



**W**RIGHT

**M**ACHINE

# W-150 HEAVY DUTY "V" MODEL AUTOMATIC V TOP GRINDER



## OPERATOR'S MANUAL

MADE IN THE U.S.A.

# W-150 HD-V TOP SHARPENER

## Contents

LIMITED WARRANTY .....	2
GENERAL SAFETY RULES.....	3
COOLANT SAFETY .....	5
SPECIFICATIONS.....	6
OPTIONS .....	7
PRE SET UP .....	8
CONTROL PANEL.....	9
SET UP.....	10
WHEEL ADJUSTMENT .....	12
MAINTENANCE .....	13
MAINTENANCE / TROUBLE SHOOTING .....	14
PROXIMITY SWITCH ADJUSTMENT.....	15
SPINDLE INSTALLATION INSTRUCTIONS .....	16
BELT REPLACEMENT INSTRUCTIONS.....	18
LUBRICATION POINTS .....	19
ADJUSTING THE FRONT INDEX ARM.....	21
UNEVEN GRINDING.....	24
LIFT OFF ADJUSTMENT .....	25
AIR SCHEMATIC.....	26
ELECTRICAL SCHEMATIC.....	27
PARTS LIST .....	29
INDEX.....	55



# W-150 HD-V TOP 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.

WRIGHT MACHINE TOOL CO., INC.  
365 Palmer Avenue  
Cottage Grove, Oregon 97424

Phone (541) 942-3712  
Fax (541) 942-0730



# W-150 HD-V TOP 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-150 HD-V TOP 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-150 HD-V TOP SHARPENER

## Coolant Safety

Proper coolant maintenance will increase grinder life and grinding performance, and possibly reduce any risks associated with health concerns. Lack of proper coolant maintenance can result in increased exposure to grinding grit, bacteria, and other by products of grinding that may lead to increased skin sensitivity in some individuals.

### WARNING!

Coolants used in this machine must be designed to be used in wet grinding operations. Do not use automotive coolant. Check with the manufacturer of the coolant to make sure it is designed for use in wet grinding of saws. Water based coolants are designed to operate at precise mixture ratios. Check with the manufacturer of your coolant to determine the proper mix ratio.

### CAUTION

Residual cleaning solutions on the saw will easily be dissolved into the coolant tank and can dramatically affect the chemistry of coolant which can significantly reduce wheel life, coolant efficiency, and corrosion efficiency.

Maintain the coolant filters that were shipped with this machine. If you have any questions on how to maintain the filters, call the factory at  
1-541-942-3712

Test your coolant at regular intervals. Contact the manufacturer of your coolant to determine when to test, and which tests to perform.

### Warning signs of improperly maintained coolant:

1. Strong (foul) odor coming from the coolant.
2. Color change in the coolant.
3. Noticeable stickiness on the saw.
4. Rust developing on the machine and/or saw steel.
5. Unexplained skin rash.
6. Deterioration of paint and/or plastic parts.

If you detect any of these warning signs consult the coolant manufacturer at once. If you are having trouble contacting the coolant manufacturer, call Wright Machine Tool Co. Inc. at 1-541-942-3712



# W-150 HD-V TOP SHARPENER

## SPECIFICATIONS

### W-150-HD "V" MODEL Automatic Top or Face Grinder for Circular Saws.

STRAIGHT "V" TOP:	1 PASS
STANDARD VOLTAGE:	230 Volt, 3 Phase, 60 HZ
OPTIONAL VOLTAGE:	460 Volt, 3 Phase, 60 HZ
SHIPPING WEIGHT:	1,350 lbs
CRATE SIZE:	L 49" X W 44" X H 62"
AIR REQUIREMENTS:	2 C.F.M at 100 psi to 150 psi
STANDARD SAW SIZE:	4"-30" (34" without tank screen)
OPTIONAL SAW SIZE:	Up to 54"
SPINDLE MOTOR:	1/2 H.P., 3 Phase, 3450 R.P.M. Motor

## PERFORMANCE

### 1. SAW BLADE DIMENSIONS:

- \* Minimum saw diameter 4 inches.
- \* Maximum saw diameter 30 inches (34" with tank screen removed).
- \* Maximum saw thickness 3/8 inches.
- \* Maximum tooth pitch straight 2" inches.
- \* Profile angle of wheel OD. +25 degrees.
- \* Hook angle -10 to +45 degrees.
- \* Bore 5/8" to 2.5" standard, 5/8" to 10" optional.
- \* Teeth per minute 0 to 29.



# W-150 HD-V TOP SHARPENER

## OPTIONS

Large Bore Option:	W-50
3 Pin Spline Saw Center	W-450
Spline Bore Saw Center	W-460
Saw Center Washer	W-1320-(Specify)
Clamp Assembly for Circle Saws 2" to 5" Dia.	W-1322-SA
Expandable Saw Center with magnets	W-495
Large Saw Option 34" to 36"	W-150 HD-A/36
36" to 54"	W-150 HD-A/54
Small Bands Clamp for 3/4" to 1-3/8" Bands	W-2256

## COMMON REPLACEMENT PARTS

Spindle Cartridge	W-1365-V-A
Finger Return Spring	W-883
Cam Follower	W-189
Finger Arm Pivot Bearing	W-188
Ramp Follower	W-188
Feed Finger	W-259
Finger Boss	W-287
Finger Arm Hold Down Spring	W-300
Filter Paper	W-588
Fixed Clamp Jaw	W-1322-3
Movable Clamp Jaw	W-1323-3
Feed Ramp	W-1324
Finger Arm	W-1381
Spindle Drive Belt	W-1726-V
Work Light Bulb	W-2310-1
V Top Wheel 90°	D-2008-90
V Top Wheel 95°	D-2008-95
V Top Wheel 100°	D-2008-100





# W-150 HD-V TOP SHARPENER

## PRE SET UP

### COOLANT

Coolant capacity is 7 to 10 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-588.

### 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.**

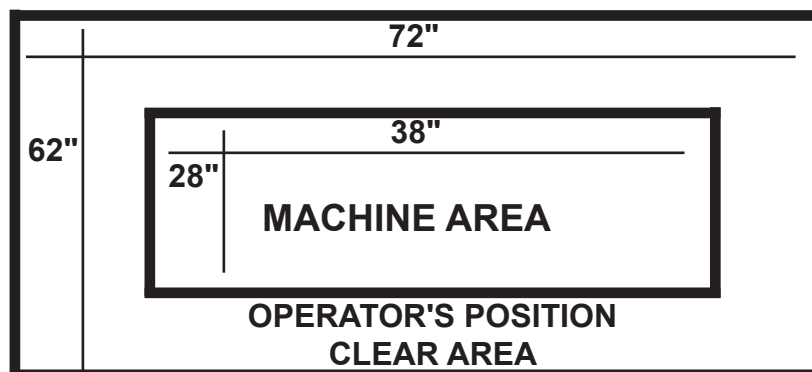
Mounting of the grinding wheel should only be done by persons with mechanical aptitude and good knowledge of mounting, care, and inspection of grinding wheels.

The W-150 HD-V uses a resin bonded diamond, 95° V shaped grinding wheel. Install the wheel onto the spindle hub followed by wheel nut and two flat head screws. Tighten screws securely, use anti seize on the threads.

## MACHINE INSTALLATION

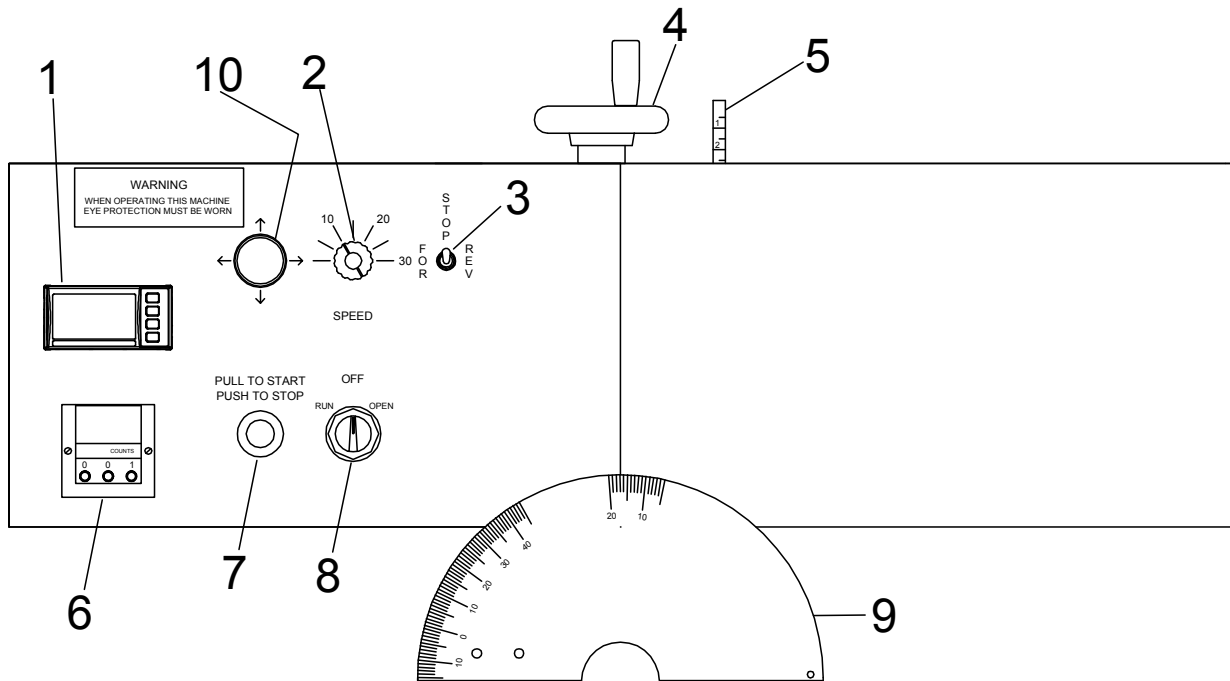
Lifting this machine should only be done with a fork lift under the Coolant Tank. Machine weight is approximately 1,300 pounds.

### RECOMMENDED FLOOR SPACE FOR MACHINE AND OPERATOR



# W-150 HD-V TOP SHARPENER

## CONTROL PANEL



1. Load Meter
2. Speed Control
3. Cycle Switch
4. Index pitch hand wheel
5. Index pitch scale
6. Counter
7. Start / Stop
8. Saw Clamp Control
9. Hook / Back Angle Scale
10. Joy Stick

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# W-150 HD-V TOP SHARPENER

## SET UP SQUARE TOP OR V TOP

1. The Load Sensor #1 monitors the power required to grind. Load sensor #1 can be programmed to momentarily stop feeding by adjusting the set point and hysteresis to sense the load when forward feed is stopped. If the machine hits a tooth that is higher than expected, the Load sensor #1 will slow the speed as necessary to reduce the chance of wheel or saw damage.
2. Set Hook angle by moving the Hook Angle / Saw Diameter Adjustment #10 (Joy Switch) to the left or right.
3. Set Speed Control #2 knob at 5 or the number of teeth per minute that you want to grind.
4. Move the Cycle Switch #3 (FOR. / STOP / REV.) to stop.
5. Set the Counter #6 by turning the set knobs to the number of teeth in the saw + one tooth. Example: If there are 30 teeth in the saw, set the counter for 31.
6. Move the Clamp Control Switch #8 (RUN / OFF / OPEN) to OPEN. This will open the saw clamp jaw.
7. Adjust the index Pitch Adjustment #4 and read Tooth Pitch on Scale #5.
8. Install proper centering device on the saw lift. The W-150 HD standard cup and cone will accommodate saw bores from 5/8 to 2-1/2 inches. A cup and cone for up to 3-1/2 inch saw bore is available. If larger bores are used, a W-50 for saws without keyways or splines or a W-460 / W-495 for spline or keyway bores will be required.
9. Mount saw on centering device. Move Hook Angle / Saw Diameter Adjustment #10 (Joy Switch) up and the saw lift actuator will move up. Stop the saw lift actuator when the saw tip is above the saw clamp jaw.
10. Move the Saw Clamp Control Switch (RUN / OFF / OPEN) to RUN. This will close the clamp Jaw.
11. The W-150 HD V Automatically shuts off with counter, the finger 1/16 inch from full forward. If the machine has been stopped before finishing the cycle, it will be necessary to jog the machine forward to get into the normal stop position.



# W-150 HD-V TOP SHARPENER

## SET UP SQUARE TOP OR V TOP (Continued)

12. Place the saw tip against the index finger and move the Hook Angle / Saw Diameter Adjustment #10 (Joy Switch) up with short flicks until the top of the carbide is approximately 1/8" above the top of the finger.
13. Pull the START / STOP Switch #7 and the machine will start. Move the Cycle Switch #3 (FOR. / STOP / REV.) to FOR.. The Index will place the tip in position and the grinding head will start moving down. Move the infeed knob as necessary to adjust the grinding wheel grind depth. The graduation indicate .0005 of movement.
14. The dial indicator centers the wheel position over the saw plate. Turn knob "A" fully clockwise to establish zero plate. Counter clockwise rotation while observing the indicator will aid efficient centering.
15. Infeed of grind depth adjustment is accomplished by turning knob "C". Clockwise feeds deeper into carbide. Graduations are .0005 of movement.
16. "Offset". Adjustment knob "B" allows for fine tuning of left/right center center of wheel for optimizing the back angle in V notch.
17. Move the Cycle Switch #3 (FOR. / STOP / REV.) to FOR. and the machine will index to the next tooth. It may be necessary to adjust the index guide ramp if the index finger does not follow the saw radius. Only make this adjustment with the machine off.
18. Move the Cycle Switch #3 (FOR. / STOP / REV.) to STOP when the grinding wheel is over the saw tip. Turn the infeed knob until the wheel touches the tip. Turn coolant ON and infeed as needed. Move the Cycle Switch #3 (FOR. / STOP / REV.) back to FOR.

## SHUT DOWN

When the machine is **NOT** being used, move Saw Clamp Control #8 (RUN / OFF / OPEN) switch to OFF. This shuts down most of the circuitry.



# W-150 HD-V TOP SHARPENER

## WHEEL CENTERING ADJUSTMENT

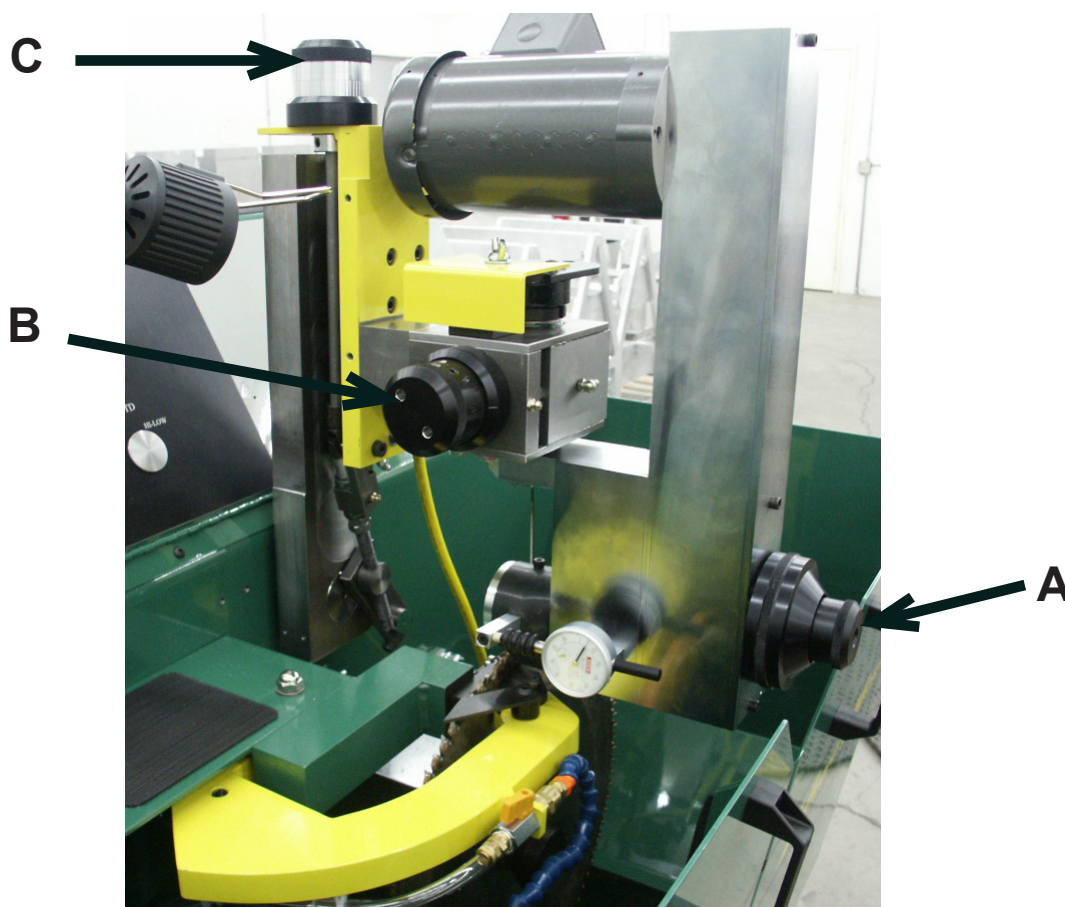
A= Zero plate thickness knob. Graduations are .0005"

B= This Knob is used in conjunction with joy stick to optimize grind wheel offset to establish slope of grind from tip/saw union up to face of tip.

LEFT = Counter clockwise

RIGHT = Clockwise

C= Fine adjustment for depth of grind. Graduations are .0005"



# W-150 HD-V TOP 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. If equipped with, and when not in use, leave the enclosure door open. This eliminates humidity build up in the enclosure.
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.
6. Do not use oilers. Do not use synthetic compressor oil or severe valve damage will occur. Use only water based grinding coolant.

## MAINTENANCE

### **DAILY**

1. Check coolant level and filter.
2. Clean control panel, ramp, sawlift, and grinding head.
3. Check and / or drain air filter water trap.

### **WEEKLY**

1. Check coolant tank for and remove carbide buildup.
2. Replace coolant filter.
3. Inspect feed finger for wear.

### **MONTHLY or 50,000 CYCLES**

1. Inspect ramp and clamp jaws for wear.
2. Clean and lube W-287 finger boss.
3. Lube clamp arm pivot and plate thickness slide plate spacer.
4. Spindle housing / bushings - lube.
5. Head feed adjust lead screw - clean / lube (W-1336).
6. Spindle adjust lead screw - lube (W-1368, W-1368-1).
7. If equipped, clean lube height sensor shaft (anti-sieze best!).

### **EVERY 6 MONTHS or 500,000 CYCLES**

1. Inspect spindle drive belt.
2. Clean spindle motor fan / housing.
3. Lube index shaft bearings.
4. Lube rear head feed shaft bearing.
5. Top angle adjustment / slide plate spacer - lube.
6. Linear slide bearing 1 1-1/2 pump.



# W-150 HD-V TOP SHARPENER

## MAINTENANCE / TROUBLE SHOOTING

Care should be taken when control console or rear cover is removed. Do not allow any grinding grit to enter. Drain water from air filter every day. More often may be required if air is wet or dirty.

### TROUBLE SHOOTING

**CAUTION: DISCONNECT FROM POWER BEFORE OPENING ANY COVER.**

**Machine will not start when start button is pulled.**

1. No power to machine.
2. Transformer fuse blown, under rear cover next to transformer.

**Machine stops as soon as start button is released.**

1. Counter is set to zero.

**Machine starts but does not cycle, feed, or index.**

1. Check load meter setting.
2. Check the fuse behind control console.
3. Index is bound.
4. Cam drive motor is defective.
5. Speed Control Unit is defective.

**Coolant does not flow when switch is on.**

1. Check to be certain coolant is in the tank.
2. Valve is closed.
3. Blow air through nozzle to clean obstruction.
4. Coolant pump may be clogged.
5. Coolant pump may be defective.

**Machine will not function, nothing works.**

1. Open rear cam cover. On door next to large transformer is an in line fuse holder, twist to open, replace with six amp fuse.

**Machine runs but will not go through it's cycle.**

1. The set point on the load meter may be set too low.
2. Fuses to speed control are blown. Location of fuses are lower left hand of speed control circuit board inside control panel.

**If other problems arise please call us for technical advice. (541) 942-3712.**

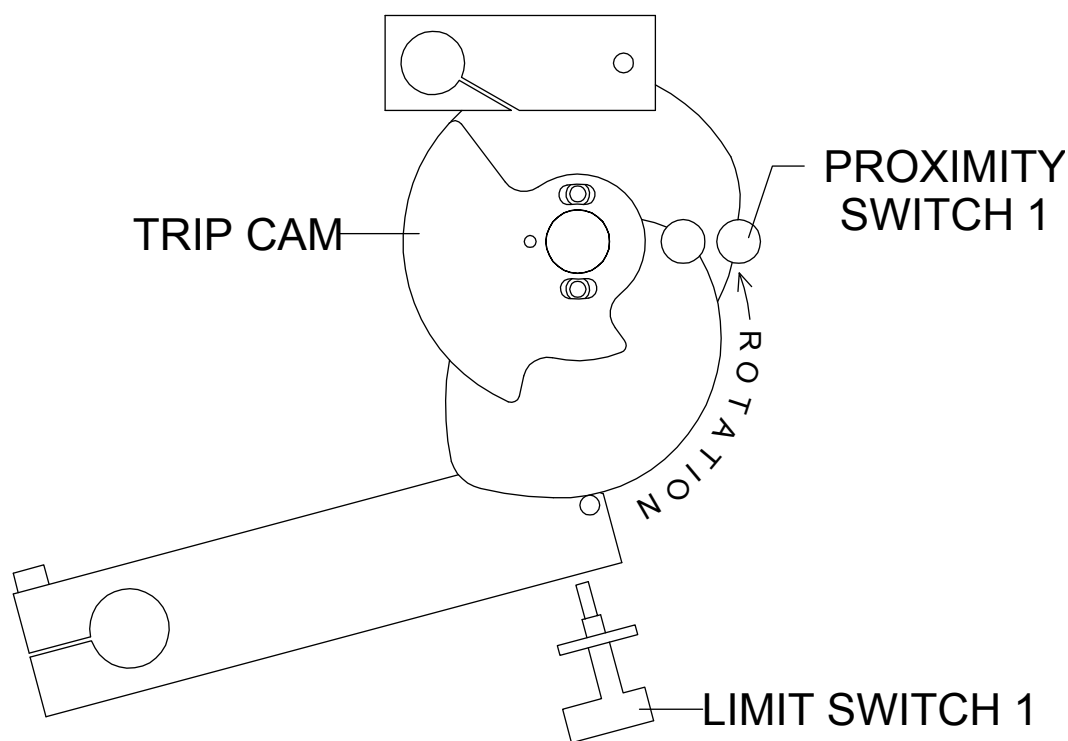


# W-150 HD-V TOP SHARPENER

## PROXIMITY SWITCH ADJUSTMENT

The proximity switches tripped by the trip cam, control the function of the machine. If the machine does not function correctly check the proximity switch for proper adjustment. Maximum sensing distance is .125".

Proximity Switch 1 controls clamp during grind stroke. When energized proximity switch 1 sets clamp to full pressure. When de-energized proximity switch 1 allows drag pressure during index.



### LS-1

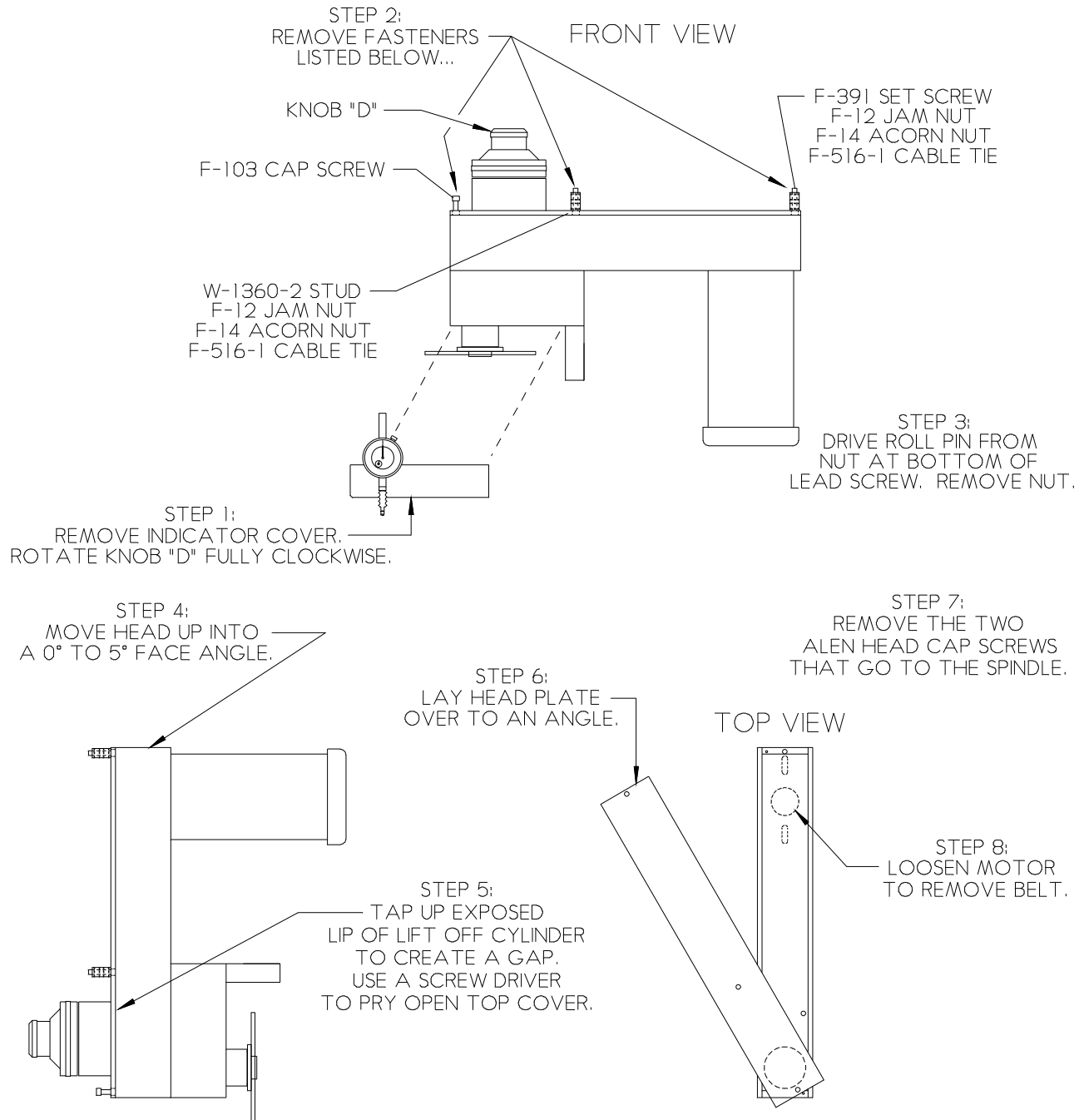
Count signal limit switch. Adjust to shut off end of count cycle so cam follower on index cam is 3/8" to 1/2" before high point.

Note: Proximity switch 1 is set for head full-in untripping by the trip cam to control CR-3.



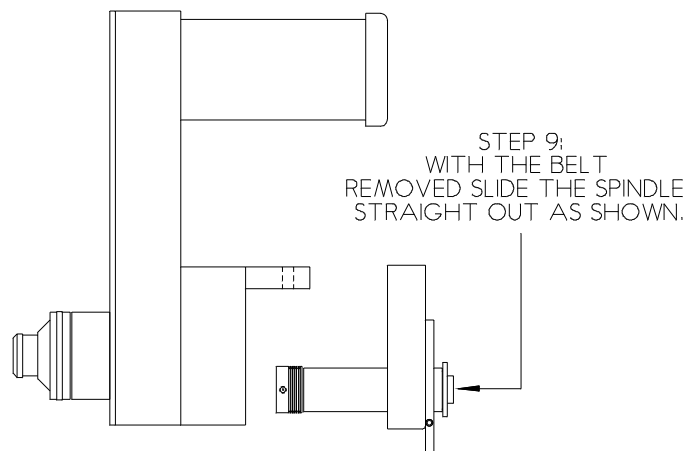
# W-150 HD-V TOP SHARPENER

## NOTE: DISCONNECT POWER FIRST! SPINDLE INSTALLATION INSTRUCTIONS

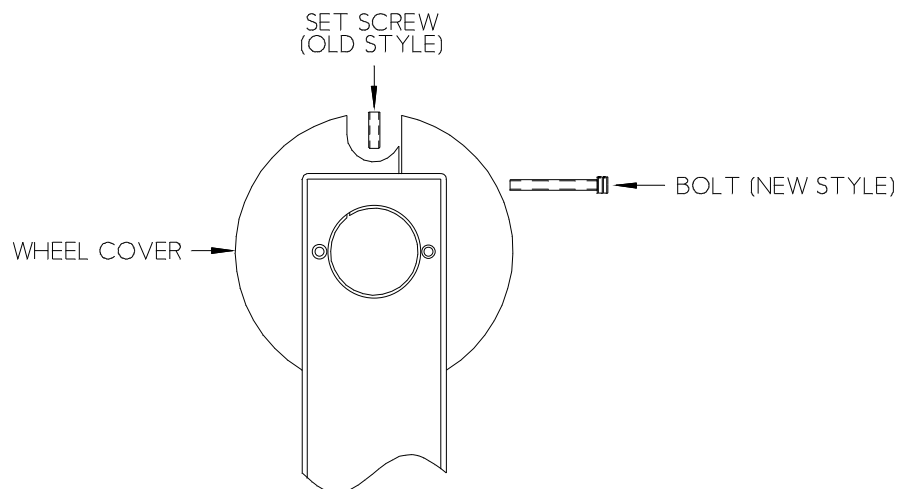


# W-150 HD-V TOP SHARPENER

**NOTE: DISCONNECT POWER FIRST!**  
**SPINDLE INSTALLATION INSTRUCTIONS CONTINUED**



INSTALL THE NEW SPINDLE IN THE SAME MANNER AS SHOWN IN STEPS 1-9.  
 BE SURE THE BELT LINES UP IN BELT GROOVES ON THE MOTOR AND SPINDLE PULLEYS.

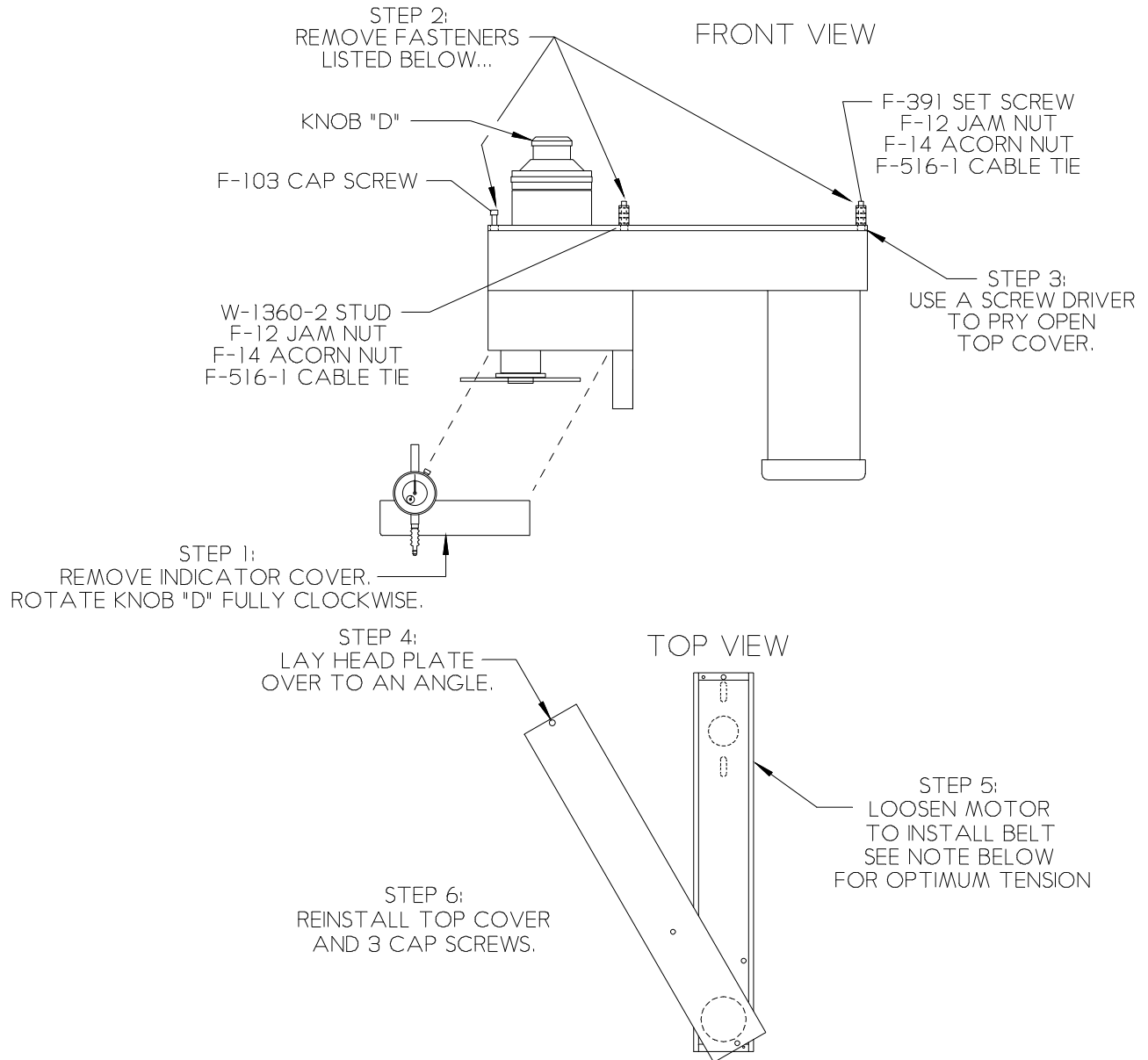


NOTE: ON THE WHEEL COVER SET SCREW - JUST RUNNING IT UP SNUG IS ALL THAT IS NEEDED.  
 OVERTIGHTENED SET SCREW WILL HARM SPINDLE.  
 ON LATER MACHINES THE SET SCREW WAS REPLACED BY A SPLIT GUARD AND SOCKET HEAD CAP SCREW.  
 THE NEW STYLE SHOULD ONLY BE SNUG AND NOT OVERTIGHTENED.

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# W-150 HD-V TOP SHARPENER

## NOTE: DISCONNECT POWER FIRST! BELT REPLACEMENT INSTRUCTIONS



**NOTE:**

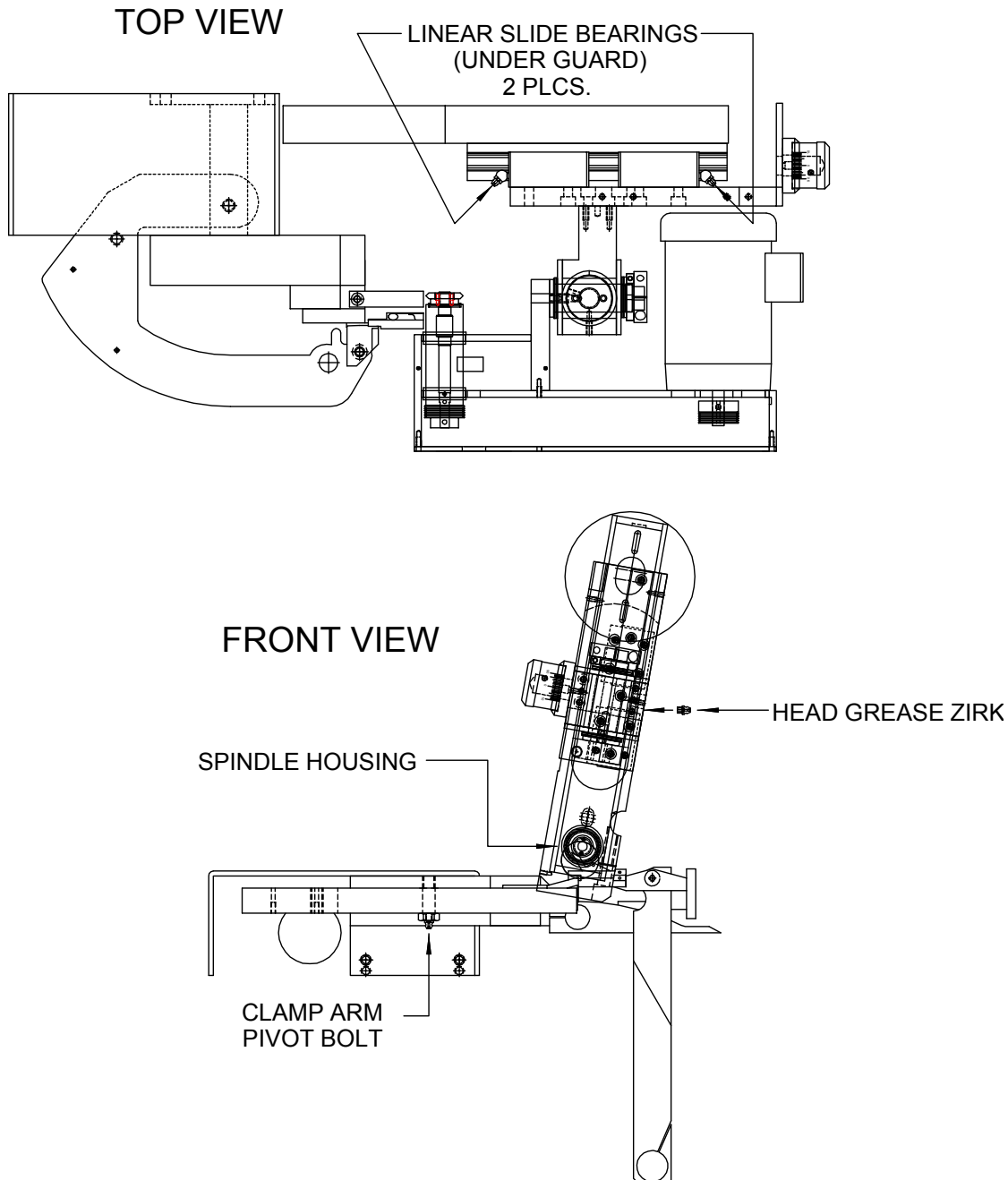
RUN MACHINE IN ALTERNATE. IF THE BELT SQUEALS WHEN REVERSING THEN TIGHTEN BELT.  
IF LIFT OFF DOES NOT FUNCTION THEN LOOSEN BELT BY ADJUSTING THE MOTOR.



# W-150 HD-V TOP SHARPENER

## LUBRICATION POINTS

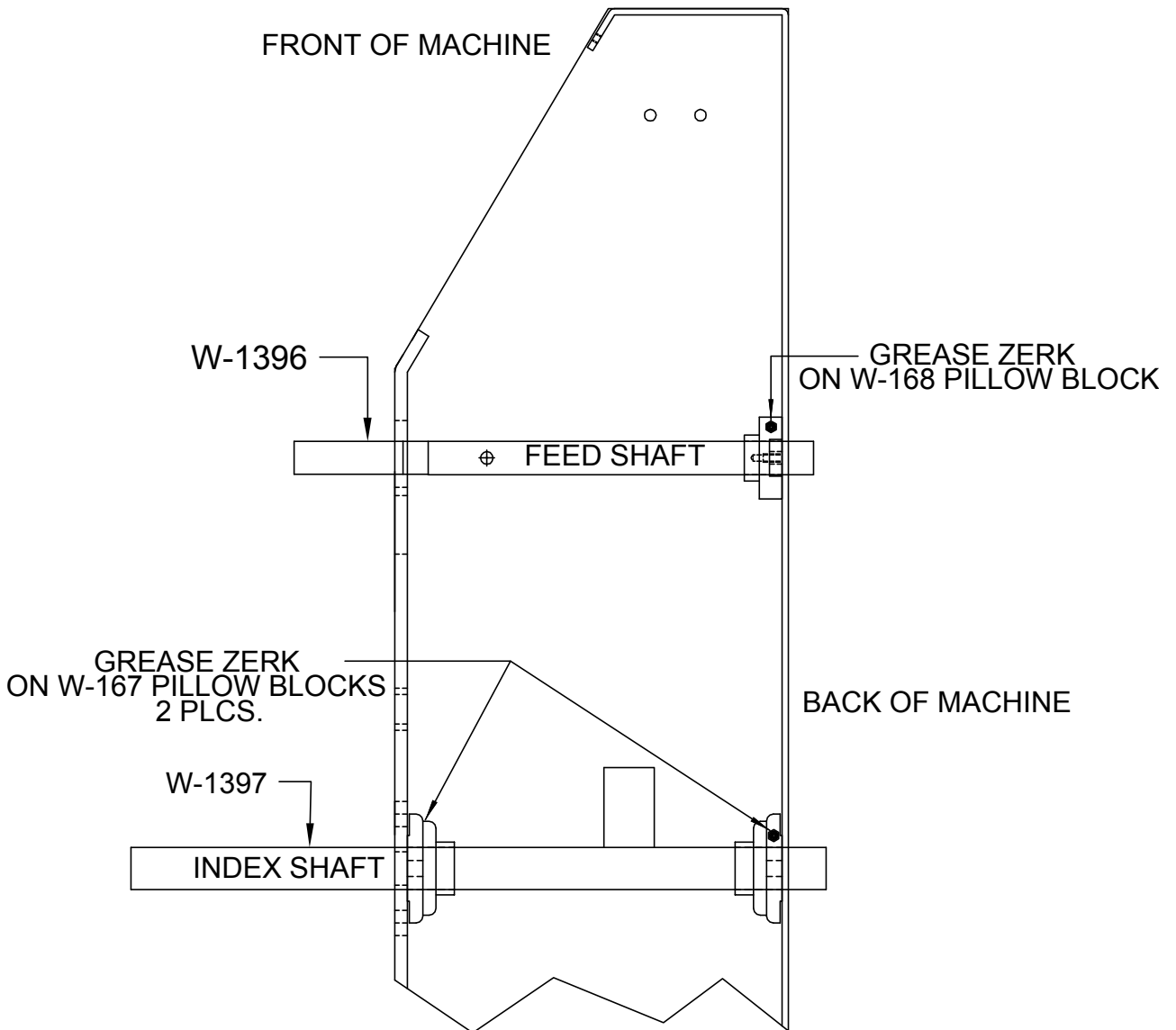
Use grease type UNOBA EP GREASE 2 (Spec. #NLGI 2) or similar grade general purpose grease.



# W-150 HD-V TOP SHARPENER

## LUBRICATION POINTS (Inside of Base)

Use grease type UNOBA EP GREASE 2 (Spec. #NLGI 2) or similar grade general purpose grease.



# W-150 HD-V TOP SHARPENER

## ADJUSTING THE FRONT INDEX ARM

Begin by checking feed arm against the positive stop set screw using the 1/4" center hole from the 2" hook pivot shaft as the reference point. See figure (i-1). This will ensure correct full forward alignment with the hook pivot. Adjust as needed.

To find the "Starting" reference point of the index cam follower you must use a straight edge held against the two cap screw on the cam set and rotate the camset by hand until the center of the cam follower is aligned with the edge of the straight edge. See figure (i-2). This "Starting" point will compensate for front arm "Pull Back" when retightening. Each machine may require more or less compensation.

To set the feed finger correctly to the clamp jaws you must loosen the front arm pinch bolts, position and hold the finger against positive stop set screw, lay out an .085 steel ruler on the extension beyond the face of the ruler. Tighten the pinch bolts and there should be about 1/8" of "Pull Back". Start the machine and cycle several tips. At the shut off point check tension of the arm by pulling with both hands; it should be barely able to move from the positive stop set screw.

These settings will help ensure consistent indexing critical to satisfactory face grinding.

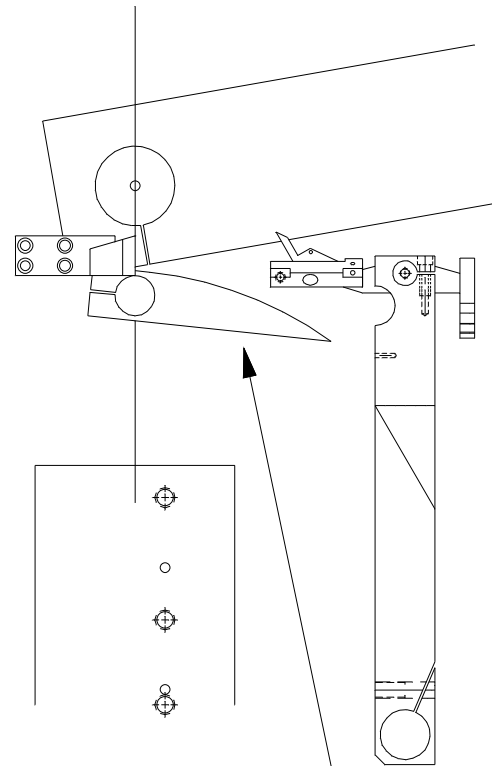


# W-150 HD-V TOP SHARPENER

## ADJUSTING THE FRONT INDEX ARM CONTINUED

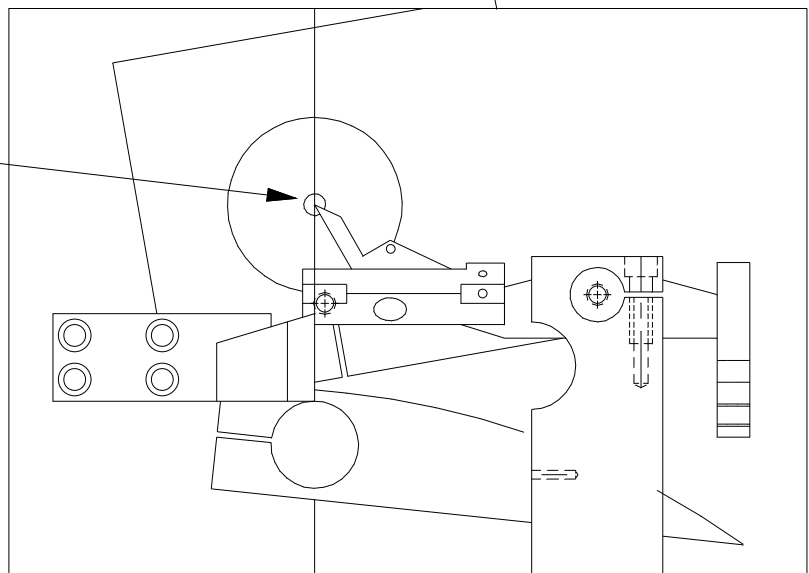
ADJUSTMENT OF POSITIVE STOP SHOULD BE CORRECT WHEN THE FEED FINGER IS ALIGNED WITH THE CENTERLINE OF THE MAIN PIVOT SHAFT.

FIGURE (i-1)



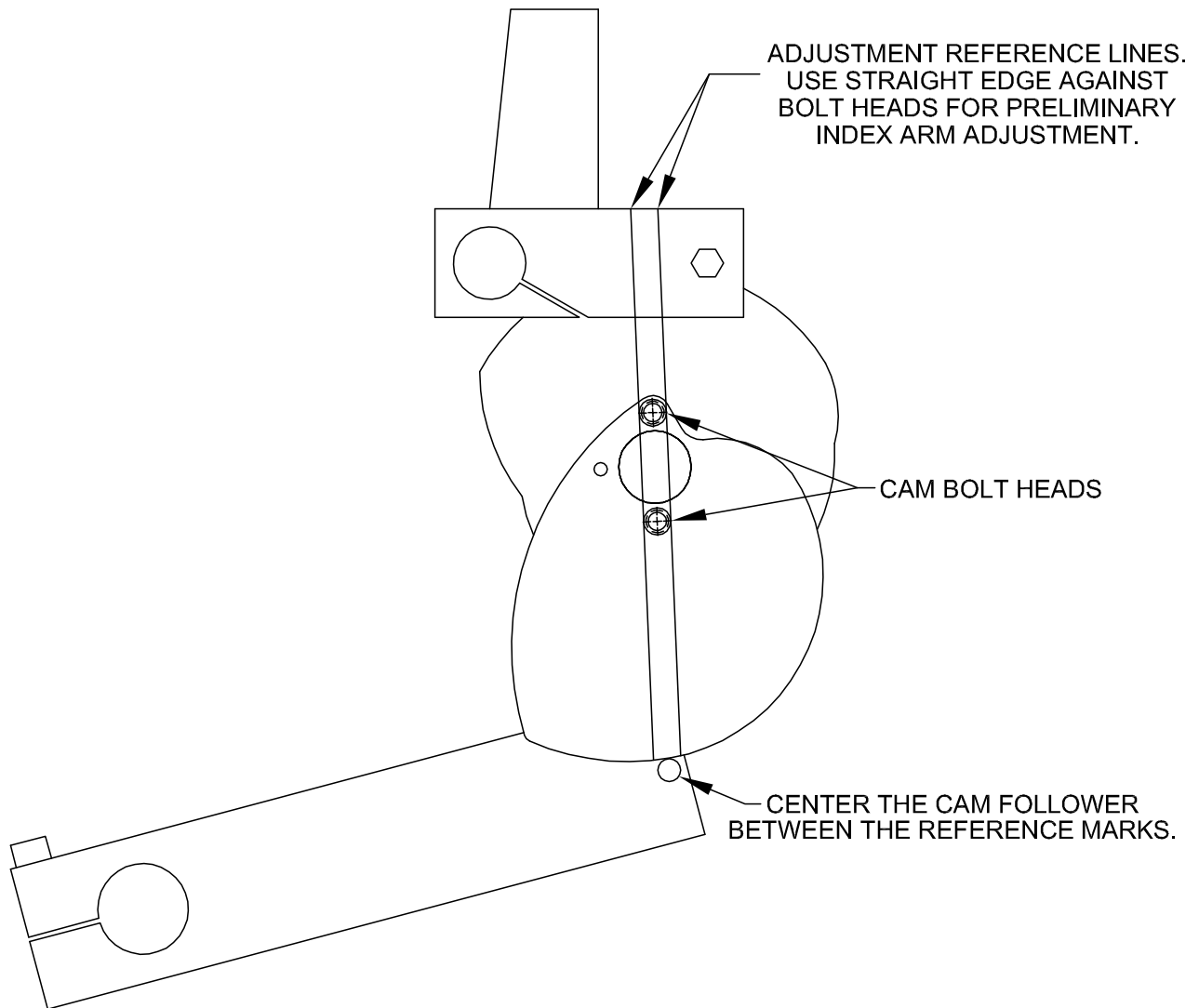
DETAIL

A 1/4" X 8" DOWEL ROD INSERTED INTO THE CENTER HOLE WILL SERVE AS A VISUAL REFERENCE POINT.



# W-150 HD-V TOP SHARPENER

FIGURE (i-2)

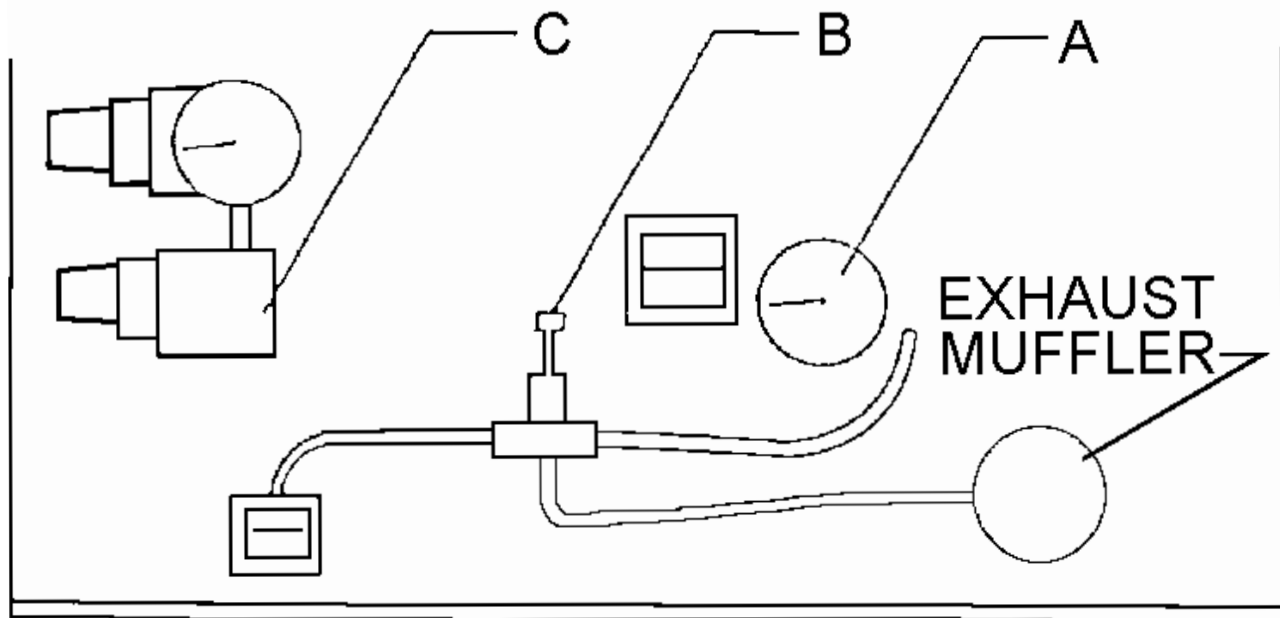




# W-150 HD-V TOP SHARPENER

## UNEVEN GRINDING

1. Is the saw free of rust and pitch.
2. Set tooth counter on 2. Start machine and let it stop by itself. Open rear cam cover. Check bleeder "B". It must be exhausting some air. Regulator "C" controls drag pressure and is set at 10 lbs. If this pressure is above 40 then the machine position limit switch 1 may need adjustment. See page 15 for proper adjustment. A lower than 10 lbs. setting may be necessary for the saw to index smoothly. To check mount saw, turn selector to run. Turn the saw by hand and see if it turns smoothly with about 5 lbs. of drag. If it does not, check the saw for plate damage or for saw center binding.
3. The index finger must contact the positive stop. This adjustment is designed to slip if an overload on the index occurs. To adjust open rear cam cover, rotate index cam figure #1 until it is 1/2" from the high point. Loosen clamp screw #1 and push front index cam against the positive stop, then lock the clamp screw.



INSIDE OF REAR CAM COVER

# W-150 HD-V TOP SHARPENER

## ADJUSTING TENSION ON LIFT OFF LEAD SCREW

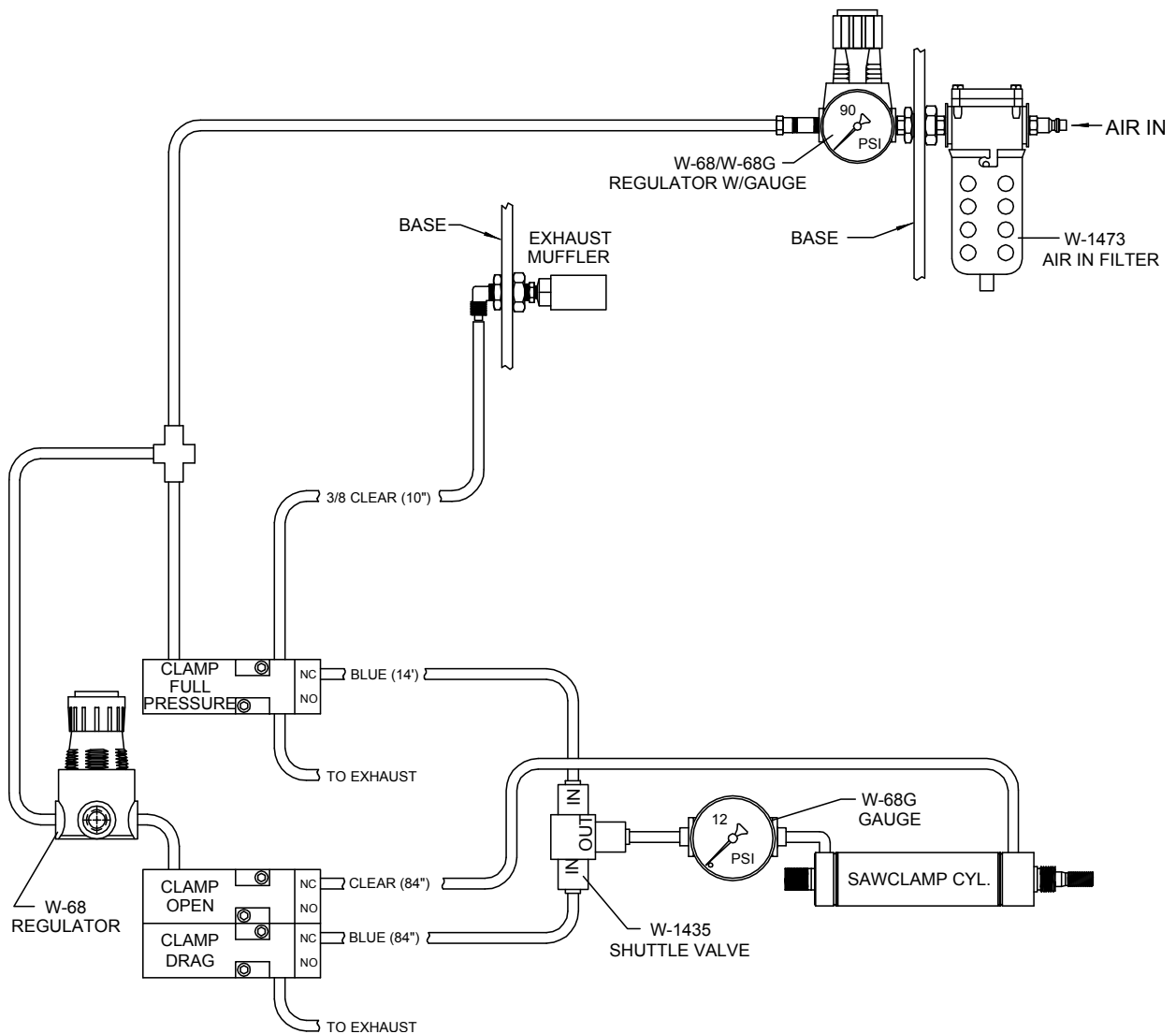
Begin by mounting the head top cover in a bench vise. Insert lead screw (W-1368) through the assembly. Slip one W-284 then eight spring washers (F-68) on as sets of four, opposing one another. Spin the anti-rotation nut (W-1358) onto the shaft and down tight. Back off nut approximately 1/16 turn. Check shaft pre-load, if tension is correct then transfer punch with 5/32 punch. Remove W-1358 nut, F-68 spring washers, and W-1358 lead screw. Drill punch marks with 1/8" drill to approximate depth of .200".

Assemble the W-1368 lead screw, eight F-68 spring washers, and the W-1358 nut. Tighten for correct tension and drive two roll pins (F-405) in place. Note: Lightly spread loctight onto the roll pins. The correct tension on the new lead screw assembly should be fairly tight to compensate for "Break In".



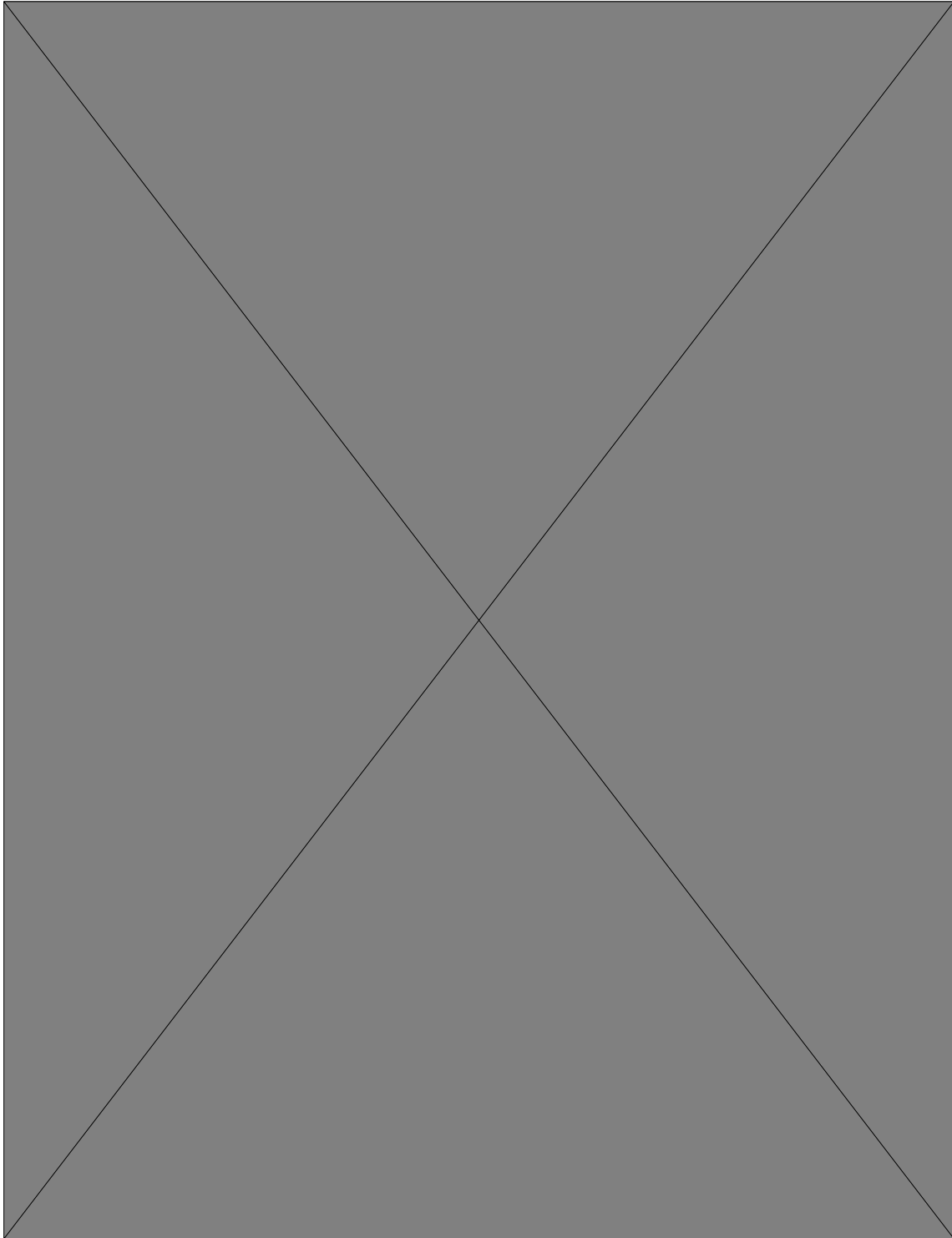
# W-150 HD-V TOP SHARPENER

## AIR SCHEMATIC



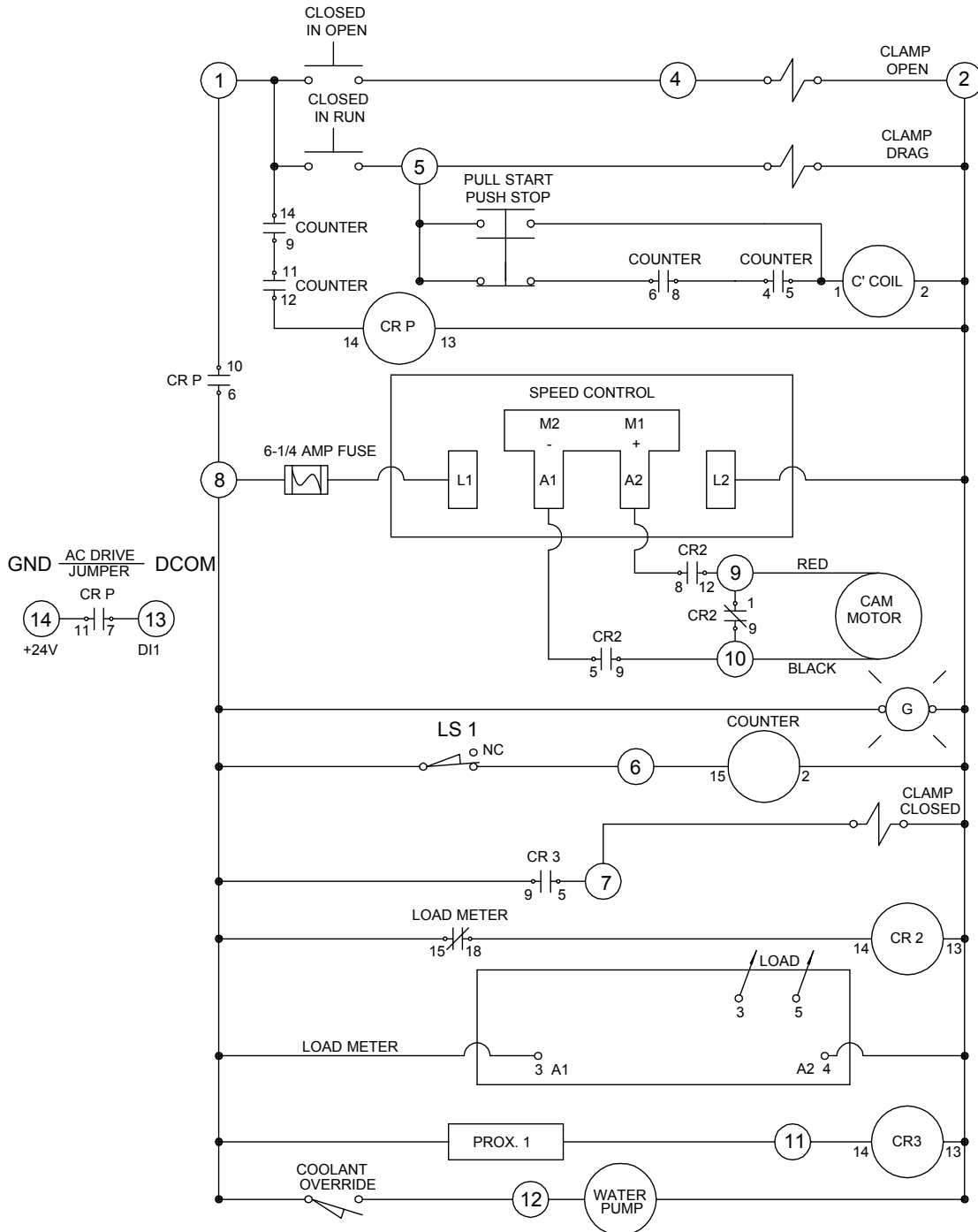
# W-150 HD-V TOP SHARPENER

## ELECTRICAL SCHEMATIC



# W-150 HD-V TOP SHARPENER

## ELECTRICAL SCHEMATIC



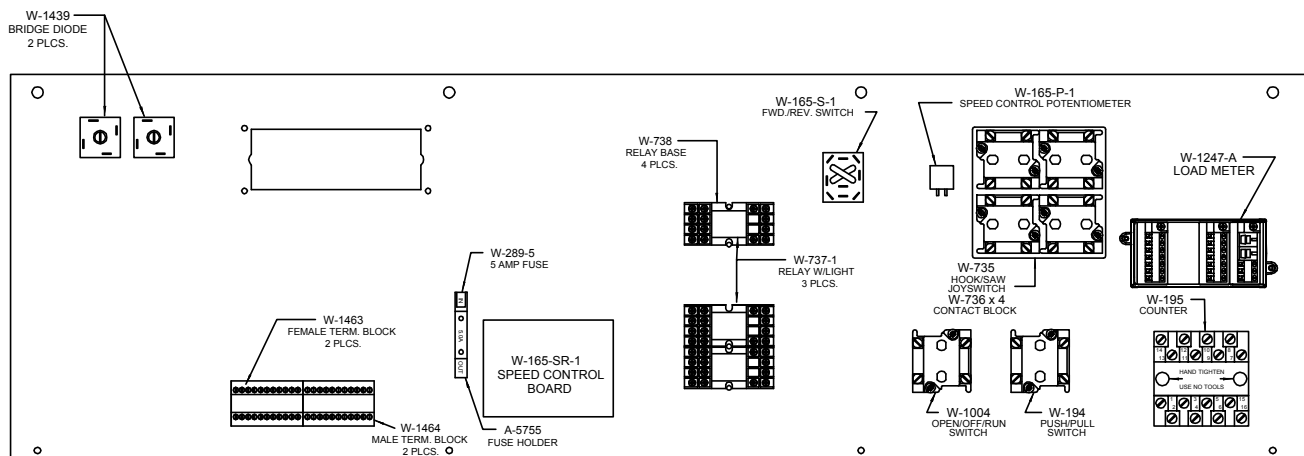
# W-150 HD-V TOP SHARPENER

## PARTS LIST

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

### INSIDE CONTROL PANEL

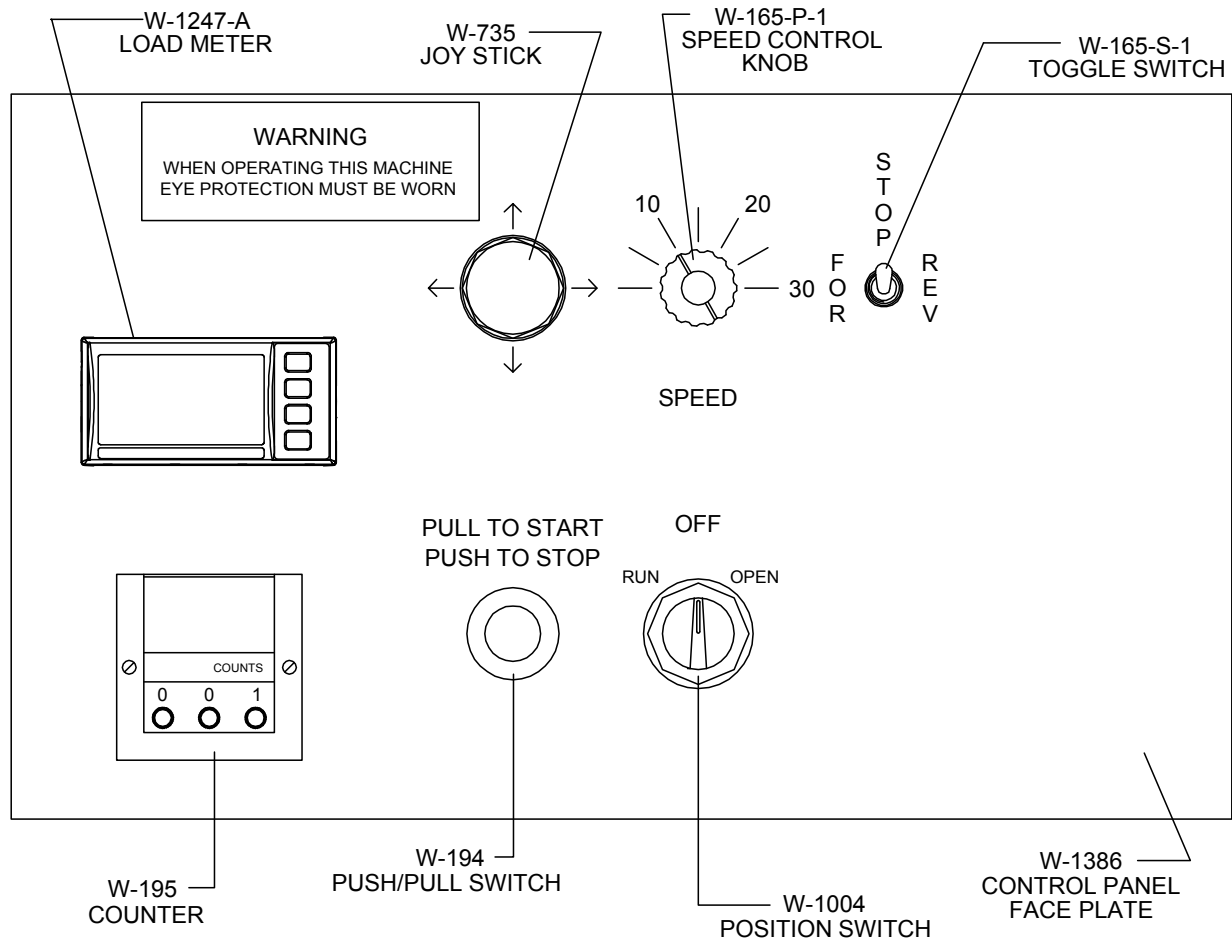
QTY	PART NUMBER	DESCRIPTION
2	W-1439	DIODE
1	W-165-SR-1	SPEED CONTROL BOARD
3	W-738	RELAY BASE
3	W-737-1	RELAY WITH LIGHT
1	W-289-5	5 AMP FUSE
1	A-5755	FUSE HOLDER



# W-150 HD-V TOP SHARPENER

## OUTSIDE CONTROL PANEL (LEFT SIDE)

QTY	PART NUMBER	DESCRIPTION
1	W-1427-A	LOAD METER
1	W-735	JOY STICK
1	W-1497	BOOT FOR TOGGLE SWITCH
1	W-165-S-1	TOGGLE SWITCH
1	W-165-P-1	SPEED CONTROL KNOB
1	W-195	COUNTER
1	W-194	PUSH PULL SWITCH
1	W-1004	3 POSITION SWITCH
1	W-1386	CONTROL PANEL FACE PLATE



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# W-150 HD-V TOP SHARPENER

## GRINDING HEAD

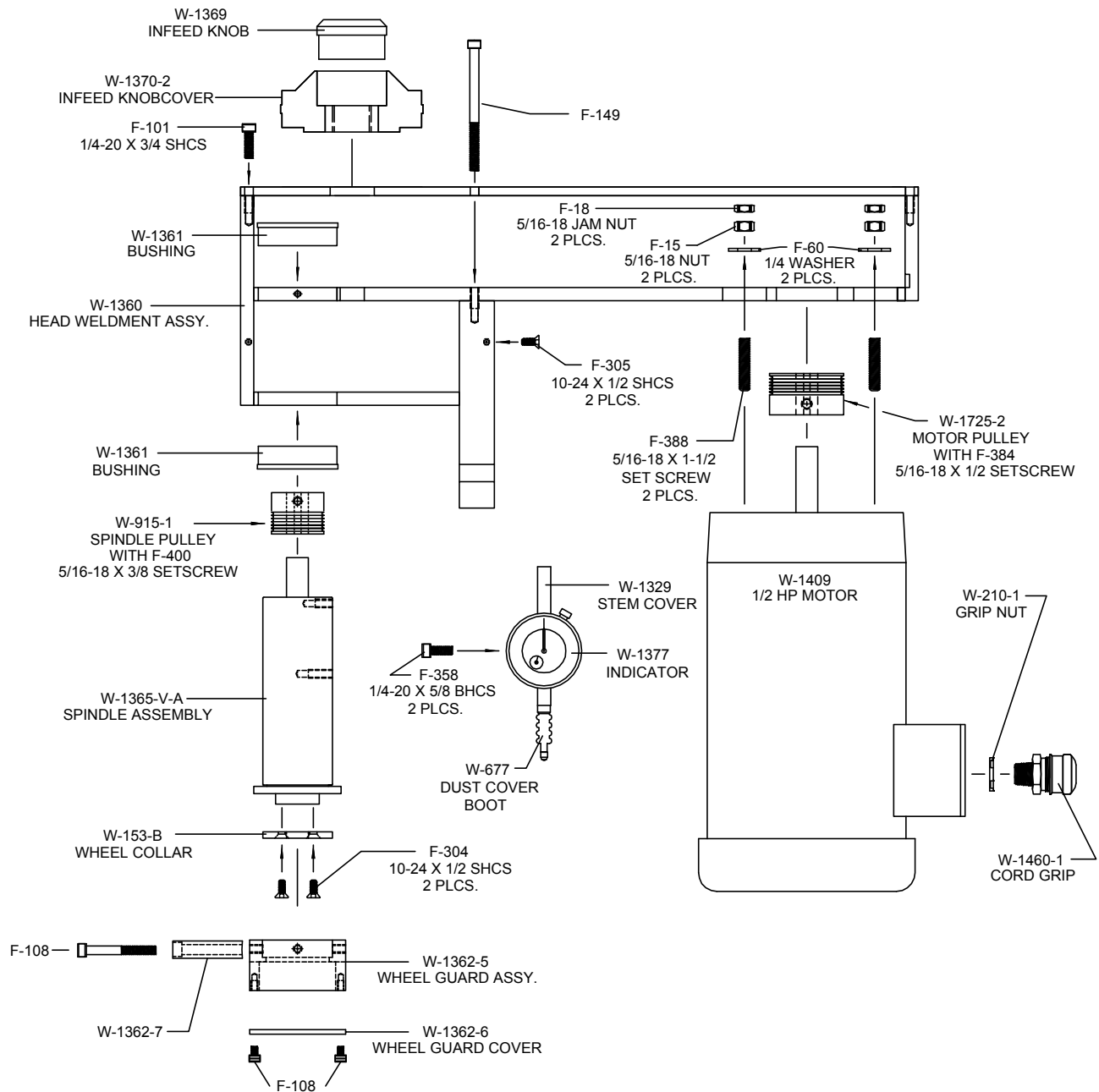
QTY	PART NUMBER	DESCRIPTION
1	W-1370-2	INFEED KNOB COVER
1	W-1369	INFEED KNOB
1	W-1370-6	THREADED INSERT
1	W-1725-2	MOTOR PULLEY
1	W-915-11	SPINDLE PULLEY
1	W-1726	SPINDLE BELT
1	W-1368-4	LEAD SCREW
1	W-1409-1	SPINDLE MOTOR
2	W-437	GROUND WASHER
2	W-667	GROUND WASHER
1	W-677	DUST BOOT
2	W-436	THRUST BEARING
1	W-1365-V-A	SPINDLE ASSEMBLY
1	W-1367	LEAD SCREW ATTACHMENT
1	W-672	INDICATOR
1	W-1329	INDICATOR COVER
2	F-304	SCREW
1	W-153-B	WHEEL HUB NUT
2	F-304	WHEEL NUT SCREW
1	W-1362-5	WHEEL GUARD
1	W-1362-6	WHEEL GUARD COVER
1	W-1362-8	INDICATOR MOUNT
2	F-101	HEAD MOUNT SCREW
1	F-143	AIR LINE SCREW
3	F-358	SCREW
2	W-1361	BUSHING
1	W-1360	HEAD WELDMENT
2	F-305	SCREW
2	F-18	JAM NUT
2	F-60	1/4 WASHER
2	F-15	5/16 NUT
2	F-136	WHEEL GUARD COVER SCREW
1	F-108	INDICATOR STOP SCREW
2	F-388	SET SCREW
1	W-1409	1/2 H.P. MOTOR
1	W-210-1	GRIP NUT
1	W-1460-1	CORD GRIP
2		U.H.M.W GUIDE





# W-150 HD-V TOP SHARPENER

## GRINDING HEAD



# W-150 HD-V TOP SHARPENER

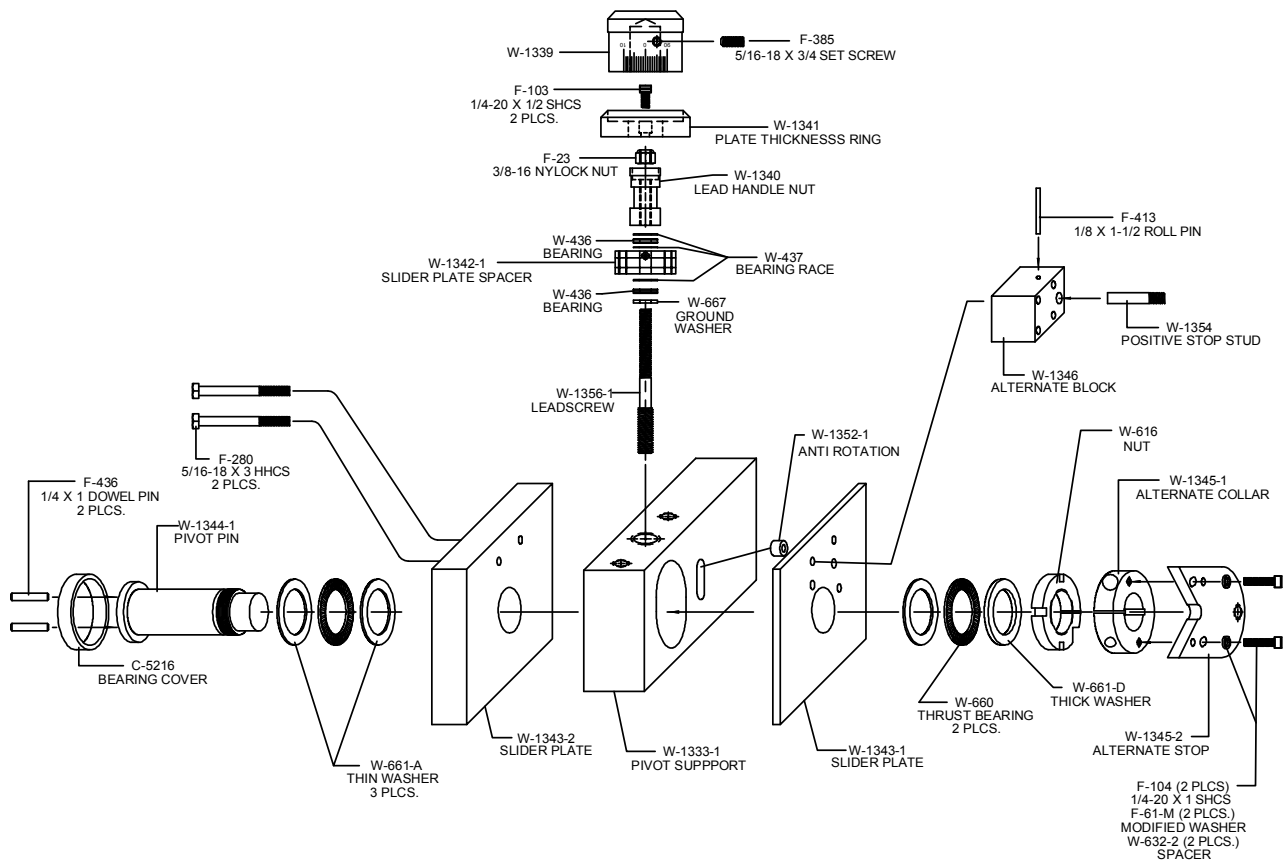
## PLATE THICKNESS ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-1333-1	PIVOT SUPPORT
2	W-1343-1	THIN SLIDER PLATE
2	W-1343-2	THICK SLIDER PLATE
1	W-1346	ALTERNATE BLOCK
1	W-1354	POSITIVE STOP STUD
1	F-413	ROLL PIN
2	F-104	1/4" SCREW
2	F-61-M	MODIFIED WASHER
2	W-632-2	SPACER
1	W-1345-2	ALTERNATE STOP
1	W-661-D	THICK GROUND WASHER
2	W-660	THRUST BEARING
3	W-661-A	THIN GROUND WASHER
1	W-616	NUT
1	W-1345-1	ALTERNATE COLLAR
2	F-439	1/4" DOWEL PIN
4	F-280	5/16" BOLT
1	F-438-1	WOODRUF KEY
2	F-436	1/4" DOWEL PIN
1	W-1344	PIVOT PIN
1	C-5216	BEARING COVER
2	F-360	5/16" SCREW
2	F-18	5/16" JAM NUT
1	W-1356	LEADSCREW
2	W-436	BEARING
1	W-667	GROUND WASHER
3	W-437	BEARING RACE
1	W-1340	LEAD HANDLE NUT
1	F-23	3/8" NUT
2	F-103	1/4" SCREW
1	W-1341	PLATE THICKNESS RING
1	W-1339	PLATE THICKNESS KNOB
1	F-385	5/16" SET SCREW



# W-150 HD-V TOP SHARPENER

## PLATE THICKNESS ASSEMBLY



# W-150 HD-V TOP SHARPENER

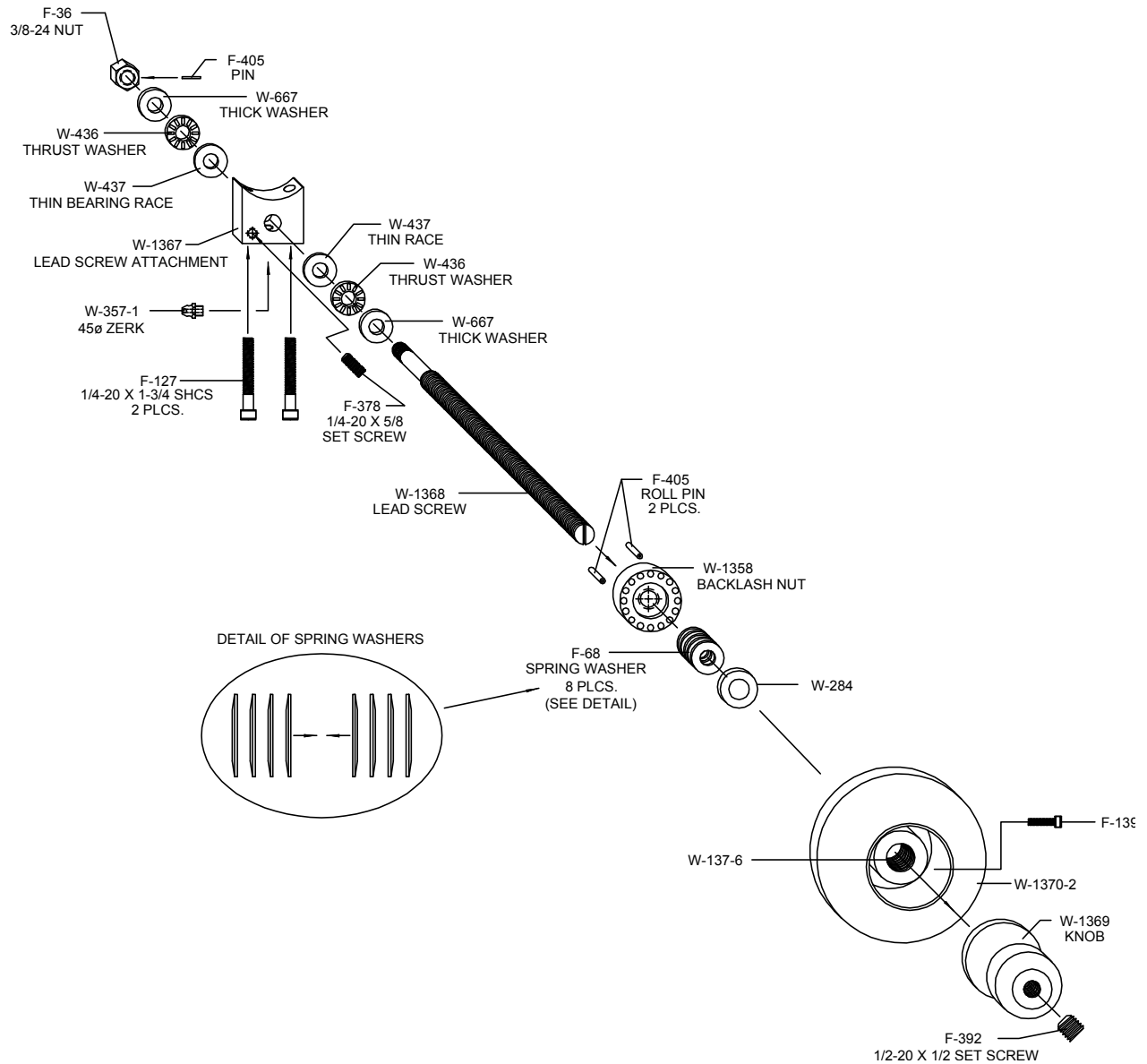
## LIFT OFF CYLINDER STACK ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	F-36	3/8" NUT
3	F-405	PIN
2	W-667	THICK WASHER
2	W-436	THRUST WASHER
2	W-437	THIN BEARING RACE
1	W-1367	LEAD SCREW ATTACHMENT
1	W-357-1	45° ZERK FITTING
2	F-127	1/4" BOLT
1	F-378	1/4"SET SCREW
1	W-1368-3	LEADSCREW
1	W-1358	BACKLASH NUT
8	F-68	SPRING WASHER
1	W-1370-2	HI-LOW RING
1	W-1369	KNOB
1	F-392	1/2" SET SCREW
1	W-284	THICK GND WASHER



# W-150 HD-V TOP SHARPENER

## LIFT OFF CYLINDER STACK ASSEMBLY



# W-150 HD-V TOP SHARPENER

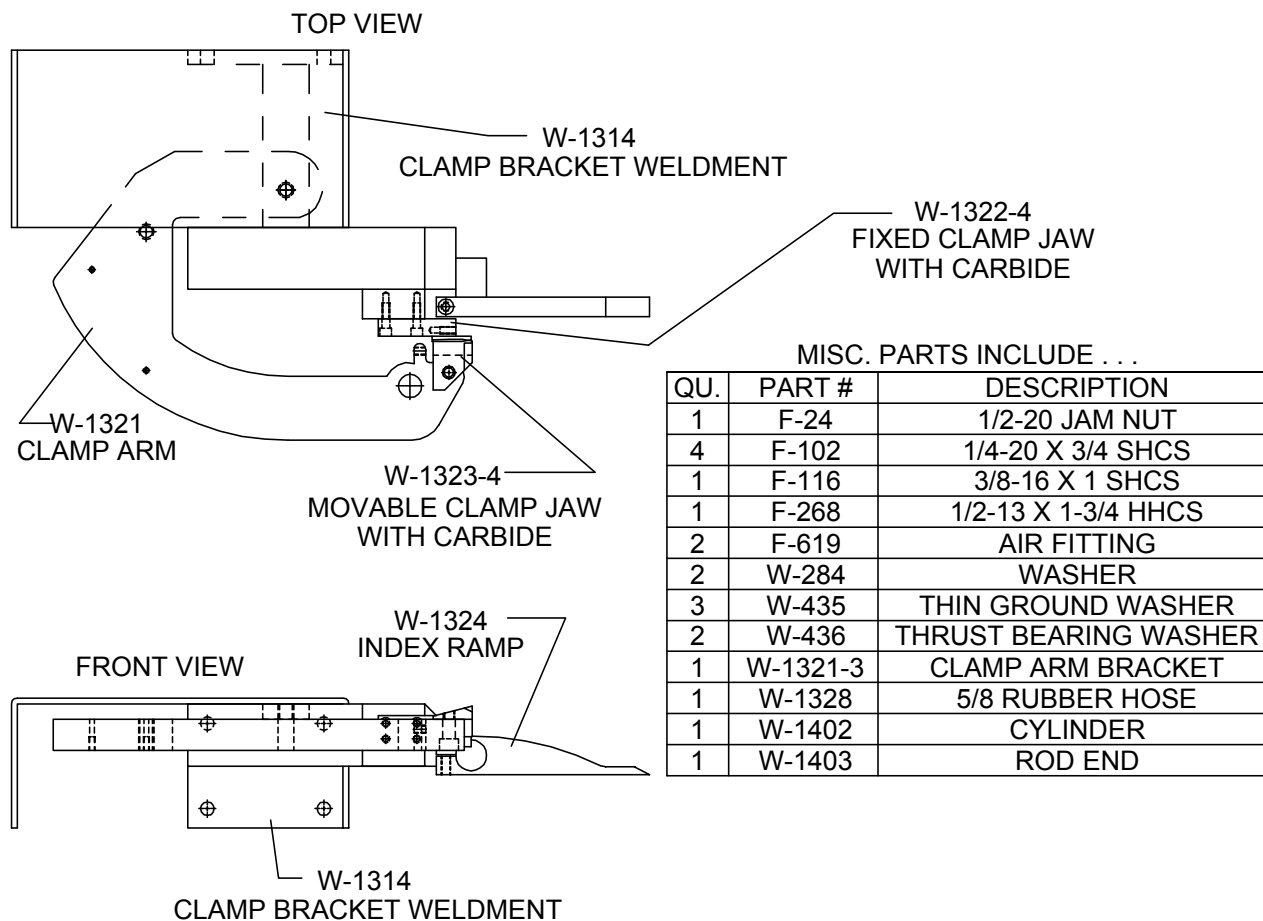
## SAW CLAMP ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-1322-3	FIXED CLAMP JAW
1	W-1322-4	FIXED CLAMP JAW WITH CARBIDE
1	W-1323-3	MOVABLE CLAMP JAW
1	W-1323-4	LARGE MOVABLE CLAMP JAW WITH CARBIDE
2	W-435	GROUND WASHER
2	W-434	THRUST BEARING
1	F-267-1	MODIFIED BOLT
2	W-284	GROUND WASHER
1	W-1328	CYLINDER BUMPER
1	W-1402	CYLINDER
1	W-1403	CYLINDER ROD END
1	W-1324	INDEX RAMP



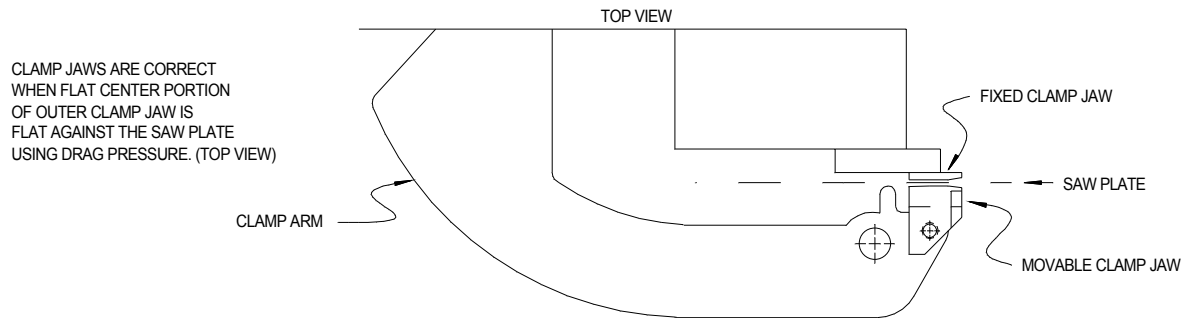
# W-150 HD-V TOP SHARPENER

## SAW CLAMP ASSEMBLY

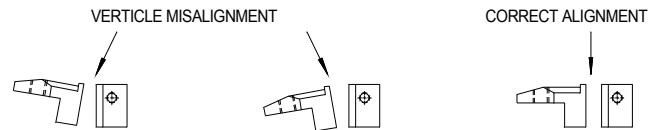


# W-150 HD-V TOP SHARPENER

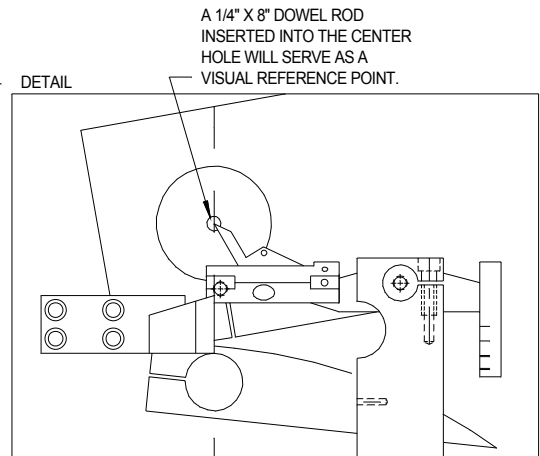
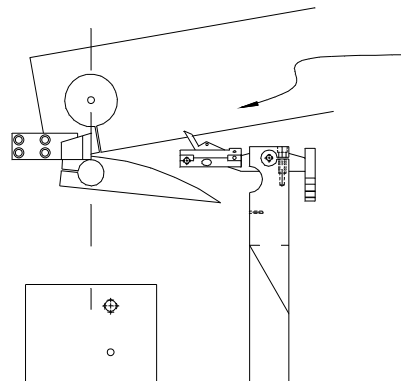
## SAW CLAMP ASSEMBLY



VIEWING FROM THE RIGHT END OF THE MACHINE, CHECK THE VERTICAL ALIGNMENT OF THE FIXED/OUTER CLAMP JAW. SHIM THE OUTER CLAMP JAW TO CORRECT FOR EXCESSIVE MISALIGNMENT.



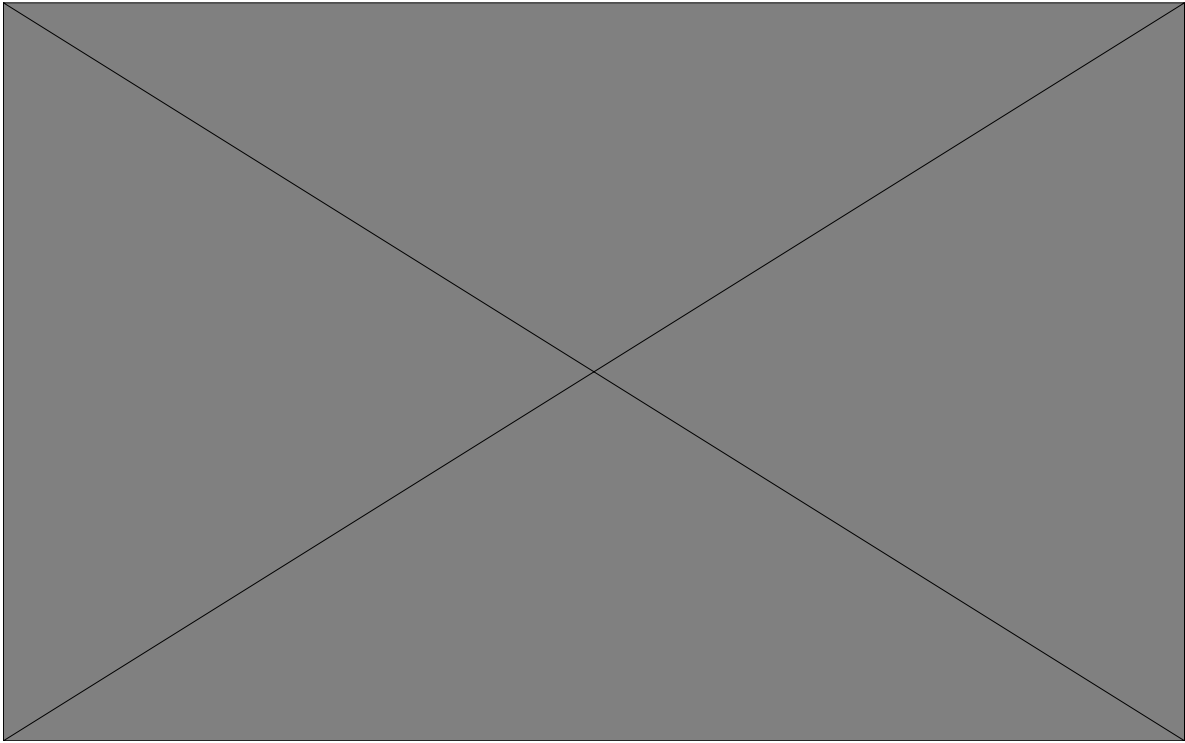
ADJUSTMENT OF POSITIVE STOP SHOULD BE CORRECT WHEN THE FEED FINGER IS ALIGNED WITH THE CENTERLINE OF THE MAIN PIVOT SHAFT.



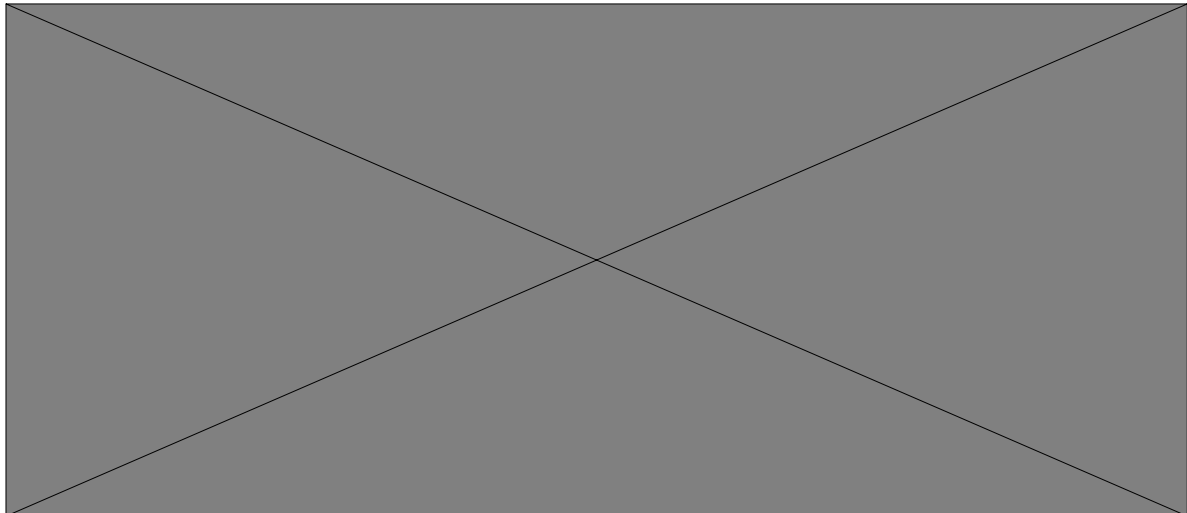


# W-150 HD-V TOP SHARPENER

CLAMP ARM PIVOT



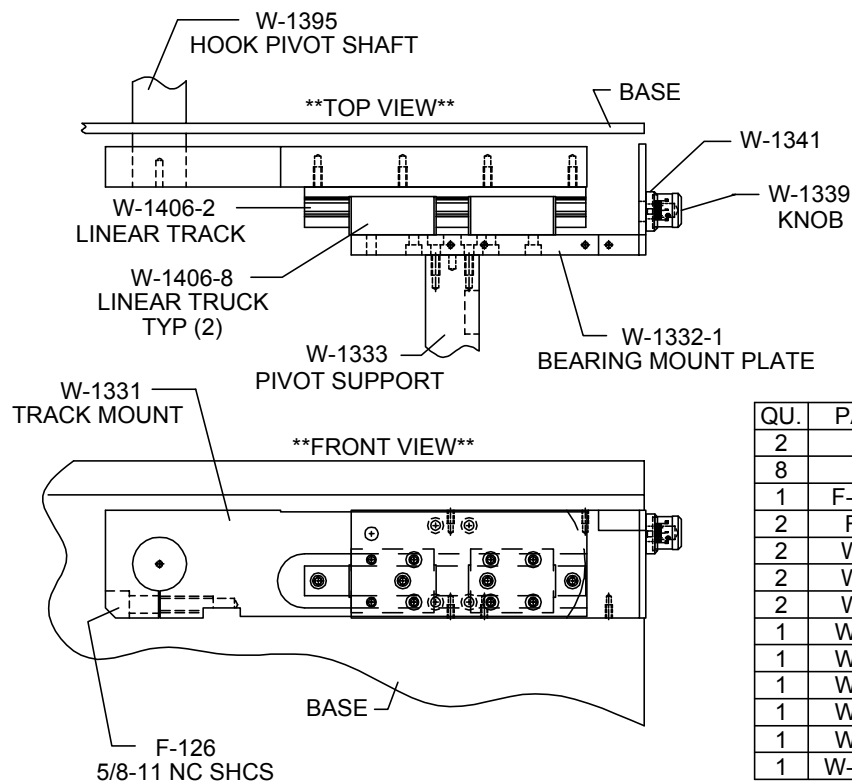
CLAMP ARM CYLINDER ROD END



# W-150 HD-V TOP SHARPENER

## FEED SYSTEM ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	W-1395	HOOK PIVOT SHAFT
1	W-1406-2	LINEAR TRACK
2	W-1406-8	LINEAR TRUCK
1	W-1333	PIVOT SUPPORT
1	W-1332-1	BEARING MOUNT PLATE
1	W-233	HANDLE
1	W-1331	TRACK MOUNT
1	F-126	5/8" BOLT



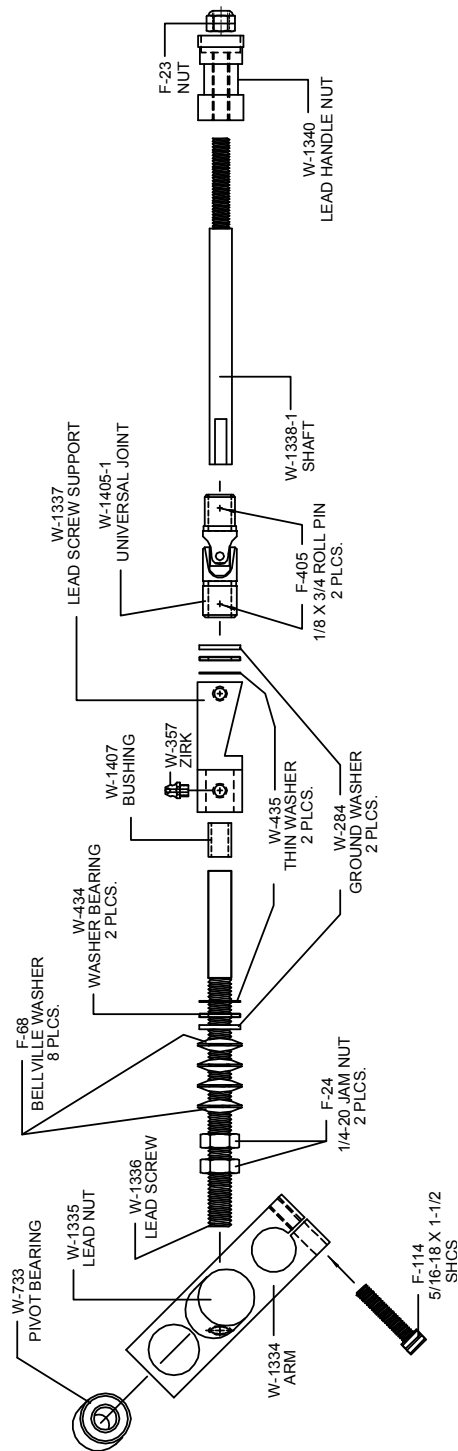
### MISC. PARTS INCLUDE . . .

QU.	PART #	DESCRIPTION
2	F-24	1/2-20 JAM NUT
8	F-68	R-6 BELLEVILLE WASHER
1	F-158-M	PIVOT BOLT MODIFIED
2	F-407	3/16 X 1 ROLL PIN
2	W-284	BUSHING
2	W-434	WASHER
2	W-435	WASHER
1	W-1334	ARM
1	W-1335	LEAD NUT
1	W-1336	LEAD SCREW
1	W-1337	LEAD SCREW SUPPORT
1	W-1338	SHAFT
1	W-1405-1	U-JOINT



# W-150 HD-V TOP SHARPENER

## FEED SYSTEM ASSEMBLY CONTINUED

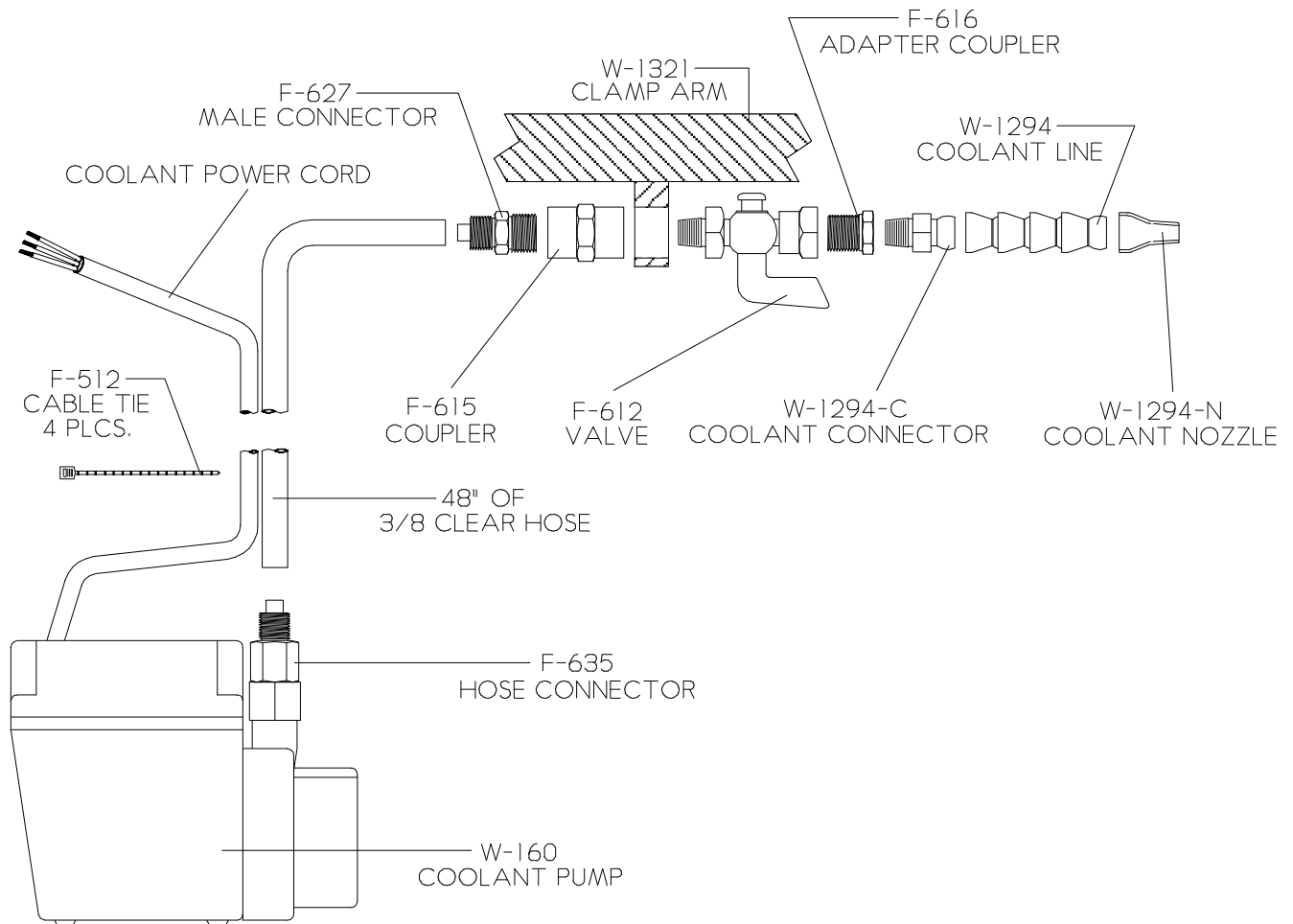


**WRIGHT**

**MACHINE**

# W-150 HD-V TOP SHARPENER

## COOLANT SYSTEM ASSEMBLY



QTY	PART NUMBER	DESCRIPTION
1	F-612	WATER VALVE
20 PCS.	W-1294	COOLANT LINE
1	W-1294-C	COOLANT CONNECTOR
1	W-1294-N	COOLANT NOZZLE
48"	F-632	3/8 CLEAR FLEX COOLANT HOSE
1	W-160	COOLANT PUMP
4	F-512	CABLE TIE
1	F-635	CONNECTOR FITTING
1	F-615	COUPLER
1	F-616	ADAPTER COUPLER
1	F-627	MALE HOSE CONNECTOR



# W-150 HD-V TOP SHARPENER

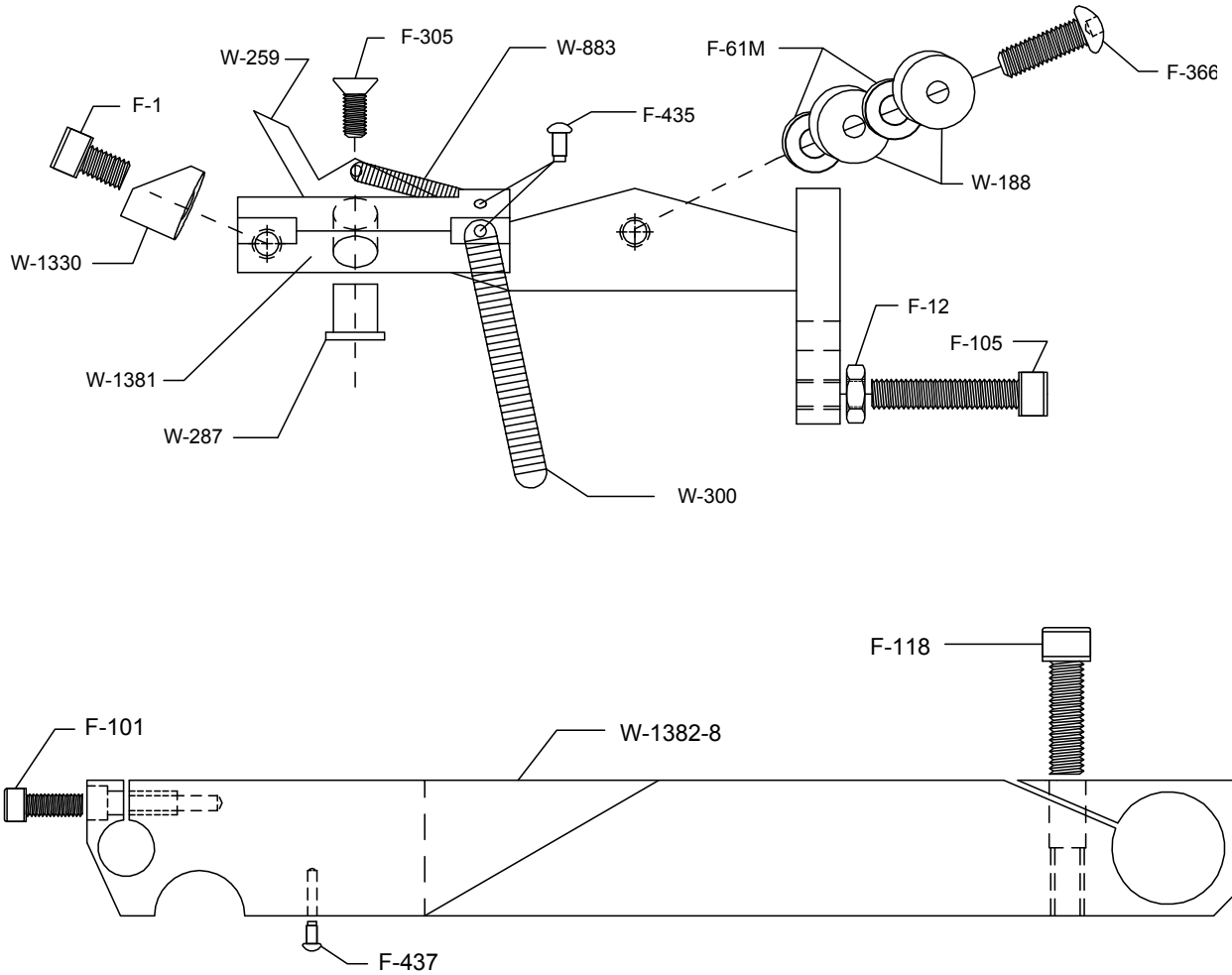
## W-1381-B INDEX FINGER ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	F-37	1/4-20 NUT
4	F-61-M	#12 WASHER MODIFIED
1	F-305	10-24 X 3/8 FHCS
2	F-366	1/4-20 X 3/4 BHCS
2	F-435	#4 X 1/4 DRIVE SCREW
1	F-105	1/4-20 X 1-1/4 SHCS
1	F-12	1/4-20 JAM NUT
1	F-101	1/4-20 X 3/4 SHCS
2	F-118	5/16-18 X 1-1/4 SHCS
1	F-437	#4 X 5/16 DRIVE SCREW
3	W-188	INDEX BEARING SEALED
1	W-300	RAMP SPRING
1	W-259	FEED FINGER
1	W-1381	FINGER ARM
1	W-883	SPRING RETURN
1	W-287	FINGER PIVOT
1	W-1382-8	INDEX ARM



# W-150 HD-V TOP SHARPENER

## INDEX ASSEMBLY



# W-150 HD-V TOP SHARPENER

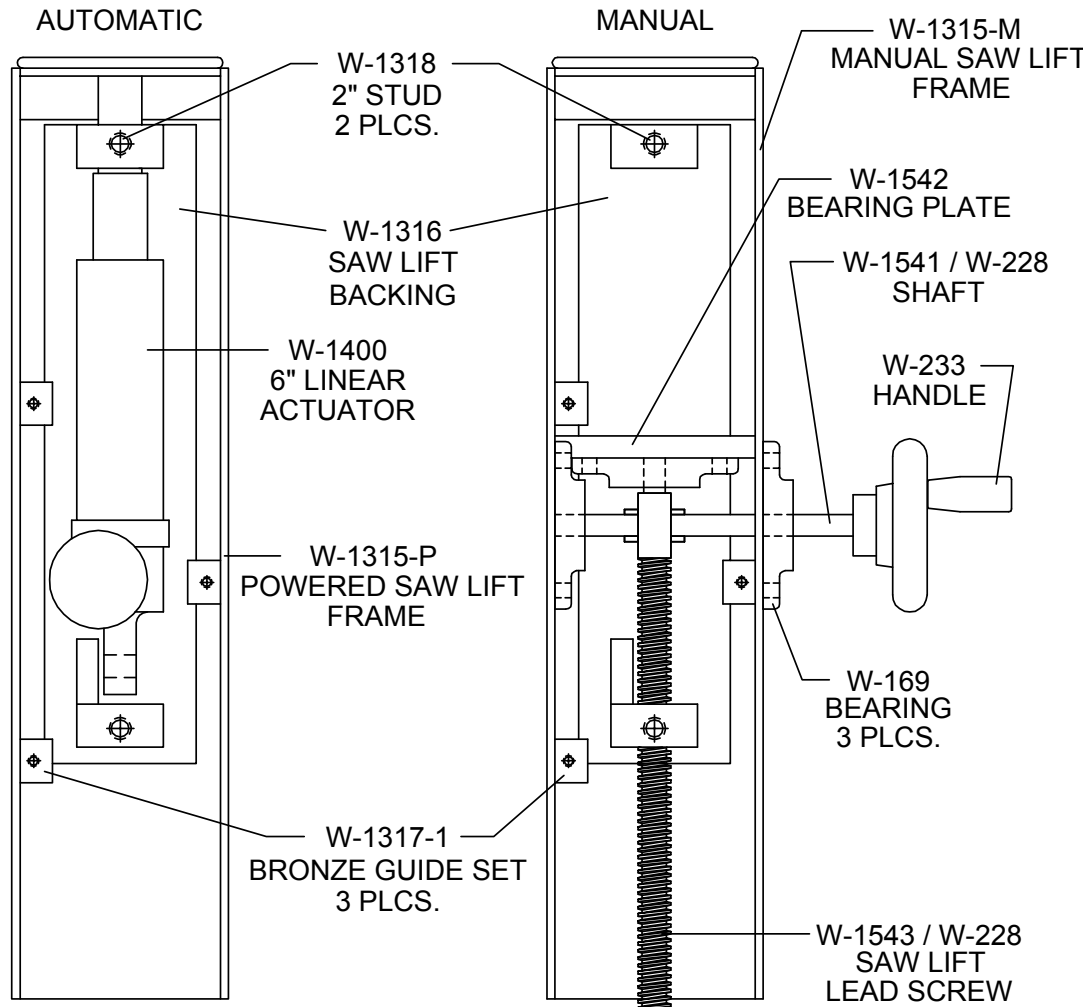
## SAW LIFT

QTY	PART NUMBER	DESCRIPTION
1	W-178	SPRING
3	W-1317-1	BRONZE GUIDE BLOCK
3	F-106	ALLEN CAP SCREW
2	W-1318	2" STUD
1	W-1316	SAWLIFT BACKING
1	W-1400	6" LINEAR ACTUATOR (AUTOMATIC ONLY)
1	W-1315-P	SAWLIFT FRAME (AUTOMATIC ONLY)
1	W-1315-M	SAWLIFT FRAME (MANUAL ONLY)
1	W-1542	BEARING PLATE
1	W-1541	SHAFT (MANUAL ONLY)
1	W-233	HANDLE (MANUAL ONLY)
3	W-169	PILLOW BLOCK BEARING (MANUAL ONLY)
1	W-1543	SAWLIFT LEAD SCREW (MANUAL ONLY)
3	F-60	5/16 WASHER
1	F-388	5/16-18 SET SCREW
1	F-388-1	5/16-18 SET SCREW
2	F-15	5/16-18 NUT
1	F-101	1/4-20 SHCS



# W-150 HD-V TOP SHARPENER

## SAWLIFT ASSEMBLY (BACK SIDE OF SAWLIFT)



MISC. PARTS INCLUDE ...

QU	PART #	DESCRIPTION	QU	PART #	DESCRIPTION
1	F-12	1/4" JAM NUT	1	F-379	1/4-20 X 5/8 S. SCREW
2	F-18	5/16" JAM NUT	2	F-512	CABLE TIE
1	F-22	1/2" JAM NUT	6	F-517	BELLEVILLE WASHER
3	F-61	#12 WASHER	1	W-178	SPRING INDEX RETURN
1	F-112	5/16-18 X 1-1/4 SHCS	1	W-231	1/2" SET COLLAR
1	F-113	5/16-18 X 2 SHCS	1	W-284	THRUST WASHER
2	F-271	1/2-13 X 2-1/4 HHCS	1	W-1493	WAX GASKET
3	F-277	1/4-20 X 1-1/2 HHCS			





# W-150 HD-V TOP SHARPENER

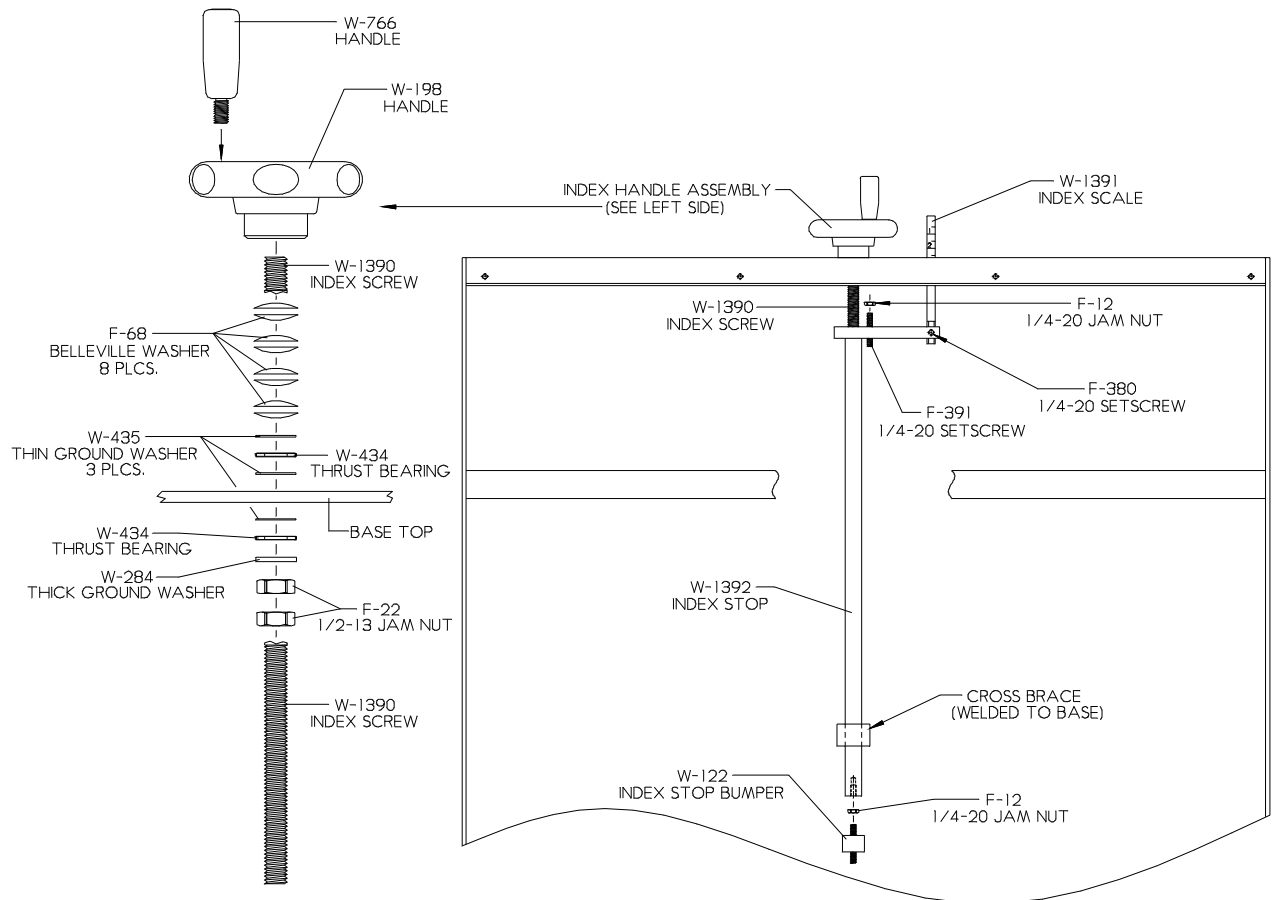
## INDEX ADJUSTMENT ASSEMBLY INSIDE BASE

QTY	PART NUMBER	DESCRIPTION
2	W-198	MODIFIED HANDLE
1	W-1391	INDEX SCALE
1	W-1485	INDEX SCALE
1	W-1390	INDEX SCREW
3	F-12	1/4-20 JAM NUT
1	F-13	5/16-24 JAM NUT
1	F-391	1/4-20 SET SCREW
1	F-380	1/4-20 SET SCREW
1	F-379	1/4-20 SET SCREW
1	W-1392	INDEX STOP
1	W-1486	INDEX STOP BRACKET
1	W-2221	SHORT INDEX CYLINDER
2	F-638	BARBED FITTING
2	W-465	FLOW CONTROL
2	W-122	INDEX STOP BUMPER
1	F-432-1	CYLINDER MOUNT NUT
1	W-1487	CYLINDER ADAPTER
16	F-68	SPRING WASHER
4	F-22	NUT
4	W-434	THRUST BEARING
4	W-435	THIN WASHER
4	W-284	THICK WASHER



# W-150 HD-V TOP SHARPENER

## INDEX ADJUSTMENT ASSEMBLY INSIDE BASE



**WM** **W**RIGHT **M**ACHINE

REVISED 7-1-2014

# W-150 HD-V TOP SHARPENER

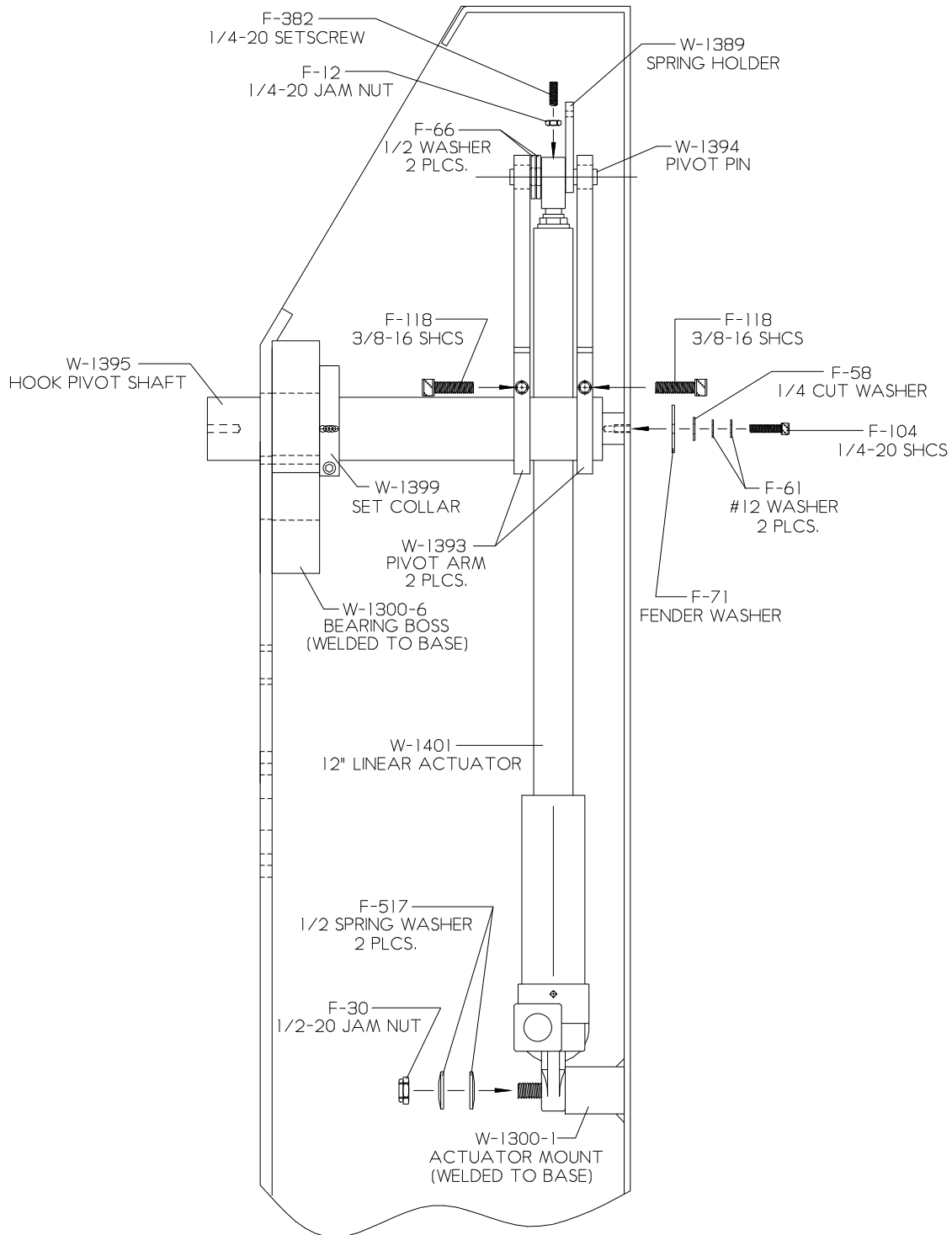
## HOOK SHAFT ACTUATOR ASSEMBLY INSIDE BASE

QTY	PART NUMBER	DESCRIPTION
1	W-1389	SPRING HOLDER
1	W-1394	PIVOT PIN
1	F-382	1/4-20 SET SCREW
1	F-12	1/4-20 JAM NUT
2	F-66	1/2" WASHER
2	F-18	3/8-16 CAP SCREW
1	F-58	1/4" CUT WASHER
2	F-61	#12 WASHER
1	F-71	1/4" FENDER WASHER
1	F-104	1/4-20 CAP SCREW
1	W-1395	HOOK PIVOT SHAFT
1	W-1399	SET COLLAR
2	W-1393	PIVOT ARM
1	W-1401	12" LINEAR ACTUATOR
2	F-517	1/2" SPRING WASHER
1	F-30	1/2-20 JAM NUT



# W-150 HD-V TOP SHARPENER

## HOOK SHAFT ACTUATOR ASSEMBLY INSIDE BASE



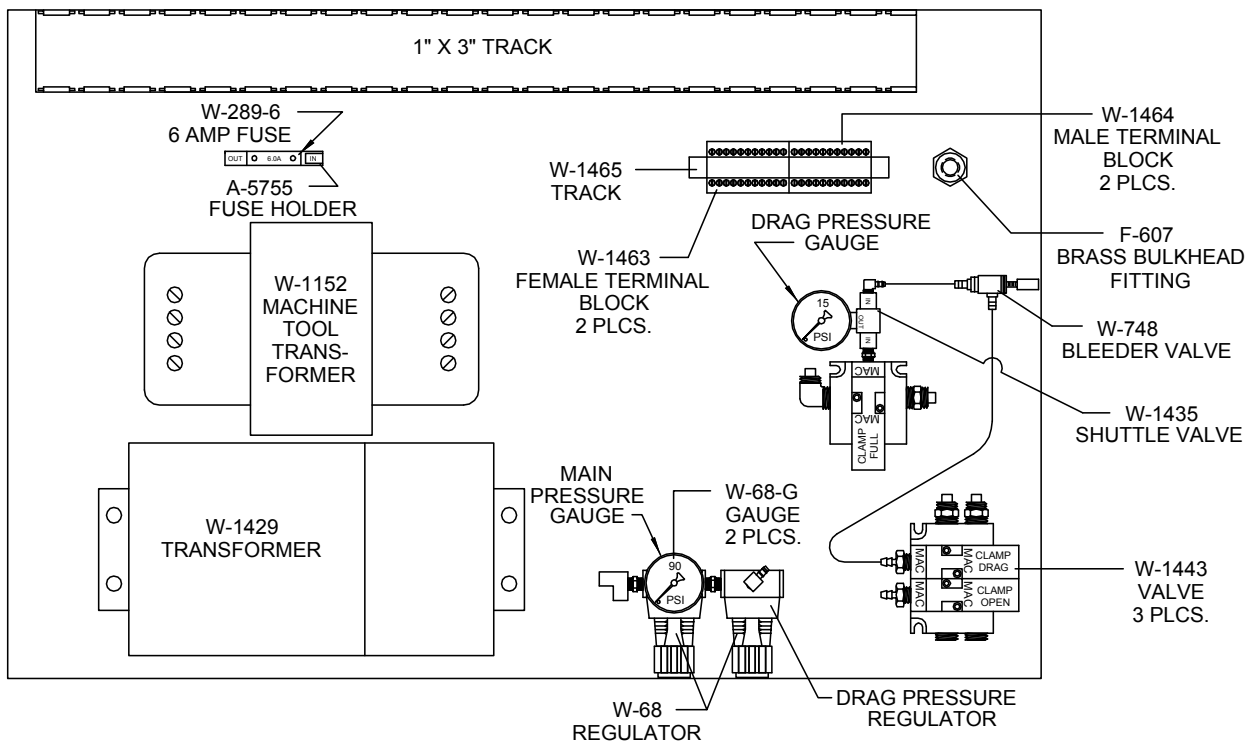
**WM** **WRIGHT** **MACHINE**

# W-150 HD-V TOP SHARPENER

## INSIDE REAR DOOR

QTY	PART NUMBER	DESCRIPTION
1	W-1429	TRANSFORMER (BUCK BOOST)
1	W-1152	TRANSFORMER (MACHINE TOOL)
1	W-289-6	6-1/4 AMP FUSE
2	W-68	REGULATOR
2	W-68-G	GAUGE
6	W-1443	VALVE
2	W-1463	FEMALE TERMINAL BLOCK
2	W-1464	MALE TERMINAL BLOCK

## SUB PANEL ASSEMBLY (INSIDE REAR DOOR)



# W-150 HD-V TOP SHARPENER

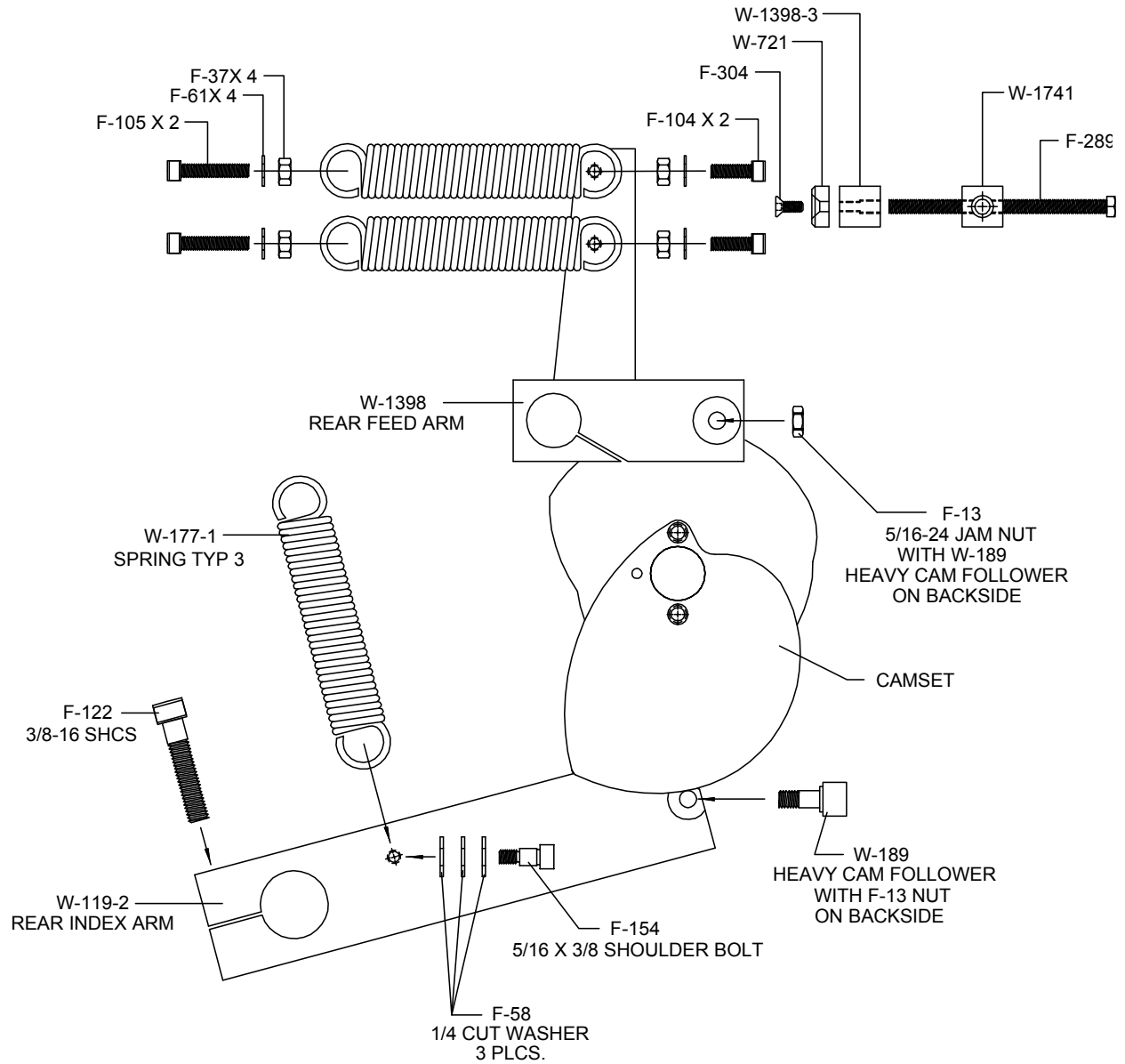
## CAM AREA

QTY	PART NUMBER	DESCRIPTION
1	W-1438	LIMIT SWITCH (MICRO)
1	W-1437	PLUNGER FOR MICRO
1	W-281	SPRING
1	W-221-5	INDEX CAM
1	W-220	CAM HUB
1	W-1383-6	FEED CAM
2	W-189	CAM FOLLOWER
3	W-177-1	NEW STYLE INDEX RETURN SPRING
2	F-13	5/16-24 JAM NUT
1	F-154	5/16 X 3/8 SHOULDER BOLT
3	F-58	1/4 CUT WASHER
1	W-119-2	REAR INDEX ARM
1	F-122	3/8-16 BOLT
1	W-1398-1	REAR FEED ARM
4	F-37	1/4-20 JAM NUT
4	F-61	#12 WASHER
2	F-105	1/4-20 BOLT
2	F-102	1/4-20 SHCS
1	W-721	BUMPER
1	W-1398-3	STOP ADAPTER
1	W-1741	STOP
1	F-289	1/4-20 HEX HEAD



# W-150 HD-V TOP SHARPENER

## CAM AREA



**WM** **W**RIGHT **M**ACHINE

# W-150 HD-V TOP SHARPENER

## Index

### A

AIR REQUIREMENTS 6  
AIR SCHEMATIC 26

### C

COMMON REPLACEMENT PARTS 7  
CONTROL PANEL 9  
COOLANT 8  
COOLANT FILTERS 8  
CRATE SIZE 6

### E

ear protection 3  
ELECTRICAL SCHEMATIC 27, 28  
eye protection 3

### F

Feed Finger 7  
Feed Ramp 7  
Filter Paper 7  
Finger Arm 7  
Finger Boss 7  
Finger Spring 7  
Fixed Clamp Jaw 7

### G

GENERAL SAFETY RULES 3

### L

Large Bore Option 7  
Large Saw Option 7  
LIMITED WARRANTY 2  
Long Index Cam 7

### M

MACHINE INSTALLATION 8  
MAINTENANCE 13, 14  
MOUNTING GRINDING WHEELS 8  
Movable Clamp Jaw 7





# W-150 HD-V TOP SHARPENER

## Index

### O

OPTIONAL SAW SIZE 6  
OPTIONAL VOLTAGE 6  
OPTIONS 7

### P

PARTS LIST 29  
PERFORMANCE 6  
PRE SET UP 8  
PROXIMITY SWITCH ADJUSTMENT 15

### R

Ramp Follower 7  
RECOMMENDED FLOOR SPACE FOR MACHINE AND OPERATOR 8

### S

SAW BLADE DIMENSIONS 6  
Saw Center 7  
Saw Center Washer 7  
SAW CLAMP ASSEMBLY 39  
SET UP 10, 11  
SHIPPING WEIGHT 6  
SPECIFICATIONS 6  
SPINDLE MOTOR 6  
STANDARD SAW SIZE 6  
STANDARD VOLTAGE 6  
SUB PANEL ASSEMBLY 51

### T

Topping Wheel 7  
TROUBLE SHOOTING 14

### U

UNEVEN GRINDING 24

