WRIGHT MACHINE

W-150 STANDARD AUTO

OPERATOR'S MANUAL

MADE IN THE U.S.A.

Limited Warranty

These machine are 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., shipping costs prepaid will be repaired or replaced, at WRIGHT MACHINE TOOL CO. option.

Performance Warranty

Performance specifications are based on use of our grinding wheels and coolant. No performance warranty can be given unless our recommended grinding wheels and coolant are used.

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: Do not 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.

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.

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. Water based coolants are designed to operate at precise mixture ratios. Check with the manufacturer of your coolant to determine the proper mix ratio.

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.

CAUTION

Residual cleaning solutions on the saw will easily be disolved 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.

SPECIFICATIONS

W-150 STDA Automatic Top or Face Grinder for Circular Saws.

STANDARD VOLTAGE:	230 Volt, 1 Phase, 50/60 HZ
OPTIONAL VOLTAGE:	230/460 Volt, 3 Phase ,50/60 HZ
SHIPPING WEIGHT:	900 lbs / 410 kg approximately
CRATE SIZE:	L 73" X W 43" X H 57"
AIR REQUIREMENTS:	2 CFM at 80 psi / 6 bar
STANDARD SAW SIZE:	6"-34"
SPINDLE MOTOR:	3/4 HP, 1 Phase, 3450 R.P.M. Motor
OPTIONAL MOTOR:	1 HP, 3 Phase, 3450 R.P.M. Motor
MAXIMUM PITCH:	6"
POWER CONSUMPTION:	1.5 kva

1. SAW BLADE DIMENSIONS:

* Minimum saw diameter 6 inches.
* Maximum saw diameter 34 inches.
* Maximum saw thickness to 3/4 inches.
* Maximum tooth pitch straight 6 inches.
* Alternate top angle 0 to 45 degrees.
* Alternate face angle 0 to 15 degrees.
* Top(Back) angle +5 to +20 degrees.
* Face(Hook) angle -10 to +30 degrees.
* Bore 5/8" to 2.5" standard, 2.5" to 10" optional.
* Teeth per minute 0 to 30.

2. SPEEDS:

* Average set up time approximately 1 minutes.
* Reload time less than 1 minute.
* Grinding speed (average resharpening) 15 teeth per minute. The above speeds were accomplished by an experienced operator. The saw used for these average speeds was 24 inches in diameter with 40 teeth, .087 plate thickness, .125 kerf. Larger saws, thicker plate or kerf will require somewhat slower speeds.

3. TECHNICAL

The M1-A offers many advantages. The air powered saw clamp holds the saw precisely while the hydraulic controlled feed gives a smooth consistent grind rate thus improving saw accuracy, sharpness, and finish while at the same time reducing grinding wheel costs. The compact design uses minimal floor space but allows sharpening of saws as large as 34" in diameter. The W-150 STDA provides reduced labor and increased quality for a very affordable capital cost.

OPTIONS

Large Bore Option:	W-50
3 Pin Spline Saw Center:	W-450
Spline Bore Saw Center:	W-460
Expandable Saw Center with magnets:	W-495
Round Run Out Option:	W-84-A

COMMON REPLACEMENT PARTS

Topping Feed Finger W-558
Facing Feed Finger W-886

Features:

The fully automatic "W-150 STDA" reduces labor and grinding wheel consumption while improving saw accuracy and sharpness. Flexibility of manual operation for single tip repair combined with automatic function when full sharpening is required improves productivity and quality while reducing labor and total cost of sharpening.

The "W-150 STDA" features include:
- *Filtered Full Flood Coolant*
- *Precision Spindle*
- *Poly Rib Belt Drive*
- *Low Voltage Work Light*
- *3\4 H.P. Spindle Motor*
- *Air Powered Saw Clamp*
- *Tooth Counter with Auto-Stop*
- *Hydraulic Controlled Feed*
- *Coolant Filter*
- *Precision Bevel Angle*
- *Dial Indicated In feed*

Notice:

Wright Machine Tool Co. Inc. is constantly seeking ways to improve its entire product line of machinery, and therefor reserves the right to change this manual and hardware mentioned therein at any time without notice.

In no event will the provider of this equipment be liable for any incidental, consequential, or special damages of any kind or nature whatsoever, including but not limited to lost profits arising from or in any way connected with the use of the equipment or this user manual.

Safety First!

MAINTENANCE

Care should be taken when control console or side cover is removed as not to allow any grinding grit to enter.

Drive belts should be inspected and cleaned every 3 months.

Coolant tank should be completely cleaned at least every 6 months. Remove all sludge from the bottom of the tank.

All bare metal surfaces should be cleaned and oiled regularly.

Every 400 hours after use...

1. Grease dovetail slide zerk fittings on spindle housing.
2. Grease head pivot zerk fitting.
3. Grease hook pivot zerk fitting.
4. Grease index pivot zerk fitting.

5. Clean coolant as necessary. Clean coolant with proper coolant mix ratio. Be sure to check W-332 bearing and that it will roll fully on head stiffener bar and that the bar is clean.

Check oil level on the infeed system oil pot. If the oil pot is low refill with oil type AW-32 hydraulic oil. Fill to approximately 2/3 full at highest level. DO NOT OVERFILL! Be sure air is disconnected before filling oil pot. Fill plugs are located at the top of the oil pot.

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. 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.

3. 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 hook pivot.** **2. Inspect finger for wear.** **3. Inspect clamp jaws and ramp for wear.**
Every 6 months or 500,000 cycles	**1. Inspect spindle drive belt.** **2. Clean spindle motor fan.** **3. Inspect and clean lube points, slide system, bevel pivot, and spindle slide**
Every 24 mounts or 1,000,000 cycles	**1. Replace spindle drive belt.** **2. Inspect pulleys for wear.**

REPLACEMENT OF W-150 STDA SPINDLE (P.N. W-2416).

1. Turn the grinding head to 45° so the bottom of the guard is facing you.
2. Take out the wing bolts and remove the bottom guard.
3. Take off the grinding wheel.
4. Take bolts out of cover where the infeed knob is.
5. Unscrew the infeed knob.
6. Loosen the cap screws on the spindle housing with a 3/16 inch allen wrench.
7. Loosen the belt by loosening the four motor mount bolts.
8. The spindle will now pull out.
9. Clean the housing before installing the new spindle.
10. Note location of pulley and install on the new spindle.
11. Install the new spindle.
12. Snugly tighten the cap screws. Important: DO NOT OVERTIGHTEN.
13. Install the grinding wheel and the bottom of the guard.
14. You are ready to grind.

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-587.

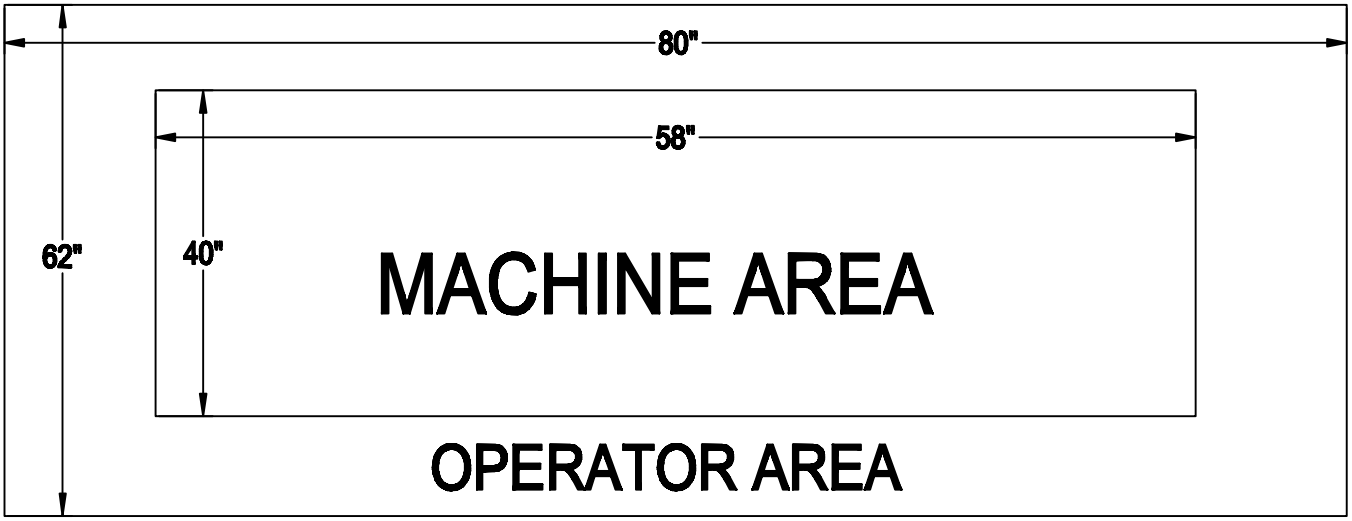
RUST DAMAGE IS NOT COVERED BY THE WARRANTY

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

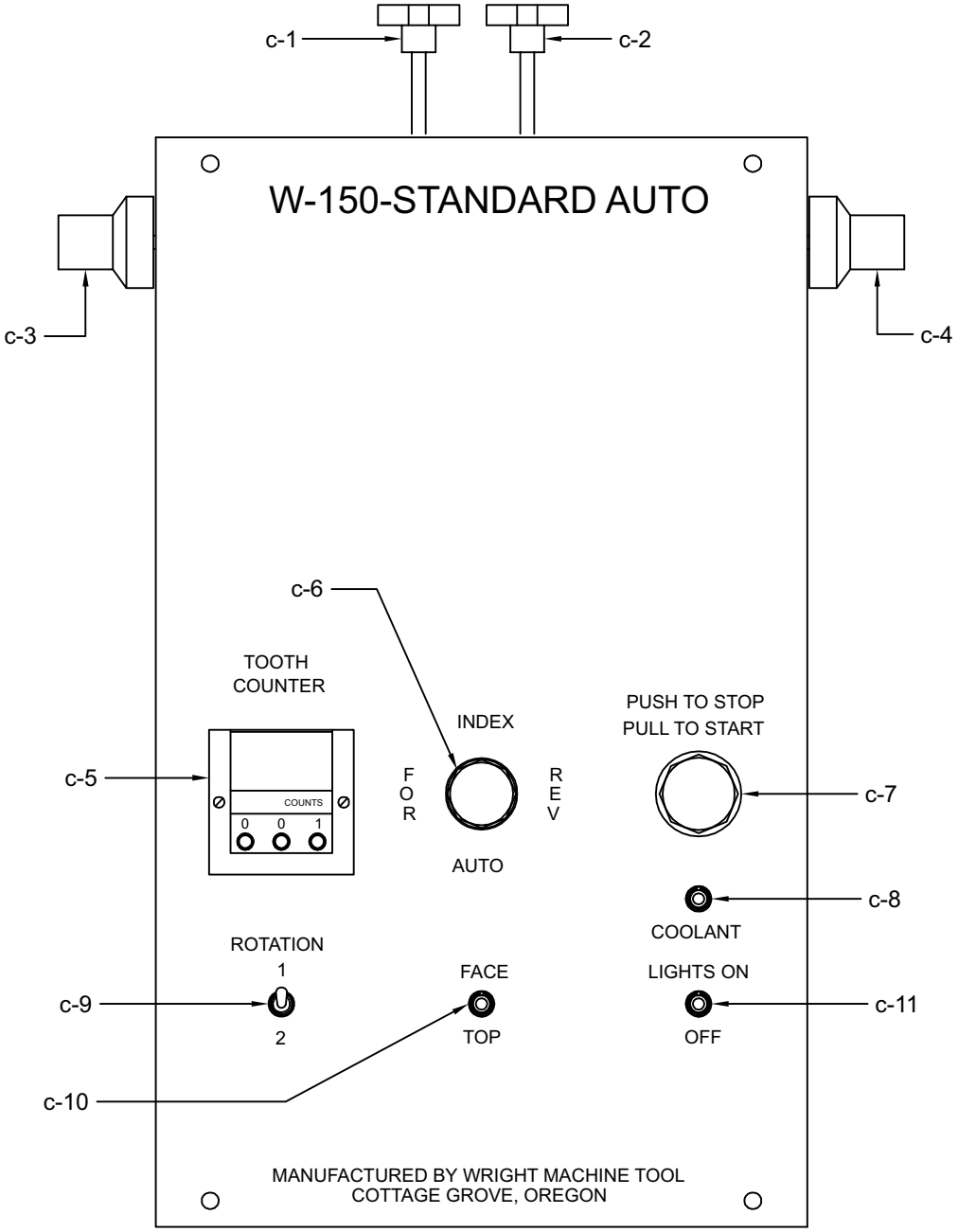
Mounting of the grinding wheel should only be done by persons with mechanical aptitude and good knowledge of mounting, care, and inspection of grinding wheels. The W-150 STDA uses one 8" diameter wheel (D-26 for facing and topping). For grinding Stellite® or High Speed Steel use B-26 wheel.

MACHINE INSTALLATION
Lifting this machine should only be done with a fork lift under the Coolant Tank. Machine weight is approximately 900 pounds.

RECOMMENDED FLOOR SPACE FOR MACHINE AND OPERATOR

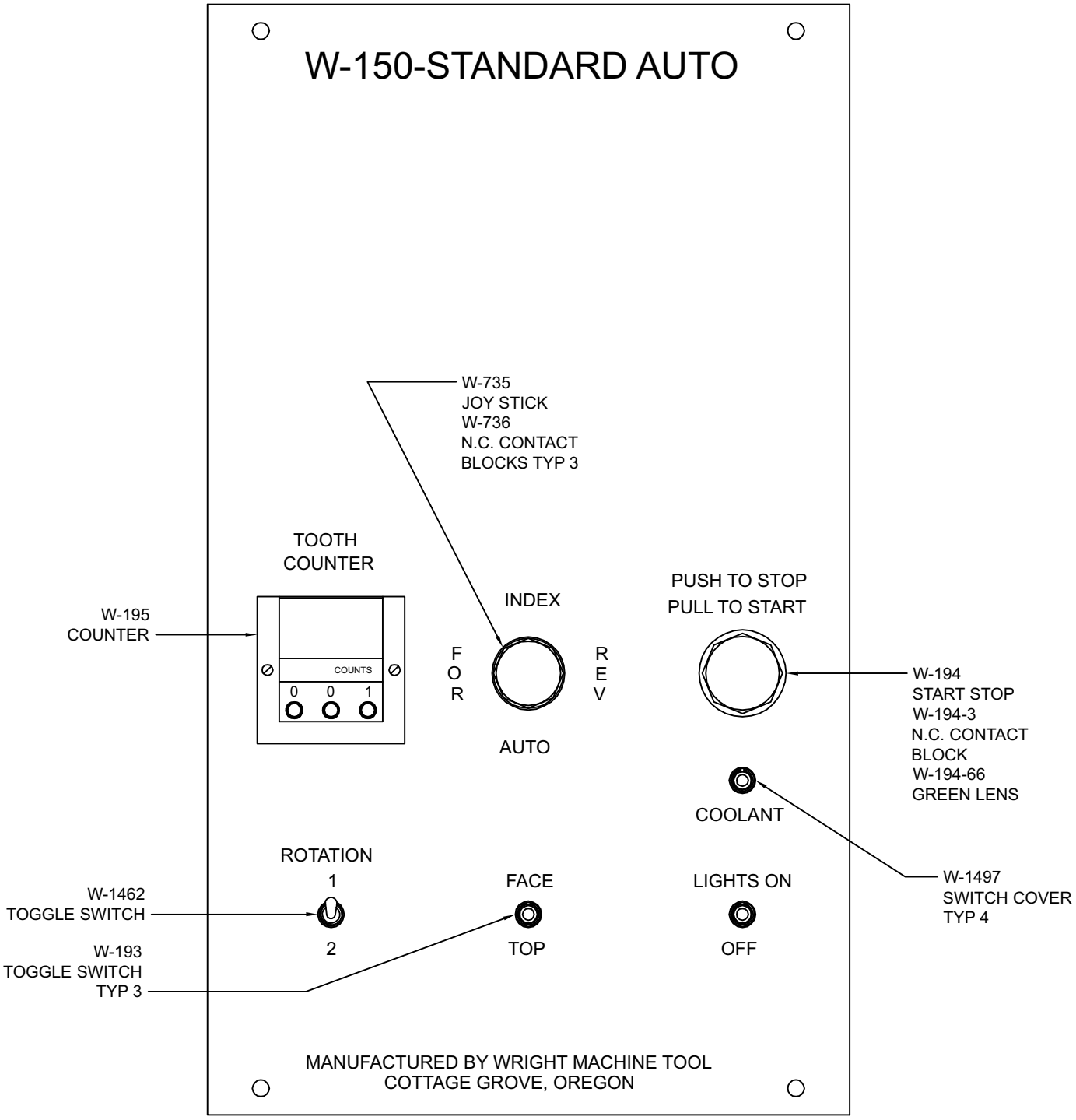


CONTROL PANEL



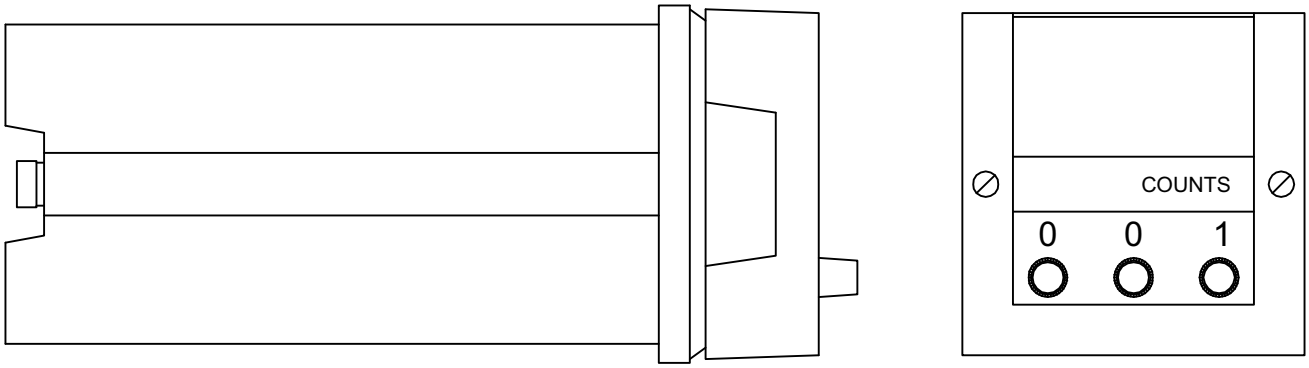
c-1 FORWARD STOP
c-2 REVERSE STOP
c-3 FORWARD FEED SPEED
c-4 REVERSE FEED SPEED
c-5 TOOTH COUNTER
c-6 JOY SWITCH
c-7 PULL TO START / PUSH TO STOP
c-8 COOLANT SWITCH
c-9 WHEEL ROTATION
c-10 FACE / TOP SELECTOR
c-11 WORK LIGHT

CONTROL PANEL

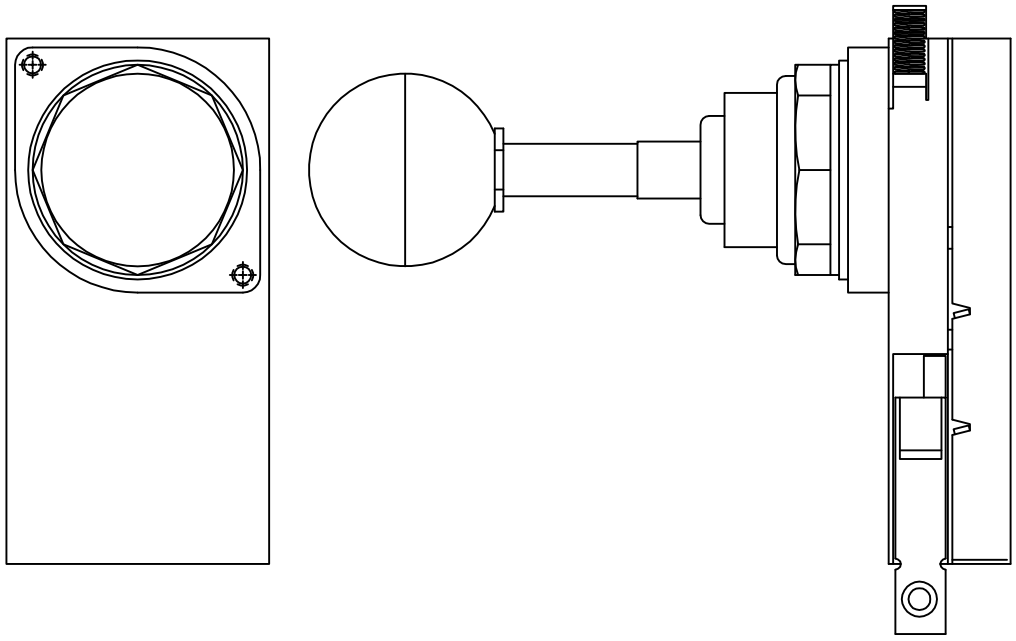


CONTROL PANEL COMPONENTS

COUNTER
COMPLETE: W-195
COVER ONLY: W-195-1

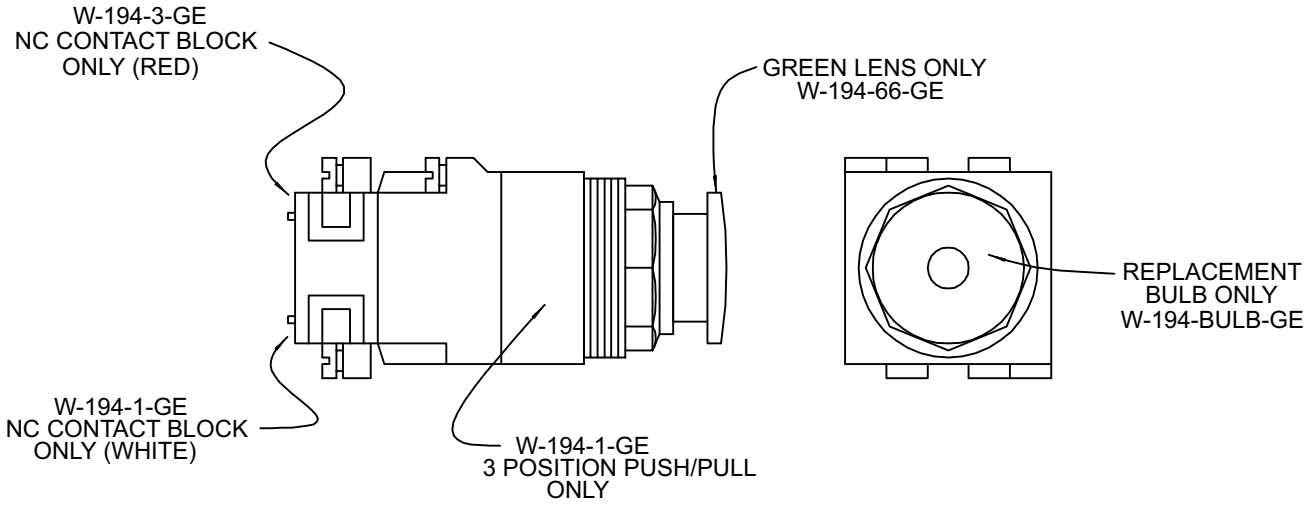


JOY SWITCH: W-735

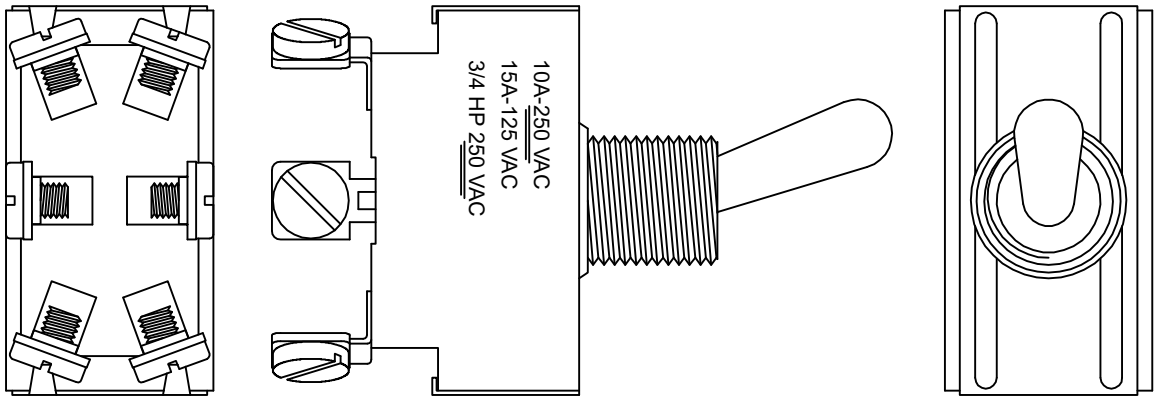


CONTROL PANEL COMPONENTS

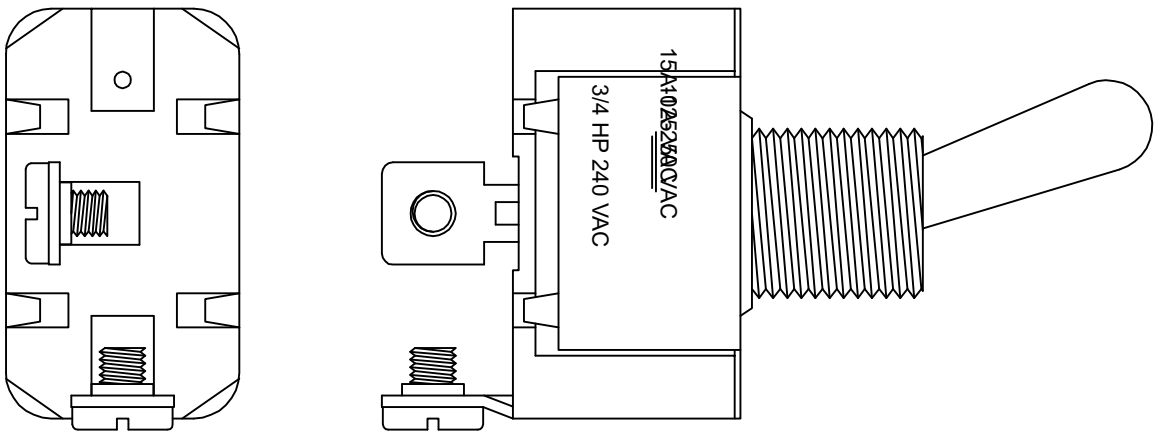
PUSH / PULL/START / STOP BUTTON: W-194-GE



POSITION TOGGLE SWITCH: W-1462



2 POSITION TOGGLE SWITCH: W-193 (3 PLCS.)



SET UP TOP GRINDING

1. The top finger C clip must be released. This will let the top finger extend.

2. Set the tooth counter C-5 to the number of teeth to be ground.

3. Set face top selector switch C-10 to top.

4. Set the hook angle by loosening the hook pivot and scale lock. Read the hook angle on the scale rod.

5. Set the bevel angle by loosening the bevel lock and installing the desired bevel angle washer H-7.

6. On alternate saws set the plate thickness knob. The hook lock handle must be released before moving the plate thickness knob. Full clockwise = 0 plate thickness, and each turn c.c.w. = .100.

7. Adjust the forward stop C-1 and reverse stop C-2 as necessary.

8. Mount the saw with the face of the tooth vertical.

9. Adjust the saw diameter until the tooth is slightly beyond the topping finger.

10. Adjust the index clamp cylinders 1/2 to 1" below O.D. of saw.

11. Adjust index pitch stop to desired length using the index scale. On alternates set the pitch so that the two teeth will be indexed.

12. Start the motor. Position # 1 or position # 2, C-9 set rotation. #1 for flats, #2 for alternate tip requiring reverse wheel rotation.

13. Open C-3 (Forward Feed Speed). This will allow the grinding head to move out toward the tooth. When the grinding wheels are over the tooth, close C-3. This will stop the grinding wheels at that position.

14. Infeed H-2 until wheel touches the tooth. Set the dial indicators H-4 on 0.

15. Open C-3 (Forward Feed Speed) again until the grinding wheels have traveled across the tooth being ground. Close C-3 Forward Feed Speed.

16. Turn C-1 (Forward Stroke Adjustment) clockwise until the grinding wheels reverse. This adjusts the travel limit of the forward stroke.

TROUBLESHOOTING

No Coolant...

1. Check coolant level.
2. Check shut off valve on coolant nozzle and make sure it is free from clogs.
3. Check line for cuts, kinks, or clogs.
4. Check if pump runs and see if clogged at pump.
5. Check connections.
6. Check pump.
7. Check coolant switch if turned on and is working properly.

Machine stops cycle with index forward...

1. Check both index limit switches, adjust as necessary.
2. Check for mechanical bind or lock up.

Machine stop cycle with head forward...

1. Check feed forward stop. Be sure it trips limit switch trip plate.
2. Check the feed speed controls to see if open.
3. Check for mechanical bind or lock up.
4. Check to see if head cycle switch functions properly.

Head does not bevel or lock...

1. Check if proper bevel washer is in place.
2. Check the condition of the threads on the bevel and head lock handles.
3. Check the pinch slot on the head to make sure it is not filled with grit

Machine will start but not cycle...

1. Check air pressure. Air pressure must be set to 90 P.S.I. for machine to run properly.
2. Check to see if feed speed knobs are turned on.
3. Check to see if joy switch functions.
4. Check if terminal strips are plugged in.
5. Check feed forward and feed reverse solenoids.

Machine will not start...

1. Check if machine is plugged in and/or has proper voltage.
2. Check the fuse on the secondary side of machine tool transformer.
3. Check overload.
4. Check if terminal strips are plugged in.

5 Make sure that the counter is <u>not</u> set to zero (0).

SET UP - FACE GRINDING

1. The top grinding finger must be retracted and locked with a C clip.

2. Set the tooth counter C-5 to the number of teeth to be ground.

3. Set face top selector switch C-10 to face.

4. Set the hook angle by loosening the hook pivot and scale lock. Read the hook angle on the scale rod.

5. Set the bevel angle by loosening the bevel lock and installing the desired bevel angle washer H-7.

6. On Alternate saws set the plate thickness knob. The hook lock handle must be released before moving the plate thickness knob. Full clockwise = 0 plate thickness, and each turn c.c.w. = .100.

7. Adjust the forward stop C-1 and reverse stop C-2 as necessary.

8. Mount the saw with the face of the tooth up. Note! To extend the facing finger place joyswitch C-6 in neutral and start the machine.

9. Adjust the saw diameter until the tooth is slightly beyond the facing finger.

10. Adjust the index clamp cylinders 1/2 to 1" below O.D. of saw.

11. Adjust index pitch stop to desired length using the index scale. On alternates set the pitch so that the two teeth will be indexed.

12. Start the motor. Position # 1 or position # 2, C-9 set rotation. #1 for flats, #2 for alternate tip requiring reverse wheel rotation.

13. Open C-3 (Forward Feed Speed). This will allow the grinding head to move out toward the tooth. When the grinding wheels are over the tooth, close C-3. This will stop the grinding wheels at that position.

14. Infeed H-2 until wheel touches the tooth. Set the dial indicators H-4 on 0.

15. Open C-3 (Forward Feed Speed) again until the grinding wheels have traveled across the tooth being ground. Close C-3 Forward Feed Speed.

16. Turn C-1 (Forward Stroke Adjustment) clockwise until the grinding wheels reverse. This adjusts the travel limit of the forward stroke.

FACE SHARPENING
ACCURACY PROBLEMS?

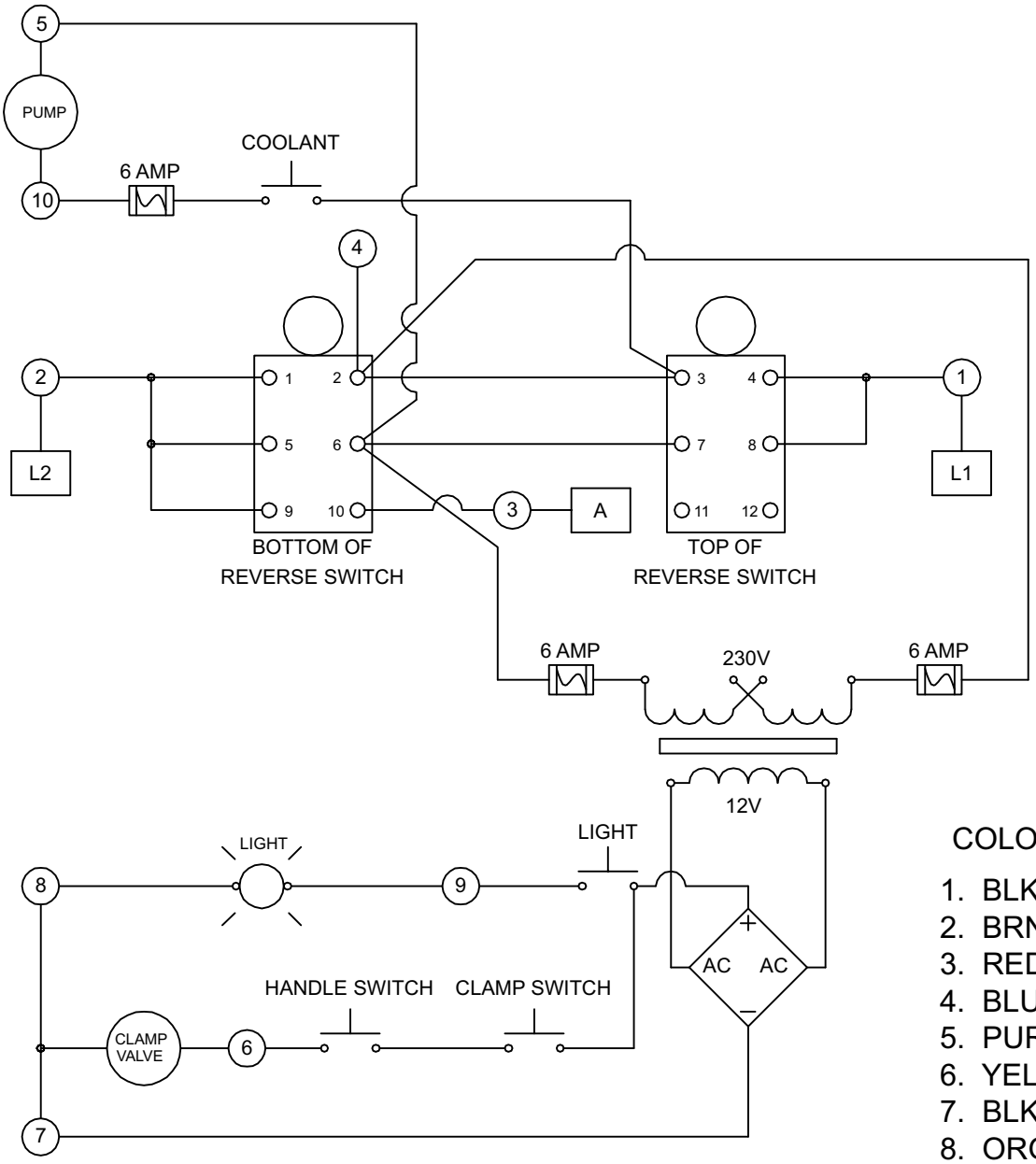
Is your saw plate clean?
If any pitch, flux or saw dust is on the sides of the saw plate, it can become lodged between the saw and the clamp jaw. This will force the saw to move away from the fixed clamp jaw.

Are your diamond wheels cutting freely?
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.
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.

Are the proper diamond wheels being used?
(see wheel specification)

Are the saw's other critical dimensions accurate?
There are many things that effect face 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 face grinding. To be extremely accurate on face grinding requires the rest of the saw to be at least reasonably accurate.
Any face 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 sharpening tolerances can be attributed to the sharpening machine.
If your face sharpening tolerances are still unacceptable, please call Wright Machine Tool Company and we will assist you with this problem.

WIRING DIAGRAM



COLOR CODE:

1. BLK
2. BRN
3. RED
4. BLU/YEL
5. PUR
6. YEL
7. BLK/ORG
8. ORG
9. YEL/RED

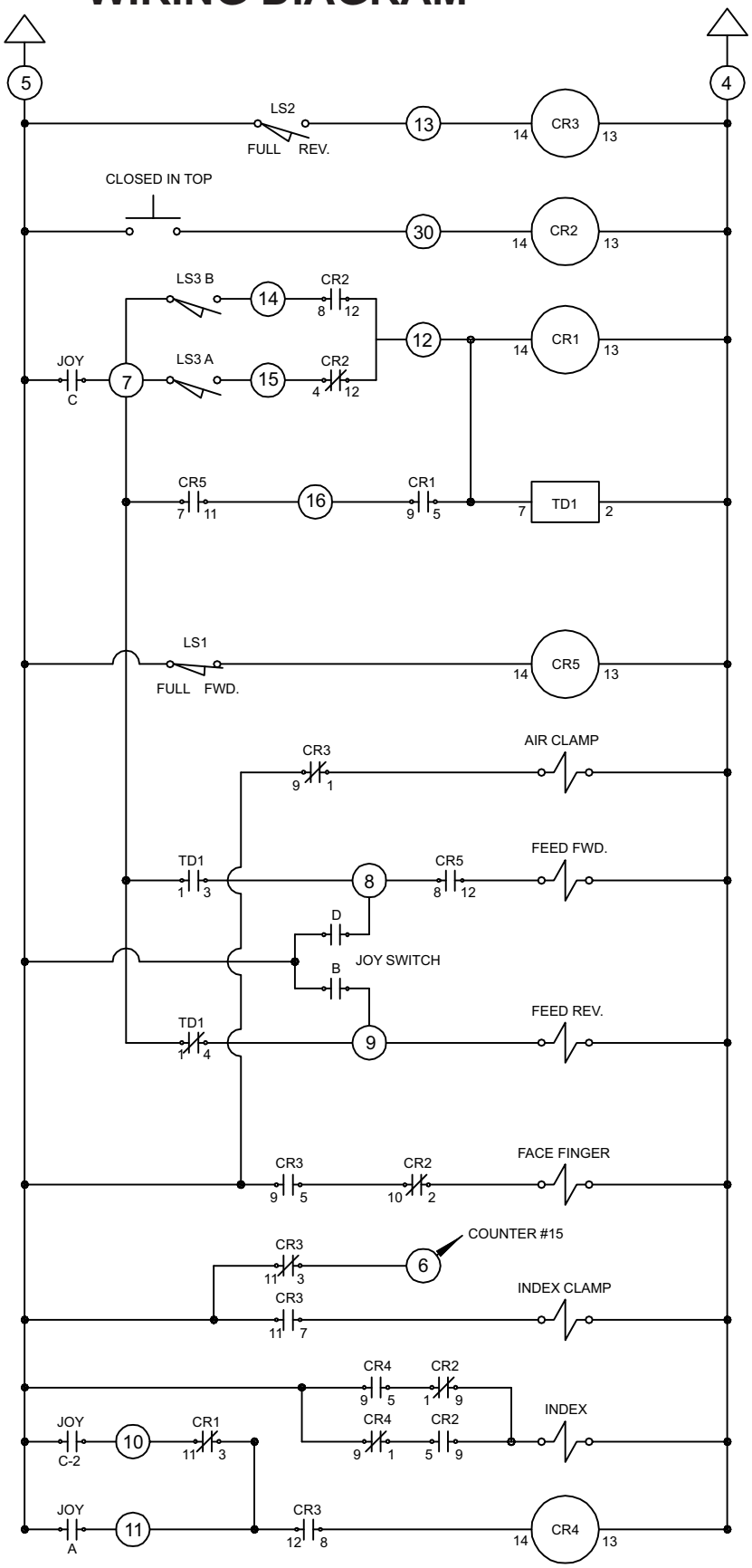
NOTES ON COMPONENT WIRING...

1. L1 = BLACK FROM CORD
2. L2 = WHITE FROM CORD
3. A = RED FROM MOTOR
4. T1 = BLACK FROM MOTOR
5. T4/PUMP = WHITE FROM MOTOR/BLUE FROM PUMP
6. AIR CLAMP VALVE
7. AIR CLAMP VALVE
8. LIGHT
9. LIGHT
10. PUMP = BROWN FROM PUMP

WIRING DIAGRAM

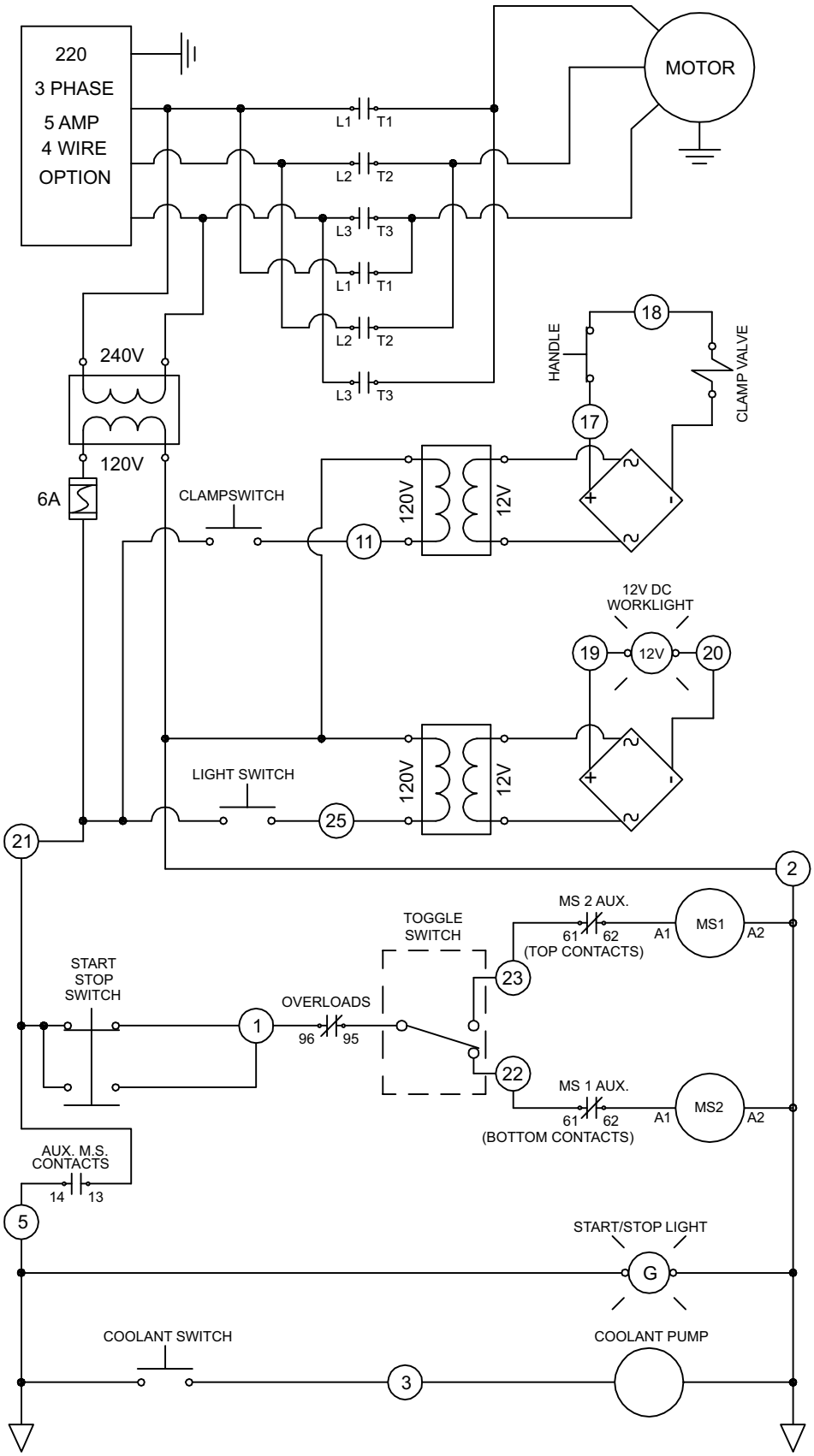
TERMINAL COLOR CODE

1	BLACK
2	BLUE/YELLOW
3	RED
4	BROWN
5	PURPLE
6	YELLOW
7	BLUE
8	BLACK/ORANGE
9	YELLOW/RED
10	ORANGE
11	BLACK
12	BLUE/YELLOW
13	RED
14	BROWN
15	PURPLE
16	YELLOW
17	BLUE
18	BLACK/ORANGE
19	YELLOW/RED
20	ORANGE
21	BLACK
22	BLUE/YELLOW
23	RED
24	BROWN
25	PURPLE
26	YELLOW
27	BLUE
28	BLACK/ORANGE
29	YELLOW/RED
30	ORANGE

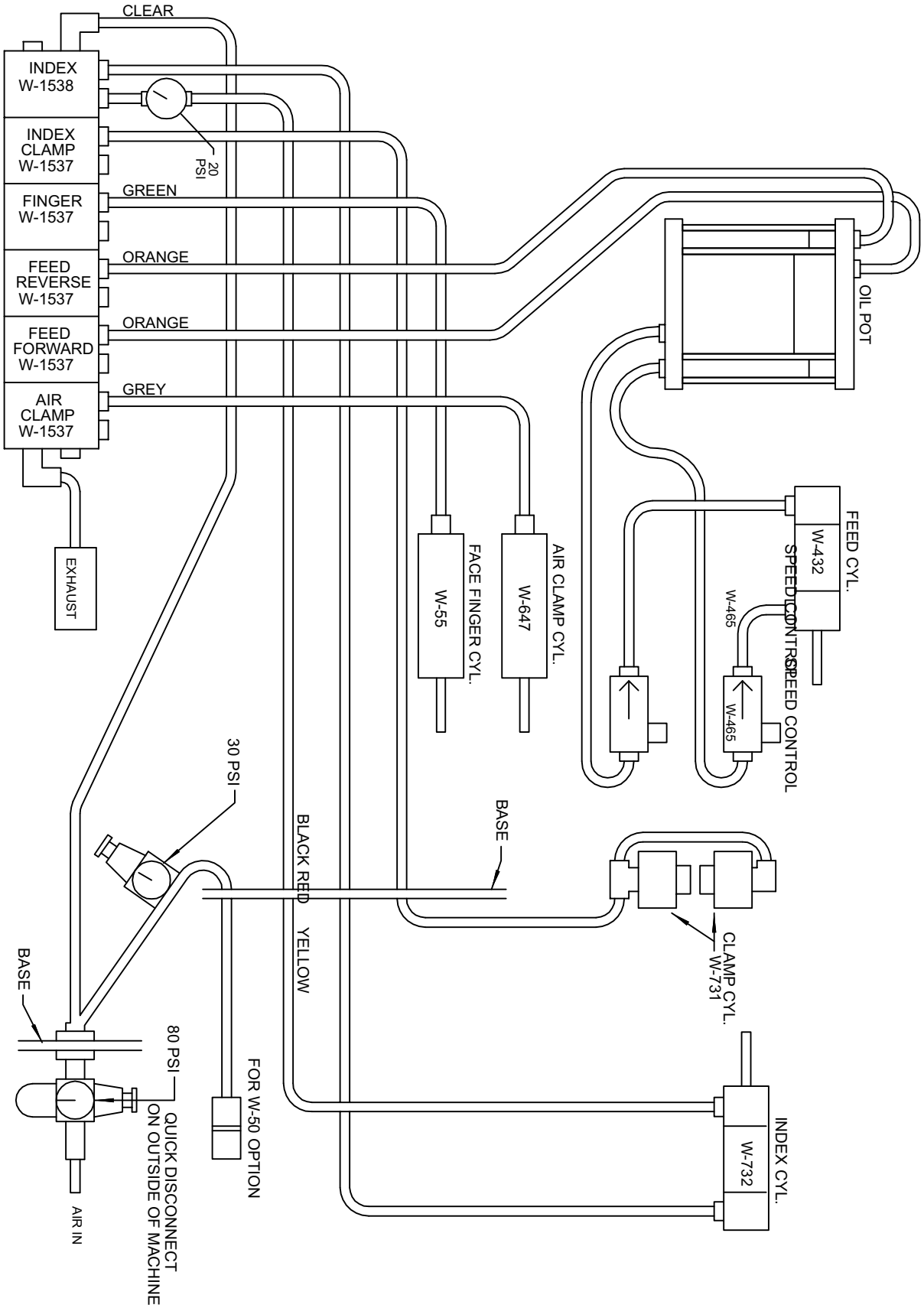


WIRING DIAGRAM (3 PHASE OPTION)

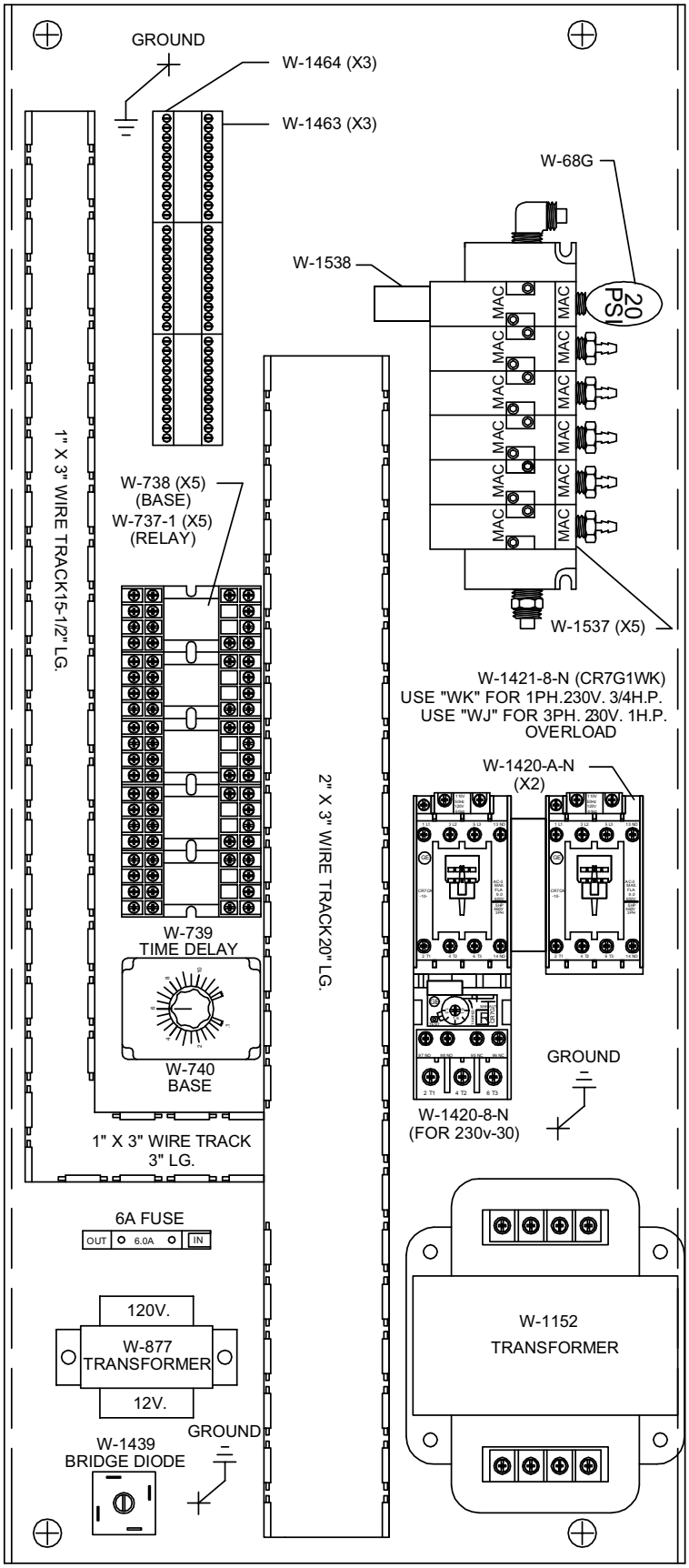
TERMINAL COLOR CODE	
1	BLACK
2	BLUE/YELLOW
3	RED
4	BROWN
5	PURPLE
6	YELLOW
7	BLUE
8	BLACK/ORANGE
9	YELLOW/RED
10	ORANGE
11	BLACK
12	BLUE/YELLOW
13	RED
14	BROWN
15	PURPLE
16	YELLOW
17	BLUE
18	BLACK/ORANGE
19	YELLOW/RED
20	ORANGE
21	BLACK
22	BLUE/YELLOW
23	RED
24	BROWN
25	PURPLE
26	YELLOW
27	BLUE
28	BLACK/ORANGE
29	YELLOW/RED
30	ORANGE



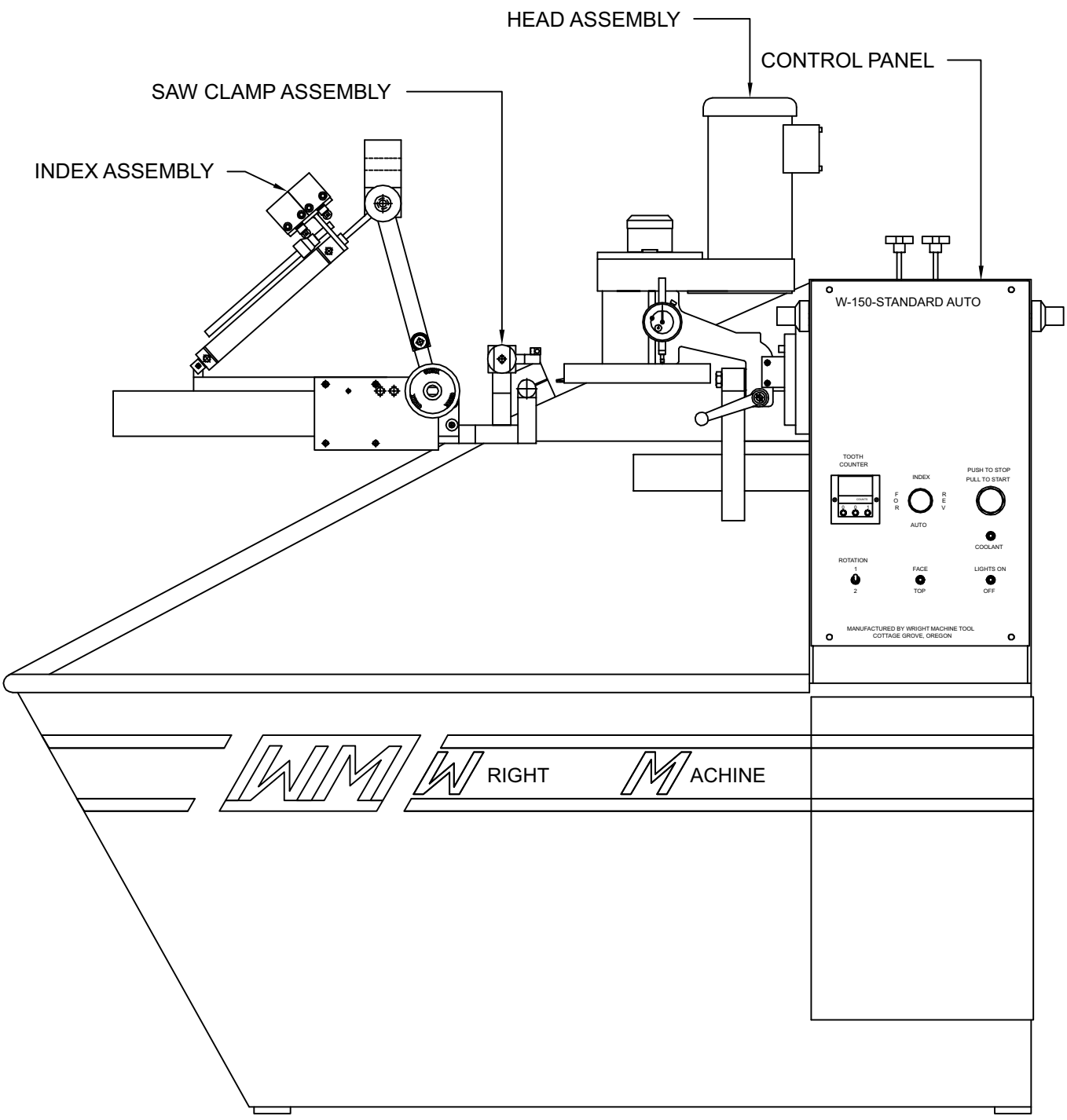
AIR DIAGRAM


CLEAR
INDEX W-1538
INDEX CLAMP W-1537
FINGER W-1537
FEED REVERSE W-1537
FEED FORWARD W-1537
AIR CLAMP W-1537
20 PSI
GREEN
ORANGE
ORANGE
GREY
EXHAUST
OIL POT
FEED CYL. W-432
SPEED CONTROL W-465
W-465
FACE FINGER CYL. W-55
AIR CLAMP CYL. W-647
30 PSI
BASE
BLACK RED
YELLOW
CLAMP CYL. W-731
BASE
80 PSI
QUICK DISCONNECT ON OUTSIDE OF MACHINE
AIR IN
FOR W-50 OPTION
INDEX CYL. W-732

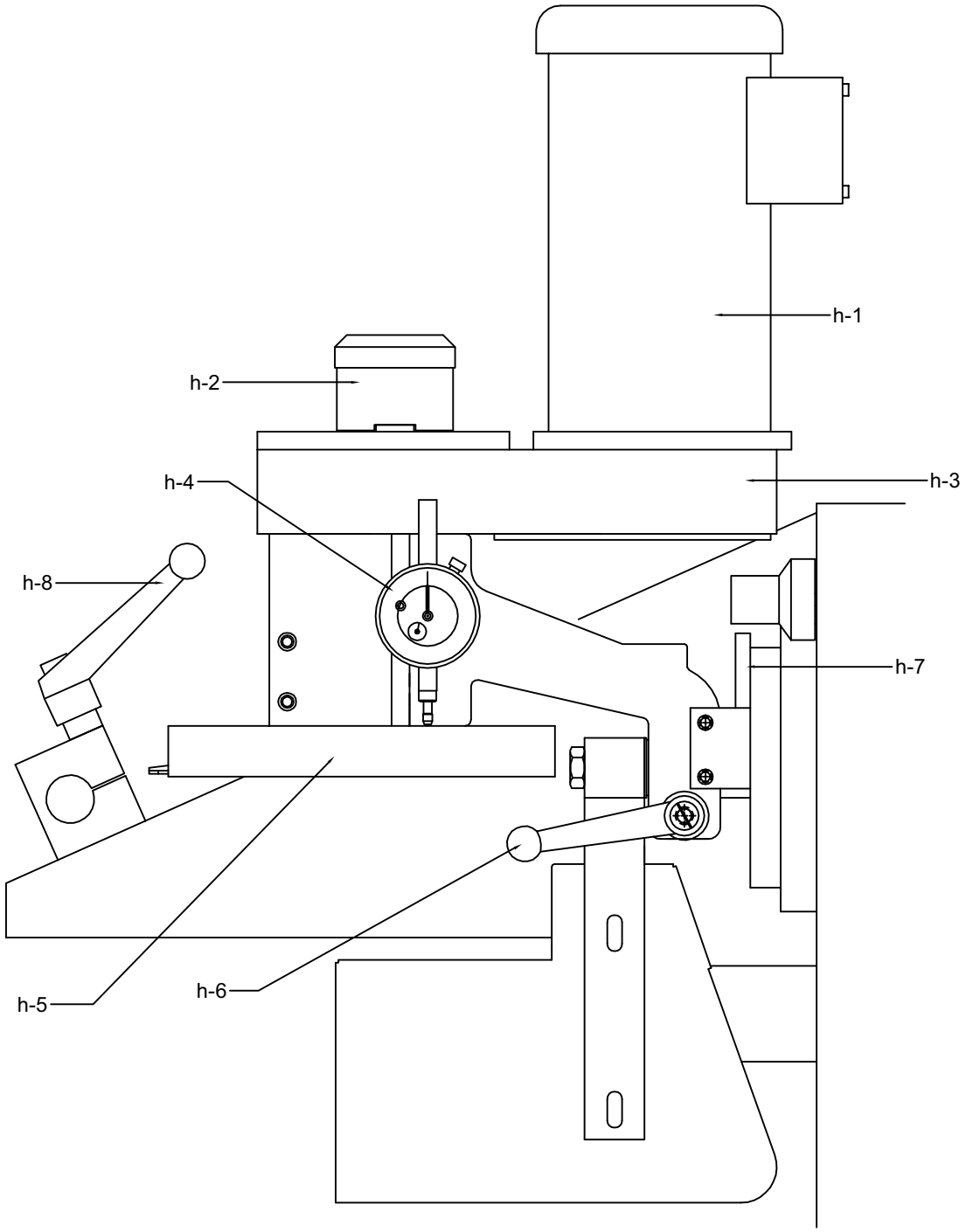
SUB PANEL


GROUND
W-1464 (X3)
W-1463 (X3)
W-68G
W-1538
20 PSI
MAC
W-1537 (X5)
1" X 3" WIRE TRACK15-1/2" LG.
W-738 (X5)
(BASE)
W-737-1 (X5)
(RELAY)
W-1421-8-N (CR7G1WK)
USE "WK" FOR 1PH.230V. 3/4H.P.
USE "WJ" FOR 3PH. 230V. 1H.P.
OVERLOAD
W-1420-A-N
(X2)
2" X 3" WIRE TRACK20" LG.
W-739
TIME DELAY
W-740
BASE
GROUND
W-1420-8-N
(FOR 230v-30)
1" X 3" WIRE TRACK
3" LG.
6A FUSE
OUT
6.0A
IN
120V.
W-877
TRANSFORMER
12V.
W-1152
TRANSFORMER
GROUND
W-1439
BRIDGE DIODE

MACHINE ASSEMBLY

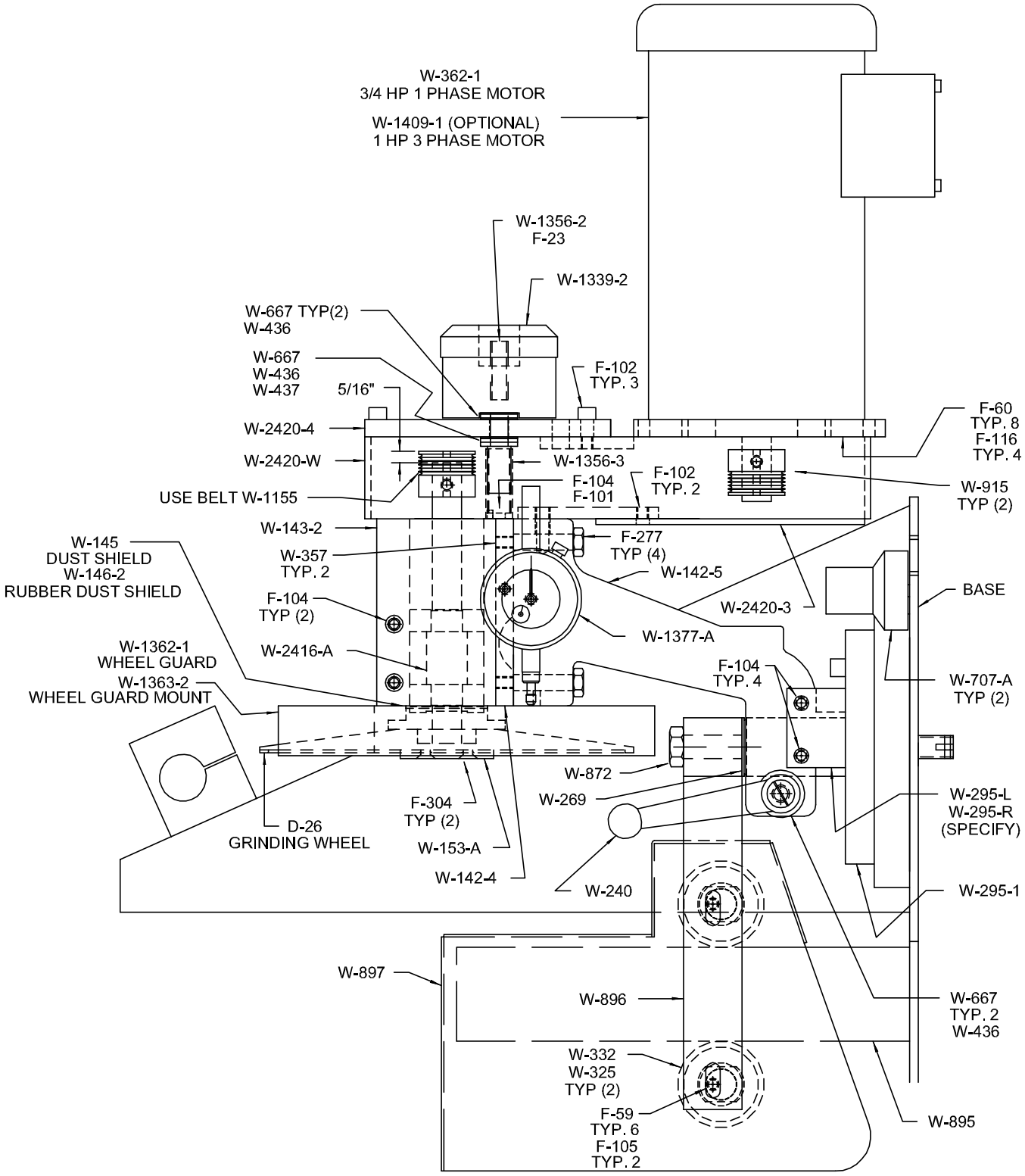


HEAD ASSEMBLY



h-1 W-362-1 Motor
h-2 W-1339-2 Grind Infeed C.C.W. = More Removal
h-3 W-2420-W Belt Guard
h-4 W-1377-A Dial Indicator (Shows wheel movent in .001")
h-5 W-1362-1 Wheel Guard
h-6 W-240 Bevel Lock
h-7 W-850 Bevel Washers
h-8 W-240 Hook Pivot Handle/Plate Thickness Lock

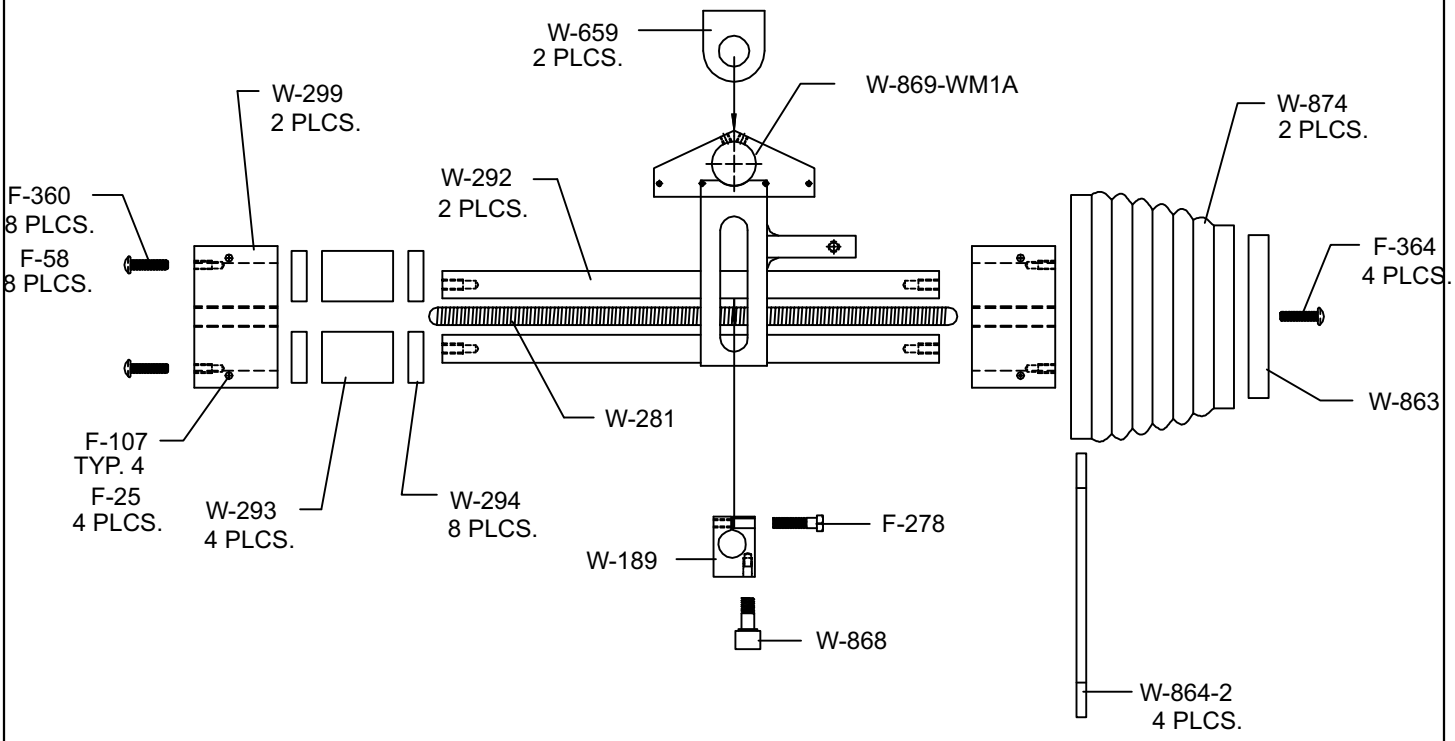
HEAD ASSEMBLY



HEAD ASSEMBLY PART NUMBER LIST

Qty.	Part #	Description
1	D-26	Diamond Grinding Wheel
1	F-23	3/8-16 Nylock Nut
6	F-59	1/4 Fender Washer
8	F-60	5/16 Washer
1	F-101	1/4-20 SHCS
5	F-102	1/4-20 SHCS
7	F-104	1/4-20 SHCS
2	F-105	1/4-20 SHCS
4	F-116	3/8-16 SHCS
1	F-272	1/2-13 HHCS
4	F-277	1/4-20 HHCS
4	F-304	10-24 FHCS
2	F-384	5/16-18 Set Screw
1	W-142-4	Dove Tail
1	W-142-5	Grinding Head
1	W-143-2	Grinding Head Spindle Housing
1	W-145	Dust Shield (large)
1	W-146-2	Rubber Dust Shield
1	W-153-A	Wheel Nut Collar
1	W-240	Handle
1	W-269	Snap Ring
1	W-295-L	Alternate Stop Left
1	W-295-R	Alternate Stop Right
1	W-195-1	Head Bracket
2	W-325	Ecentric
2	W-332	Bearing
2	W-357	Zerk Fitting
1	W-362-1	3/4 h.p. Single Phase Motor
2	W-436	Thrust Bearing
4	W-667	Ground Washer
2	W-707-A	Feed Speed Knob
1	W-850	Alternate Angle Washers
1	W-872	Spring Clip
1	W-895	Bearing Slide
1	W-896	Bearing Bracket
1	W-897	Bearing Shield
2	W-915	Drive Pulley
1	W-1155	Drive Belt
1	W-1339-2	Infeed Knob
1	W-1356-2	Lead Screw
1	W-1356-3	Lead Screw Nut
1	W-1362-1	Wheel Guard
1	W-1363-2	Wheel Cover
1	W-1377-A	Dial Indicator Kit
1	W-1409-1	1h.p. 3 Phase Motor (optional)
1	W-2416	Spindle Assembly Complete
1	W-2420-W	Belt Shroud Weldment
1	W-2420-3	Lower Shroud Cover
1	W-2420-4	Upper Shroud Cover

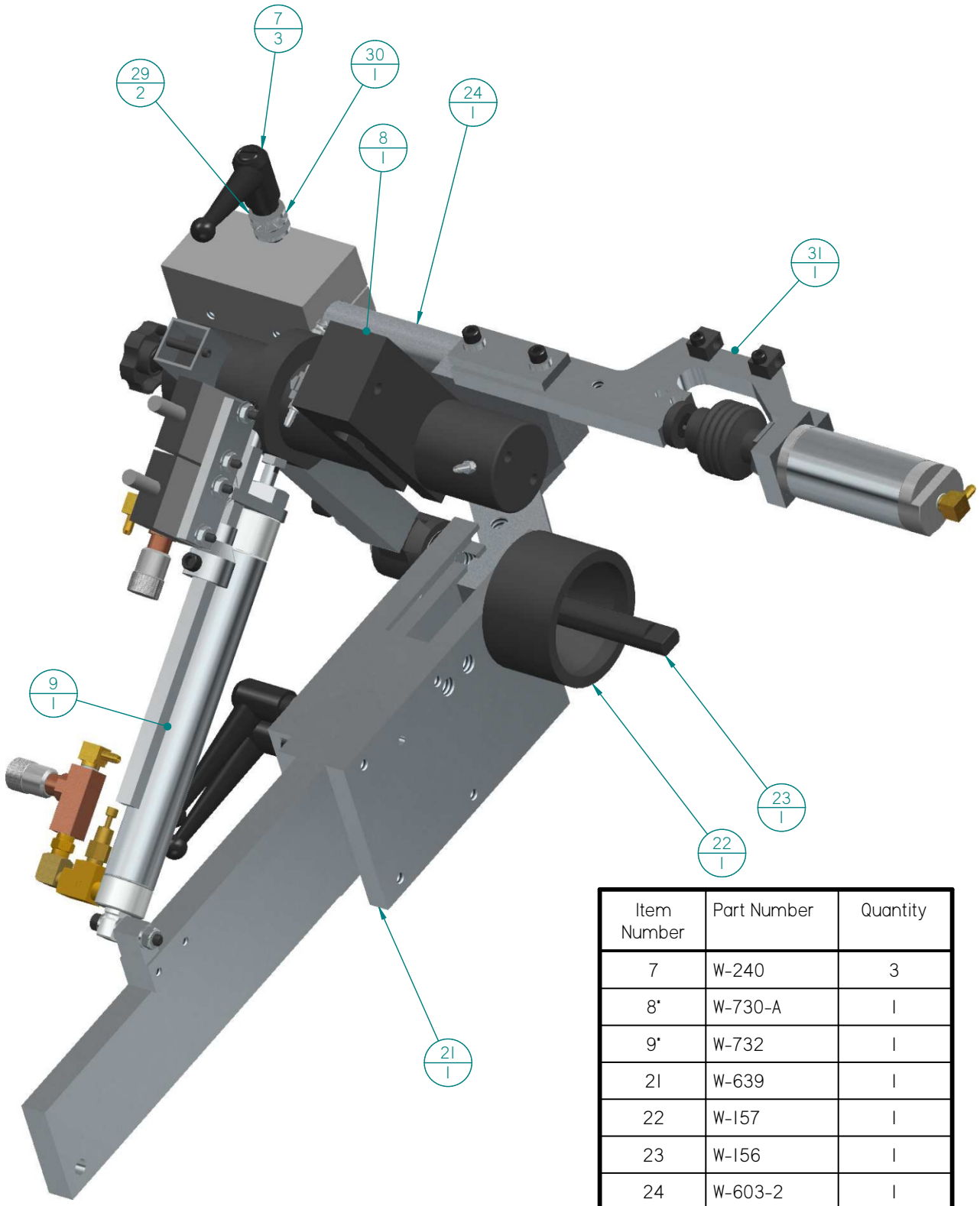
FEED SYSTEM ASSEMBLY



FEED SYSTEM ASSEMBLY PART NUMBER LIST

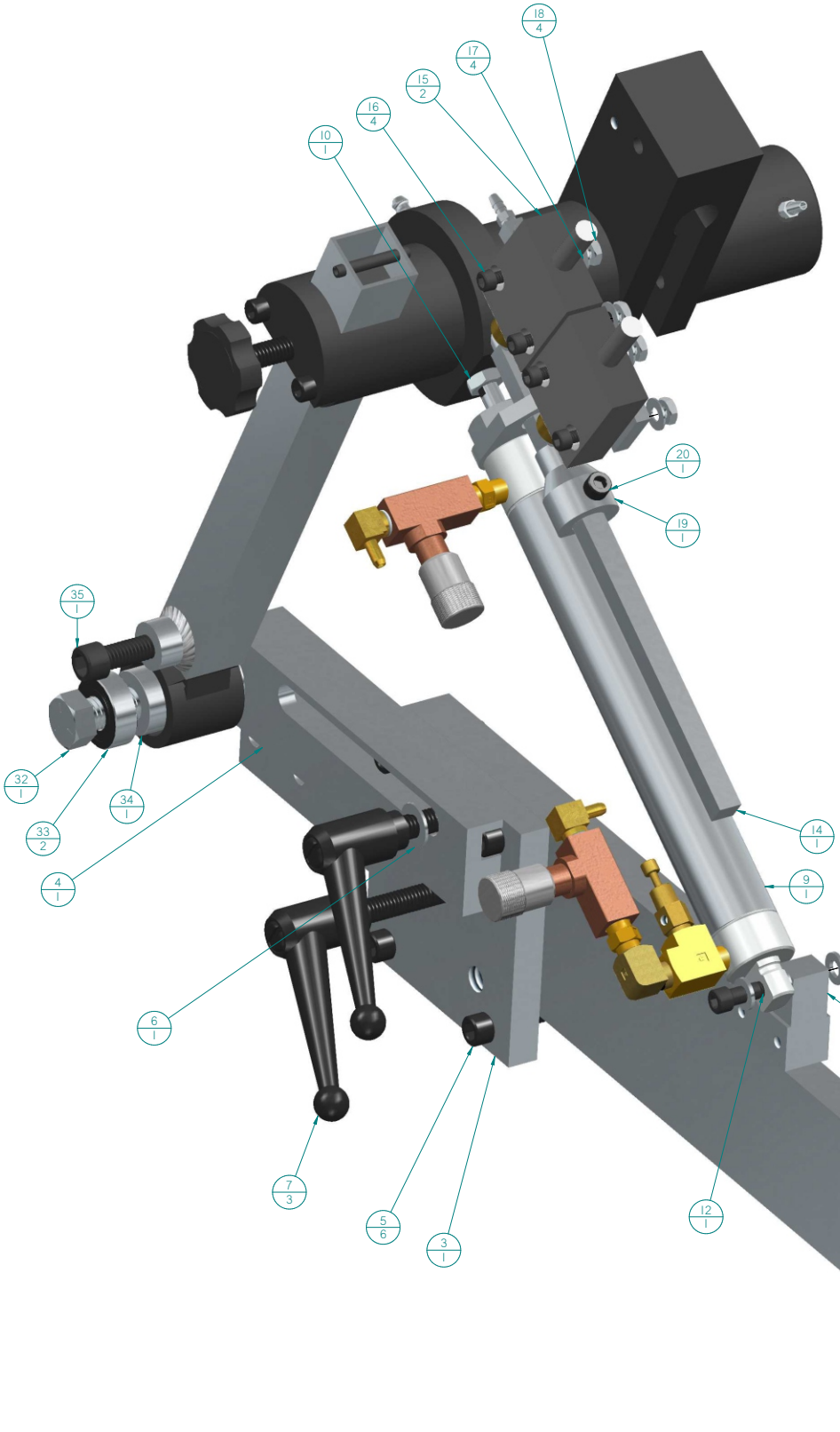
Qty.	Part #	Description
4	F-25	1/4-20 Jam Nut
8	F-58	1/4 Cut Washer
4	F-107	1/4-20 SHCS
1	F-278	5/16-18 HHCS
8	F-360	5/16-18 BHCS
4	F-364	3/8-16 BHCS
1	W-189	Cam Follower (Heavy)
1	W-281	Spring
2	W-292	Head Shaft
4	W-293	Head Bearing
8	W-294	Seals
2	W-299	Bearing Block
2	W-659	Pillow Block Bearing
1	W-863	Bellow End Plate
4	W-864-2	Hose Clamp
1	W-868	Feed Roller Clamp
1	W-869-WM1A	Feed Shaft Weldment
2	W-874	Bellow

SAW SUPPORT SYSTEM ASSEMBLY



Item Number	Part Number	Quantity
7	W-240	3
8*	W-730-A	1
9*	W-732	1
21	W-639	1
22	W-157	1
23	W-156	1
24	W-603-2	1
29	W-667	2
30	W-436	1
31*	AIR CLAMP ASSEMBLY (W-921-A)	1

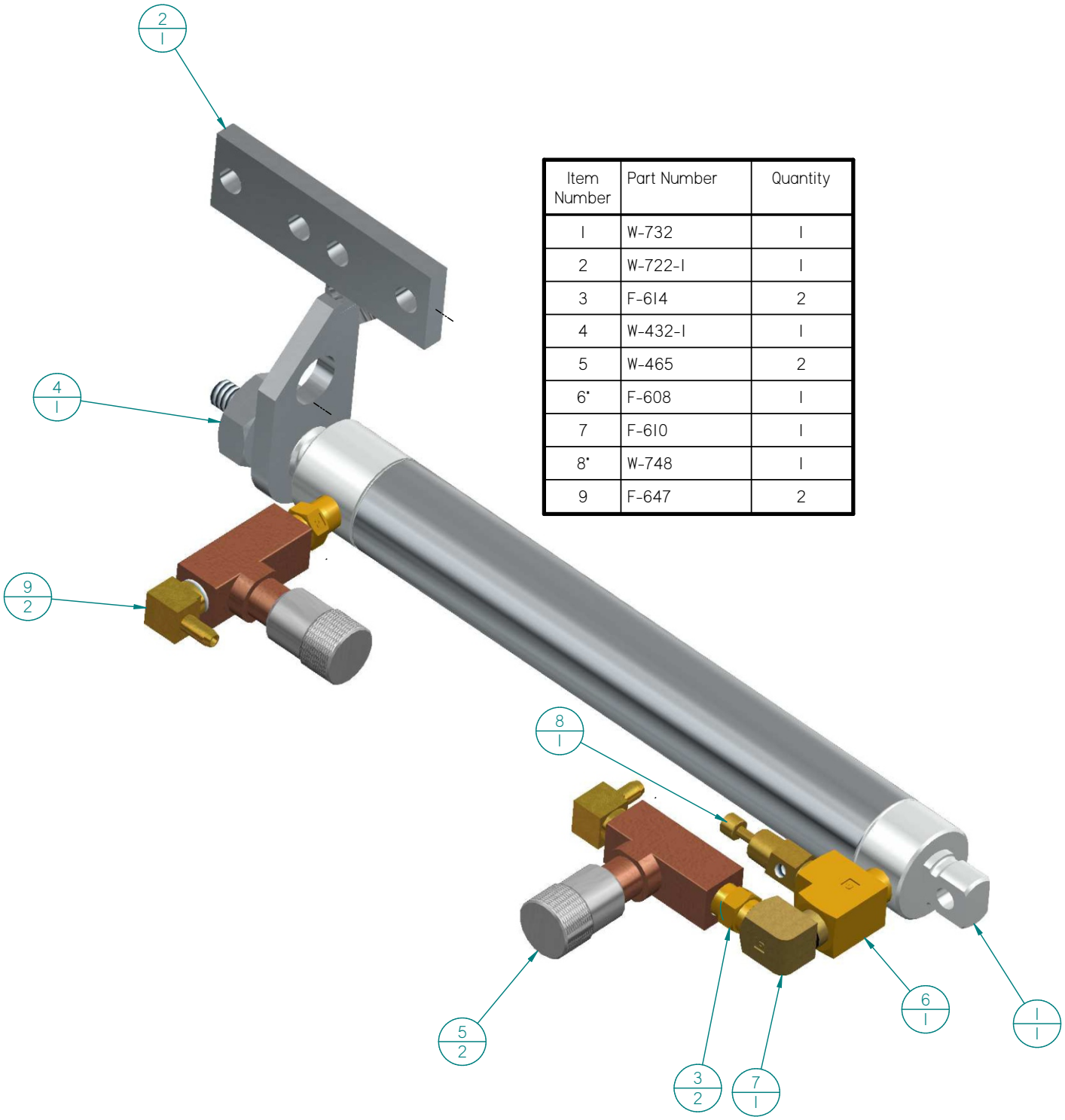
SAW SUPPORT SYSTEM ASSEMBLY



Item Number	Part Number	Quantity
1	W-856	1
2	W-712	1
3	W-640	1
4	W-713	1
5	F-114	6
6	F-60	1
7	W-240	3
8	W-730-A	1
9	W-732	1
10	F-13	1
11	F-67	3
12	F-106	1
13	F-25	1
14	W-723	1
15	W-731	2
16	F-123	4
17	F-56	4
18	F-11	4
19	W-724	1
20	F-1	1
21*	W-639	1
22*	W-157	1
23*	W-156	1
24*	W-603-2	1
25*	F-314	4
26*	W-858-1	1
27*	F-436	2
28*	W-851-13	1
29*	W-667	2
30*	W-436	1
31*	AIR CLAMP ASSEMBLY (W-921-A)	1
32	F-268	1
33	W-733	2

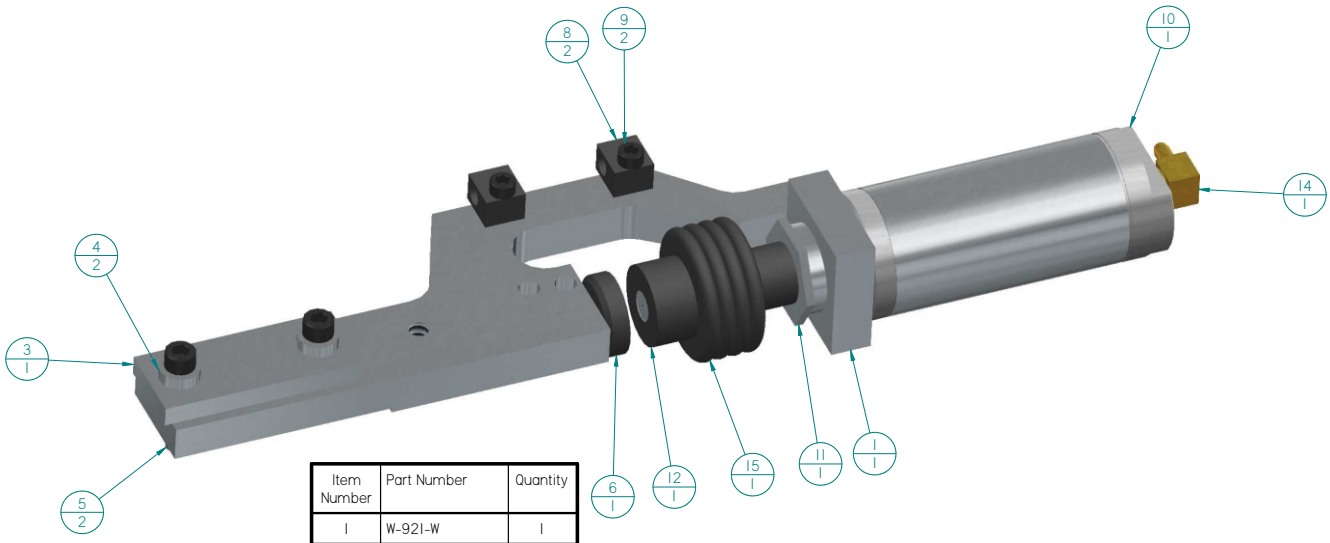
Item Number	Part Number	Quantity
34	W-435	1
35	F-116	1

SAW SUPPORT SYSTEM ASSEMBLY
AIR CYLINDER



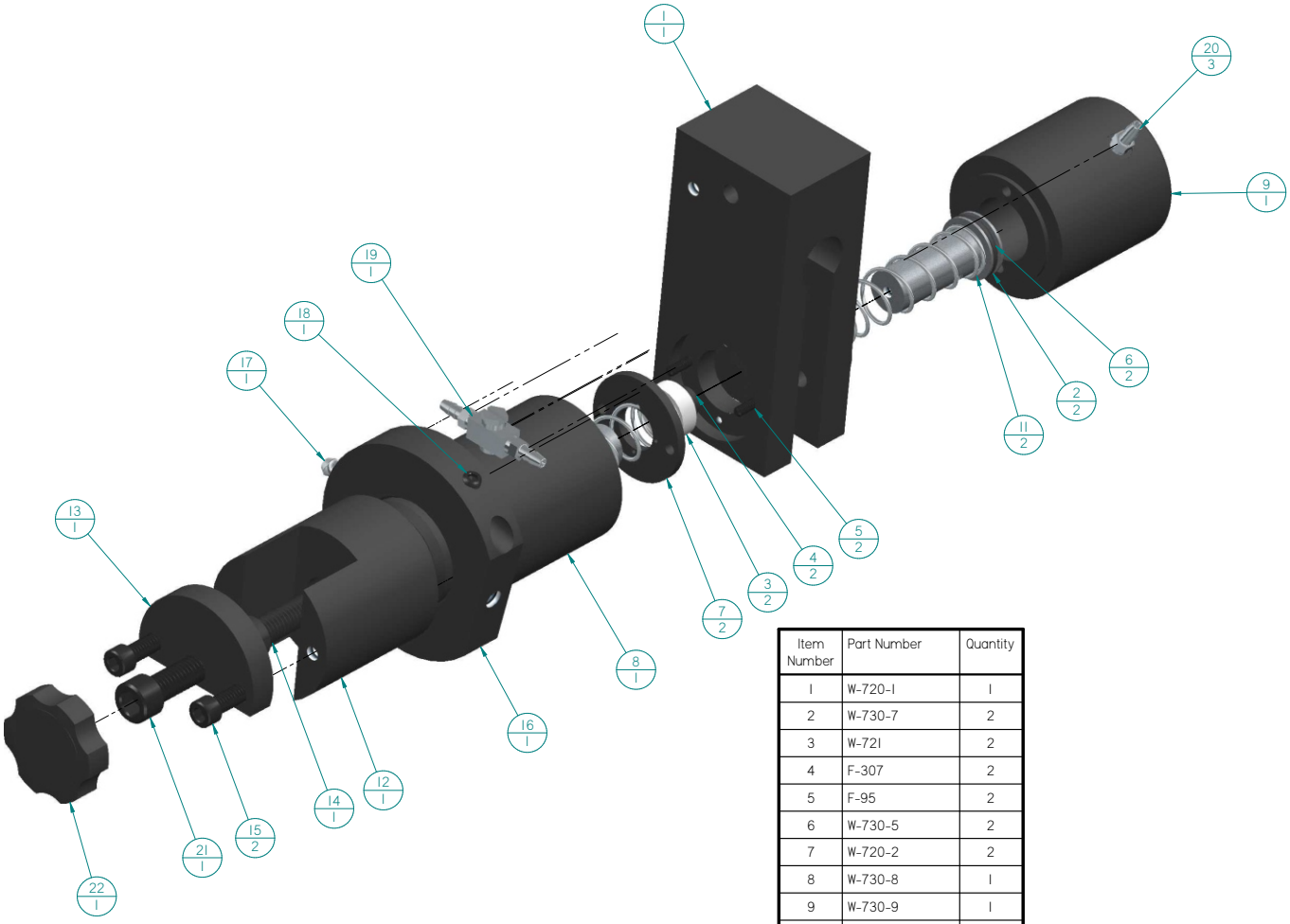
Item Number	Part Number	Quantity
1	W-732	1
2	W-722-1	1
3	F-614	2
4	W-432-1	1
5	W-465	2
6*	F-608	1
7	F-610	1
8*	W-748	1
9	F-647	2

SAW SUPPORT SYSTEM ASSEMBLY
AIR CLAMP



Item Number	Part Number	Quantity
1	W-921-W	1
2*	F-393	4
3	W-921-1	1
4	C-5386	2
5	F-105	2
6	W-923	1
7*	F-309	1
8	W-2350	2
9	F-137	2
10	W-647	1
11	W-1045	1
12	W-924	1
13*	F-40	1
14	F-647	1
15	W-117-A	1

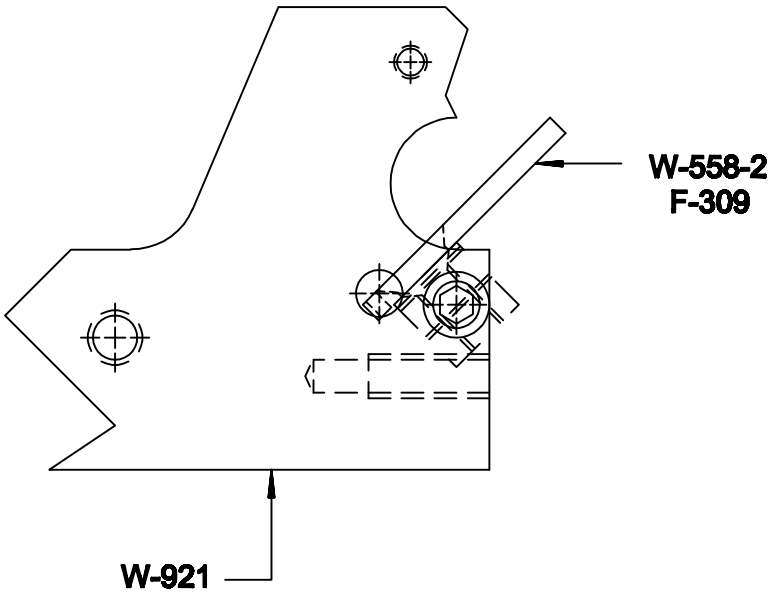
SAW SUPPORT SYSTEM ASSEMBLY
INDEX CLAMP (W-730-A)



Item Number	Part Number	Quantity
1	W-720-1	1
2	W-730-7	2
3	W-721	2
4	F-307	2
5	F-95	2
6	W-730-5	2
7	W-720-2	2
8	W-730-8	1
9	W-730-9	1
10*	F-98	2
11	W-730-6	2
12	W-717	1
13	W-716	1
14	F-116	1
15	F-102	2
16	W-718	1
17	W-357	1
18	F-380	1
19	F-637	1
20	F-638	3
21	F-118	1
22	W-523	1

TOPPING FINGER ASSEMBLY

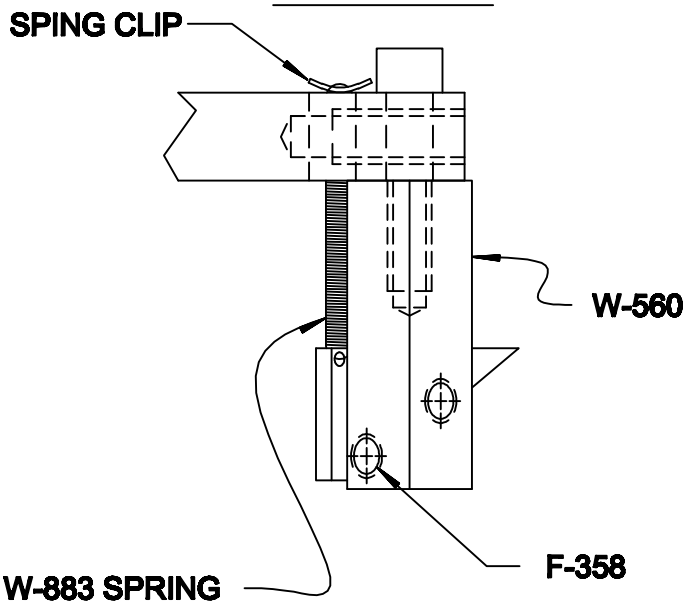
TOP VIEW



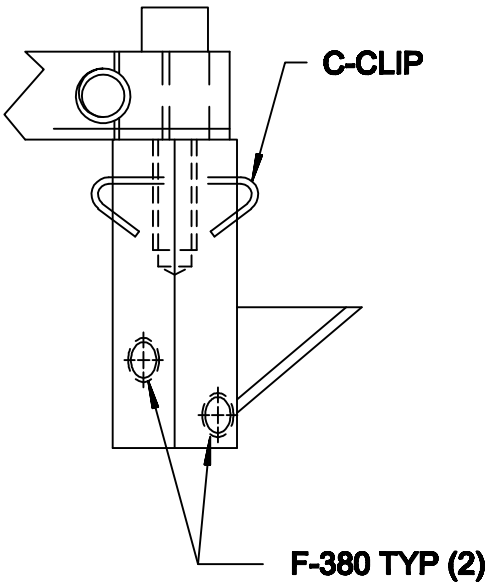
PARTS LIST

Qty.	Part #	Description
1	F-309	1/4-20 FHCS
1	F-358	1/4-20 BHCS
2	F-380	1/4-20 Set Screw
1	W-558-2	Topping Finger
1	W-560	Finger Arm
1	W-883	Spring

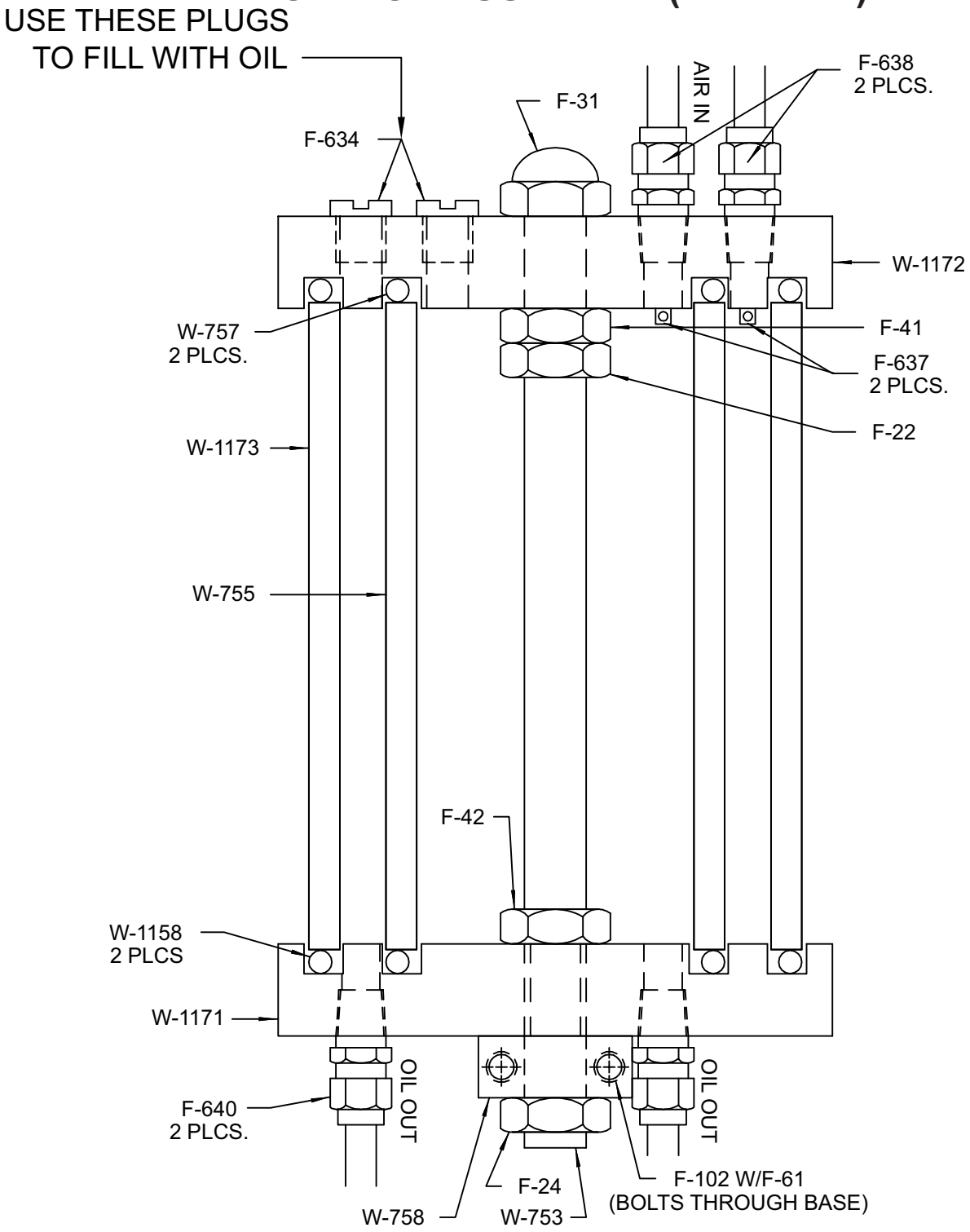
SIDE VIEW



END VIEW



OIL POT ASSEMBLY (W-1171-A)



Use AW-32 hydraulic oil.
Fill 2/3 full at highest level.

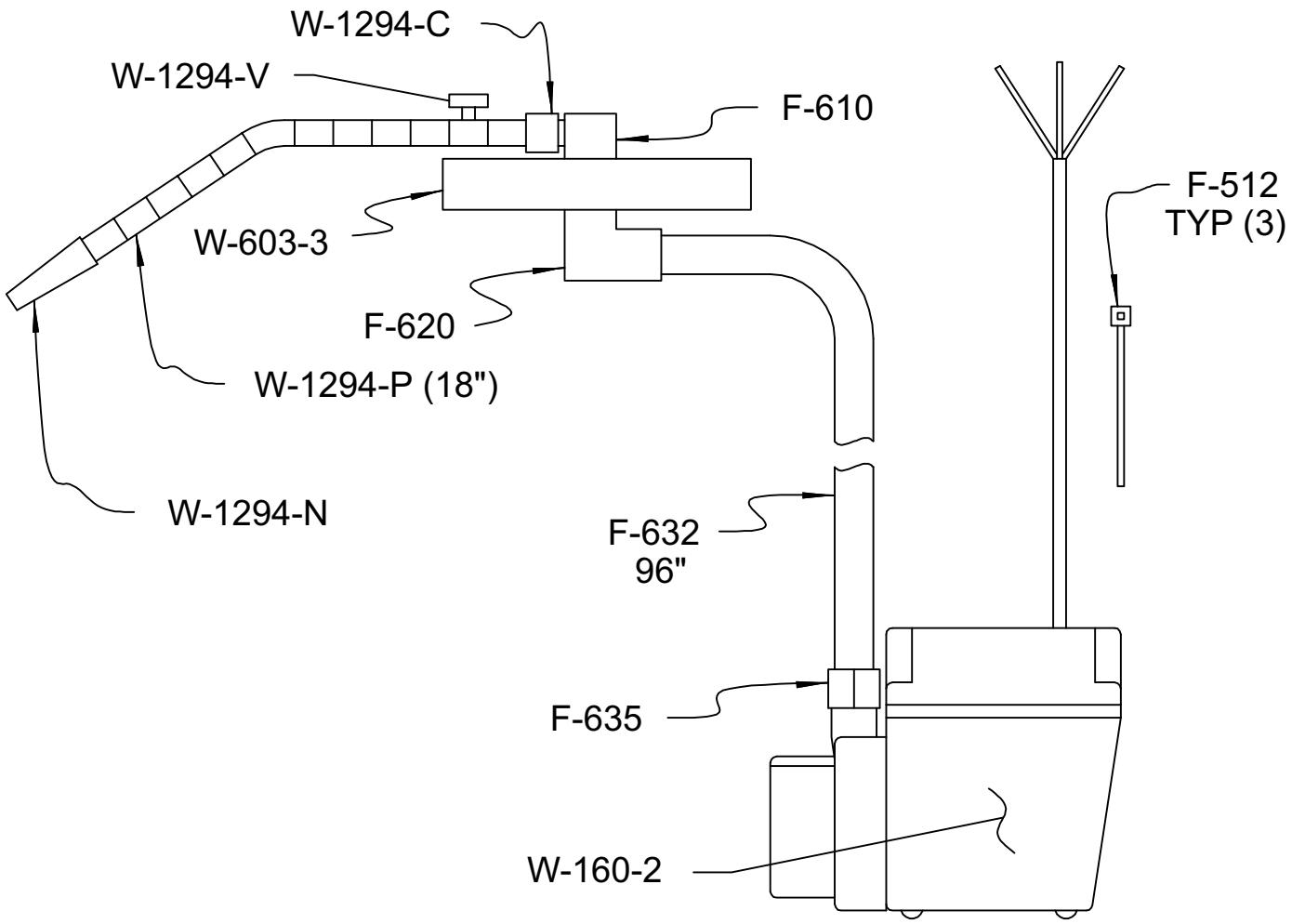
IMPORTANT!

Disconnect air and do not overfill.

OIL POT ASSEMBLY PART NUMBER LIST

QTY.	PART #	DESCRIPTION
1	F-22	1/2-13 Jam Nut
1	F-24	1/2-20 Jam Nut
1	F-31 1/2-13	A-Corn Nut
1	F-41 1/2-13	Hydra-Lok Nut
1	F-42 1/2-20	Hydra-Lok Nut
2	F-61 #12	Washer
2	F-102	1/4-20 SHCS
2	F-634	1/8" Pipe Plug
2	F-638	Barbed Fitting
2	F-640	Barbed Fitting
1	W-753	Stud
1	W-755	Inner Oil Tube
2	W-757	O-Ring
1	W-758	Oil Pot Bracket
2	W-1158	O-Ring
1	W-1171	Large End Cap (Bottom)
1	W-1172	Large End Cap (Top)
1	W-1173	Outer Oil Tube

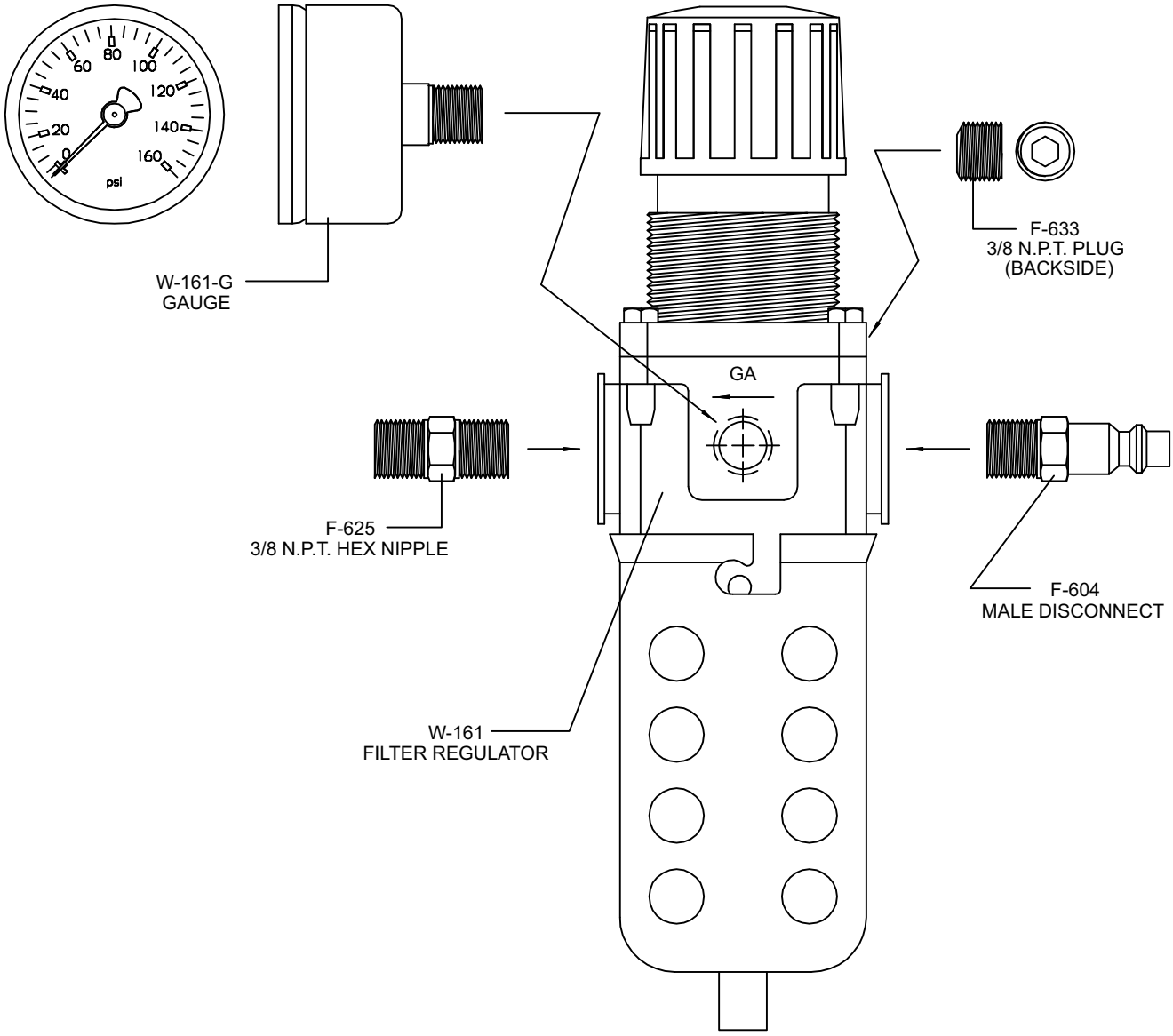
COOLANT ASSEMBLY



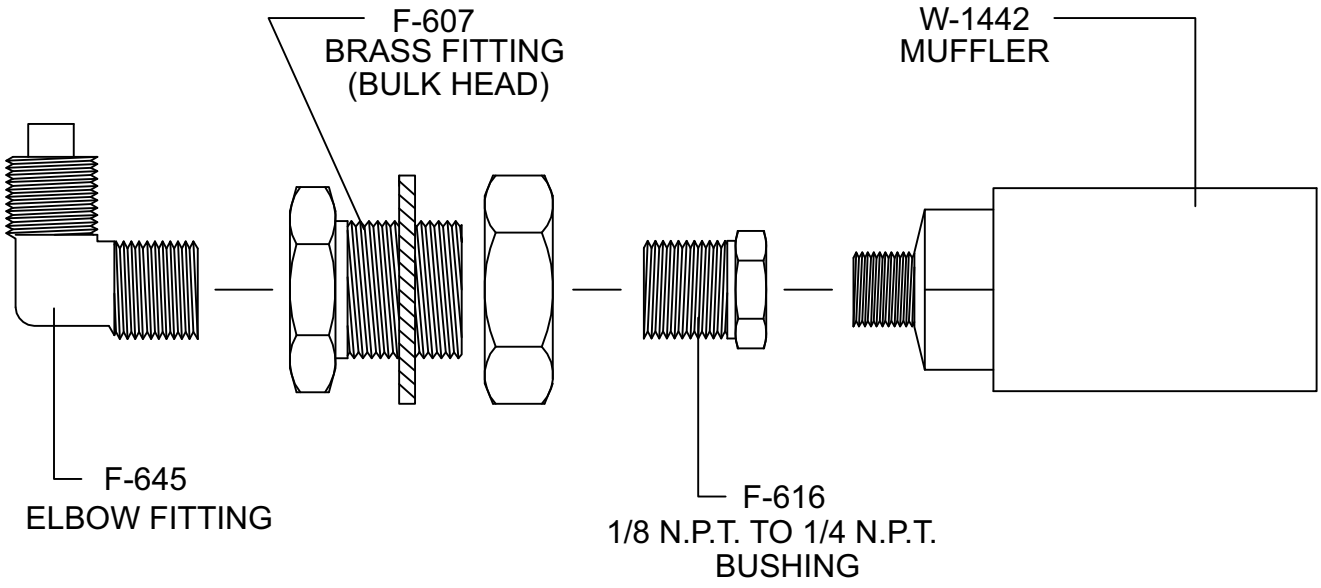
PARTS LIST

QTY.	PART #	DESCRIPTION
3	F-512	Cable Tie
1	F-610	1/8 N.P.T. Street Elbow
1	F-620	Elbow Fitting
96"	F-632	3/8 Tubing (Clear Flex)
1	F-635	Connector Nut
1	W-160-2	230 V. Coolant Pump
1	W-603-3	Saw Arm Pivot Bracket
1	W-1294-C	1/8 N.P.T. Connector
1	W-1294-N	1/4" Nozzle
18"	W-1294-P	Coolant Pipe
1	W-1294-V	1/4" In-Line Valve

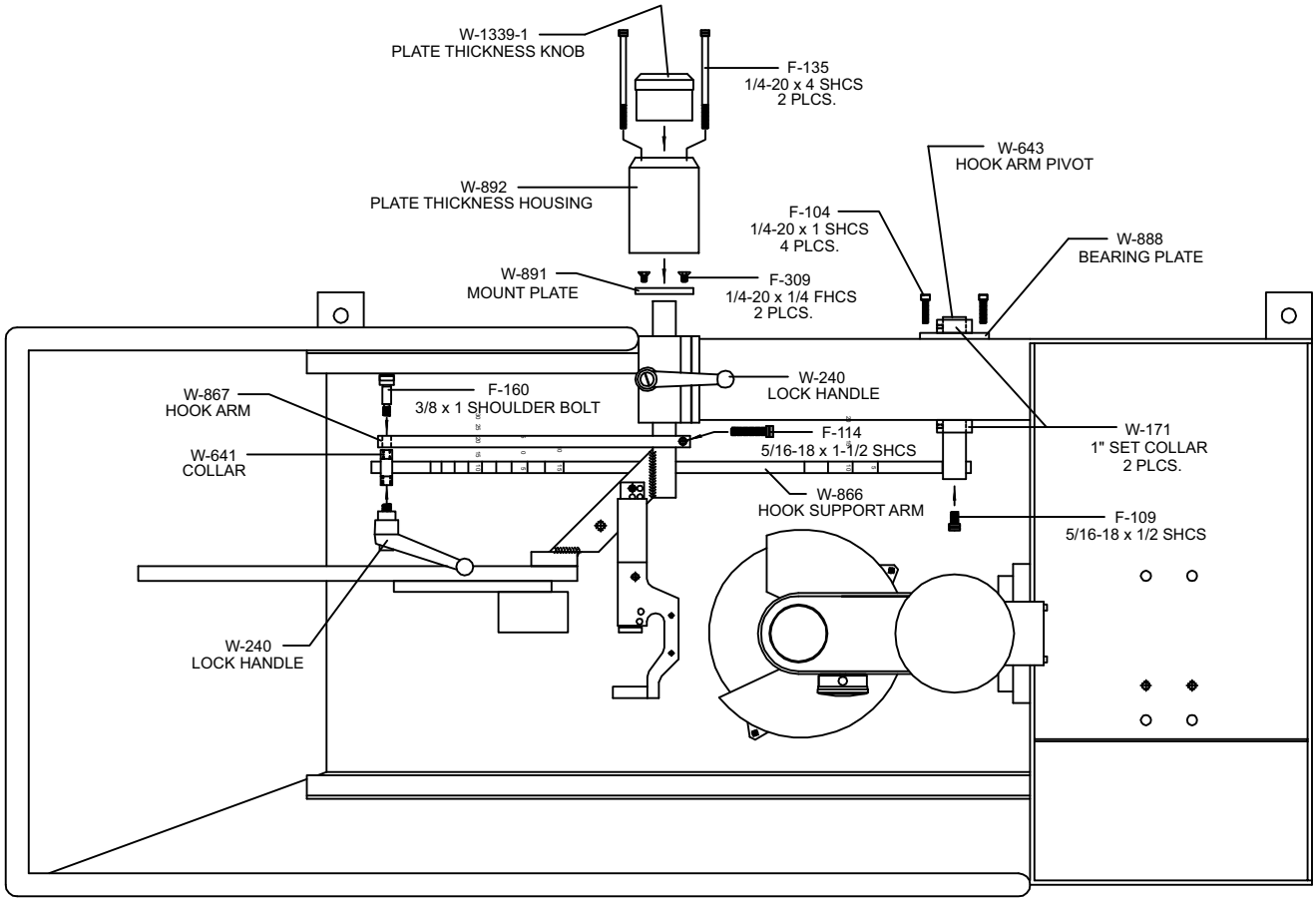
AIR IN / FILTER REGULATOR ASSEMBLY



EXHAUST ASSEMBLY



HOOK ASSEMBLY
(TOP VIEW OF BASE)



AIR FEED FINGER ASSEMBLY

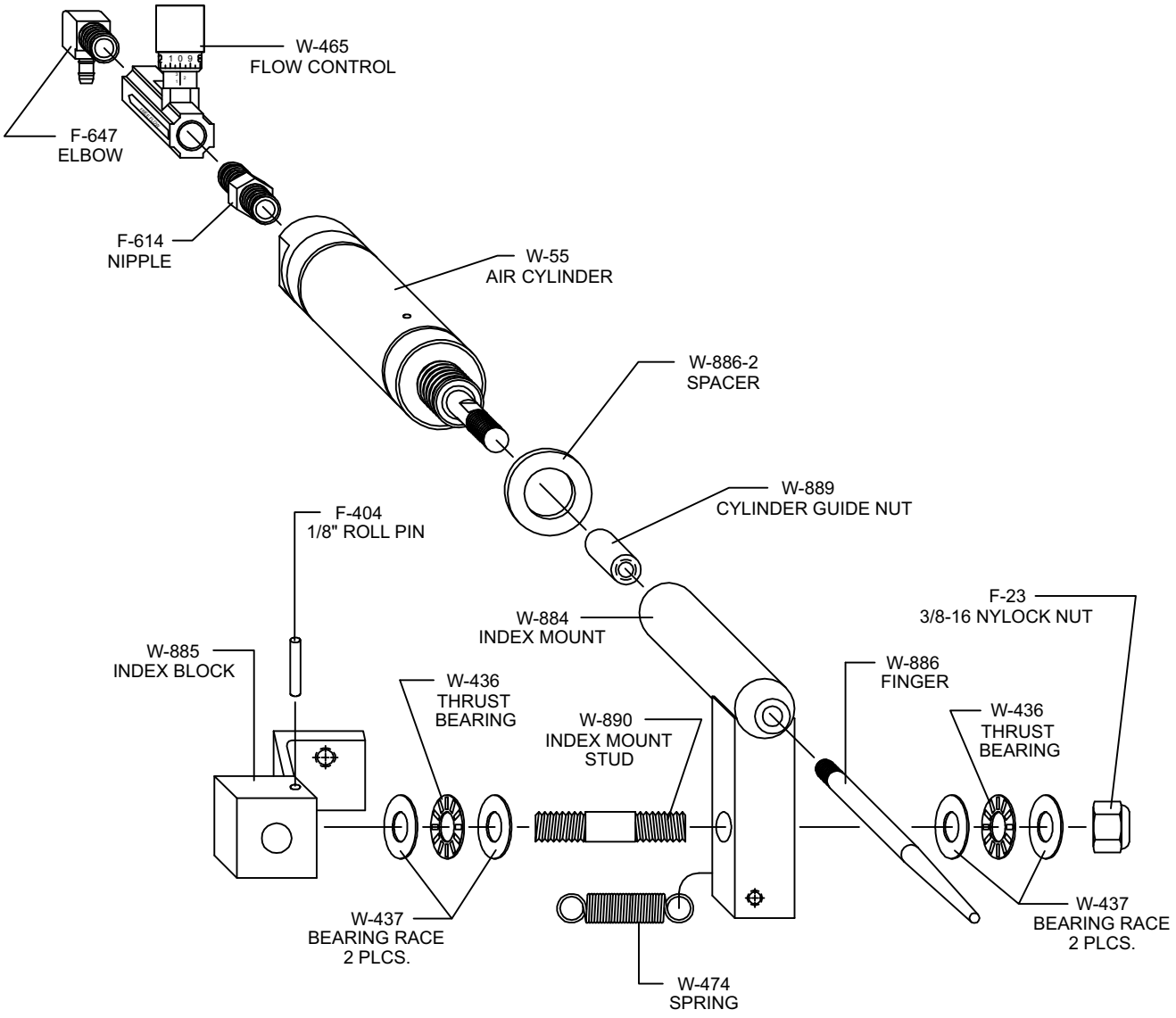


PLATE THICKNESS ASSEMBLY