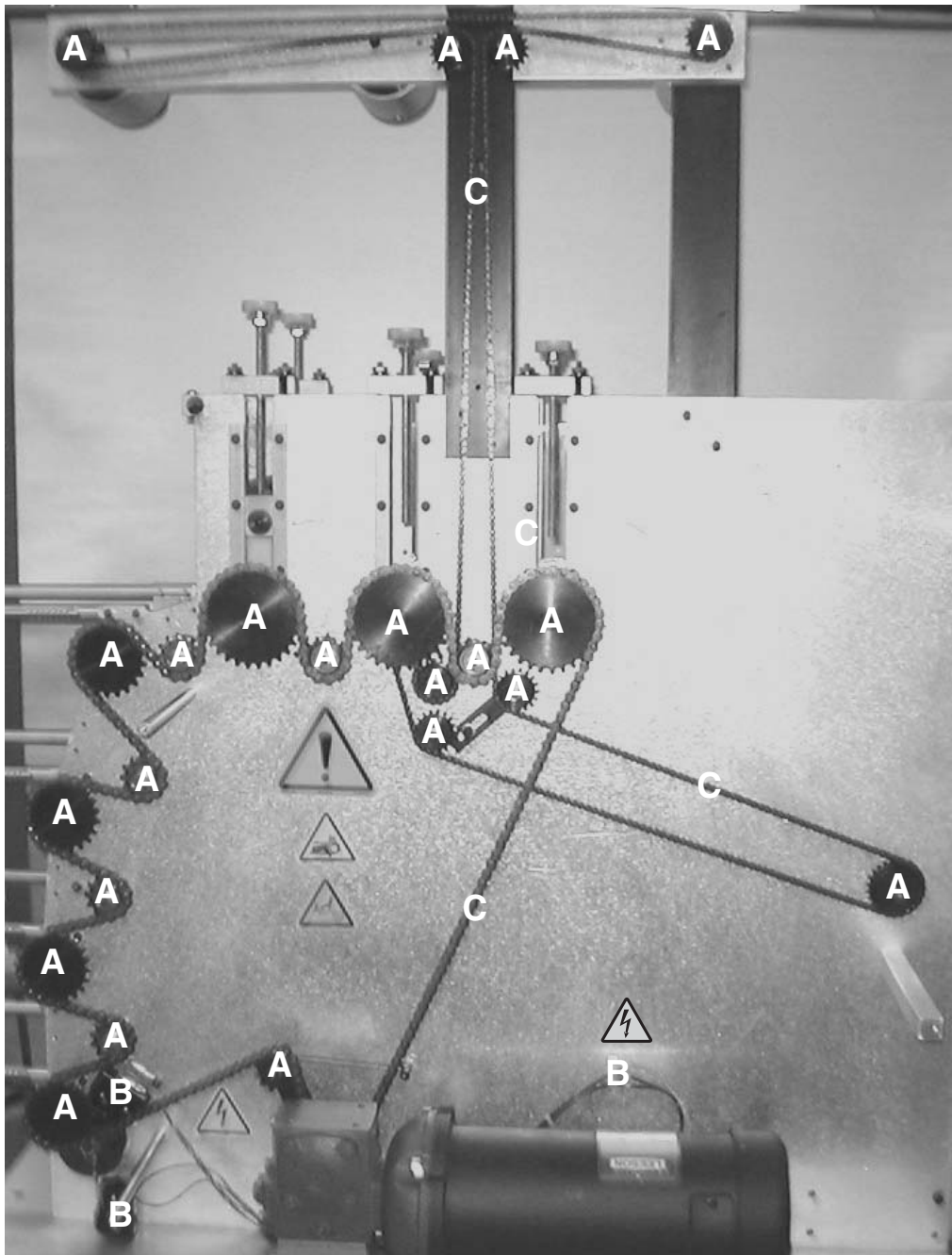


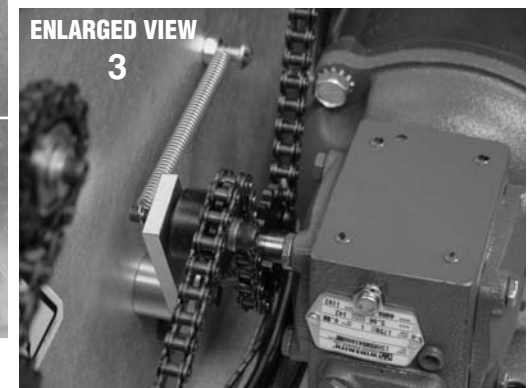
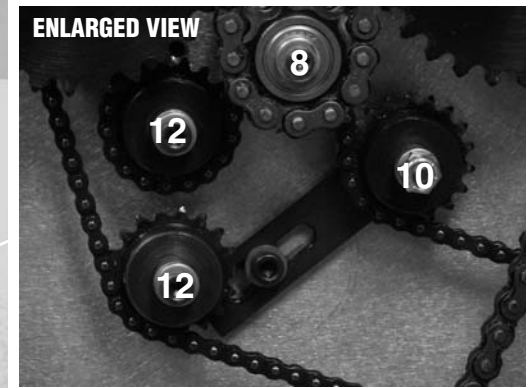
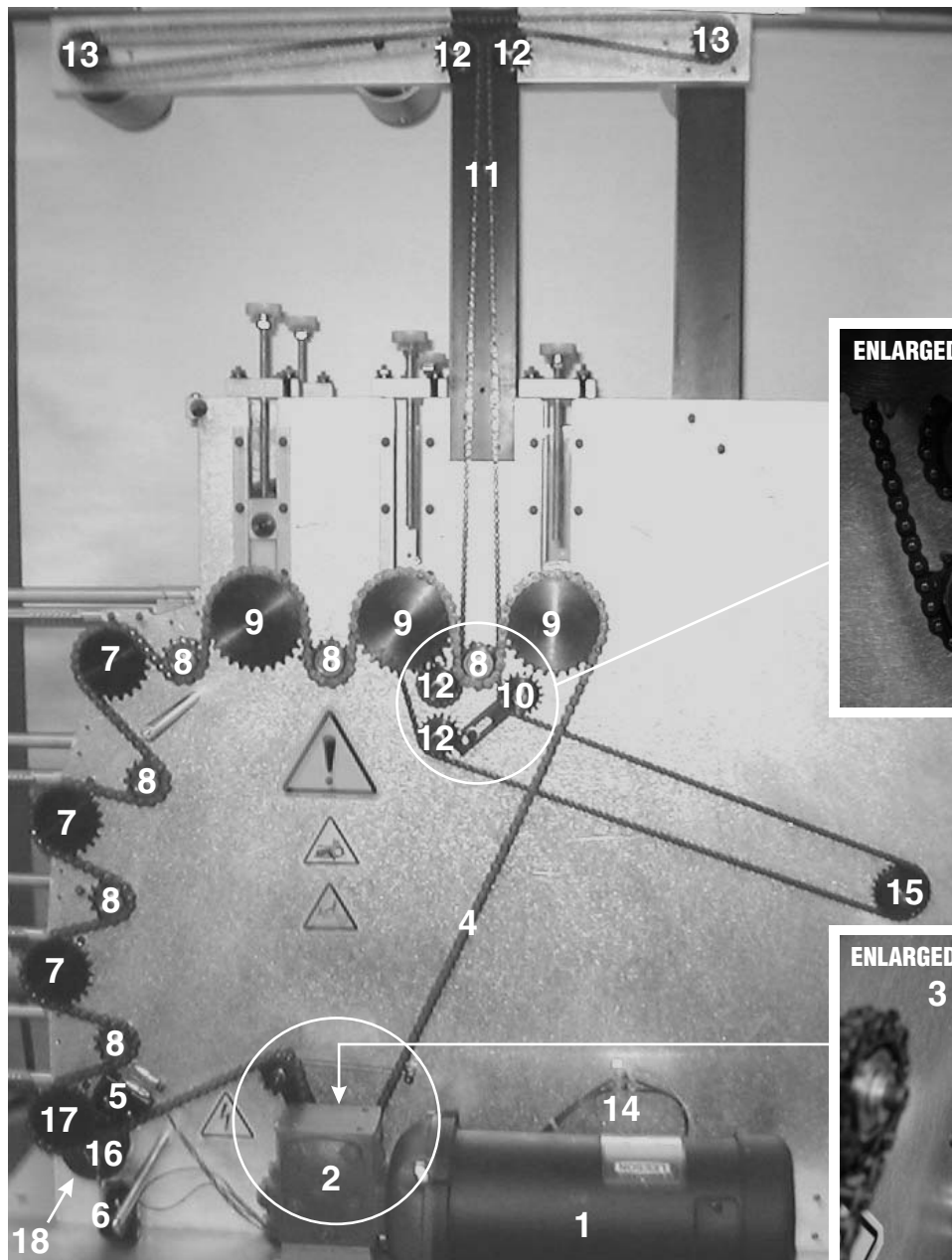
INK FOUNTAIN ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|----|-------------|--|------|-------------|
| 1 | 65-218 | Dipstick..... | 1 | |
| 2 | 44-282-C | Reverse Dr. Blade Assembly..... | 1 | |
| 3 | 44-203 | Reverse Dr. Blade..... | 1 | |
| 4 | K083212 | Screw, Brass Knurled..... | 2 | |
| 5 | 44-284 | Reverse Dr. Blade Pressure Block..... | 1 | |
| 6 | 44-281 | Reverse Dr. Blade Mount..... | 1 | |
| 7 | 44-210 | Fountain Carrier Bracket..... | 1 | |
| 8 | S102408 | Screws, Fountain Carrier Bracket Assembly..... | 4 | |
| 9 | 44-200-91 | Fountain Body, Coated..... | 1 | |
| 10 | 44-207 | Fountain Bushing..... | 2 | |
| 11 | 44-201-91 | Ink Roller..... | 1 | |
| 12 | 44-215-91-C | Ink Roller Gear..... | 1 | |
| 13 | 44-211-L-91 | Fountain Seal (left)..... | 1 | |
| 14 | 44-211-R-91 | Fountain Seal (right)..... | 1 | |
| 15 | 1005-01 | O-Ring..... | 2 | |



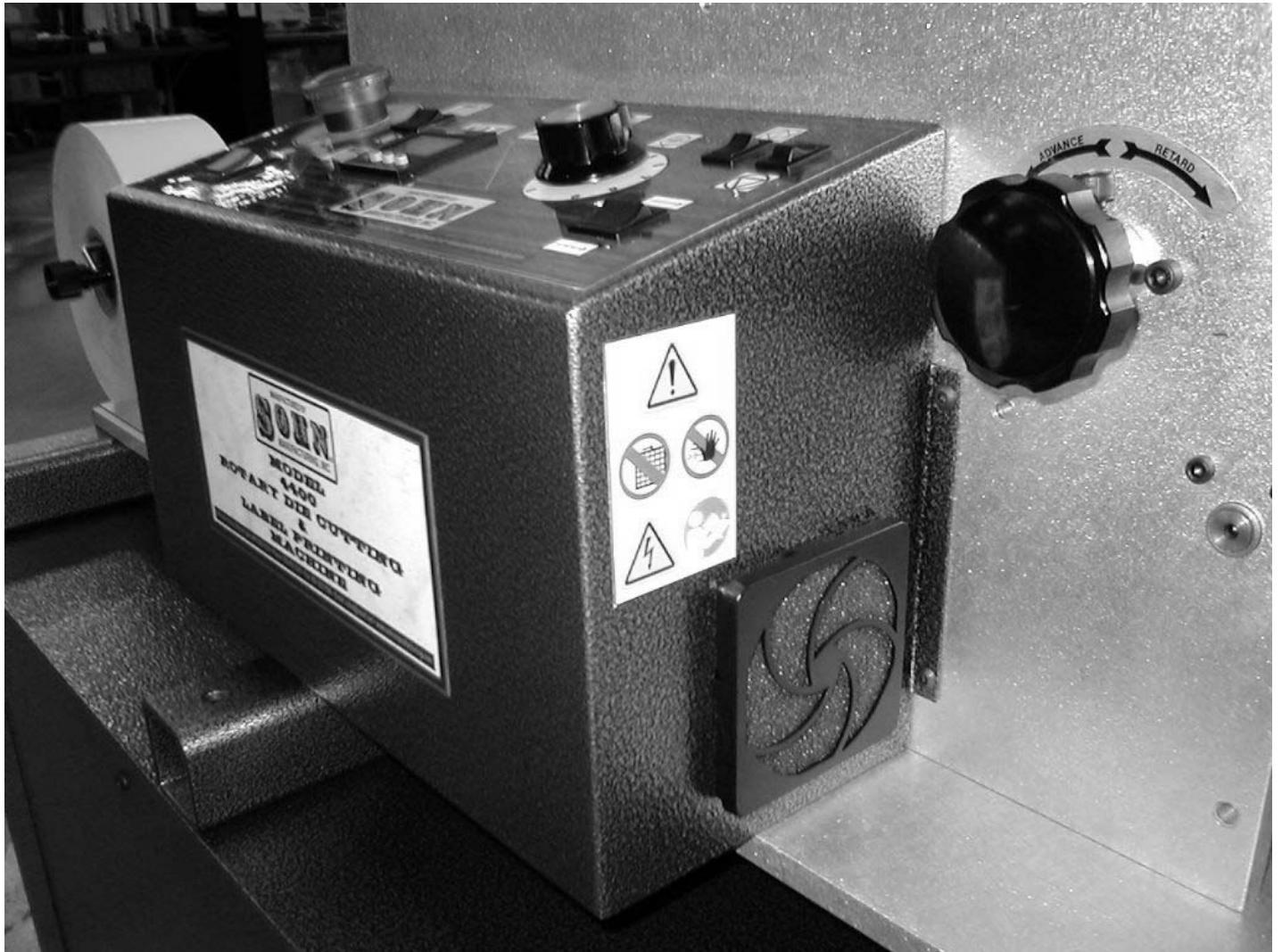
BACK GUARD



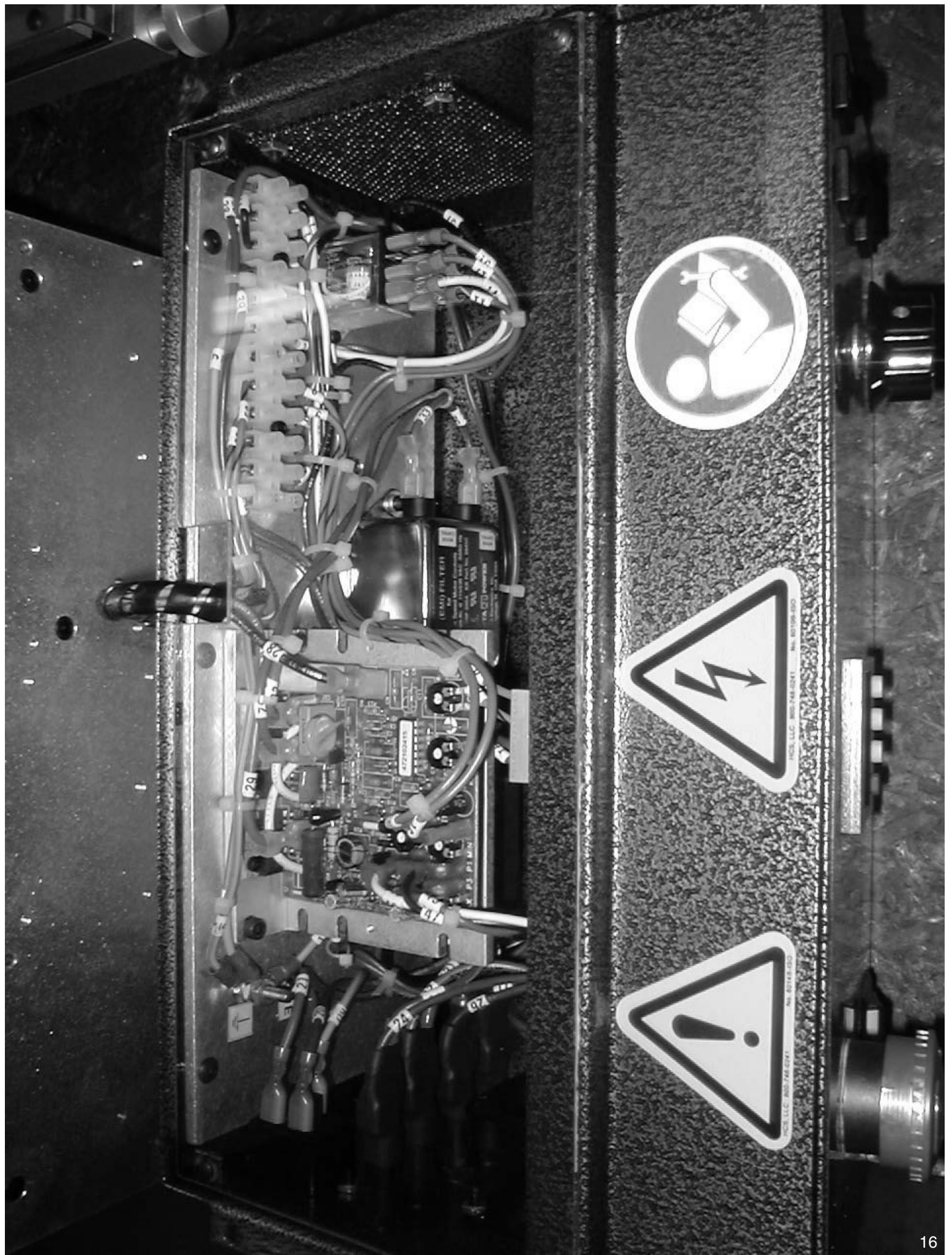


DRIVE ASSEMBLY

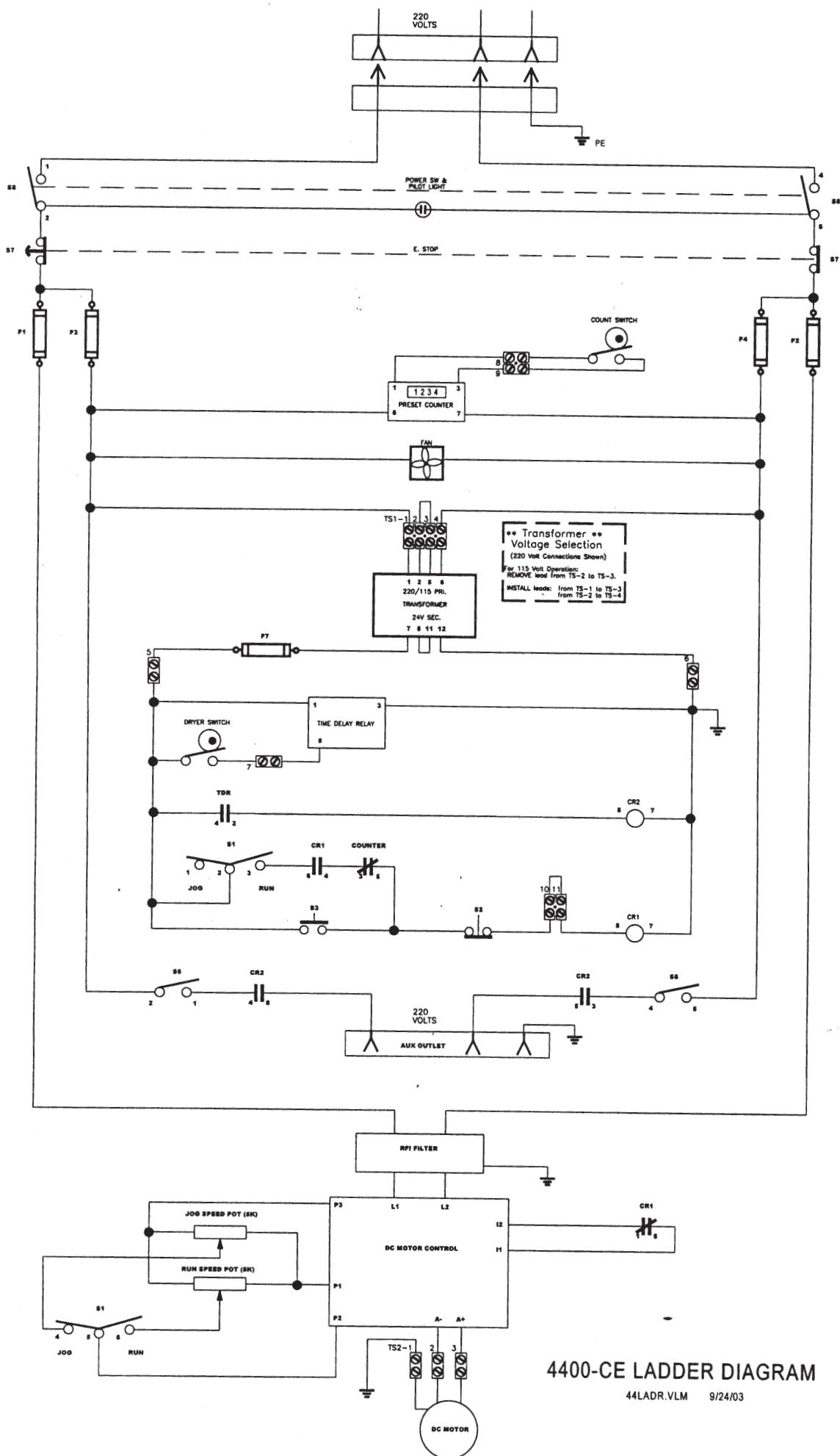
| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|----|----------|--|------|-------------|
| 1 | 5144 | Drive Motor..... | 1 | |
| 2 | 2000-01 | Gear Reducer..... | 1 | |
| 3 | 44-121-C | Main Chain Tightener & Pivot Assembly..... | 1 | |
| 4 | 44-368-7 | Drive Chain..... | 1 | |
| 5 | 5145 | Micro Switch..... | 1 | |
| 6 | 44-253 | Micro Switch, with Extension..... | 1 | |
| 7 | 44-138-C | Sprocket..... | 3 | |
| 8 | 44-132-1 | Idler Sprocket..... | 6 | |
| 9 | 44-133-C | Sprocket..... | 3 | |
| 10 | 44-123-C | Waste Chain Tension Assembly..... | 1 | |
| 11 | 44-368-6 | Laminator Drive Chain..... | 1 | |
| 12 | 65-173 | Idler Sprocket..... | 4 | |
| 13 | 65-172 5 | Waste Drive Sprocket..... | 2 | |
| 14 | 5117 | Terminal Strip..... | 1 | |
| 15 | 44-129 1 | Sprocket..... | 1 | |
| 16 | 44-255 | Counter Gear..... | 1 | |
| 17 | 44-138 1 | Sprocket (with Counting Pin)..... | 1 | |
| 18 | 44-251 | Counter Pick Up Gear..... | 1 | |



FRONT GUARD



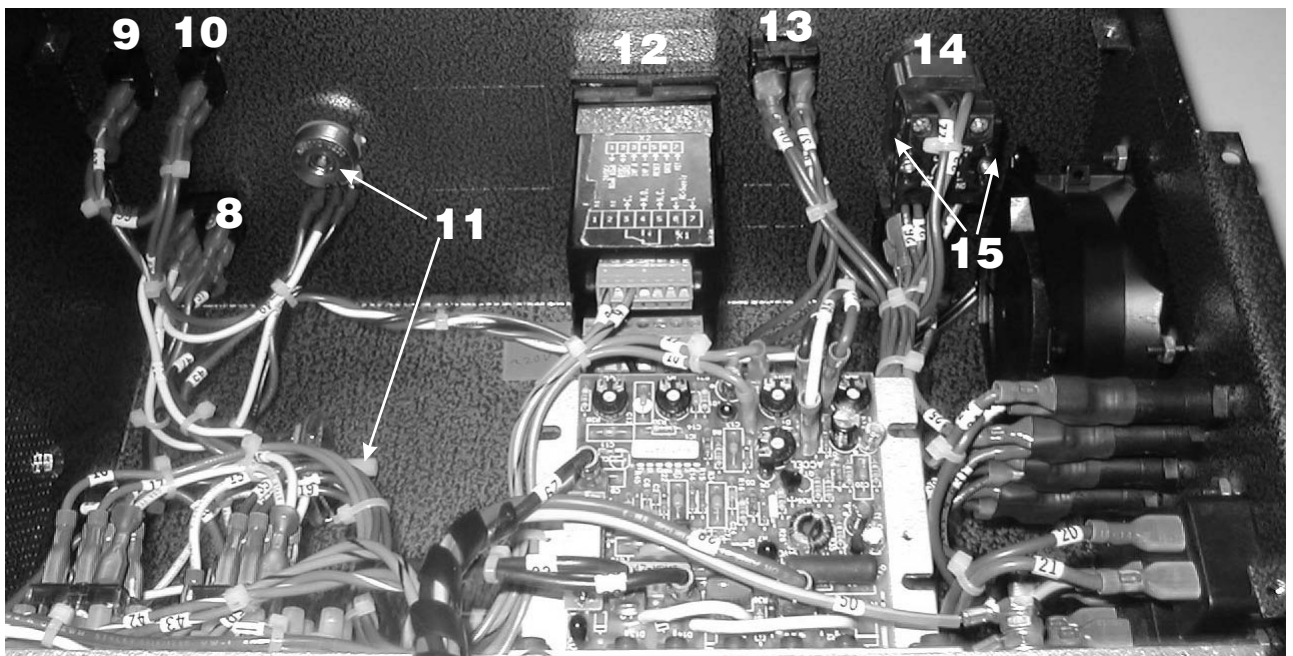
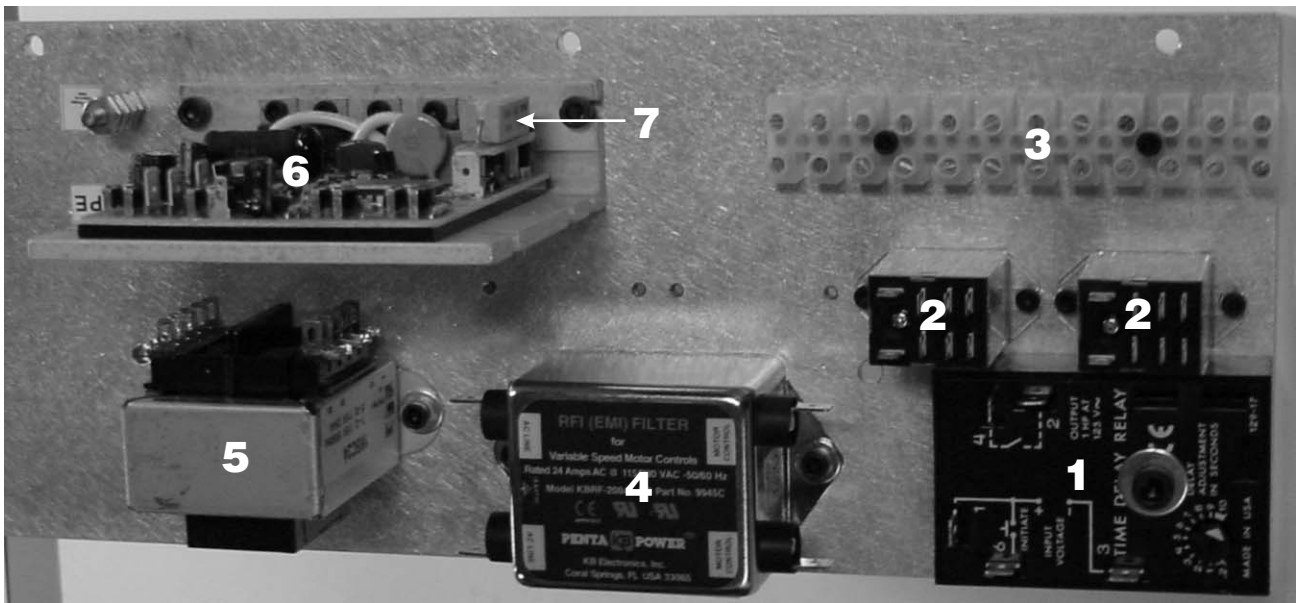






EXTERNAL ELECTRICAL ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|----|----------|--------------------------------------|------|-------------|
| 1 | 5120 | Switch (run/jog)..... | 1 | |
| 2 | 5119 | Switch (stop)..... | 1 | |
| 3 | 5118 | Switch (start)..... | 1 | |
| 4 | 5013 | Knob..... | 1 | |
| 5 | 5061 | Counter (200-230V)..... | 1 | |
| | 5069 | Counter (120V)..... | 1 | |
| 6 | 5121 | Switch (aux)..... | 1 | |
| 7 | 5096 | Switch (E stop button)..... | 1 | |
| 8 | 5123 | Switch (power 220V)..... | 1 | |
| | 5122 | Switch (power 120V)..... | 1 | |
| 9 | 5127 | Fan (220V)..... | 1 | |
| | 5128 | Fan (120V)..... | 1 | |
| | 5129 | Fan Guard Assembly..... | 2 | |
| | 5130 | Fan Filter Service Only..... | 2 | |
| 10 | 5112 | Fuse Holder (5 x 20mm)..... | 5 | |
| | 5124 | Fuse (10A) F1, F2..... | 2 | |
| | 5125 | Fuse (5A) F3, F4..... | 2 | |
| | 5126 | Fuse (0.8A) F7..... | 1 | |
| 11 | 5132 | Power Outlet..... | 1 | |
| 12 | 5133 | Power Inlet..... | 1 | |
| 13 | 5134 | Power Cord (110V)..... | 1 | |
| | 5137 | Power Cord (220V) International..... | 1 | |



INTERNAL ELECTRICAL ASSEMBLY

| | PART NO. | DESCRIPTION | QTY. | PRICE / EA. |
|----|----------|--|------|-------------|
| 1 | 5114 | Time Delay Relay..... | 1 | |
| 2 | 5115 | Relay..... | 2 | |
| 3 | 5116 | Terminal Strip..... | 1 | |
| 4 | 5104 | RFI Filter..... | 1 | |
| 5 | 5113 | Transformer..... | 1 | |
| 6 | 5087 | Motor Control..... | 1 | |
| 7 | 5036 | 3/4 HP Resistor..... | 1 | |
| 8 | 5120 | Switch (run/jog)..... | 1 | |
| 9 | 5119 | Switch (stop)..... | 1 | |
| 10 | 5118 | Switch (start)..... | 1 | |
| 11 | 5074 | Potentiometer..... | 2 | |
| 12 | 5061 | Counter (200-230V)..... | 1 | |
| | 5069 | Counter (120V)..... | 1 | |
| 13 | 5121 | Switch (aux)..... | 1 | |
| 14 | 5098 | Switch (E stop) contact block mount..... | 1 | |
| 15 | 5097 | Switch (E stop) contact assembly..... | 2 | |
| | 5135 | Fan Cord (not shown)..... | 1 | |

SERVICE LOG

[illegible]

SOHN MODEL 4400



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