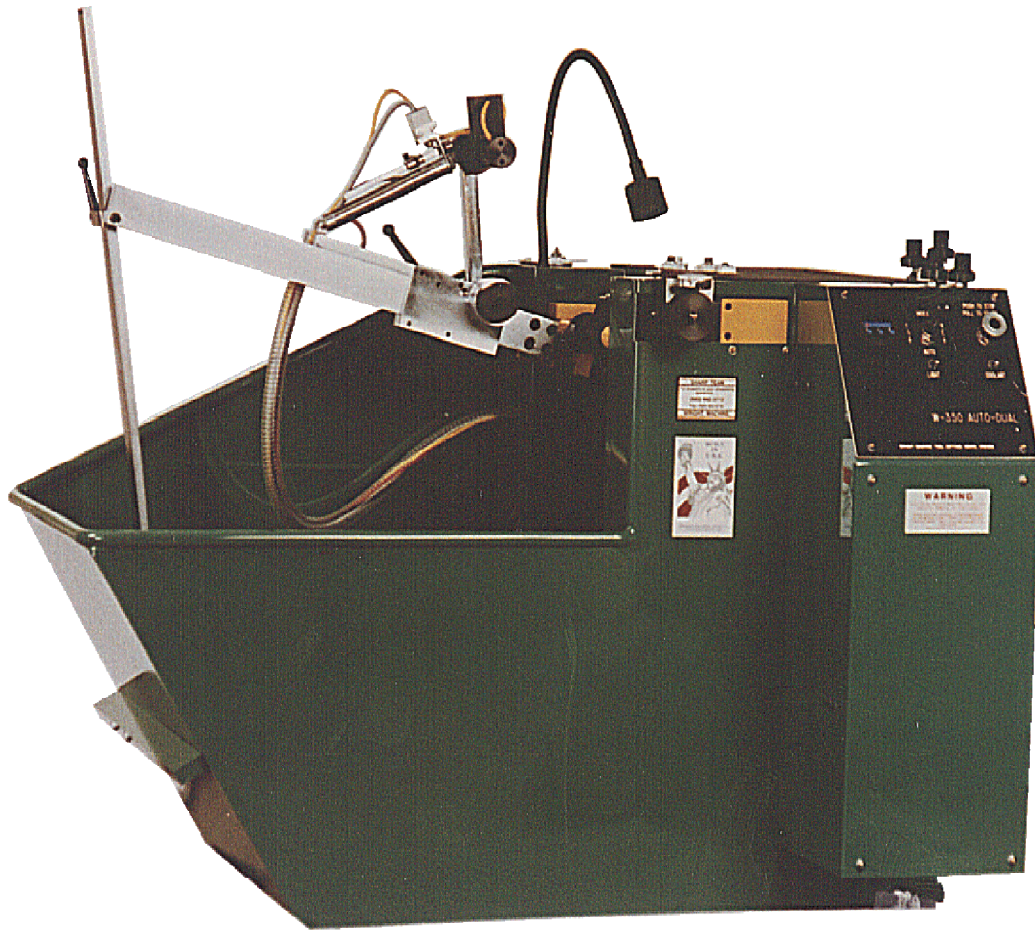




# W-350 HD

Automatic Dual Side Sharpener



## OPERATOR'S MANUAL

MADE IN THE U.S.A.

# W-350 HD DUAL SIDE SHARPENER

## LIMITED WARRANTY

This machine is warranted against defects in workmanship and materials under normal use and proper maintenance, for one year after date of purchase from WRIGHT MACHINE TOOL CO. Any part which is determined to be defective in material or workmanship and returned to WRIGHT MACHINE TOOL CO., shipping costs prepaid will be repaired or replaced, at WRIGHT MACHINE TOOL CO. option.

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# W-350 HD DUAL SIDE SHARPENER

## GENERAL SAFETY RULES

**Failure to follow the Safety Rules and other basic precautions, may result in serious injury.**

**Always use eye protection:** When operating this machine, eye protection should be worn. Grinding particles and the possibility of wheel breakage make eye protection necessary. Also face or dust mask if operation is dusty. Use adequate ventilation.

**Use ear protection:** If operation is creating excessive noise.

**Disconnect power:** To machine when NOT in use.

**Keep clear:** Of grinding wheels and pinch points when machine is running.

**Saws are sharp:** Wear appropriate personal protective equipment when handling saw blades.

**Mounting of wheels:** Should only be done by persons with mechanical aptitude and good knowledge of mounting, care, and inspection of grinding wheels. Wheels must be rated for the RPM of the machine.

**Dress properly:** Do not wear loose clothing or jewelry. Nonskid foot wear is recommended. Wear protective hair covering to contain long hair.

**Avoid dangerous environments:** Don't use in wet location. Keep work area well lit. Do not use this machine in the presence of flammable liquid or gasses.

**Keep children away:** Do not let VISITORS contact this machine.

**Keep work area clean:** Cluttered areas invite accidents.

**All electrical covers:** Must be in place before applying electrical power to this machine. Electrical service must be locked out prior to removing any electrical covers or machine guards. Access to electrical components must be restricted to trained personnel only to avoid possible electrical shock.



# W-350 HD DUAL SIDE SHARPENER

## GENERAL SAFETY RULES (CONTINUED)

**Voltage greater:** Than specified on name plate can result in serious injury to user.

**Never stand on this machine:** Serious injury could occur if the machine is tipped or if the grinding wheel is accidentally contacted.

**Follow safety precautions:** For wheels, coolant and material being ground. These items must also be compatible. This information is available on the Safety Data sheet for each of these products.



# W-350 HD DUAL SIDE SHARPENER

## SPECIFICATIONS

### W-350 HD Automatic Dual Side Grinder for Circular Saws, Tapered Peripheral Grind.

STANDARD VOLTAGE: 230 Volt, 3 Phase, 50/60 HZ

OPTIONAL VOLTAGE: 440 Volt, 3 Phase

SHIPPING WEIGHT: 1,000 lbs. / 450 kg

CRATE SIZE: L 65" X W 49" X H 75"  
L 145 X 125 X H 135 cm

AIR REQUIREMENTS: 2 CFM at 80 psi / 6 bar

STANDARD SAW SIZE: 6"-48"

OPTIONAL SAW SIZE: 3-3/4" - 4"

SPINDLE MOTORS: (2) 3/4 h.p. Motors

STANDARD RPM: 5150 RPM

OPTIONAL RPM: As Requested

\*NOTE: 48" saws with less than a 25° hook may require having the base notched out.



# W-350 HD DUAL SIDE SHARPENER

## OPTIONS

Large Bore Option	W-50
Totalizer Counter	W-70
3 Pin Spline Saw Center	W-450
Spline Bore Saw Center	W-460
Expandable Saw Center with magnets	W-495
Manual Saw Locator	W-761
Small Saw Option (Down to 4") (Includes 2 W-652-1 and 4 bushings - specify size)	W-1320-1A
Dual Pitch Option	W-1745
Small Saw Auto Indexer - down to 2"/50mm	W-2370
Bevel Face Stop	W-1220
Borazon Grinding Wheel	B-35 (2 Required)
Diamond Grinding Wheel	D-35 (2 Required)

## COMMON REPLACEMENT PARTS

Clamp Jaw strob	W-652
Clamp Jaw Round	W-652-2
Index Finger	W-635



# W-350 HD DUAL SIDE SHARPENER

## PRE SET UP

### COOLANT

Coolant capacity is 10 to 15 gallons. A rust inhibiting grinding coolant **MUST** be used or severe rust damage to machine can result. Mix coolant according to manufacturer's instructions.

COOLANT FILTERS: Clean coolant will increase grinding wheel life, improve grind finish and increase removal rates. Change coolant filter as necessary. Part # W-589.

### RUST DAMAGE IS NOT COVERED BY THE WARRANTY

### MOUNTING GRINDING WHEELS

**All grinding wheels must be rated for the RPM of this machine. Wheels exposed to higher than rated RPM are dangerous.**

Mounting of the grinding wheel should only be done by persons with mechanical aptitude and good knowledge of mounting, care, and inspection of grinding wheels.

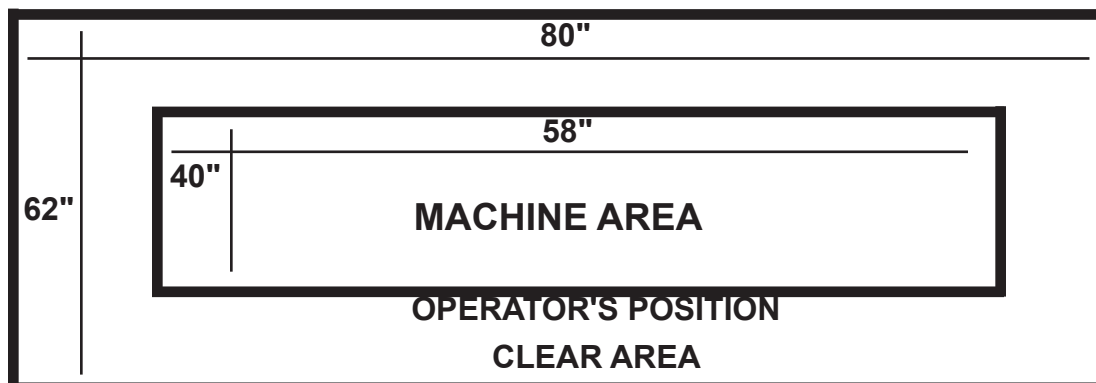
All grinding wheels must be rated for at least 5,150 RPM of the RPM of your machine, whichever is greater. For Carbide, 2 D-35 Diamond Wheels are required. For Stellite<sup>®</sup> / High Speed Steel, 2 B-35 Borazon Wheels are required.

### MACHINE INSTALLATION

Lifting this machine should only be done with a fork lift under the Coolant Tank.

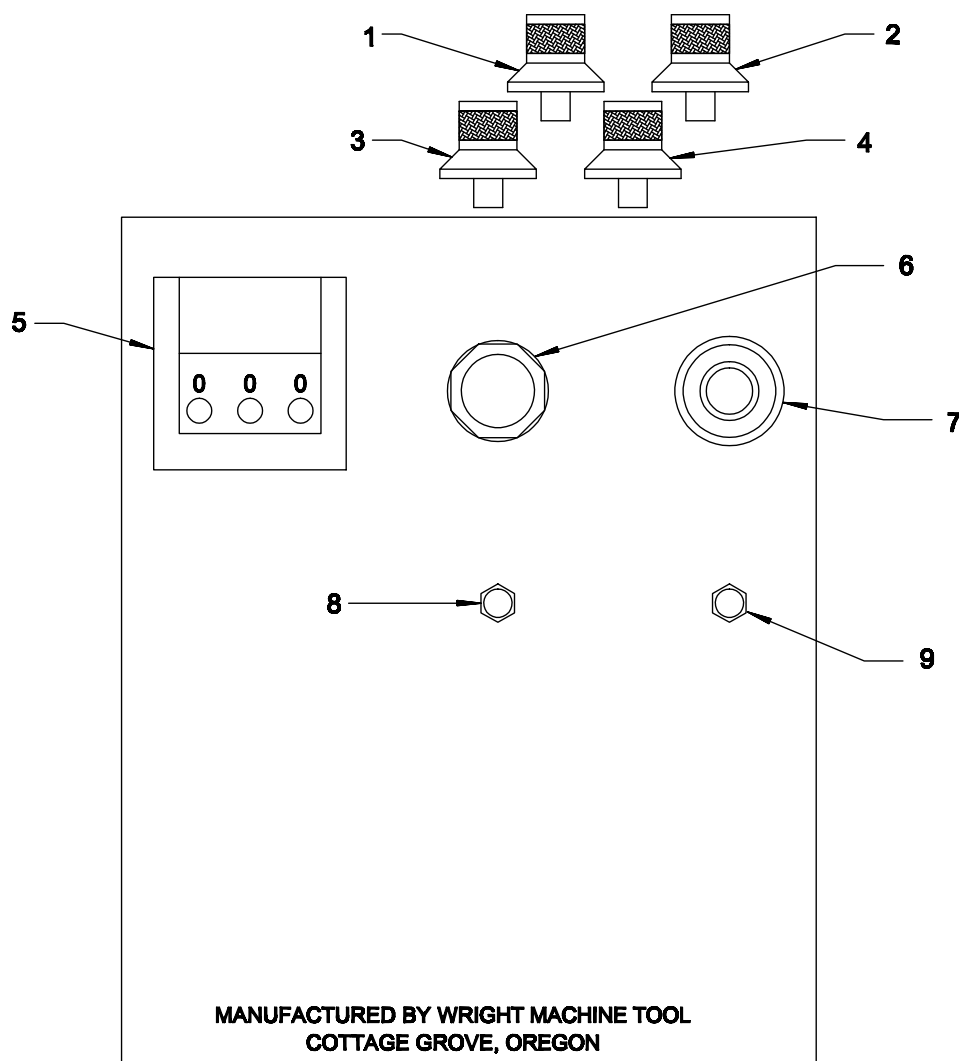
Machine weight is approximately 1,000 pounds.

### RECOMMENDED FLOOR SPACE FOR MACHINE AND OPERATOR



# W-350 HD DUAL SIDE SHARPENER

## CONTROLS



1. Forward Stroke Stop Position
2. Reverse Stroke Stop Position
3. Forward Feed Speed
4. Reverse Feed Speed
5. Tooth Counter

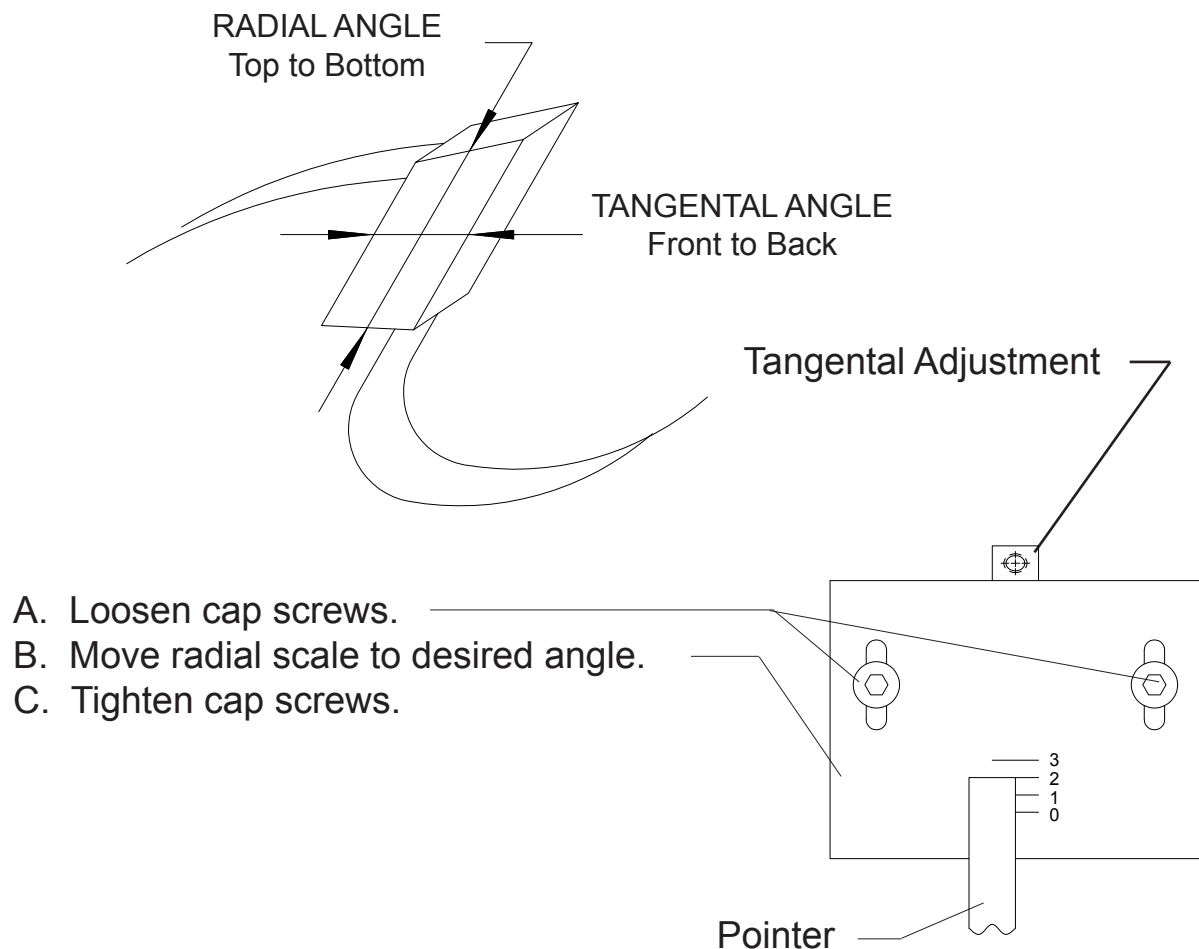
6. Control Joy Switch
7. Start / Stop Switch
8. Work Light Switch
9. Coolant Switch



# W-350 HD DUAL SIDE SHARPENER

## SET UP

1. Set radial angle if necessary. Loosen the 2 allen screws on the top of the finger plate and slide the finger plate forward or back until the proper radial angle is set on the scale on top of the finger plate.

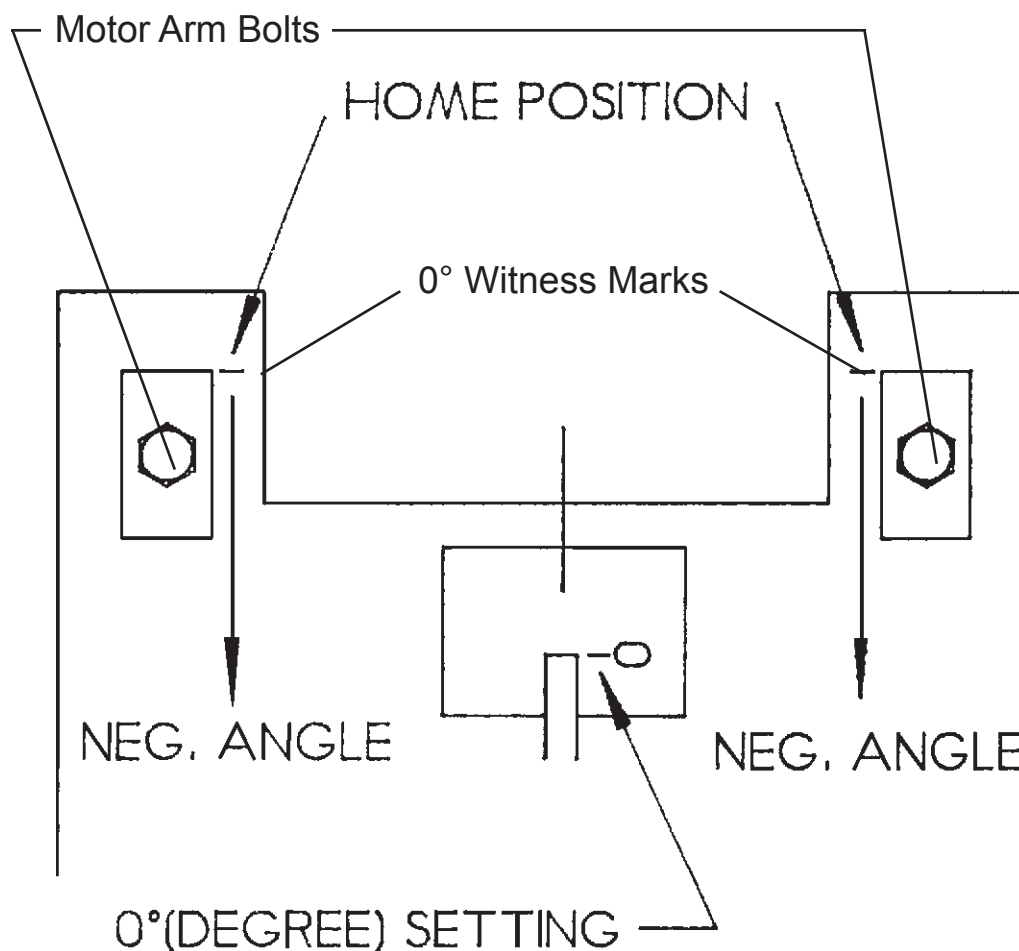


# W-350 HD DUAL SIDE SHARPENER

The W-350 M HD is capable of grinding negative radial angles. Use the following procedure to set up for those applications, otherwise continue to the next step on the following page.

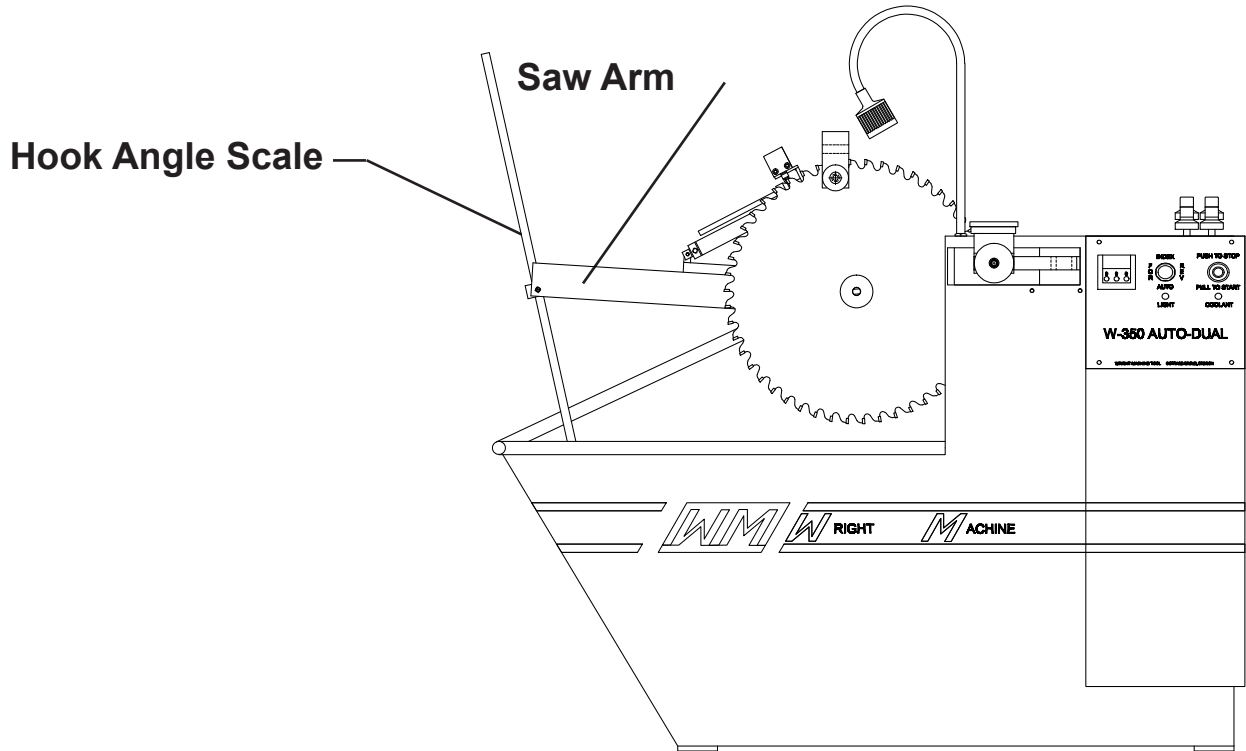
Step 1. Set machine on 0° radial.

Step 2. Remove the rear cover, loosen the motor arm bolts and move the motor arms back  $\frac{7}{32}$ ", .219 for each degree negative required. Example:  $4^\circ \text{ neg.} \times .219 = .876$  or  $\frac{7}{8}$ ". Support the motor with one hand while making adjustments.

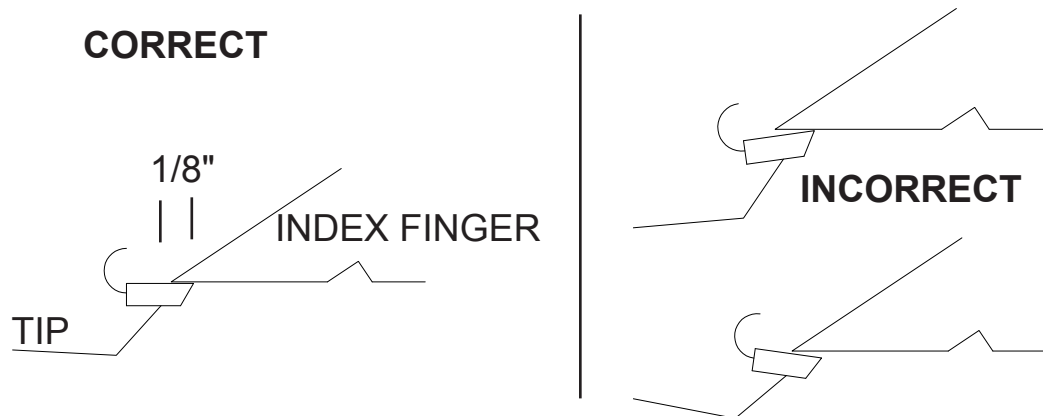


# W-350 HD DUAL SIDE SHARPENER

2. Set hook angle. Move the saw arm until the hook angle of the saw matches the hook angle scale at the end of the saw arm. When set properly, the face of the saw tip to be ground should be horizontal.

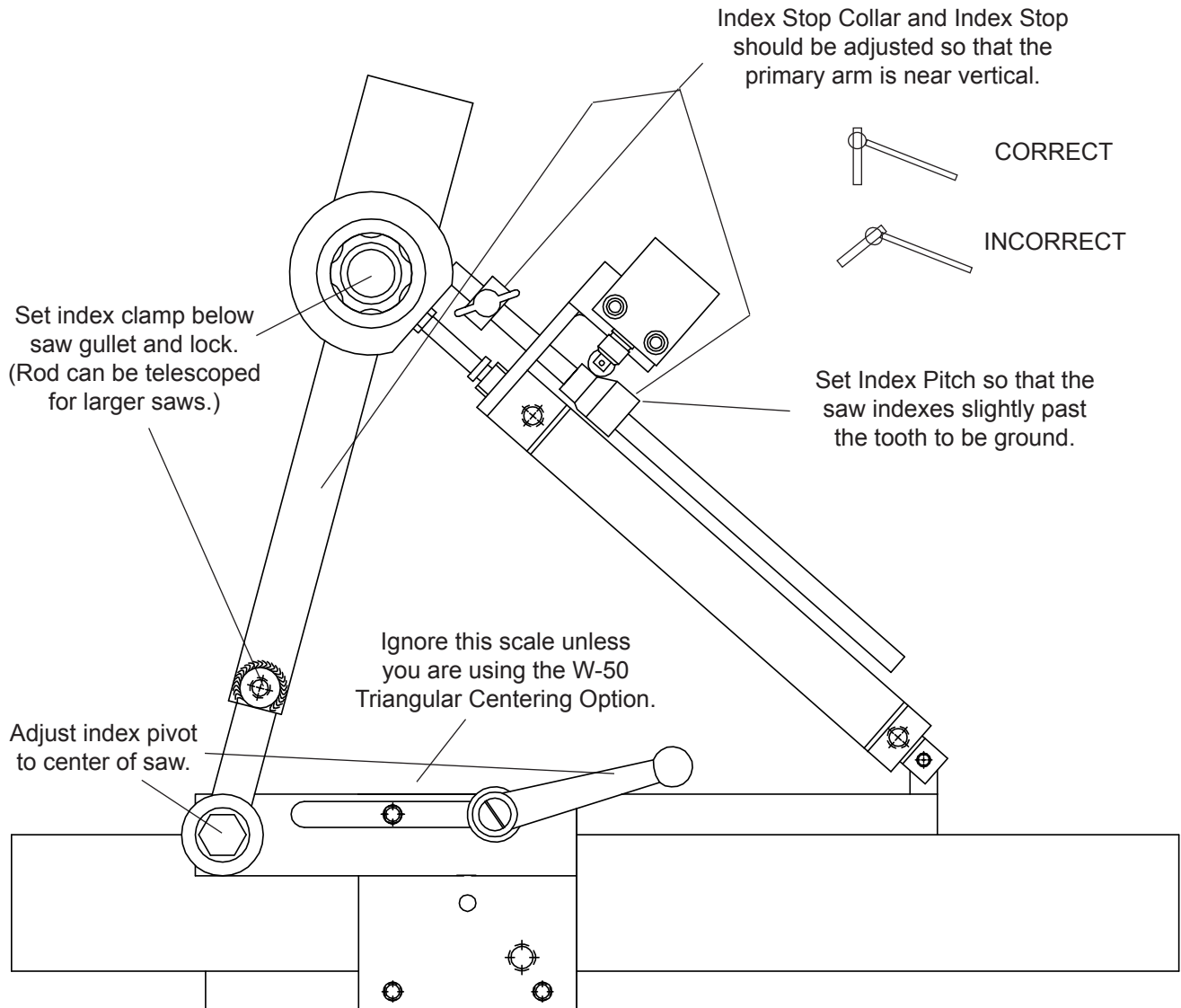


3. Mount the saw on the centering device. Place the saw tip so that the index finger overlaps it by 1/8". The face of the tooth should be flat against the index finger to prevent excess wear and chipping.



# W-350 HD DUAL SIDE SHARPENER

4. Adjust index pitch and clamp as shown below.



5. Start the machine by pulling the Start/Stop Switch (#6) out.

# W-350 HD DUAL SIDE SHARPENER

5. Set the Tooth Counter (#5) to the number of teeth in the saw.
6. Start the machine by pulling the Start/Stop Switch (#7) out.
7. Turn the Forward Feed Speed knob (#3) full clockwise.
8. Place Joy Switch (#6) into Auto. The machine will index one tooth and be ready to grind.
9. Open Forward Feed Speed knob (#3) slightly. This will allow the grinding head to move out toward the tooth. When the grinding wheels are over the front edge of the carbide tip, Turn Forward Feed Speed knob (#3) full clockwise again. This will stop the grinding wheels at that position.
10. Turn the infeed until it grinds across the entire surface of the tooth. (The tooth should clean up and shine across it's entire width where the grinding wheel is contacting it.) Do this for both sides, then zero the dial indicators.
11. Open Forward Feed Speed (#3) again until the grinding wheels have traveled beyond the tooth being ground. Close Forward Feed Speed (#3) by turning full clockwise.
12. Turn the Forward Stroke Adjustment knob (#1) clockwise until the grinding wheels reverse. This adjusts the travel limit of the forward stroke.
13. When the grinding wheels have fully retracted, place Joy Switch (#6) to the center position.
14. Stop the machine by pushing the Start/Stop Switch (#7).



# W-350 HD DUAL SIDE SHARPENER

## SET UP CONTINUED

15. Check the tip that was ground. Measure the side clearance of the tip after it is ground and make any necessary adjustments to the infeed wheels to give the tooth the proper side clearance, then grind it and recheck it.

NOTE: All adjustments of infeed must be made with the hand wheel being turned in. If necessary to move out, turn at least one half turn further out than necessary, then adjust it back into the proper position. This removes the backlash in the lead screw threads.

16. After step 15 is completed it may be necessary to adjust the Tangential Angle. If the Tangential Angle is changed it will be necessary to recheck the hook angle to ensure that the tooth face is still flat against the index finger. The procedure for setting the Tangential Angle is on the following page.

NOTE: Teeth must have flat tops (0° Top Bevel) in order for side tolerances to be accurate. For grinding alternate tops the procedure on the following page is recommended.

17. Setup is now complete. Move Joy Switch (#6) to Auto and open Forward Feed Speed knob (#3) to begin grinding the saw.

### IMPORTANT

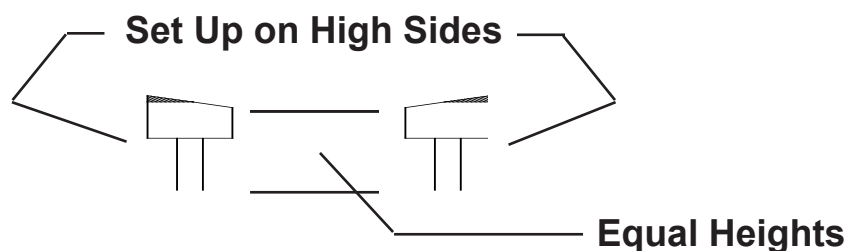
Do not shut off machine during the grind with the Start / Stop Button. It will unclamp the saw before the wheels stop turning.



# W-350 HD DUAL SIDE SHARPENER

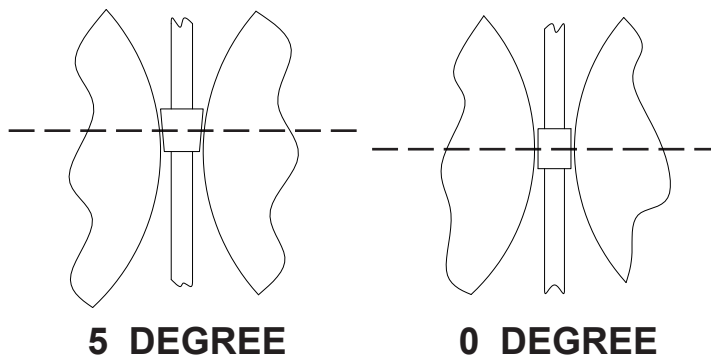
## Alternate Tops:

When setting alternate top bevels you should grind small 0° flats on the tops of two set up teeth, making them the same height. Then set up each side so that it grinds correctly on the "high" side of each tooth.

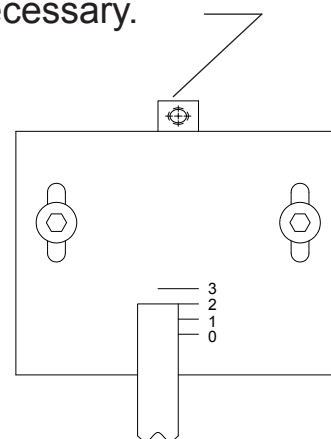


## TANGENTIAL ANGLE ADJUSTMENT

Note: The finger location vertically sets the tangential angle.

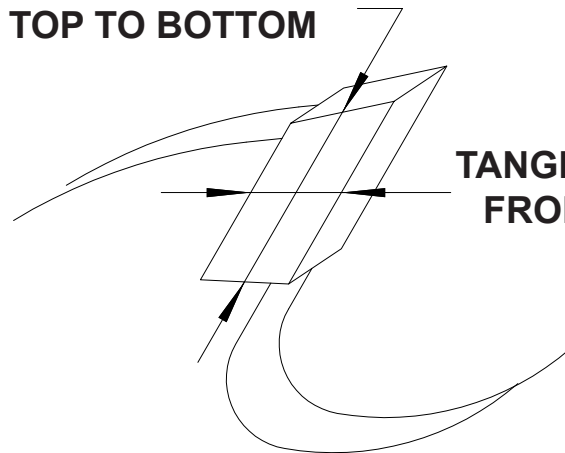


- Step 1. Loosen set screw nut and adjust finger as necessary.  
 Step 2. Check tangential angle.



# W-350 HD DUAL SIDE SHARPENER

RADIAL ANGLE  
TOP TO BOTTOM



TANGENTIAL ANGLE  
FRONT TO BACK

## CONVERSION CHART

DEGREES OF ANGLE CONVERTED TO DROP OFF IN THOUSANDTHS X DISTANCE.

To convert degrees to thousandths, select degrees required on line (A). Example: 3.5 degrees. On line (B) select length of measurement. Example: .375 for a 3/8 tip. Where 3.5 degrees and .375 intersect is drop off in thousandths of an inch.

Line (A)	.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
.125	1	2	3	4	5	6	7	8	9	10	11	12
.250	2	4	7	9	11	13	15	18	20	22	24	26
.312	3	5	8	11	14	16	19	22	25	27	30	33
.375	3	7	10	13	16	20	23	26	30	33	36	39
.437	4	8	11	15	19	23	27	30	34	38	42	46
.500	4	9	13	17	22	26	31	35	39	44	48	52
Line (B)												



# W-350 HD DUAL SIDE SHARPENER

## MAINTENANCE

The useful life of this machine can be dramatically extended if the following rules of operation are followed.

1. Clean the machine regularly to avoid carbide buildup.
2. Leave all inspection covers closed and in place. Only open inspection covers during maintenance.
3. A good rust inhibiting coolant must be used in the correct ratio. Too weak a mix will cause rust problems and too thick will damage the paint and load the Diamond wheels.
4. When not in use leave the enclosure door open. This eliminates humidity build up in the enclosure. (Enclosure optional)
5. Do not clean the machine with high pressure air or water. This can blow grit into the internals of the machine and cause rusting problems which is not covered by warranty.

## MAINTENANCE

### DAILY

1. Check coolant level and filter.
2. Clean interior of machine.

### WEEKLY

1. Check coolant tank for carbide buildup.
2. Replace coolant filters.

### MONTHLY or 100,000 CYCLES

1. Grease all zerk fittings.
2. Inspect finger for wear.
3. Inspect drive belts for wear.
4. Inspect saw clamp jaws for wear.

### EVERY 6 MONTHS or 500,000 CYCLES

1. Clean coolant tank completely

### EVERY 24 MONTHS or 1,000,000 CYCLES

1. Replace spindle drive belt .
2. Inspect pulleys for wear.

## TROUBLESHOOTING

1. **Coolant does not flow when switch is on:**
  - a. Check to be certain coolant is in the tank.
  - b. Is valve open.
  - c. Blow air through the nozzle to clean obstruction.
  - d. Coolant pump defective.



# W-350 HD DUAL SIDE SHARPENER

## TROUBLESHOOTING

### 2. Machine does not grind accurately:

Possible problems:

Kerf is uniform but side clearance varies between tips. This problem is usually caused by saw teeth that are bent or the body of the saw has lumps. When using a side dial indicator to measure side clearance, keep in mind that it can give false readings if the saw plate is not perfectly flat. The readings from a side dial indicator should be used only to set side clearances, not to check the accuracy of the machine.

### 3. Kerf and side clearance varies:

a. Diamond wheels are glazed or loaded. Dress diamond wheels to correct the problem, or switch them from side to side. (Don't turn them over.)

b. Operating machine at too fast a speed for the amount of carbide to be removed.

c. Carbide tips were installed excessively off center causing the bend away from the heavy grind pressure on that side.

**NOTE:** If silver solder is allowed to flow onto sides of carbide when tipped, the diamond wheels will be clogged by it. This will cause erratic nonuniform grind.

### 4. In automatic, heads stop full forward and do not return:

a. Forward Stroke Stop (#1) is adjusted too far out, screw it in until machine reverses.

### 5. In automatic, heads grind first tip and then saw does not index:

a. Reverse Stroke Stop (#2) is adjusted too far out, screw in until the machine indexes.



# W-350 HD DUAL SIDE SHARPENER

## HELPFUL HINTS

All saws should be measured with a micrometer to determine the saw plate thickness. Then each plate thickness should be marked on the plate with a marking pen.

When ready to grind the first saw be sure that the finger is 1/8" beyond the top of the carbide tip when the tip is pulled back against the index finger. If the next saw is approximately the same hook angle, the outside grinding head will not have to be changed unless a different side clearance is needed.

The inside grinding head will have to be moved to compensate for difference in saw plate thickness. Example, if the second saw is .003 thinner than the first saw, the inside head would have to be moved .003 in to give the same clearance as the first saw, starting with thickest saws first.

If the next saw to be ground is slightly larger or smaller in diameter it will affect the side clearance unless you reset the diameter adjustment so the finger is 1/8" below the top of the carbide tip. A 1/16" change in this adjustment will change the side clearance approximately .005.



# W-350 HD DUAL SIDE SHARPENER

## ACCURACY PROBLEMS

Our W-350 M HD Manual Side Grinders can easily hold a tolerance of + or - .0003. If the saws you are grinding exceed acceptable side clearance tolerances one or more of the following problems exist.

### **Is your saw plate clean?**

If any pitch, flux or saw dust is on the sides of the saw plate, it can become lodged between the saw and the clamp jaw. This will force the saw to move away from the fixed clamp jaw. This will shift the side clearance which will add side clearance from the opposite side.

### **Are your diamond wheels cutting freely?**

If the diamond wheels are loaded or dull, the saw will bend away from the loaded wheel and the accuracy of the side clearance and kerf will be erratic. Diamond wheels will not remove large amount of silver solder. The solder will melt and stick to the diamond particles in the grinding wheel. This makes it impossible for the wheel to cut freely.

To determine if the wheel is loaded, feel the back edge of the wheel with your fingernail. If there are any chips on this surface of the wheel, it indicates that the wheel is not cutting freely and therefore the grinding pressure is high enough that the rear of the wheel chips out.

To clean and sharpen the wheel, reverse the left wheel with the right. This will reverse the rotation of the cutting load and will easily clean the wheels.

If large amounts of silver solder are on the side of the tip, remove it with a 4-1/2 inch hand held grinder with paper grinding disk. This will remove the solder but leave the carbide undamaged. Grinding with loaded diamond wheels is very similar to shaving with a very dull razor.



# W-350 HD DUAL SIDE SHARPENER

## ACCURACY PROBLEMS (Continued)

### **Are your clamp jaws adjusted as close as possible to the tooth that is being ground?**

Use the U shaped clamp jaws only if you are grinding strob saws. If you are using these strob jaws, rotate them until they are set at the 2 o'clock position. This can be done by loosening the allen screw in the center of each clamp jaw. The round clamp jaws part number W-652-2 support the saw plate much closer to the tip and therefore there will be less saw plate deflection which means closer tolerances.

On saws with a plate thickness of .095, 5 pounds of side load will bend the saw plate .0025 and 10 pounds of side load will bend it .005. Due to the lateral flexibility in a saw, uneven grinding forces will cause the plate to bend during the grind, which will cause erratic grinding tolerances. On the W-350 M HD Side Grinder it would take a grind side load of 25 pounds to deflect the grinding wheels .001. Therefore any deflection always occurs in the saw plate not in the grinding machine.

If there is more than .005 difference in the amount of carbide to be removed from opposing sides of the top, a slower feed rate may become necessary to keep the lateral grinding forces from bending the saw plate sideways.

### **Are the proper diamond wheels being used?**

Not all diamond wheels are the same. The type of wheel used must match the recommended width of 1/8". If the wheel is wider, it can bend the saw plate while grinding. The finer grit wheels can only be used if the feed rate is slowed so the wheel cutting capacity is not exceeded. For most applications 150 grit with no more than 75 concentration should work well. If the wheel bond is too hard, the wheel will not cut freely. Use a quality brand of wheel. Bargain wheels may not work well.



# W-350 HD DUAL SIDE SHARPENER

## ACCURACY PROBLEMS (Continued)

### **Are the saw's other critical dimensions accurate?**

There are many things that effect side grinding tolerances in the saw plate such as O.D. run out, dubbed faces, hook angle variation, plate thickness variation, bumps, uneven tension, and bent teeth. You can not make an inferior saw into a quality saw by side grinding. To be extremely accurate on side grinding requires the rest of the saw to be at least reasonably accurate. Uneven face and top bevel (other than 0°) is not recommended.

Any dual side grinder can grind accurately if reasonably maintained. Even the most expensive grinder will grind erratically if any of the preceding problems are encountered. In our experience less than 1/4 of the side grinding tolerances can be attributed to the side grinding machine.

If your side grinding tolerances are still unacceptable, please call Wright Machine Tool Company and we will assist you with this problem.



# W-350 HD DUAL SIDE SHARPENER

## REPLACEMENT OF W-350 M HD SPINDLE (P.N. W-1166).

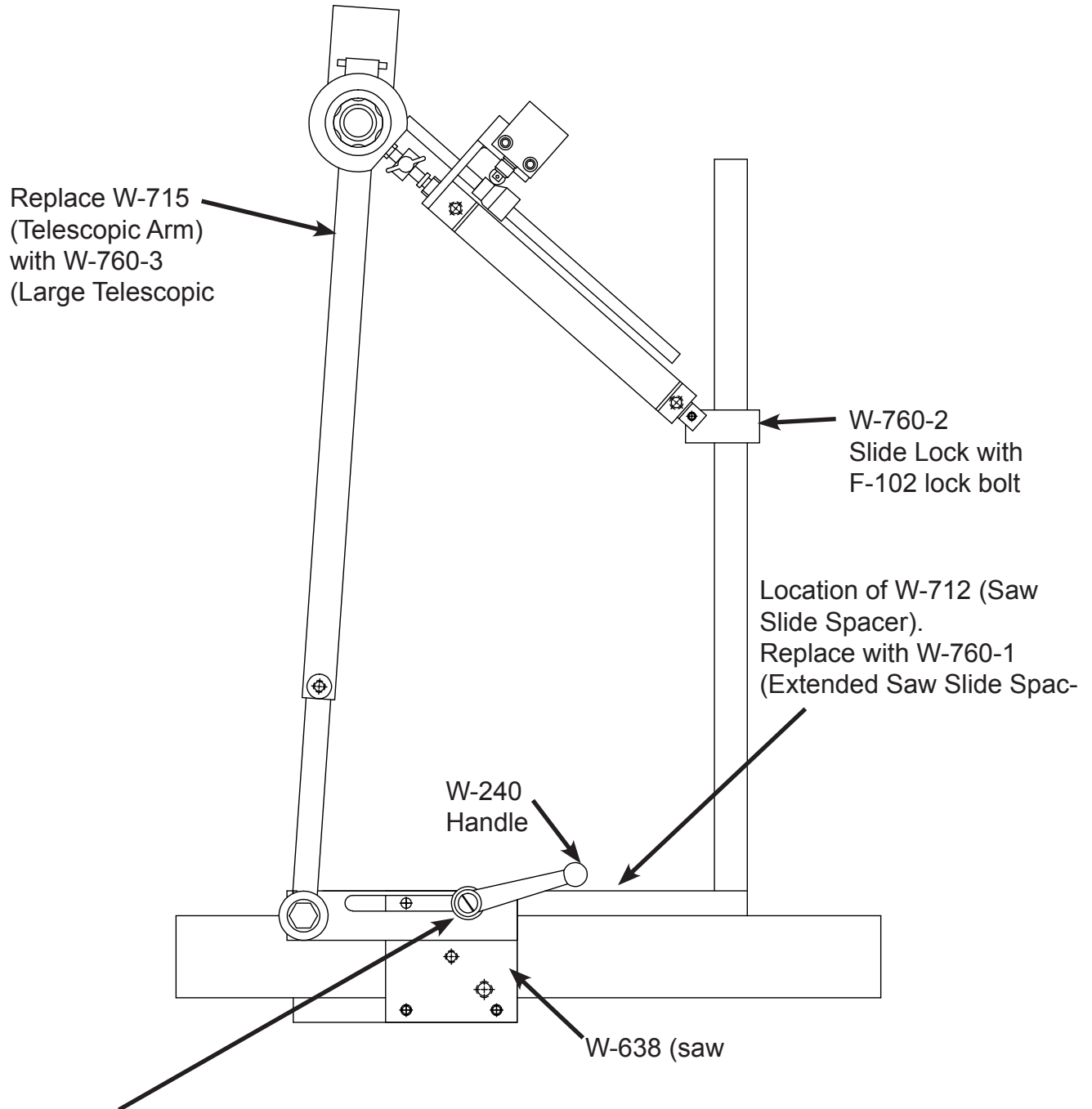
1. Loosen one end of the feed linkage on the side of the spindle being replaced.
2. Remove the drive belt.
3. Take the pulley off of the spindle shaft, taking note of location.
4. Remove the wheel guard on the spindle housing.
5. Loosen the bolts on the spindle housing.
6. Move the head all of the way back and slide the spindle out the front.
7. Slide the new spindle in.
8. Tighten bolts on the spindle housing (snug). **IMPORTANT: DO NOT OVER TIGHTEN.**
9. Install the wheel guard, being sure that the spindle moves freely.
10. Put the pulley on in the same location as on the old spindle.
11. Reinstall the drive belt.
12. Fasten the feed linkage.

Note: If the motor arm hits on the guide, loosen and turn to the side.



# W-350 HD DUAL SIDE SHARPENER

## W-760 LARGE SAW OPTION



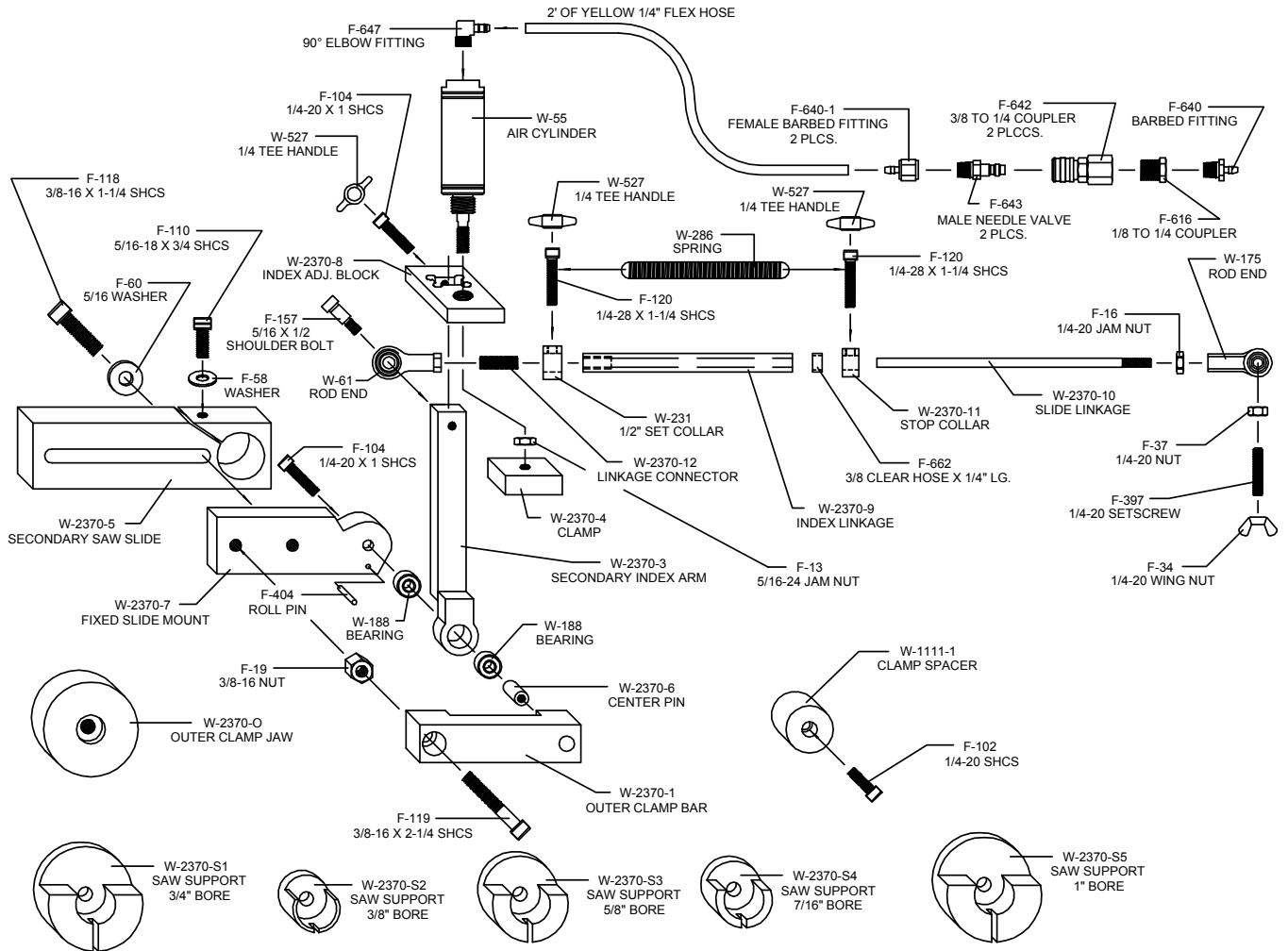
Note: to access the bolts to remove the W-712 Saw Slide Spacer, remove the W-240 Handle and slide out the W-713 Slide Arm being careful to not let the W-638 Saw Slide fall





# W-350 HD DUAL SIDE SHARPENER

## W-2370 2" TO 7" SMALL SAW OPTION

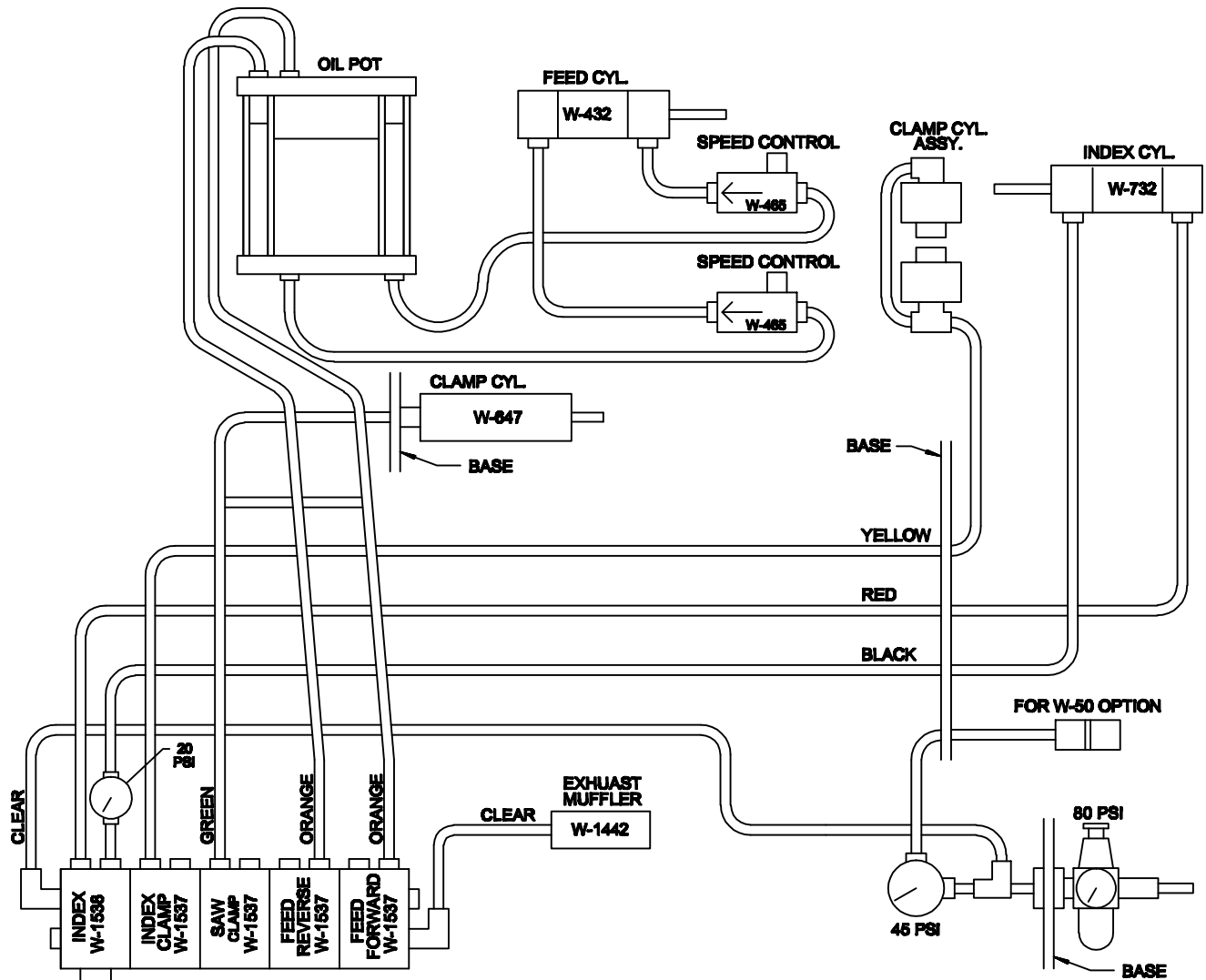


# W-350 HD DUAL SIDE SHARPENER

## PARTS AND SCHEMATICS LIST

The following parts lists are areas within the machine broken down into various individual assemblies.

### AIR SYSTEM

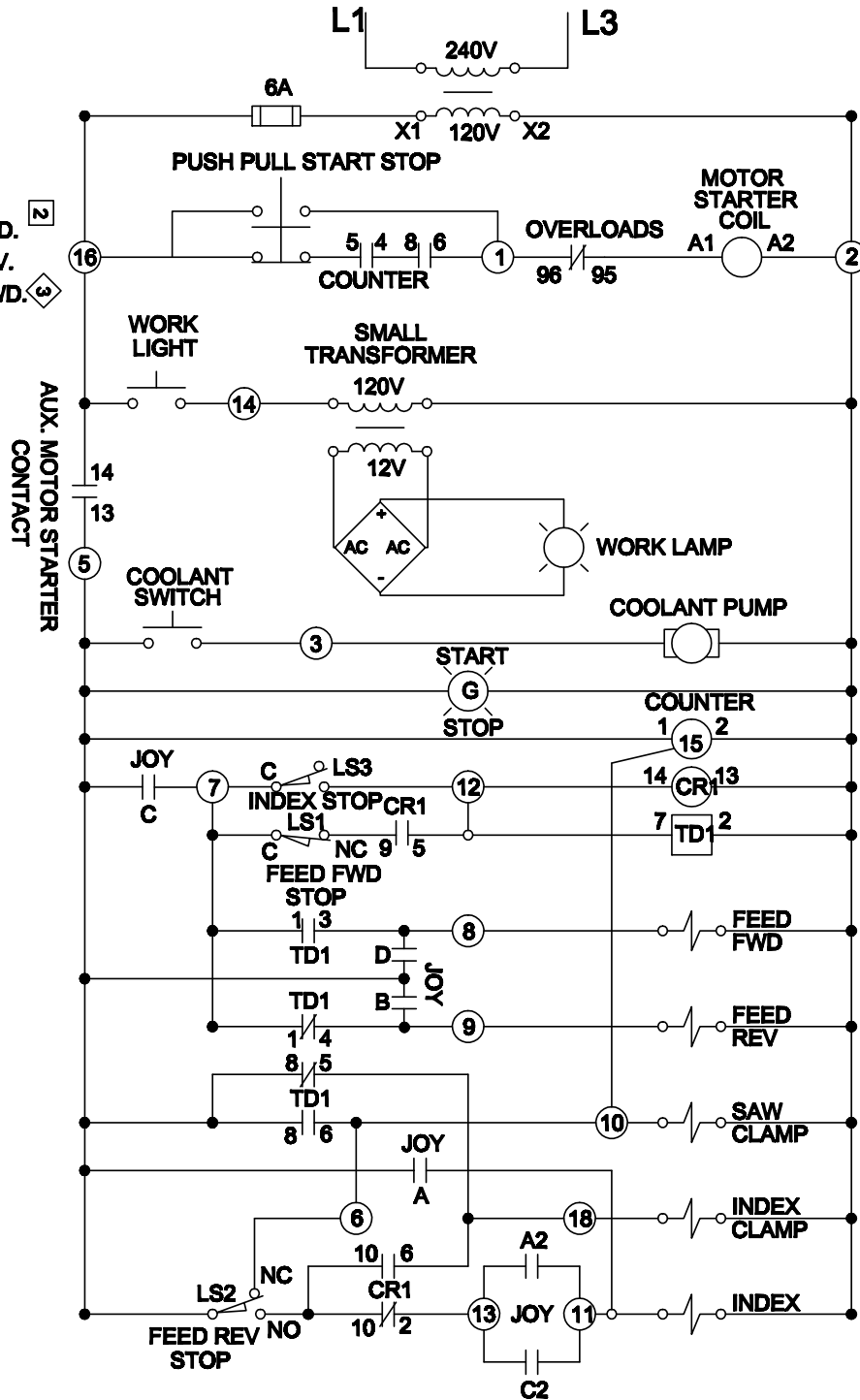


**CAUTION:** Use of some types of synthetic lubricants in the air system can break down the plastic in the sediment bulb, ultimately resulting in failure. For safety purposes always keep the metal cover in place over the plastic sediment bulb. If your air system uses synthetic lubricants contact Wright Machine Tool to order a metal replacement bulb.

# W-350 HD DUAL SIDE SHARPENER

## ELECTRICAL SCHEMATIC

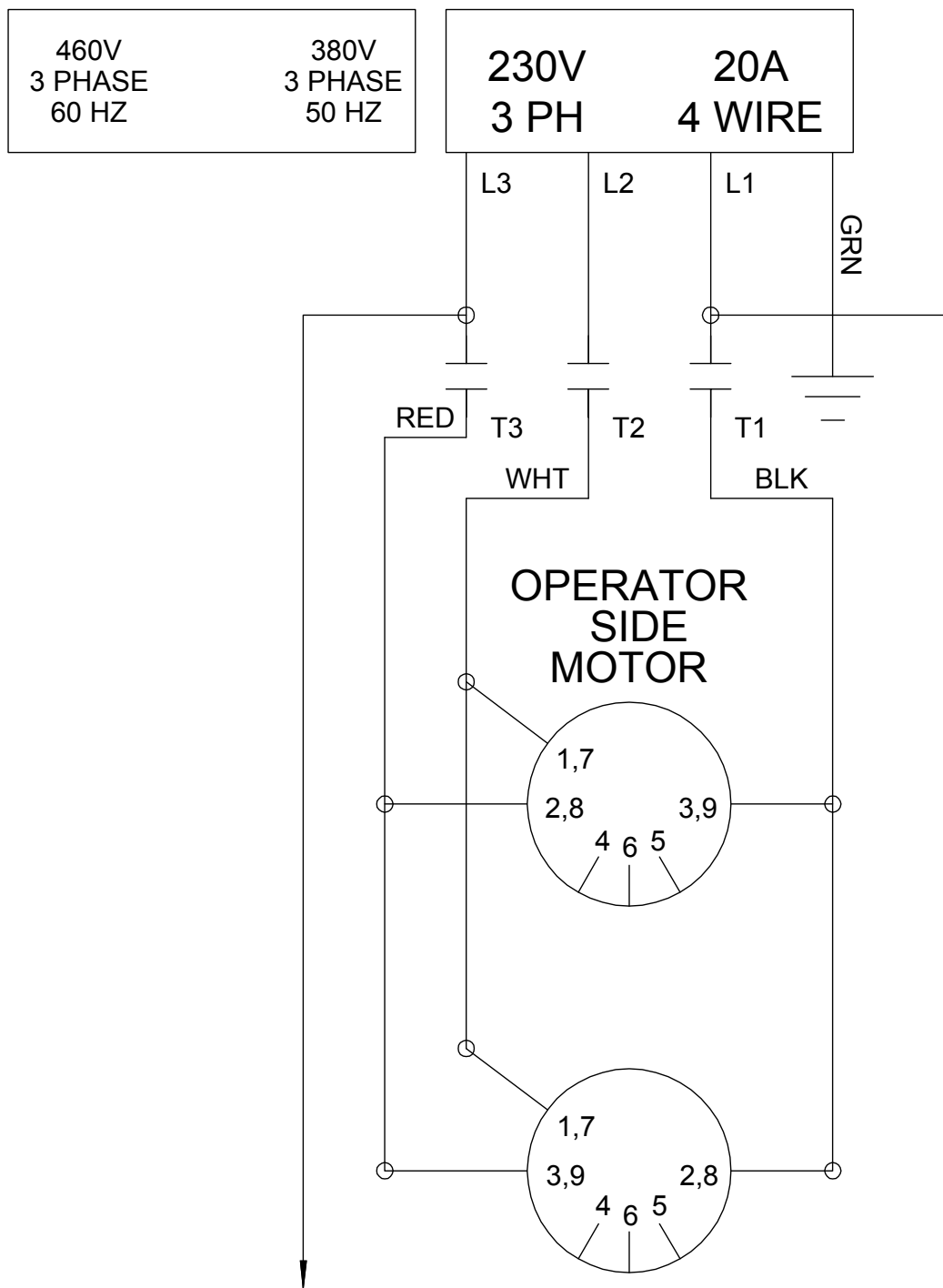
- A = INDEX
- B = FEED REV.
- C = AUTO
- D = FEED FWD.
- E = START
- F = STOP
- LS1 = FEED FWD.
- LS2 = FEED REV.
- LS3 = INDEX FWD.



# W-350 HD DUAL SIDE SHARPENER

## ELECTRICAL SCHEMATIC CONT.

### OPTIONAL VOLTAGES



# W-350 HD DUAL SIDE SHARPENER


## INSTRUCTIONS FOR CONVERTING W-350 TO 440v

### LEFT MOTOR

RED - 2  
BLACK - 3  
WHITE - 1

### RIGHT MOTOR

WHITE - 1  
RED - 3  
BLACK - 2

EVERYTHING ELSE IS THE SAME AS SHOWN:  7-4  
8-5  
9-6

### MOTOR STARTER

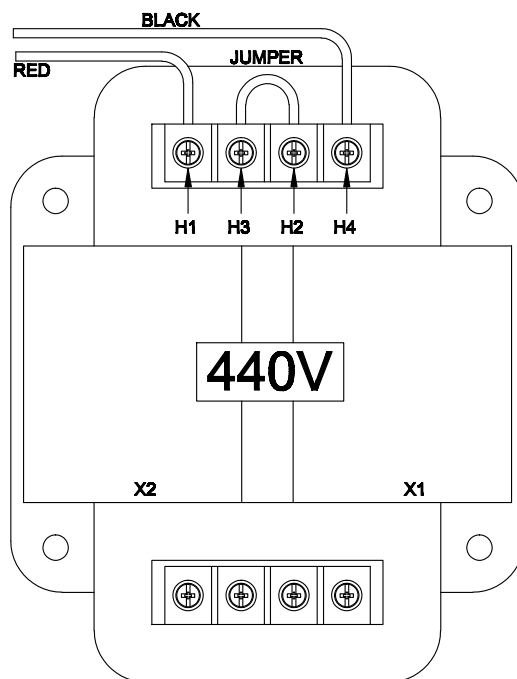
SWITCH AND WIRE UP THE SAME. SHOULD BE SET ON AUTO AND SET AT 3 AMPS ON THE DIAL.

### CORD END

WIRE UP THE SAME AS EXISTING ONE AND IF MOTOR RUNS BACKWARDS, SWITCH THE RED AND BLACK WIRES.

### TRANSFORMER

TAKE JUMPER OFF OF H1 AND H3, H2 AND H4. PUT A JUMPER ON H2 AND H3 SO THAT THE RED AND BLACK WIRES ARE THE ONLY WIRES IN CONNECTION. PLACE THE 440v STICKER OVER THE EXISTING 230v/240v STICKER ON THE ELECTRICAL NAME PLATE.

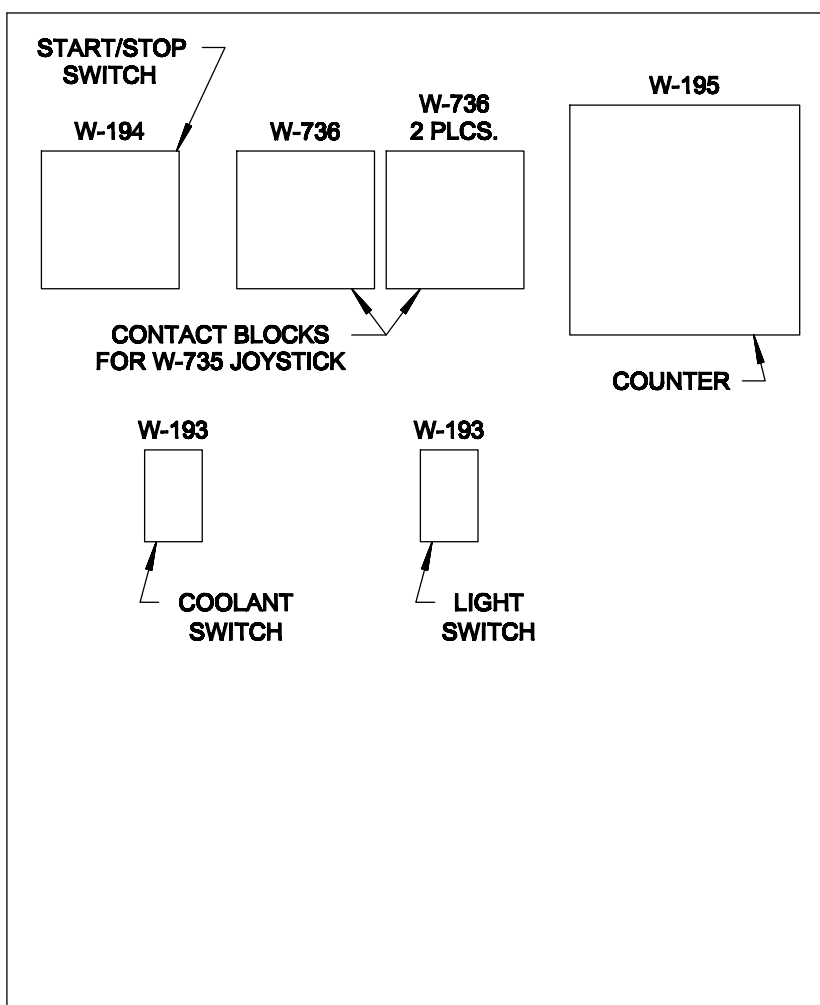


# W-350 HD DUAL SIDE SHARPENER

## CONTROL BOX COMPONENTS (CONTROL CONSOLE)

QTY	PART	NUMBER DESCRIPTION
2	W-193	TOGGLE SWITCH
1	W-194	STOP/START SWITCH
1	W-195	COUNTER
1	W-705	FACE PLATE
1	W-706-3	FACE PANEL
1	W-735	JOY STICK
2	W-736	CONTACT BLOCK

W-350 HEAVY DUTY CONTROL PANEL  
LOOKING FROM BACKSIDE.



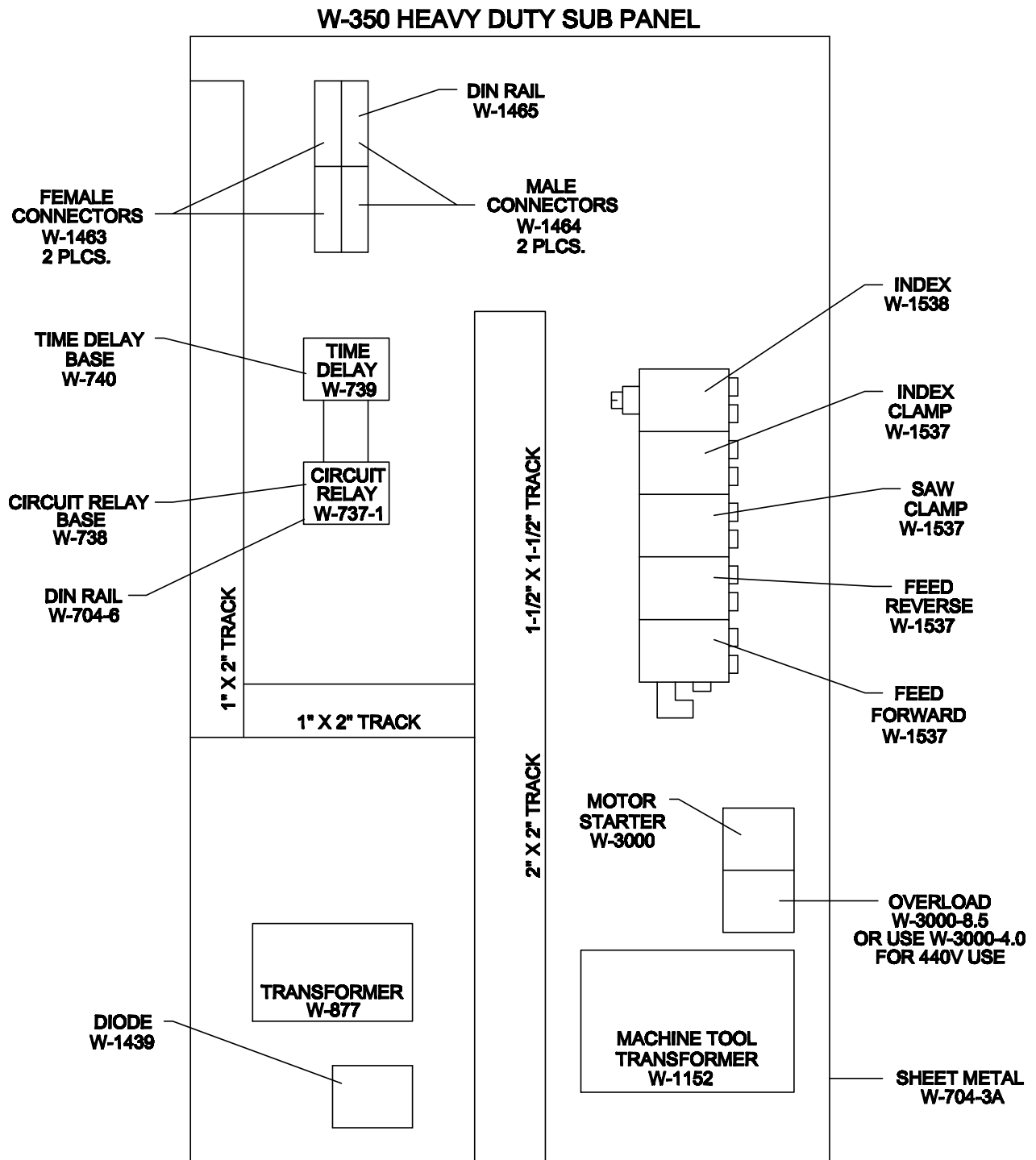
# W-350 HD DUAL SIDE SHARPENER

## CONTROL BOX COMPONENTS (SUB PANEL)

QTY	PART NUMBER	DESCRIPTION
1	A-6753	FUSE HOLDER
1	W-68	GUAGE
1	W-289-1/2	FUSE
1	W-289-1.5	FUSE
1	W-289-4	FUSE
1	W-704-3A	PANEL (SHEET METAL)
1	W-704-6	DIN RAIL
1	W-737-1	RELAY
1	W-738	RELAY BASE
1	W-739	TIME DELAY
1	W-740	TIME DELAY BASE
1	W-877	TRANSFORMER
1	W-1152	TRANSFORMER
1	W-1439	DIODE
2	W-1463	FEMALE CONNECTOR
2	W-1464	MALE CONNECTOR
1	W-1465	DIN RAIL
4	W-1537	VALVE
1	W-1538	VALVE
1	W-1539	END PLATE
1	W-3000	MOTOR STARTER
1	W-3000-8.5	OVERLOAD



# W-350 HD DUAL SIDE SHARPENER





# W-350 HD DUAL SIDE SHARPENER

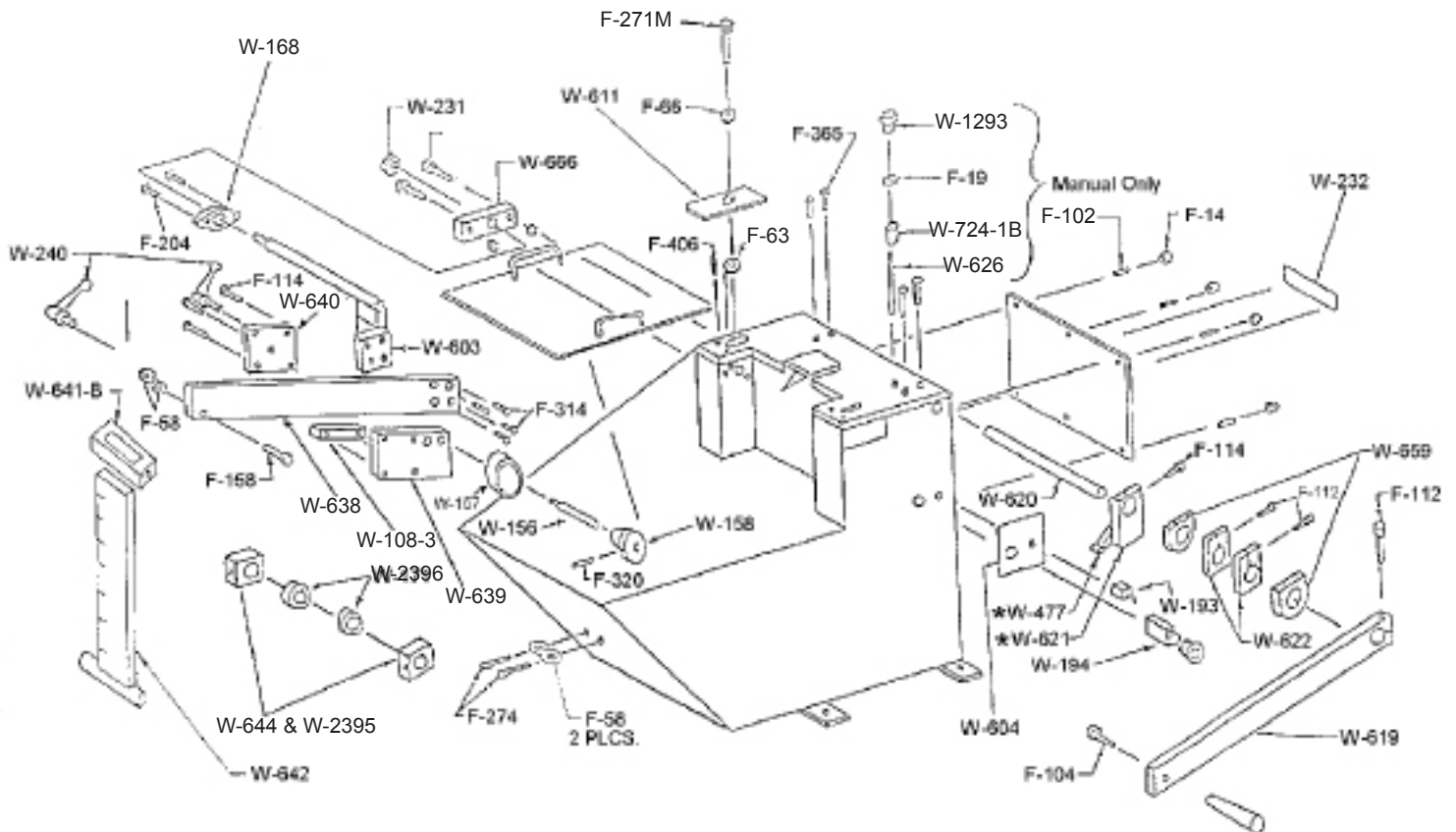
## BASE ASSEMBLY

<b>PART #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>DESCRIPTION</b>
W-108-3	SAW SLIDE PLATE	F-14	NUT
W-156	CONE BOLT	F-19	NUT
W-157	CUP	F-58	WASHER
W-158	CONE	F-63	WASHER
W-168	FACE MT BEARING	F-102	SET SCREW
W-193	COOLANT SWITCH	F-104	SCREW
W-194	STOP/START SWITCH	F-109	SCREW
W-202	COVER	F-112	SCREW
W-204	HAND WHEEL	F-114	SCREW
W-231	COLLAR	F-158	BOLT
W-240	HANDLE	F-204	BOLT
W-603	SAW ARM PIVOT	F-271M	SCREW
W-604	FACE PLATE	F-359	SCREW
W-611	RADIAL ANGLE SCALE	F-365	SCREW
W-619	FEED HANDLE	F-384	SET SCREW
W-620	FEED SHAFT	F-390	SET SCREW
W-621	CLAMP SWITCH ARM	F-406	ROLL PIN
W-626	MANUAL FEED STOP		
W-638	SAW ARM		
W-639	SAW SLIDE FRONT		
W-640	SAW SLIDE REAR		
W-641-B	HOOK LOCK		
W-642	LARGE HOOK SUPPORT ARM		
W-643	HOOK ARM PIVOT		
W-643	HOOK ARM PIVOT		
W-644	HOOK PIVOT BEARING		
W-659	BEARING		
W-666	PIVOT PLATE		
W-724-1B	INDEX BUMPER		
W-1293	KNOB		
W-2395	PLASTIC BUSHING		



# W-350 HD DUAL SIDE SHARPENER

## BASE ASSEMBLY



# W-350 HD DUAL SIDE SHARPENER

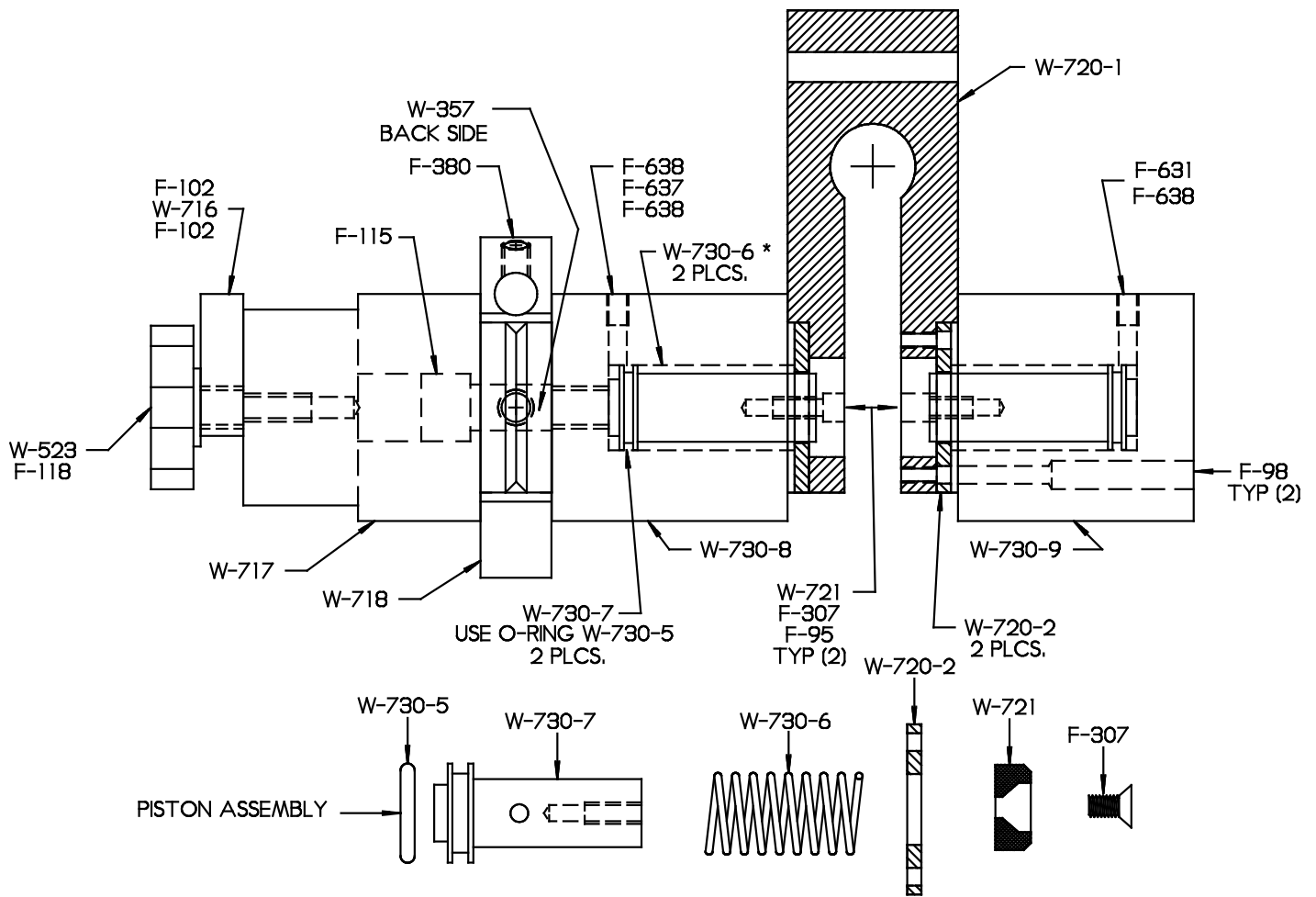
## AUTO INDEX 1

QTY	PART NUMBER	DESCRIPTION
1	W-357	ZERK FITTING
1	W-523	HANDLE
1	W-716	COVER PLATE
1	W-717	MOUNT BRACKET
1	W-718	CYLINDER MOUNT RING
1	W-720-1*	CLAMP YOKE
2	W-720-2*	SPACER
2	W-721*	INDEX CLAMP JAW
1	W-730-A	INDEX CLAMP ASSEMBLY (INCLUDES EVERYTHING WITH *)
1	W-730-7*	PISTON
1	W-730-5*	O-RING
2	W-730-6*	SPRING
1	W-730-8*	INNER CLAMP CYLINDER
1	W-730-9*	OUTER CLAMP CYLINDER
2	F-95*	6-32 SHCS
1	F-98*	6-32 SHCS
2	F-102	1/4-20 SHCS
1	F-115	3/8-16 SHCS
1	F-116*	3/8-16 SHCS
1	F-118	3/8-16 SHCS
1	F-268	1/2-13 SHCS
2	F-307*	10-32 FHCS
1	F-380	1/4-20 SET SCREW
1	F-631	T-FITTING
1	F-637*	TEE
3	F-638*	BARBED FITTING



# W-350 HD DUAL SIDE SHARPENER

## AUTO INDEX 1



# W-350 HD DUAL SIDE SHARPENER

## AUTO INDEX 2

QTY	PART NUMBER	DESCRIPTION
1	W-101-1	NUT
1	W-156	CONE BOLT
1	W-157	CUP
1	W-240	HANDLE
2	W-284	GROUND WASHER
1	W-432-1	CYLINDER MOUNT
1	W-638	SAW ARM
1	W-639	FRONT SAW SLIDE
1	W-712	SAW SLIDE SPACER
1	W-714	PRIMARY ARM
1	W-715	OUTER TELESCOPIC TUBE
1	W-721-1	INDEX STOP COLLAR
1	W-722	SWITCH BRACKET
1	W-723	INDEX PITCH SCALE
1	W-724	INDEX STOP
1	W-731	LIMIT SWITCH
1	W-732	INDEX CYLINDER
2	W-733	BEARING
1	F-1	1/4-20 SHCS
2	F-11	10-24 NUT
1	F-13	5/16-18 NUT
1	F-25	1/4-20 NYLOCK JAM NUT
2	F-56	#10 WASHER
1	F-58	1/4" WASHER
2	F-67	NYLON WASHER
1	F-106	1/4-20 SHCS
2	F-114	5/16-18 SHCS
1	F-116	3/8-16 SHCS
1	F-268	1/2-13 HHCS
2	F-339	10-24 RHCS
1	F-357	10-24 RHCS
1	F-380	1/4-20 SETSCREW
1	F-408	3/16 X 1/4 ROLL PIN
2	F-647	ELBOW FITTING

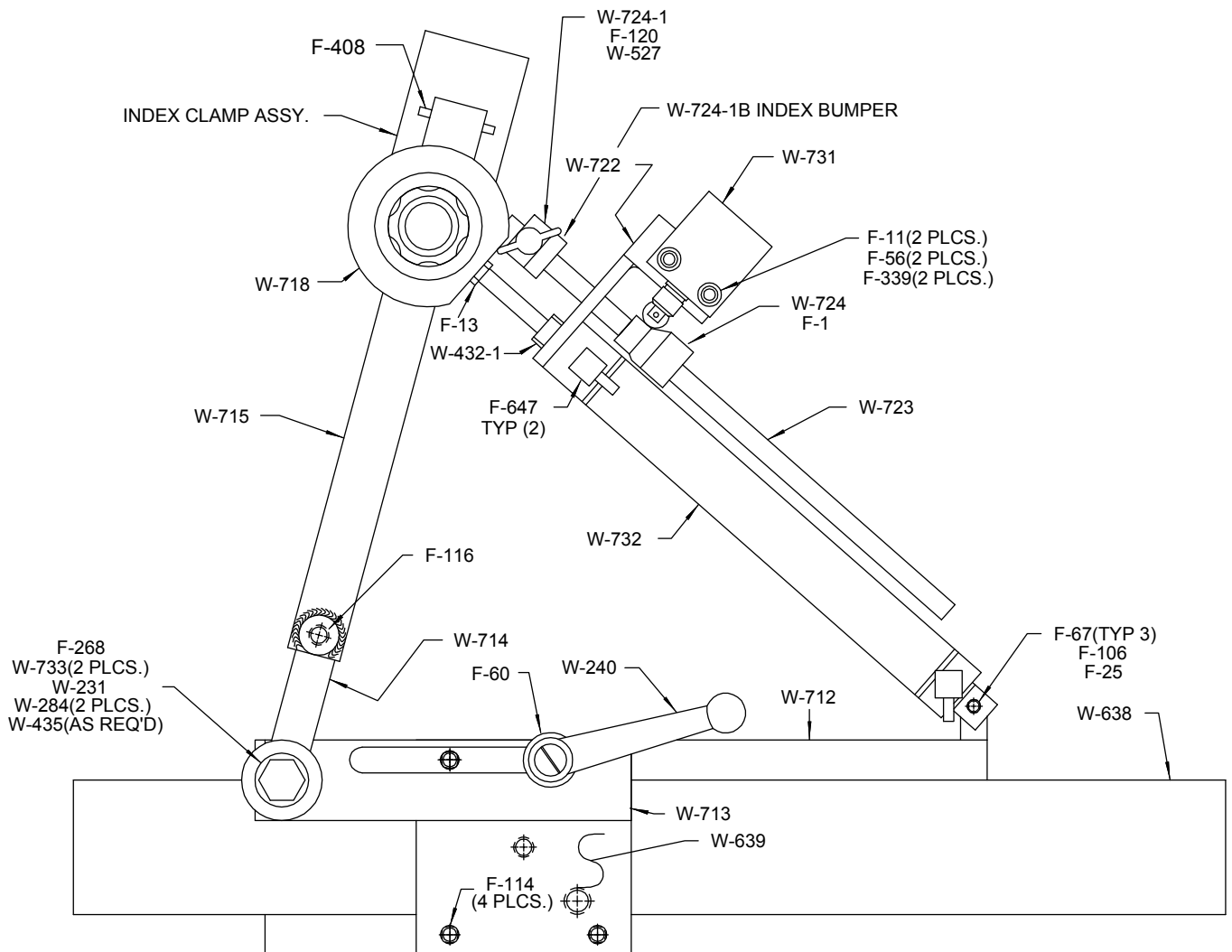


**WRIGHT**

**MACHINE**

# W-350 HD DUAL SIDE SHARPENER

## AUTO INDEX 2



# W-350 HD DUAL SIDE SHARPENER

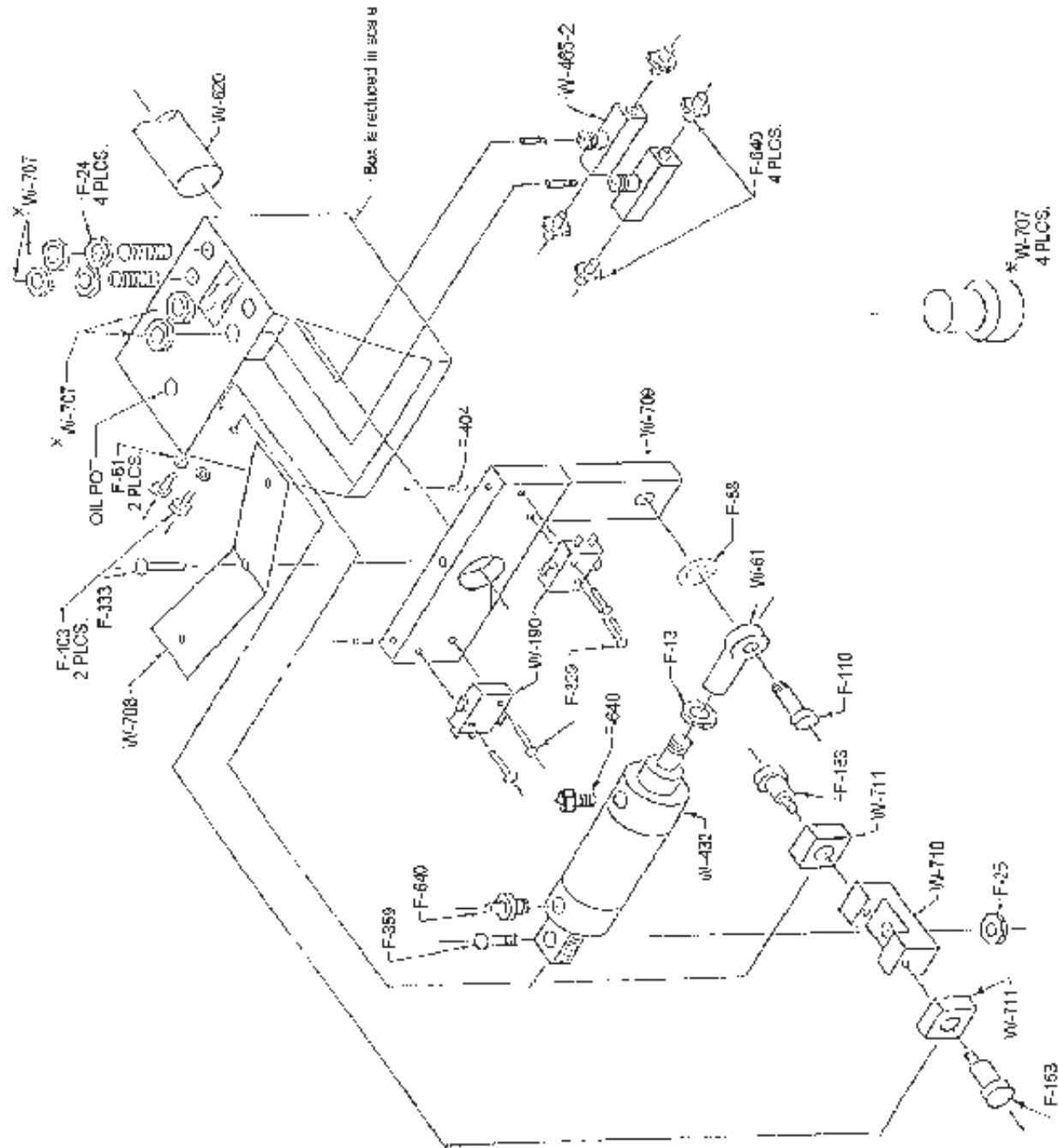
## STROKE CONTROL

QTY	PART NUMBER	DESCRIPTION
1	W-61	ROD END
2	W-190	LIMIT SWITCH
1	W-432	CYLINDER
2	W-465-2	FLOW CONTROL
1	W-620	FEED SHAFT
4	W-707	KNOB
1	W-708	SWITCH TRIP PLATE
1	W-709	FEED CYLINDER ARM
1	W-710	CYLINDER MOUNT BLOCK
2	W-711	MOUNT PIVOT
1	C-5386	WASHER
1	F-13	5/16-24 NUT
4	F-24	1/2-20 JAM NUT
1	F-25	1/4-20 NYLOCK JAM NUT
1	F-58	1/4 CUT WASHER
2	F-61	#12 WASHER
1	F-101	1/4-20 SHCS
2	F-103	1/4-20 SHCS
1	F-110	5/16-18 SHCS
2	F-153	1/4 X 1/2 SHOULDER BOLT
4	F-329	4-40 RHCS
1	F-333	10-24 RHCS
1	F-358	1/4-20 BHCS
1	F-359	1/4-20 BHCS
2	F-404	1/8 X 1/2 ROLL PIN
1	F-618	MALE ELBOW FITTING
1	F-639	PLUG FITTING
6	F-640	BARBED FITTING



# W-350 HD DUAL SIDE SHARPENER

## STROKE CONTROL





# W-350 HD DUAL SIDE SHARPENER

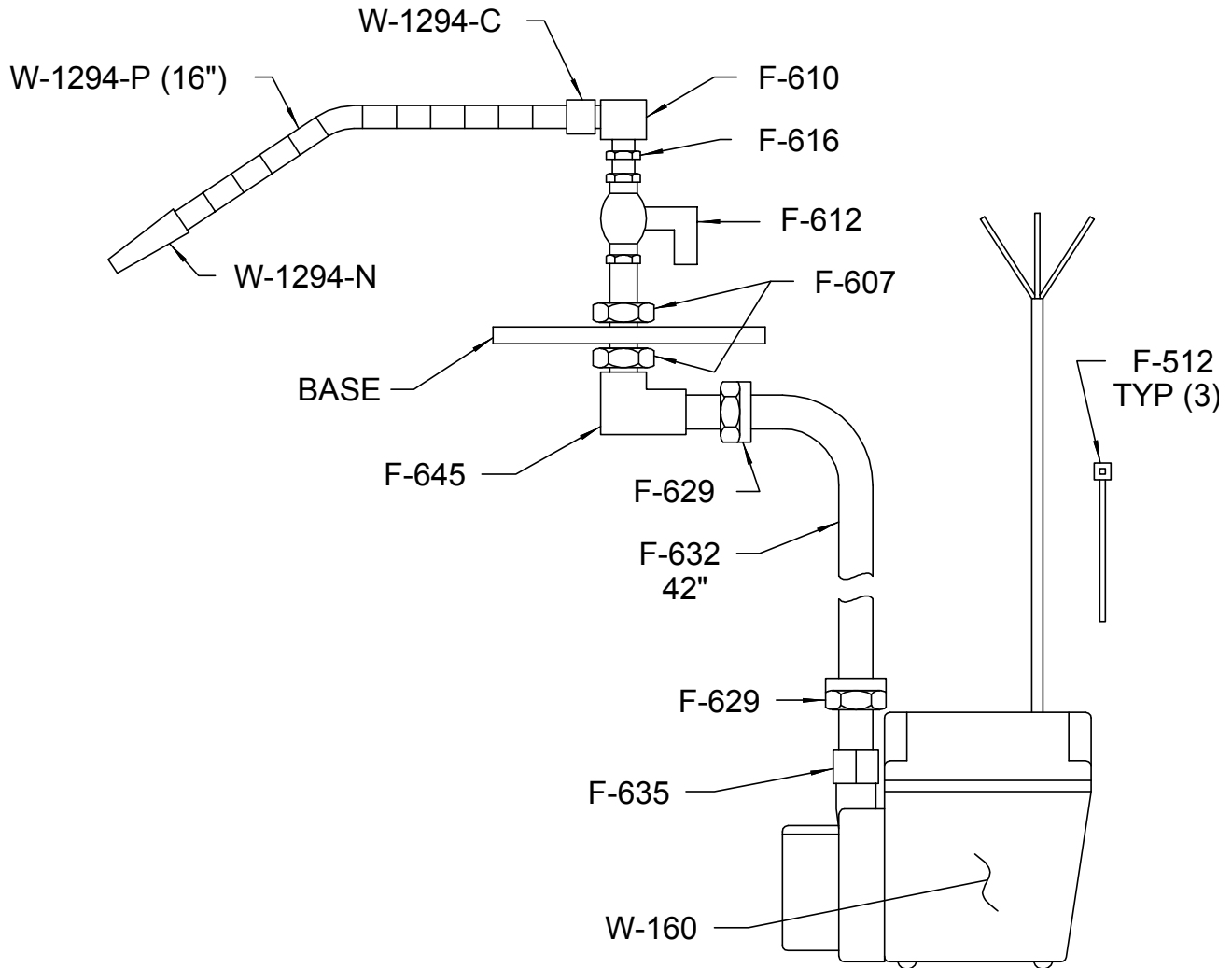
## COOLANT PART DIAGRAM

QTY	PART NUMBER	DESCRIPTION
1	W-160	COOLANT PUMP
1	W-1294-C	CONNECTOR
1	W-1294-N	NOZZEL
16	W-1394-P	COOLANT NOZZLES
3	F-512	CABLE TIE
2	F-607	BULK HEAD FITTING
1	F-610	1/8 NPT STREET ELBOW
1	F-612	SHUT OFF VALVE
1	F-616	1/8 TO 1/4 BUSHING
2	F-629	1/4 WEDDING BAND
1	F-632	3/8 TUBING
1	F-635	FITTING
1	F-645	FITTING



# W-350 HD DUAL SIDE SHARPENER

## COOLANT PART DIAGRAM



# W-350 HD DUAL SIDE SHARPENER

## SAW CLAMP CYLINDER

QTY	PART NUMBER	DESCRIPTION
1	W-117-A	CLAMP JAW BELLOWS
1	W-646	CYLINDER EXTENSION
1	W-647	AIR CYLINDER
1	W-674	NPT EXTENSION
1	W-1170	HEAVY DUTY FIXED CLAMP JAW MOUNT
1	F-22	1/2-13 JAM NUT
1	F-40	7/16-20 JAM NUT
1	F-63	WASHER
1	F-647	ELBOW FITTING
2	F-115	3/8-16 SHCS
1	W-1169	CLAMP SUPPORT
1	W-1045	CYLINDER NUT
1	F-66	1/2" WASHER

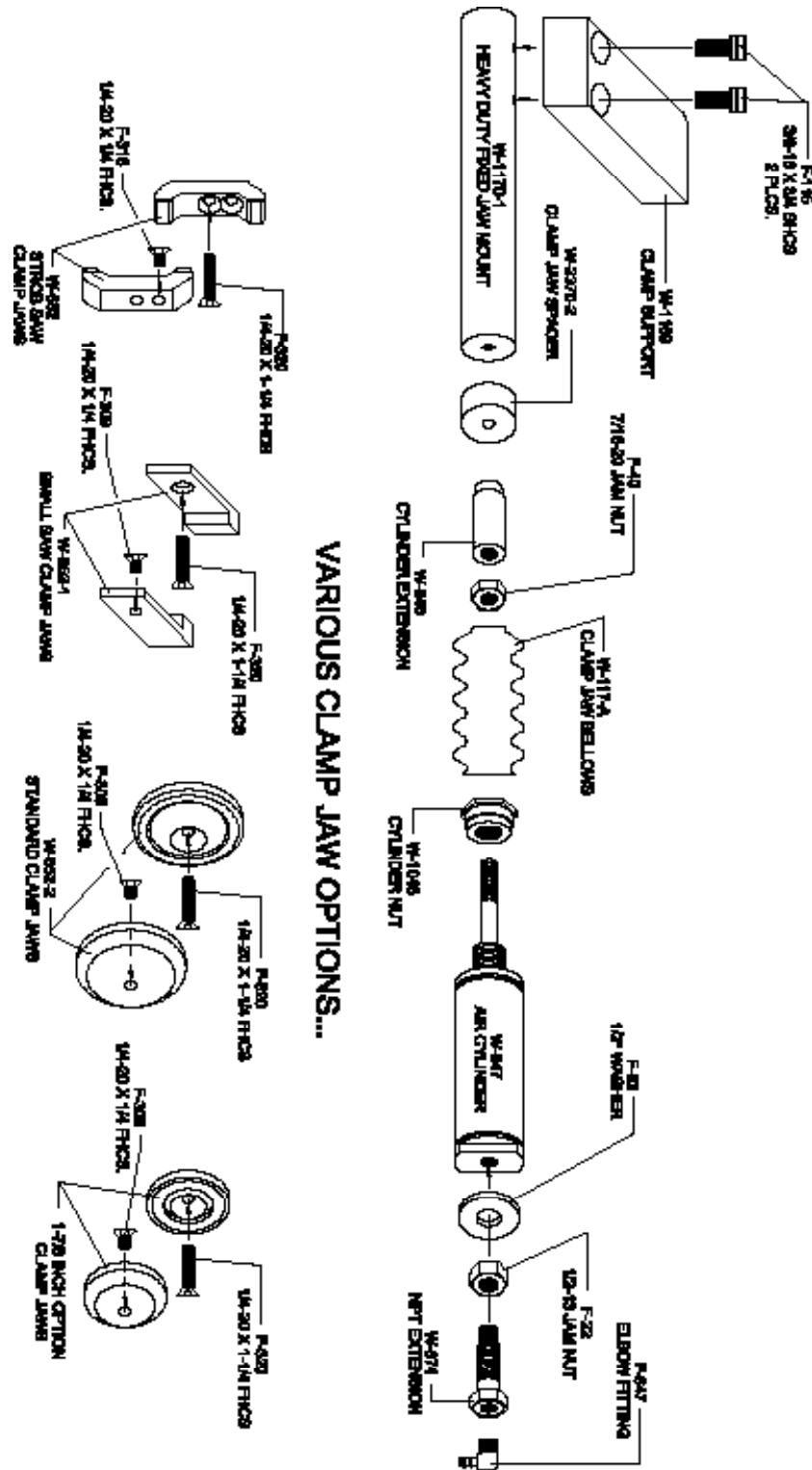


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# W-350 HD DUAL SIDE SHARPENER

## SAW CLAMP CYLINDER



VARIOUS CLAMP JAW OPTIONS...



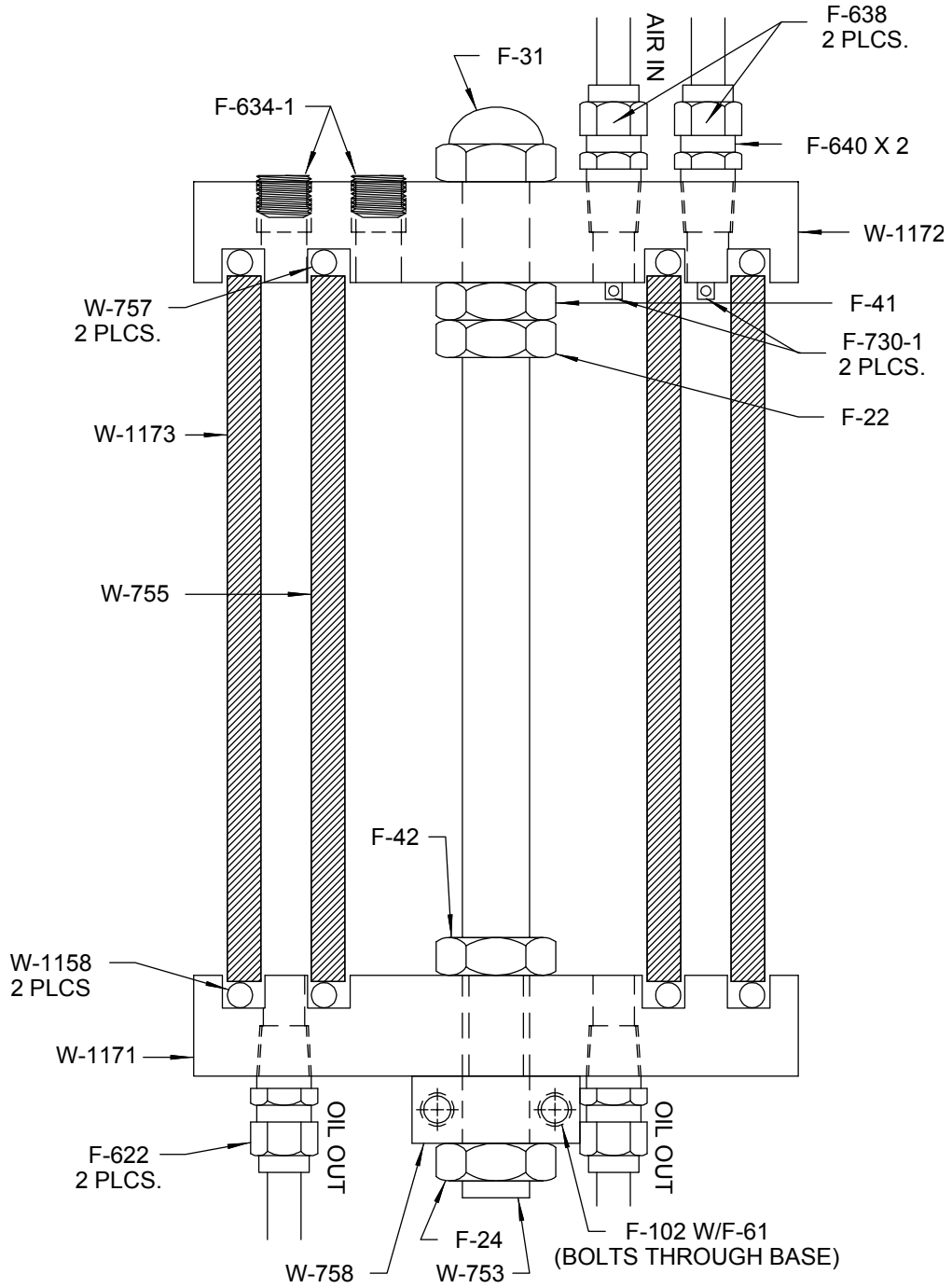
# W-350 HD DUAL SIDE SHARPENER

## OIL POT ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-752	AIR INLET
1	W-753	STUD
1	W-755	TUBE
2	W-757	O-RING
2	W-1158	O-RING
1	W-1171	END CAP BOTTOM
1	W-1172	END CAP TOP
1	W-758	OIL POT BRACKET
1	F-24	1/2-20 JAM NUT
1	F-31	1/2-13 ACORN NUT
1	F-41	1/2-13 HYDRA-LOCK NUT
1	F-42	1/2-20 HYDRA-LOCK NUT
1	F-626	FITTING
1	F-632	3/8" TUBING HARD WHITE
2	F-634	1/8 NPT PIPE PLUG
1	F-640	BARBED FITTING
2	F-637	BARBED "T" FITTING
2	F-638	BARBED FITTING
2	F-622	MALE CONNECTOR
2	F-102	1/4-20 SHCS
2	F-61	#12 SAE WASHER

# W-350 HD DUAL SIDE SHARPENER

## OIL POT ASSEMBLY (W-1171-A)



# W-350 HD DUAL SIDE SHARPENER

## MOTOR ARM ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-602	MOTOR ARM
1	W-658	SPINDLE NUT
1	W-915	SPINDLE PULLEY
1	W-1154-2	MOTOR PULLEY
1	W-1154-3	SHIVE
1	W-1155-1	BELT (AFTER S.N. 383)
1	W-1159	MOTOR
1	W-1166-A	SPINDLE ASSEMBLY
1	W-1167-L/R	SPINDLE HOUSING
1	W-1168-L/R	WHEEL GUARD
1	W-1174	WHEEL COVER
1	W-1175	BELT GUARD
2	F-34	1/4-20 WING NUT
2	F-104	1/4-20 SHCS
1	F-110	5/16-18 SHCS
3	F-124	5/16-18 SHCS
1	F-279	3/8-16 HHCS
2	F-306	10-24 FHCS
2	F-379	1/4-20 SET SCREW
1	F-380	1/4-20 SET SCREW

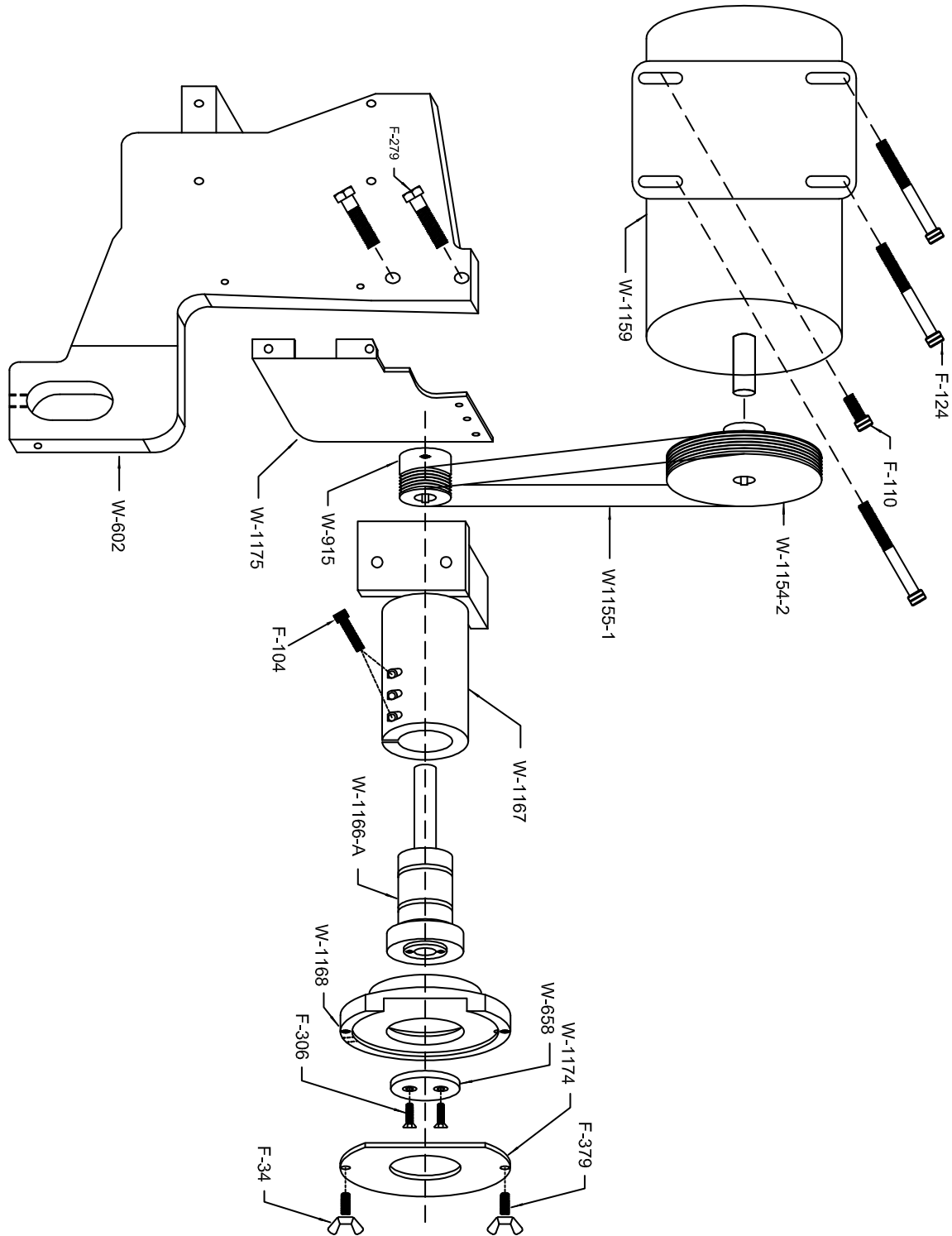


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# W-350 HD DUAL SIDE SHARPENER

## MOTOR ARM ASSEMBLY



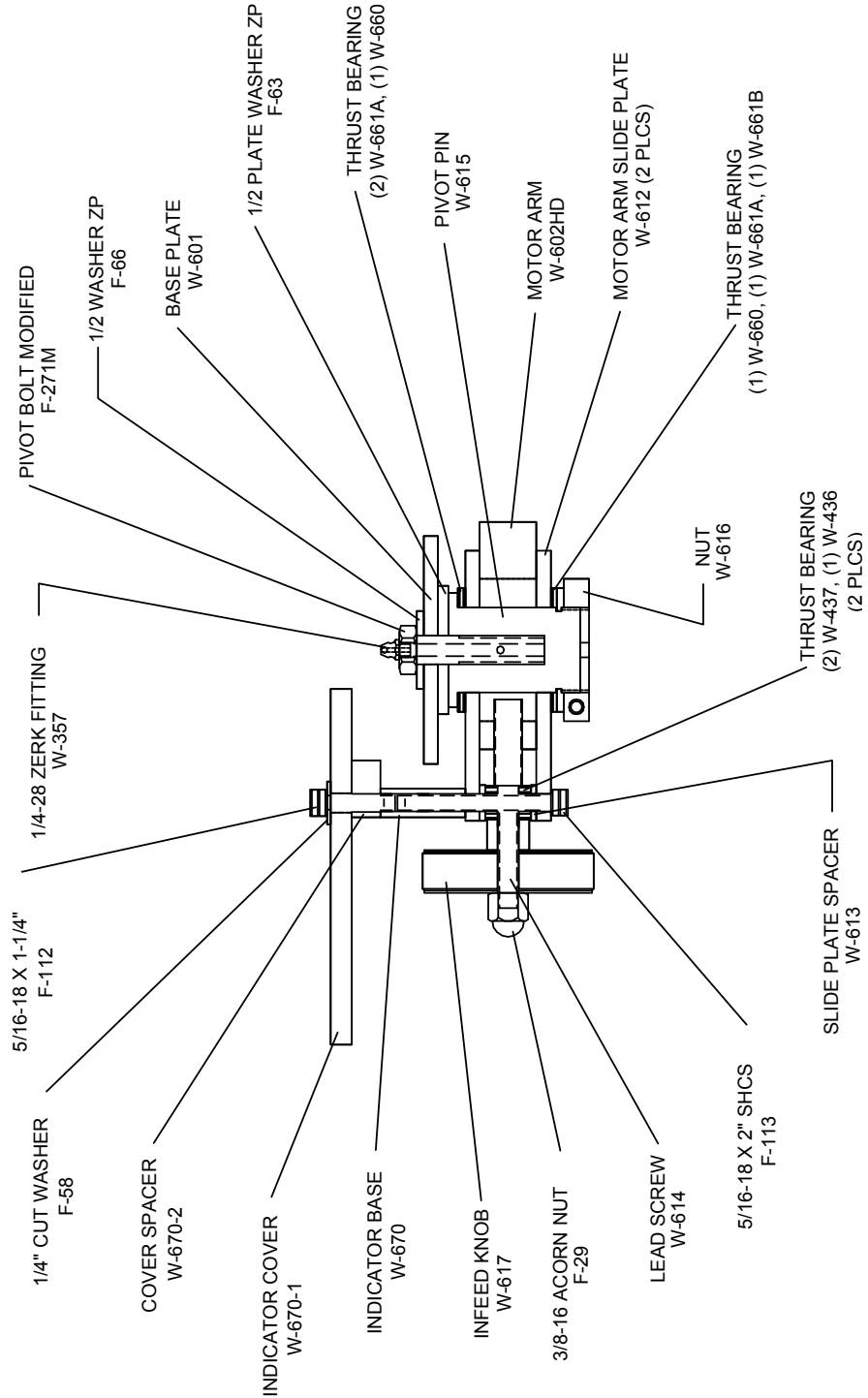
**W**RIGHT

**M**ACHINE



# W-350 HD DUAL SIDE SHARPENER

## MOTOR ARM ASSEMBLY CONT.

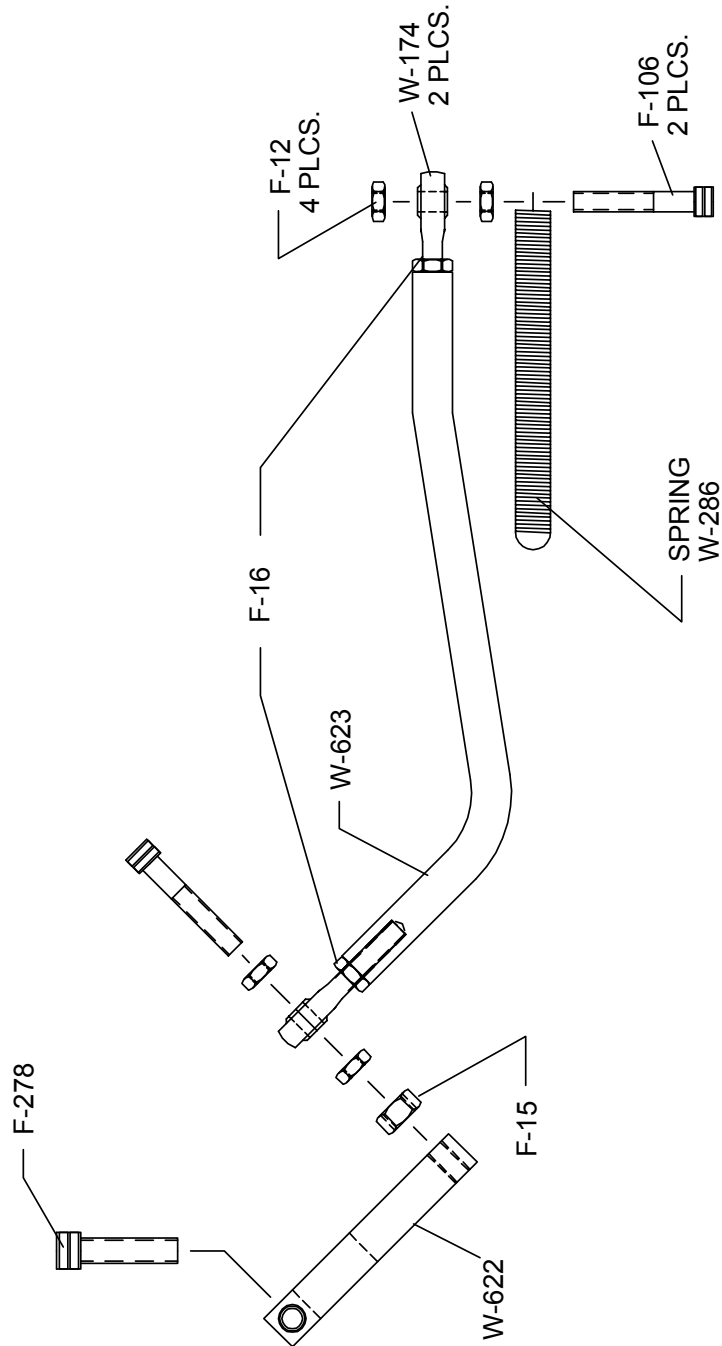


**WRIGHT**

**MACHINE**

# W-350 HD DUAL SIDE SHARPENER

## MOTOR ARM ASSEMBLY CONT.

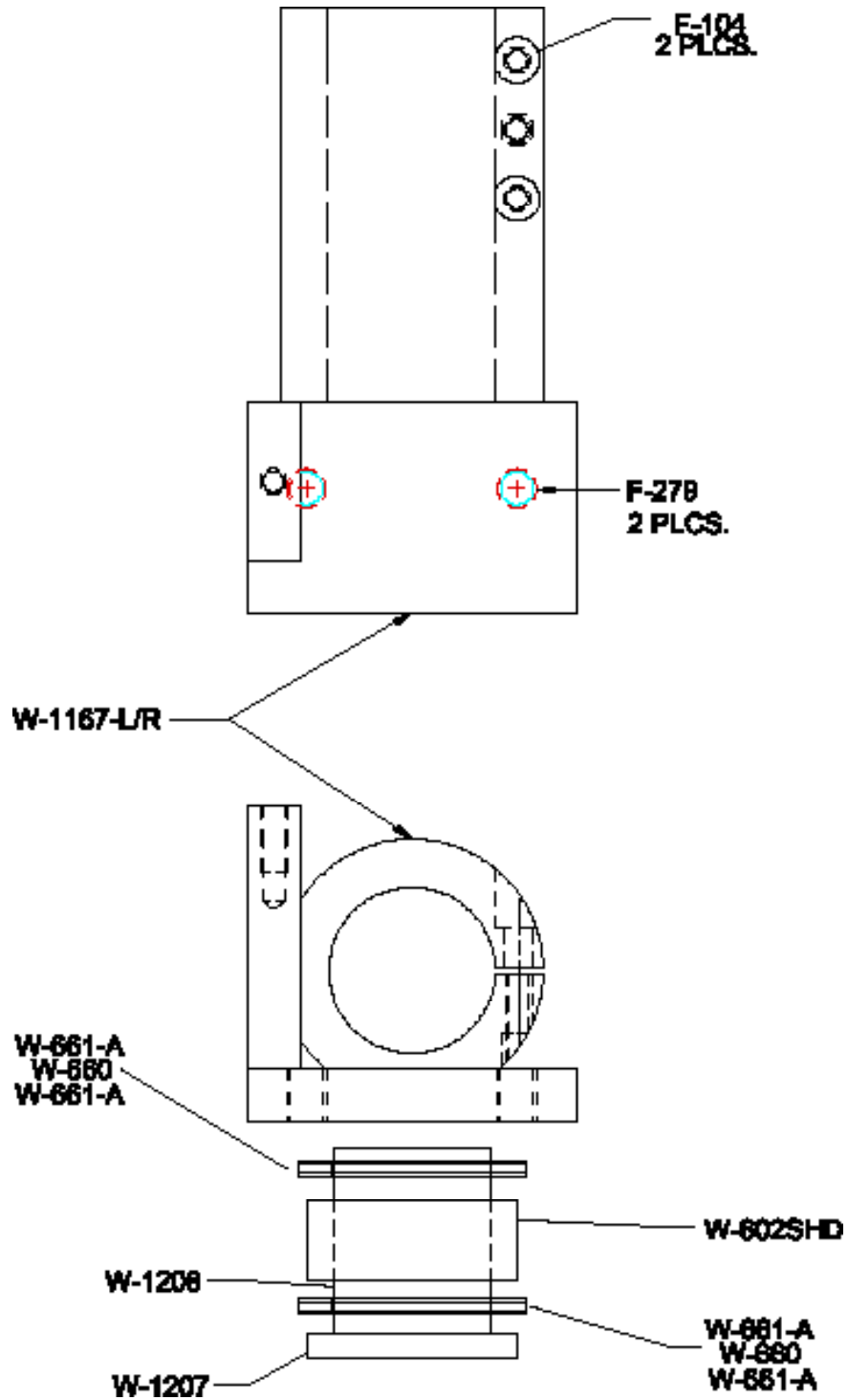


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**M**ACHINE

# W-350 HD DUAL SIDE SHARPENER

## MOTOR ARM ASSEMBLY CONT.



# W-350 HD DUAL SIDE SHARPENER

## FINGER ARM ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
2	W-188	BEARING
1	W-263	SPRING
1	W-631-1	FINGER BASE
1	W-632-1	BLOCK
1	W-634-1	FINGER ARM
1	W-635	FEED FINGER
2	F-12	1/4-20 JAM NUT
1	F-37	1/4-20 NUT
1	F-61	#12 WASHER
1	F-102	1/4-20 SHCS
2	F-104	1/4-20 SHCS
2	F-345	8-22 RHCS
2	F-379	1/4-20 SET SCREW
1	F-391	1/4-20 SET SCREW

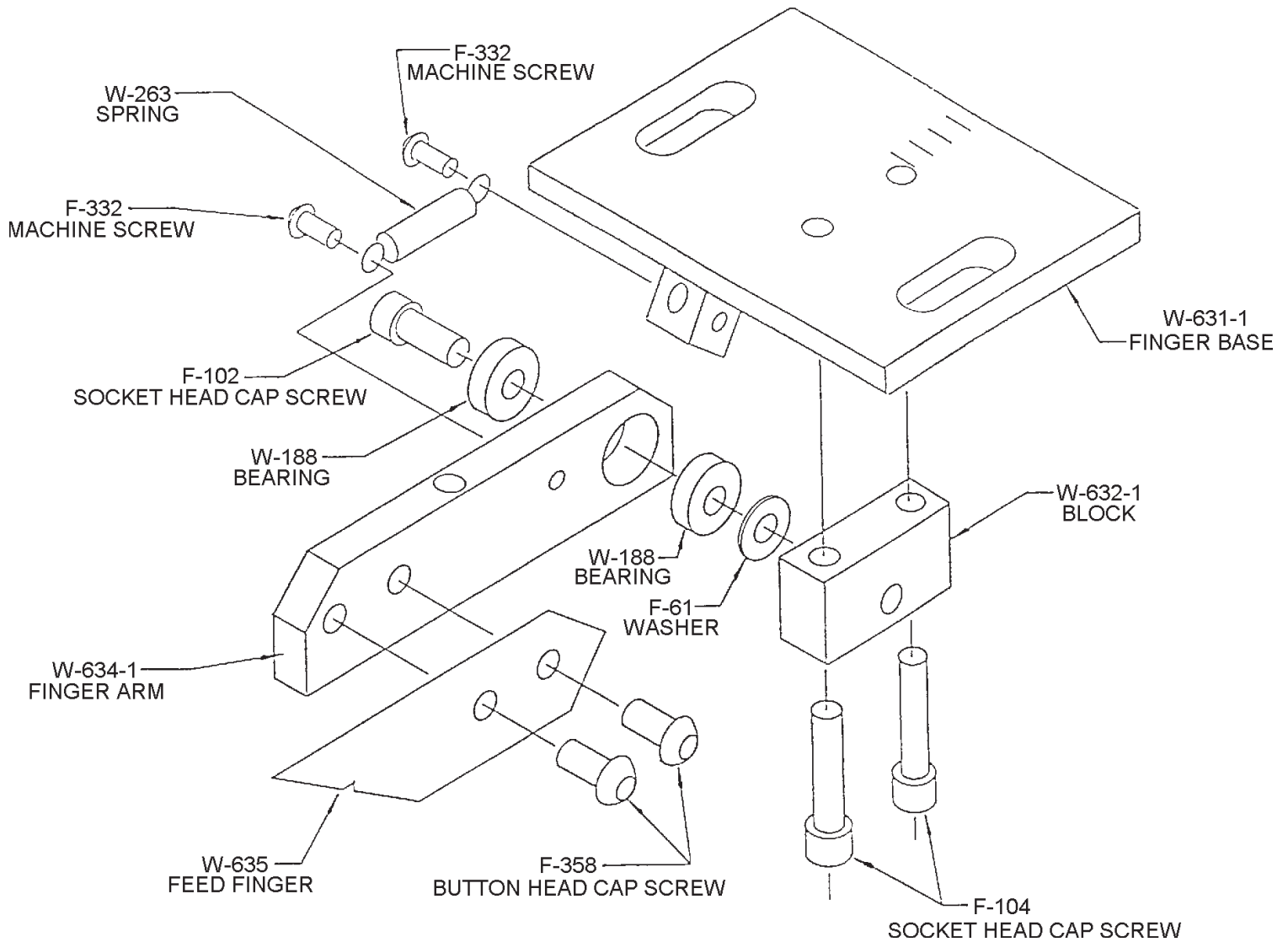


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# W-350 HD DUAL SIDE SHARPENER

## FINGER ARM ASSEMBLY



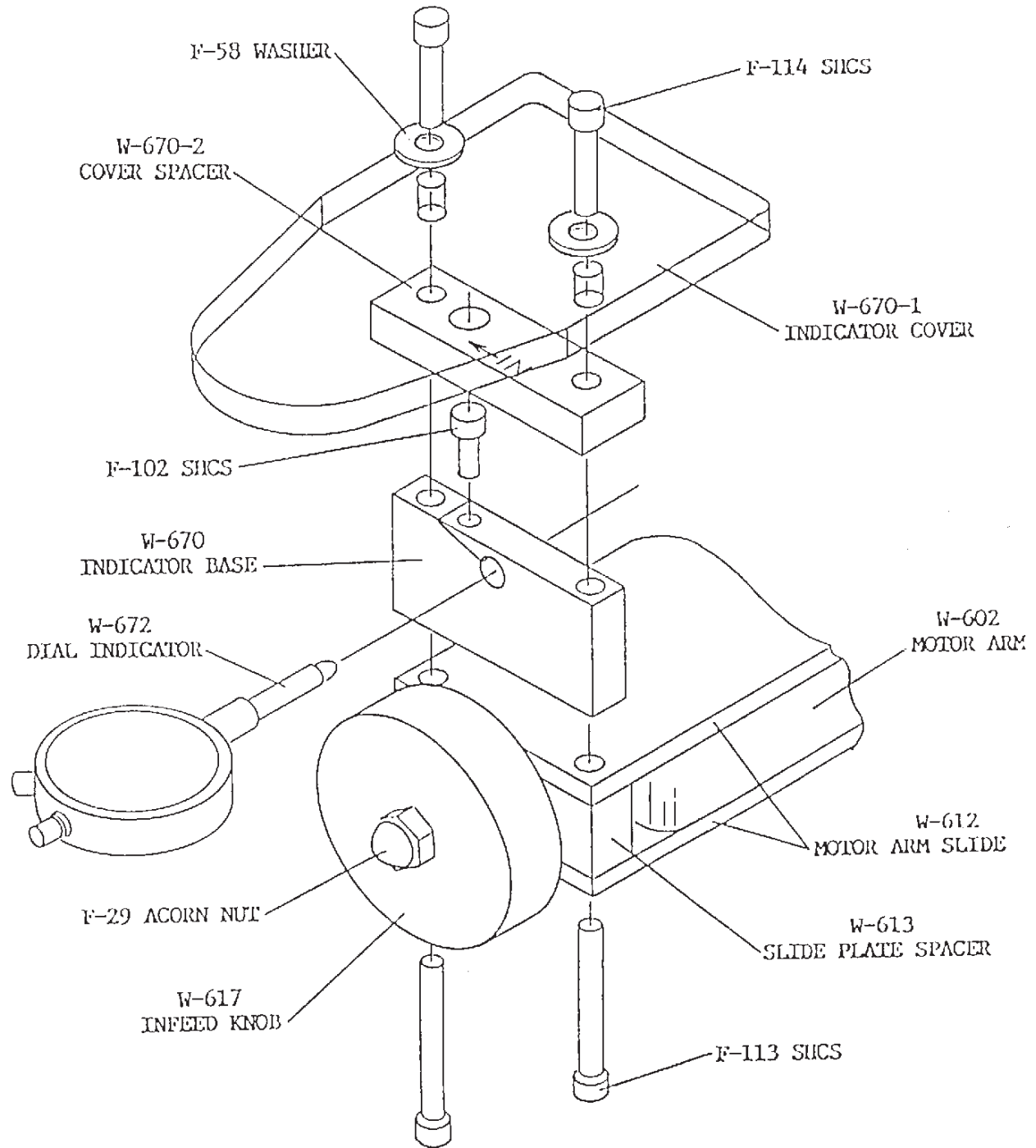
# W-350 HD DUAL SIDE SHARPENER

## DIAL INDICATOR & COVER ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-602	MOTOR ARM
1	W-612	MOTOR ARM SLIDE PLATE
1	W-613	SLIDE PLATE SPACER
1	W-617	INFEED KNOB
1	W-670	INDICATOR BASE
1	W-670-1	INDICATOR BASE
1	W-670-2 L/R	COVER SPACER
1	W-672	DIAL INDICATOR
1	F-29	3/8-16 ACORN NUT
2	F-58	1/4 CUT WASHER
1	F-102	1/4-20 SHCS
2	F-113	5/16-18 SHCS
2	F-114	5/16-18 SHCS

# W-350 HD DUAL SIDE SHARPENER

## DIAL INDICATOR COVER ASSEMBLY



# W-350 HD DUAL SIDE SHARPENER

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