
DUAL SIDE GRINDER

W-1902-P



OPERATORS MANUAL

MADE IN THE U.S.A.

W-1902-P QUAD DUAL SIDE GRINDER

Contents

LIMITED WARRANTY	1
GENERAL SAFETY RULES.....	2
SPECIFICATIONS.....	4
OPTIONS	5
MAINTENANCE.....	6
PRE SET UP	7
CONTROL PANEL.....	8
MACHINE CONTROLS.....	11
LOADING SAW	12
TOOTH GEOMETRY.....	14
CONVERSION CHART	15
ELECTRICAL SCHEMATICS.....	16
PARTS LIST	22
INDEX.....	52

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
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W-1902-P QUAD DUAL SIDE GRINDER

GENERAL SAFETY RULES

Failure to follow the safety rules and other basic safety 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.

Don't over reach: Keep proper footing and balance at all times.

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. Non-skid 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.



W-1902-P QUAD DUAL SIDE GRINDER

GENERAL SAFETY RULES (CONTINUED)

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 onr 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 tipped or if the grinding wheel is accidently contacted.

Follow safety precautions: For the wheels, coolant and material being ground. This information is available on the Safety Data sheet for each of these products.



W-1902-P QUAD DUAL SIDE GRINDER

SPECIFICATIONS

The W-1902 is designed to finish Grind the sides of band saws.

STANDARD VOLTAGE:	440 Volt, 3 Phase, 50/60 HZ
OPTIONAL VOLTAGE:	As Requested
SHIPPING WEIGHT:	2,300 lbs
CRATE SIZE:	L 83" X W 48" X H 60"
AIR REQUIREMENTS:	2 CFM at 80 psi
STANDARD SAW SIZE:	6" to 16"
OPTIONAL SAW SIZE:	Down to 2"
SPINDLE MOTORS:	(2) 1hp 3450 RPM Motors TEFC



W-1902-P QUAD DUAL SIDE GRINDER

OPTIONS

Totalizer Counter	W-70
Double Cuts Saw Carrier for Machine:	W-1550
Short Band Saw Support Assembly:	W-2083
Narrow Band Saw Carrier 2" to 6":	W-2190
Sliver Tooth Saw Carrier (4 Required):	W-2231-1
Stands:	W-2259 Back Feed W-2260 Back Stands W-2262 Guide Stands
Double Cuts Saw Carrier for Back Stands:	W-2265

COMMON REPLACEMENT PARTS

Coolant Nozzle	W-1294
Feed Finger Assy	W-2186-1



W-1902-P QUAD DUAL SIDE GRINDER

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

1. Clean the machine regularly.
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 internal parts of the machine and cause rusting problems which is not covered by warranty.

MAINTENANCE

DAILY

1. Check coolant level and filter.
2. Clean exterior of machine.
3. Check hydraulic oil level. (periphery grinder)

WEEKLY

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

MONTHLY or 100,000 CYCLES

1. Grease index linear bearing.
2. Inspect feed finger for wear.
3. Inspect clamp jaws for wear.
4. Inspect roller hold down bearings.

EVERY 6 MONTHS or 500,000 CYCLES

1. Clean motor fan.
2. Remove stainless splash guards and clean completely.
3. Inspect index system linear slide bearing assembly for excessive clearance.



W-1902-P QUAD DUAL SIDE GRINDER

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 pump plugs into female receptacle on back door of the machine.

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.

STYLE OF GRINDING WHEELS

FINISHING WHEELS

B-35-6

6" X 1/8"X 1-1/4"

2 Required

GRINDING WHEELS MUST BE RATED FOR 5000 RPM OR THE RPM OF YOUR MACHINE.

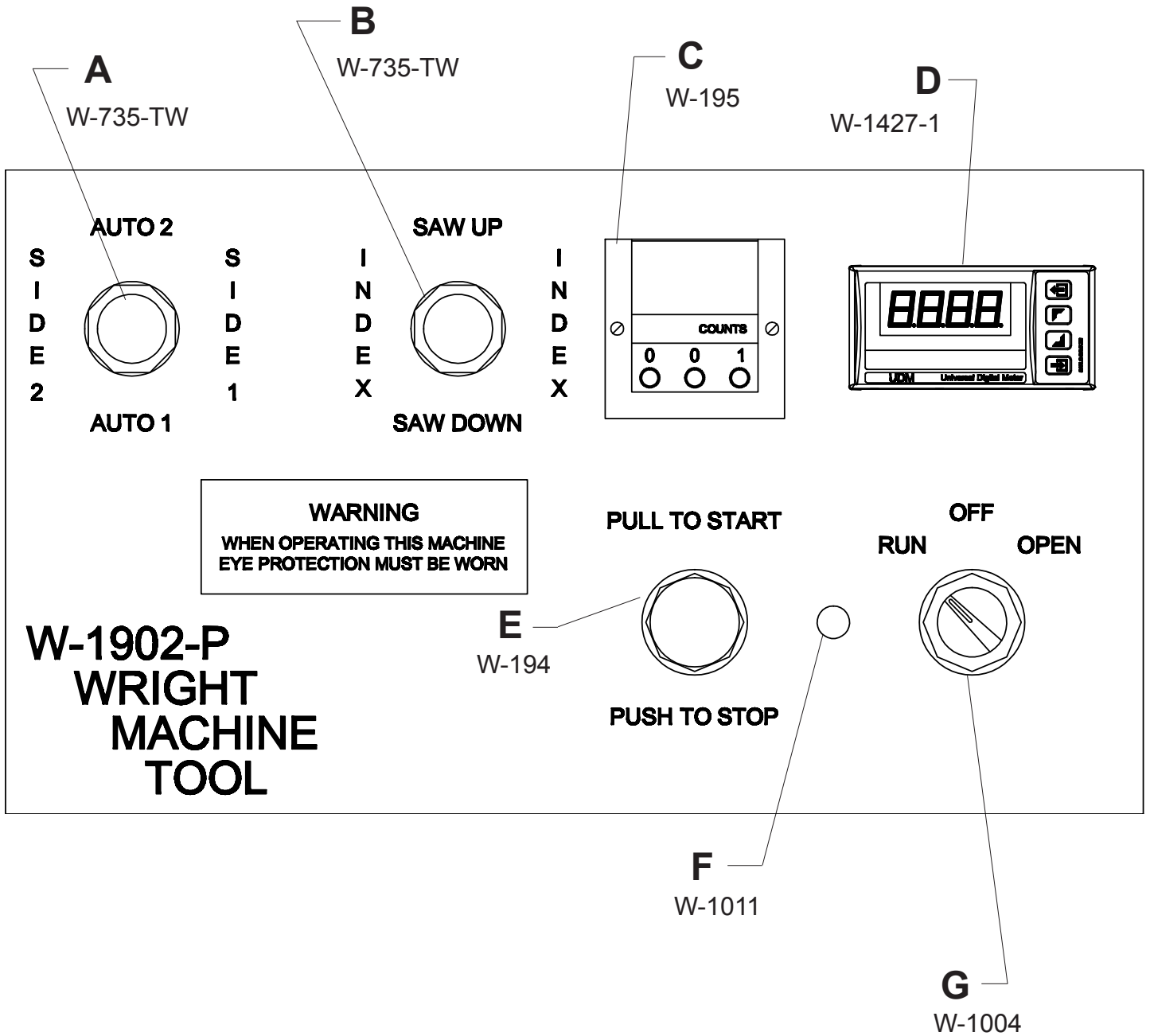
NOTE: Power must be disconnected to machine when changing Grinding Wheels.

To change Grinding Wheels remove wheel guards, use 1/8" allen wrench to remove screws that hold the wheel nut in place.



W-1902-P QUAD DUAL SIDE GRINDER

CONTROL PANEL



W-1902-P QUAD DUAL SIDE GRINDER

CONTROL PANEL

- A.** Control Joy Switch has 5 positions. Left for side #2 (Manual Finish Head In only), right for side #1 (Manual Rough In only), down for Automatic #1 (Rough Grind only) up is for Automatic #2 (Rough and Finish Grind only.) Machine must be running for these controls to work.
- B.** Saw Up / Saw Down only function when saw clamp is open. Index Forward / Reverse only function when saw clamp is closed and machine is not running.
- C.** Tooth Counter only counts in the Automatic #2 position.
- D.** The Load Meter monitors the power required to grind with the periphery Heads. The Load Meter is set by accessing the **SET** and the **HYS** screens. The meter controls the set point which is a nominal amp draw with no grind load. The hysteresis is what established the amp draw during the grind, which suspends forward grind motion if the Finish Head hits a tooth that is wider than expected, this load meter will slow the speed as necessary to reduce the chance of wheel or saw damage.
- E.** Pull to start - Push to stop.
- F.** Indicator light shows power to machine.
- G.** Open position - Opens saw clamp jaws. Run position - Closes clamp jaws and allows the machine to be started. When machine is not in use turn to Off position.









W-1902-P QUAD DUAL SIDE GRINDER


LOAD METER

 ENTER
  VALUE / SCROLL
  DECIMAL / EXIT

HOLD ENTER FOR 2 SECONDS → **PASS** → **0000** PRESS ENTER

	SCROLL →	InP	PRESS ENTER				
		rAnG		→	r3	PRESS ENTER	
		tYPE		→	trnS	PRESS ENTER	
		intt		→	Auto	PRESS ENTER	
	SCROLL →	COLr	PRESS ENTER	→	GrEn	PRESS ENTER	
	SCROLL →	SCAL	PRESS ENTER	→	LoE	→	0000 PRESS ENTER
					Hi E	→	5000 PRESS ENTER
					dP	→	1111 PRESS ENTER
					Lod	→	0000 PRESS ENTER
					Hi d	→	5000 PRESS ENTER
	SCROLL →	L in	PRESS ENTER	→	nonE	PRESS ENTER	
	SCROLL →	SP.1	PRESS ENTER	→	LoS	→	0500 PRESS ENTER
					Hi .S	→	5000 PRESS ENTER
					SEt	→	3200 PRESS ENTER
					HYS	→	3200 PRESS ENTER
					oFFd	→	0000 PRESS ENTER
					ond	→	0000 PRESS ENTER
					rLY	→	nd PRESS ENTER
					ALr	→	oFF PRESS ENTER
					colr	→	rEd PRESS ENTER
					SP.1		
	SCROLL →	SP.2	REPEAT FOR		SP.2		

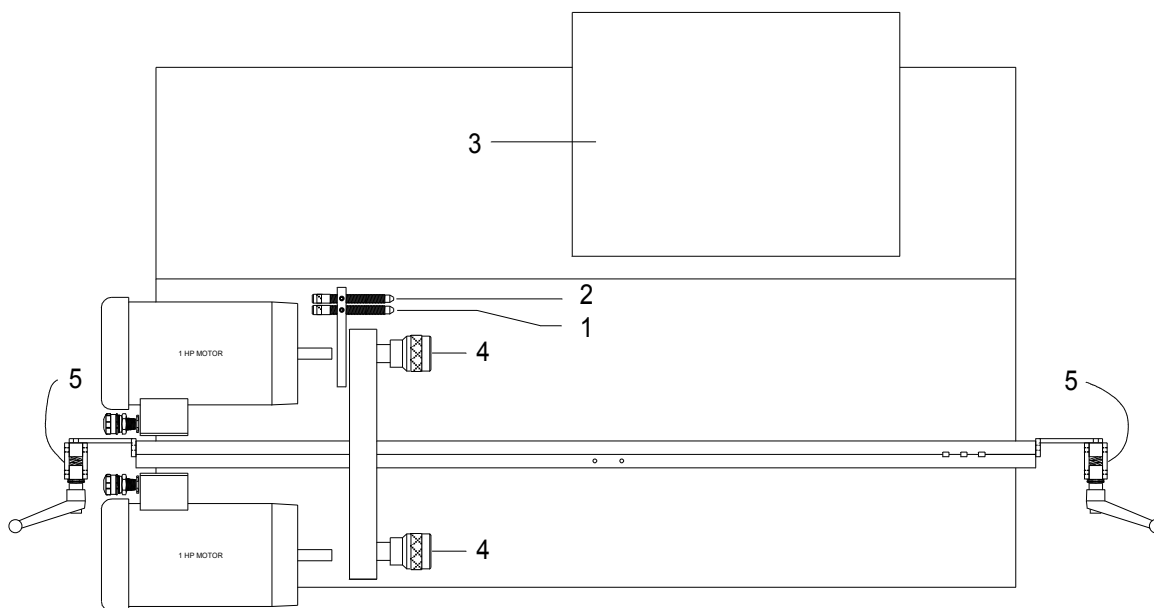
NO NEED TO ENTER PARAMETERS WHEN FINISHED

PRESS EXIT  → RETURNS TO DISPLAY



W-1902-P QUAD DUAL SIDE GRINDER

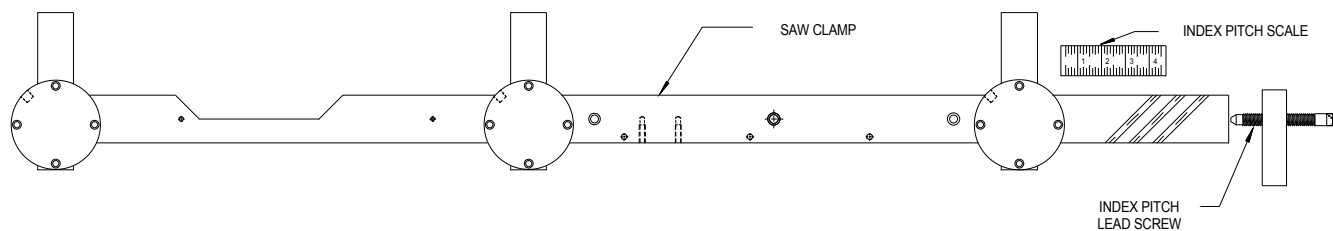
MACHINE CONTROLS (top view)



1. Depth of grind Finish Head.
2. Adjusts the start of the slow speed.
3. Control Console.
4. In-Feed knobs (2).
5. Band Saw hold downs (2).

SETTING INDEX PITCH

To set Index Tooth Pitch, adjust index pitch lead screw using index pitch scale for tooth spacing.



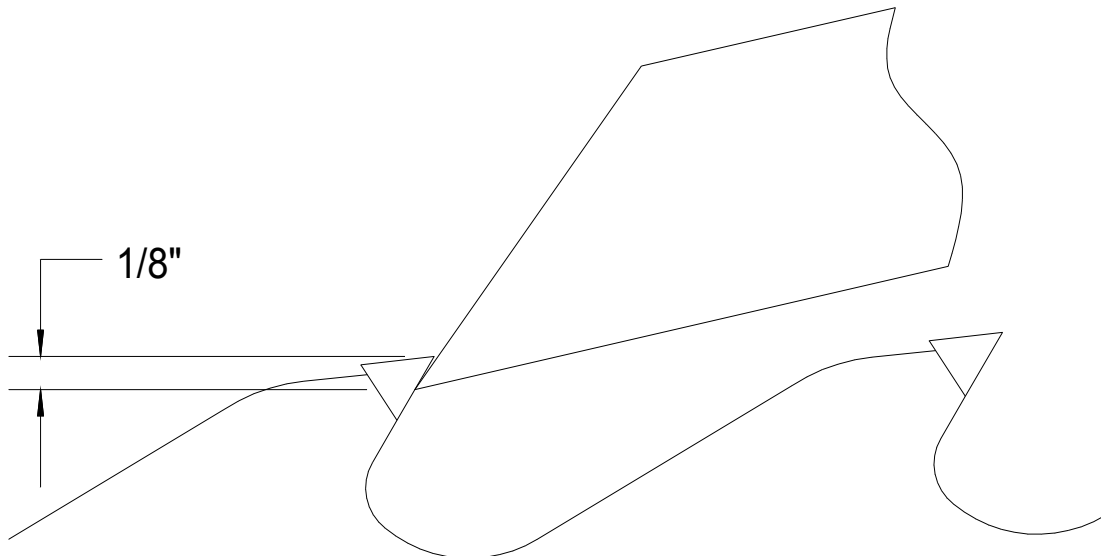
W-1902-P QUAD DUAL SIDE GRINDER

LOADING SAW

1. Turn Switch (G) to Open. Move Saw carrier Down by moving Switch (B) to Saw Down.
2. Place saw in carrier track. Move Switch (B) to Saw Up. As saw is traveling up through the Clamp Jaws, make certain that the Index Fingers are over a gullet. Otherwise the fingers and saw tooth may be damaged.

HANDS MUST BE KEPT CLEAR OF PINCH POINTS DURING THIS OPERATION

3. The band saw is in the proper position when the tooth is $1/8$ " above the Index Finger.



NOTE: The more accurate the height is set, less variation in Kerf will be experienced. If the tooth is placed higher a wider Kerf will occur. If lower, a narrower Kerf will occur.

W-1902-P QUAD DUAL SIDE GRINDER

LOADING SAW SET UP (CONTINUED)

4. Tighten Band Saw Hold Down at each end of the Saw Clamp Bar. If too tight the index will not be able to slide back, and if too loose the band saw will lift up when indexing.
5. After making sure the Index Finger is in the gullet, turn Switch (G) to Run. This will close the Clamp Jaws. Move Joy Switch (B) to the left until a tooth passes the Index Finger. Then allow Joy Switch (B) to return to center position.
6. At this time a saw tooth should be against the Index Fingers. If the index stroke is insufficient, adjust as shown on page 10
7. Set Tooth Counter (C) on the number of teeth to be ground.
8. Place Joy Switch (A) in center position, pull Start button.
9. After coolant flow is on tip, place Joy Switch (A) into Automatic #1.
10. The grinding head will travel down and grind a tooth. Set speed and stroke as necessary.
11. Adjust In-Feed knobs as necessary on the grinding head to achieve desired finish kerf width. Set speed and stroke as necessary.



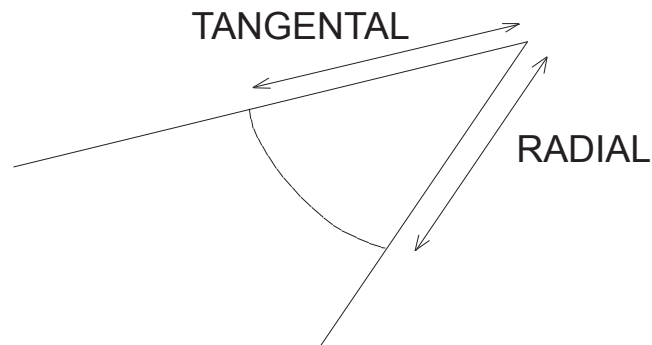
W-1902-P QUAD DUAL SIDE GRINDER

TOOTH GEOMETRY

The W-1904 is set at what we consider **AVERAGE** tooth angles when it leaves our factory.

FINISH HEAD

30 Degree Hook - 8 Degree Back 3 Degree Tangential 3 Degree Radial



W-1902-P QUAD DUAL SIDE GRINDER

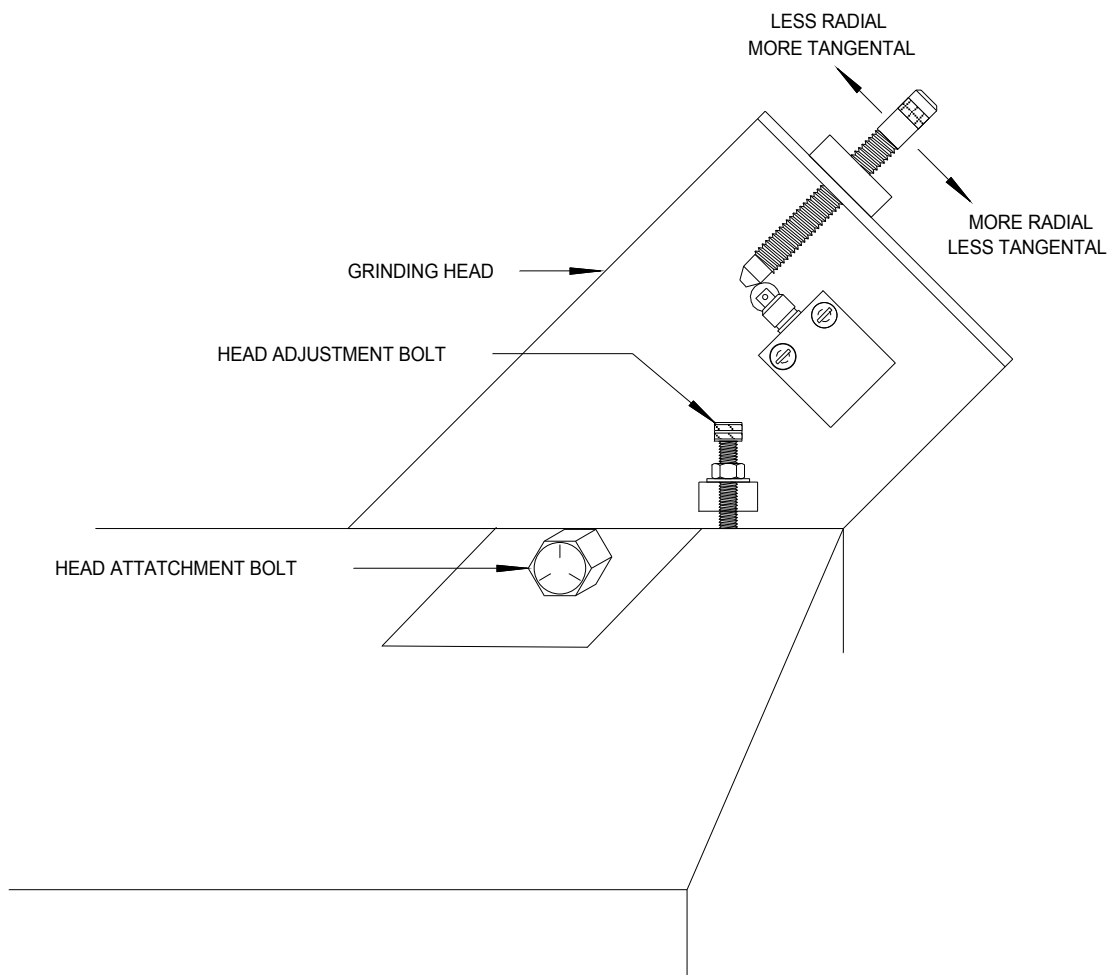
TOOTH GEOMETRY FINISH HEAD

30 Degree Hook - 8 Degree Back 3 Degree Tangential 3 Degree Radial
INCREASE RADIAL ANGLE VS TANGENTIAL ANGLE

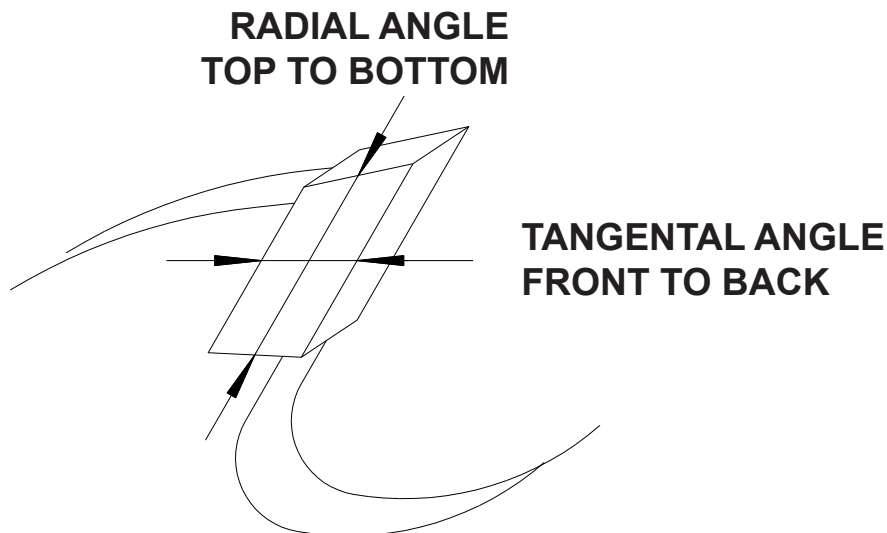
Loosen bolts that attach head to base and rotate head using adjustment bolt.

INCREASE RADIAL AND TANGENTIAL ANGLE

Loosen feed finger tower bolts and move tower to the right to increase both angles. Move tower to the left to decrease angles. Rotating head clockwise increases radial angle and decreases tangential angle. Rotating head counter-clockwise increases tangential angle and decreases radial angle.



W-1902-P QUAD DUAL SIDE GRINDER



CONVERSION CHART

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

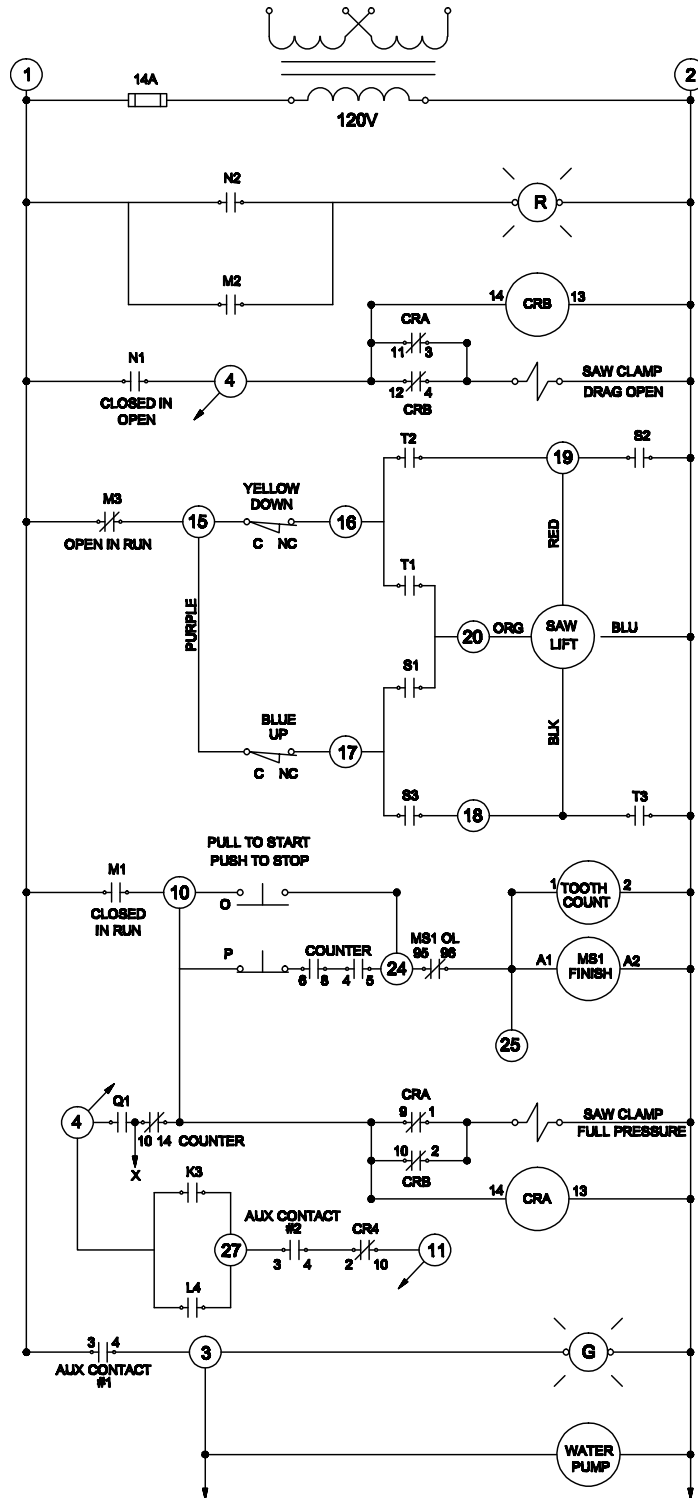
To convert degrees to thousandths, select degrees required on line (A). Example: 3.5 degrees. On line (B) select length of measurement. Example: .375 for a 3/8 tip. Where 3.5 degrees and .375 intersect is drop off in thousandths of an inch.

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)												



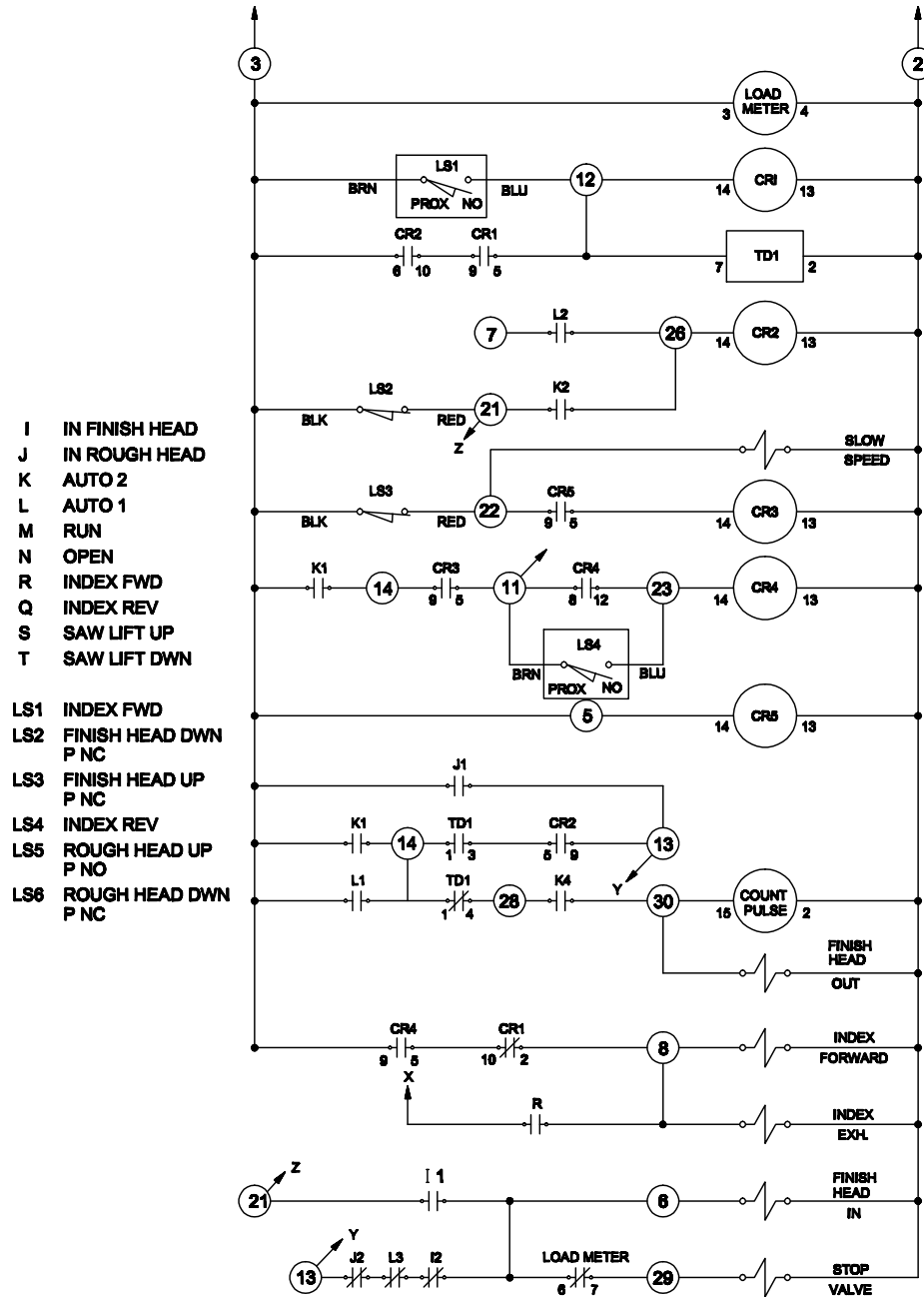
W-1902-P QUAD DUAL SIDE GRINDER

ELECTRICAL SCHEMATICS



W-1902-P QUAD DUAL SIDE GRINDER

ELECTRICAL SCHEMATIC



- I IN FINISH HEAD
- J IN ROUGH HEAD
- K AUTO 2
- L AUTO 1
- M RUN
- N OPEN
- R INDEX FWD
- Q INDEX REV
- S SAW LIFT UP
- T SAW LIFT DWN

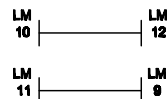
- LS1 INDEX FWD
- LS2 FINISH HEAD DWN
P NC
- LS3 FINISH HEAD UP
P NC
- LS4 INDEX REV
- LS5 ROUGH HEAD UP
P NO
- LS6 ROUGH HEAD DWN
P NC

LM-1 TO MS-1 T-2

LM-2 TO WHITE WIRES
ON FINISH HEADS

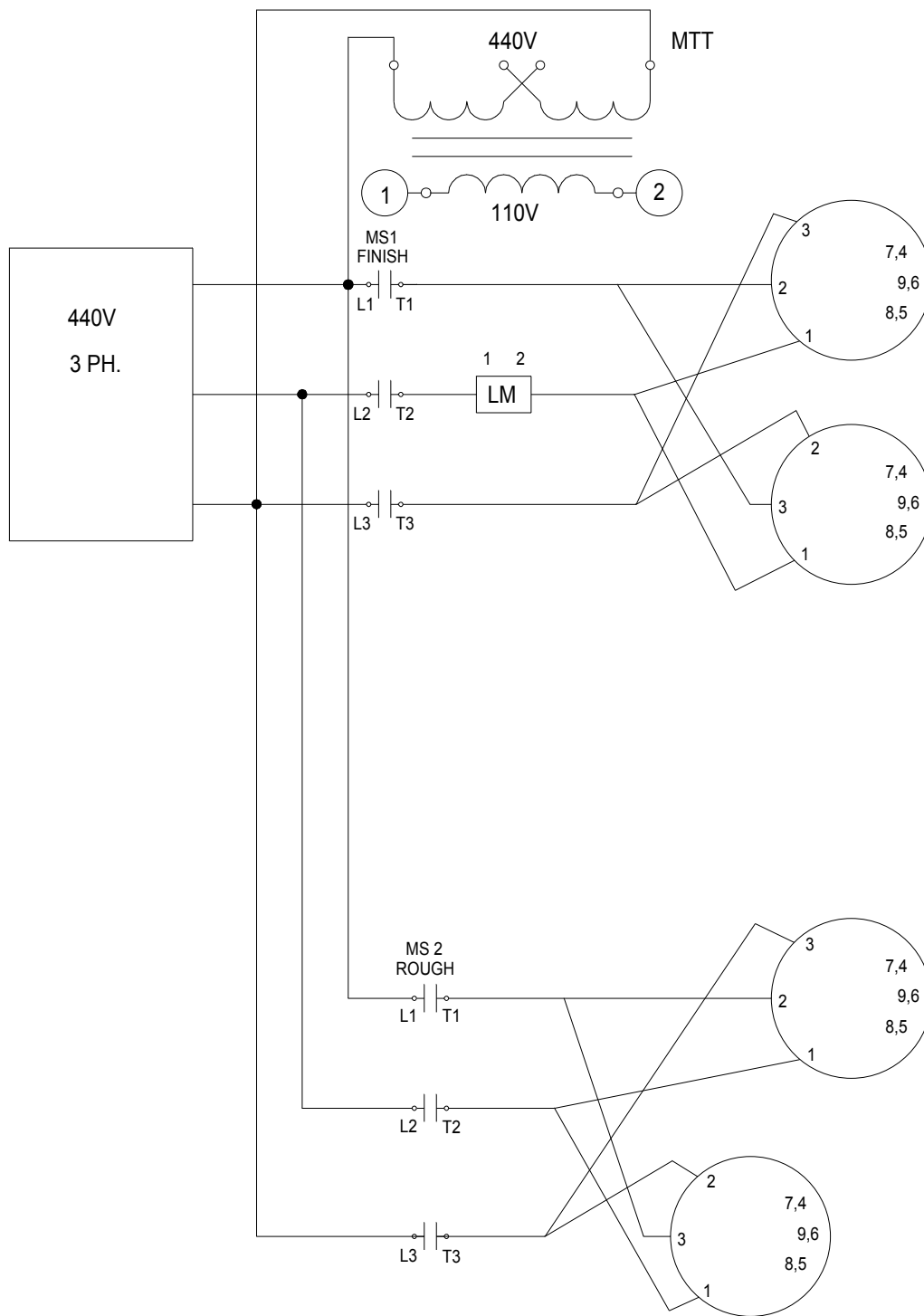
LOAD METER WIRES ARE
ORANGE 12GA. 126" LG.

GROUND WIRES ARE
GREEN 12GA. 9' LG.



W-1902-P QUAD DUAL SIDE GRINDER

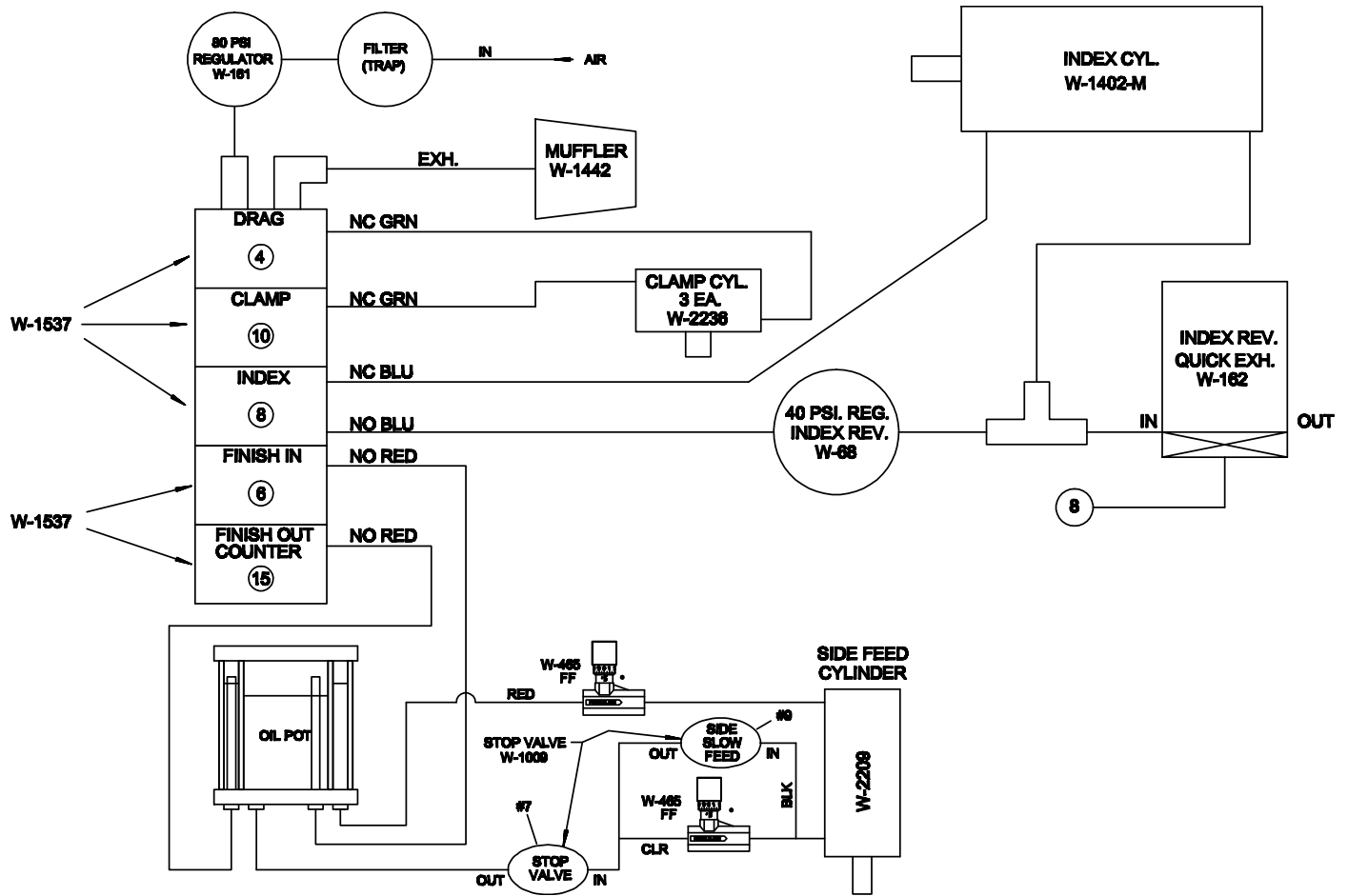
ELECTRICAL SCHEMATIC



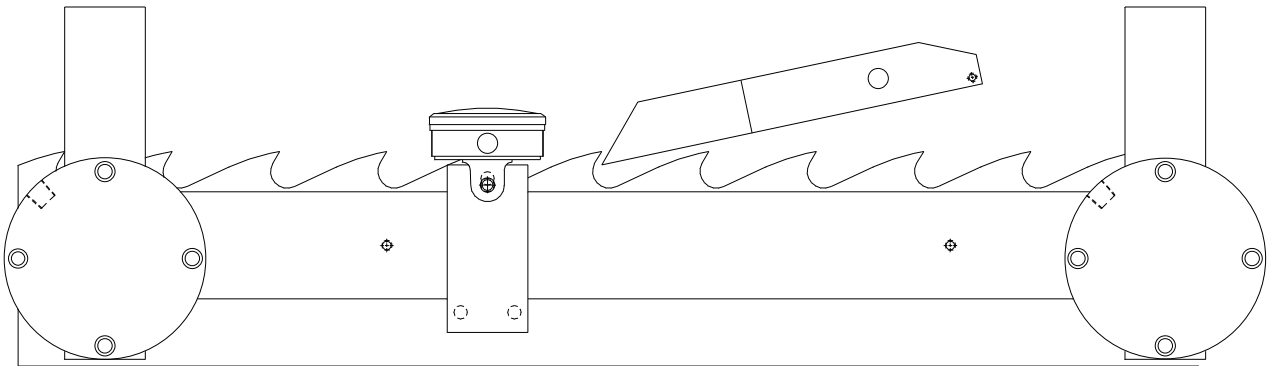
WM **W** RIGHT **M** MACHINE

W-1902-P QUAD DUAL SIDE GRINDER

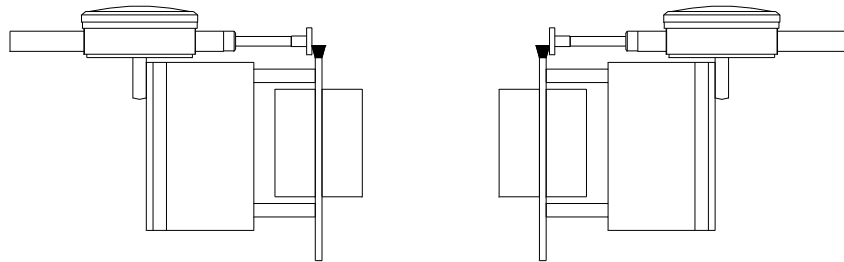
AIR SCHEMATIC



W-1902-P QUAD DUAL SIDE GRINDER



**NOTE: USE SIDE DIAL INDICATOR WITH CLAMP
JAWS CLOSED.
THIS WILL INSURE PROPER MEASUREMENT.**



W-1902-P QUAD DUAL SIDE GRINDER

PARTS LIST

This parts list is broken down into various areas within the machine. Each following area has part numbers that start on the first page with an assembly view on the following page.

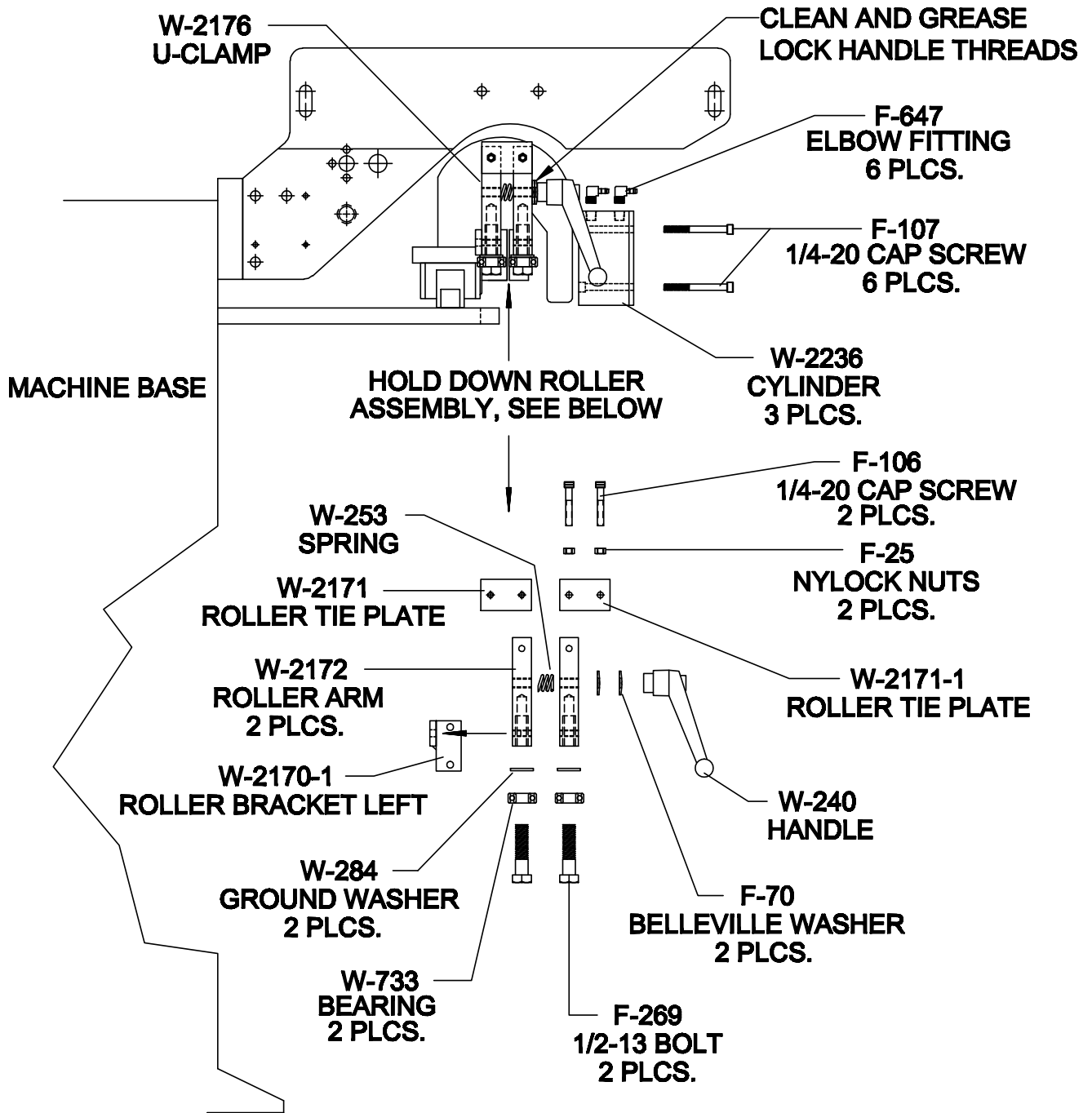
LEFT END OF BASE (OUTSIDE)

QTY	PART NUMBER	DESCRIPTION
2	F-25	NYLOCK NUTS
2	F-70	BELLEVILLE WASHER
2	F-106	1/4-20 SOCKET HEAD CAP SCREW
6	F-107	1/4-20 SOCKET HEAD CAP SCREW
2	F-269	1/2-13 BOLT
6	F-647	ELBOW FITTING
1	W-240	HANDLE
1	W-253	COMPRESSION SPRING
2	W-284	GROUND WASHER
2	W-733	BEARING
1	W-2170-1	ROLLER BRACKET LEFT
1	W-2171	ROLLER TIE PLATE
1	W-2171-1	ROLLER TIE PLATE
2	W-2172	ROLLER ARM
1	W-2176	U-CLAMP
3	W-2236	AIR CYLINDER



W-1902-P QUAD DUAL SIDE GRINDER

LEFT END OF BASE (OUTSIDE)



W-1902-P QUAD DUAL SIDE GRINDER

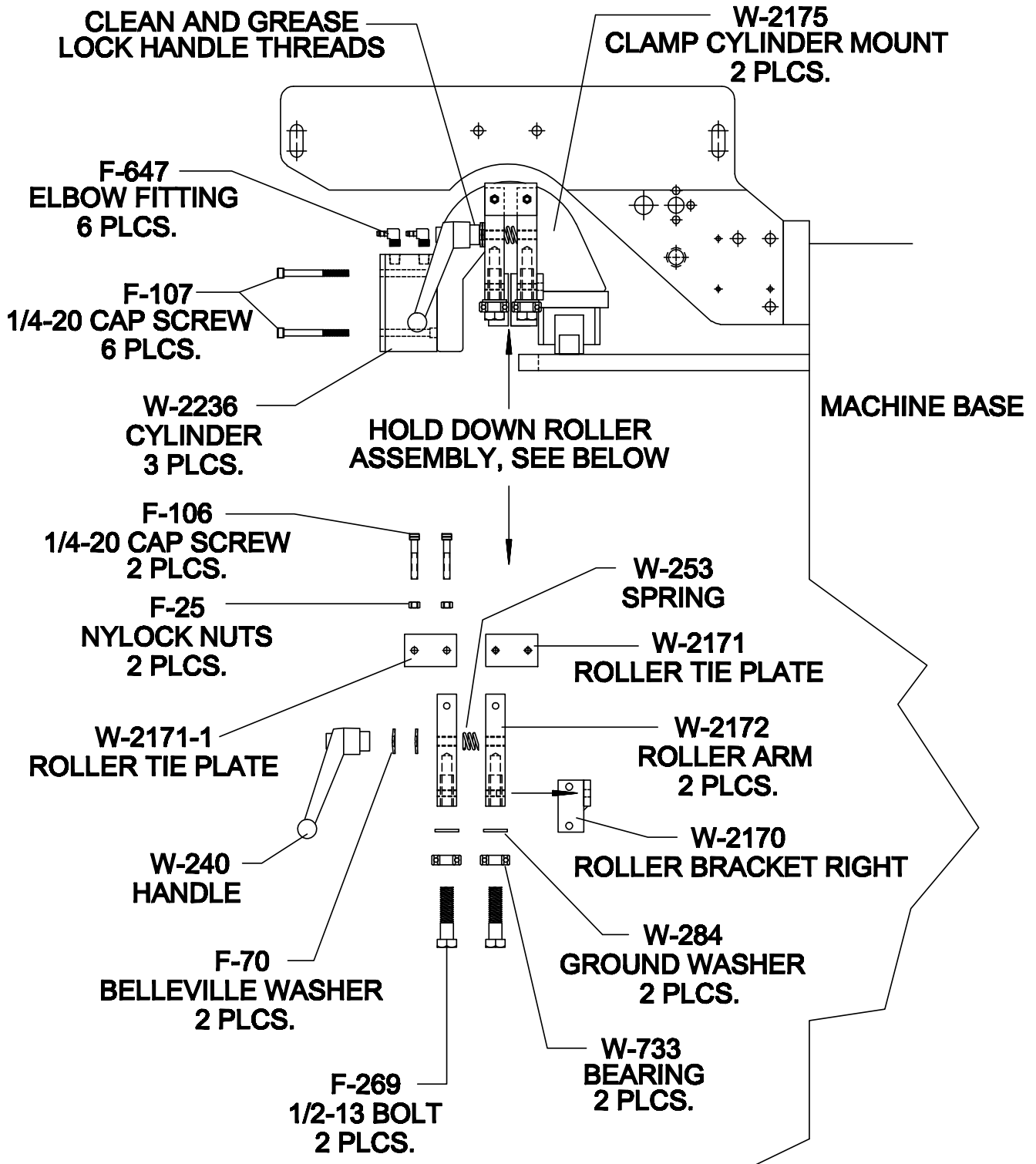
RIGHT END OF BASE (OUTSIDE)

QTY	PART NUMBER	DESCRIPTION
2	F-25	NYLOCK NUTS
2	F-70	BELLEVILLE WASHER
2	F-106	1/4-20 SOCKET HEAD CAP SCREW
6	F-107	1/4-20 SOCKET HEAD CAP SCREW
2	F-269	1/2-13 BOLT
6	F-647	ELBOW FITTING
1	W-240	HANDLE
1	W-253	COMPRESSION SPRING
2	W-284	GROUND WASHER
2	W-733	BEARING
1	W-2170	ROLLER BRACKET RIGHT
1	W-2171	ROLLER TIE PLATE
1	W-2171-1	ROLLER TIE PLATE
2	W-2172	ROLLER ARM
2	W-2175	CLAMP CYLINDER MOUNT
3	W-2236	AIR CYLINDER



W-1902-P QUAD DUAL SIDE GRINDER

RIGHT END OF BASE (OUTSIDE)



W-1902-P QUAD DUAL SIDE GRINDER

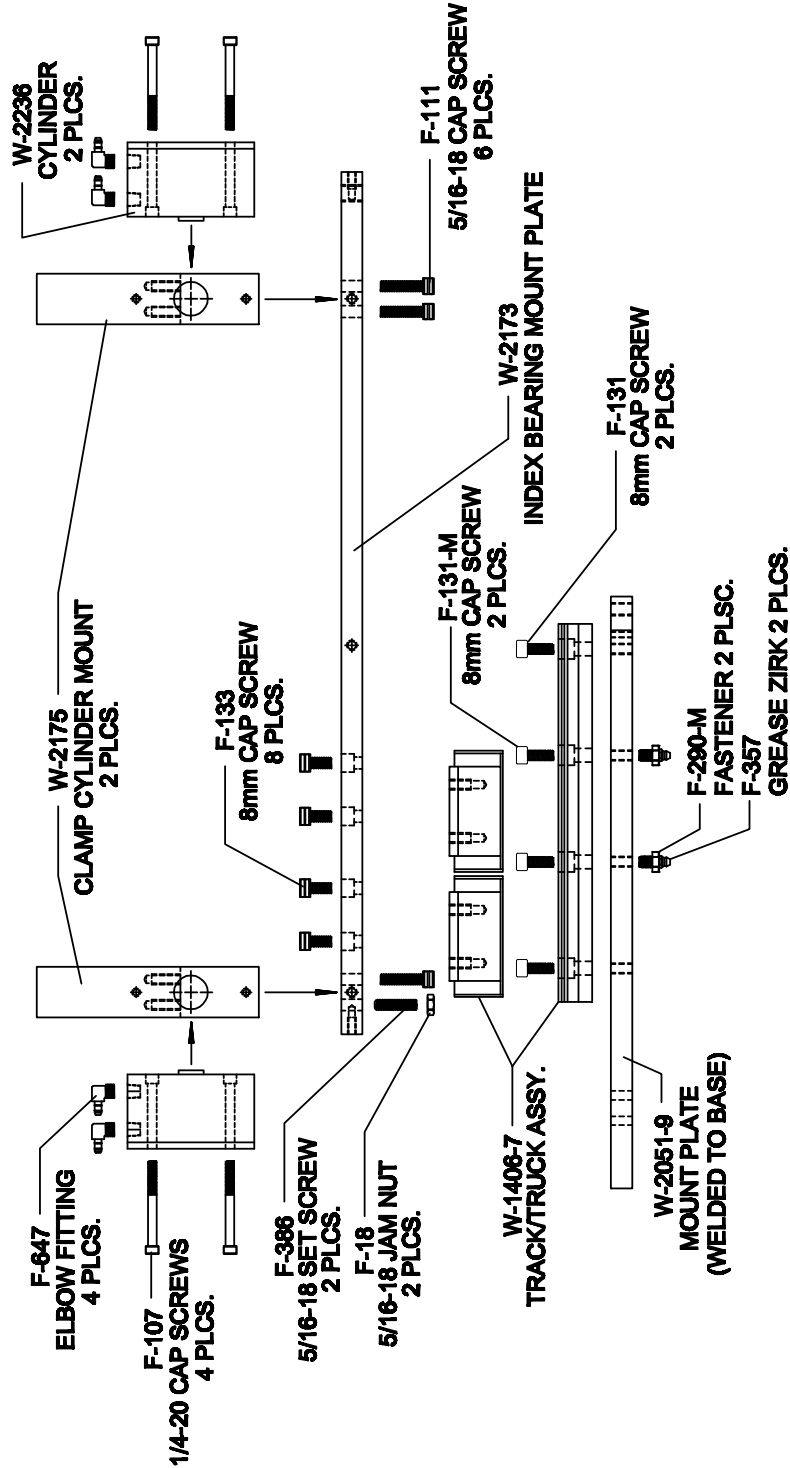
CLAMP FEED SYSTEM

QTY	PART NUMBER	DESCRIPTION
2	F-18	5/16-18 JAM NUT
4	F-107	1/4-20 CAP SCREW
6	F-111	5/16-18 CAP SCREW
4	F-131	8mm CAP SCREW
8	F-133	8mm CAP SCREW
2	F-386	5/16-18 SET SCREW
4	F-647	ELBOW FITTING
1	W-1406-7	TRACK/TRUCK ASSEMBLY
1	W-2051-9	MOUNT PLATE
1	W-2173	INDEX BEARING MOUNT PLATE
2	W-2175	CLAMP CYLINDER MOUNT
2	W-2236	AIR CYLINDER



W-1902-P QUAD DUAL SIDE GRINDER

FRONT VIEW OF CLAMP FEED SYSTEM



W-1902-P QUAD DUAL SIDE GRINDER

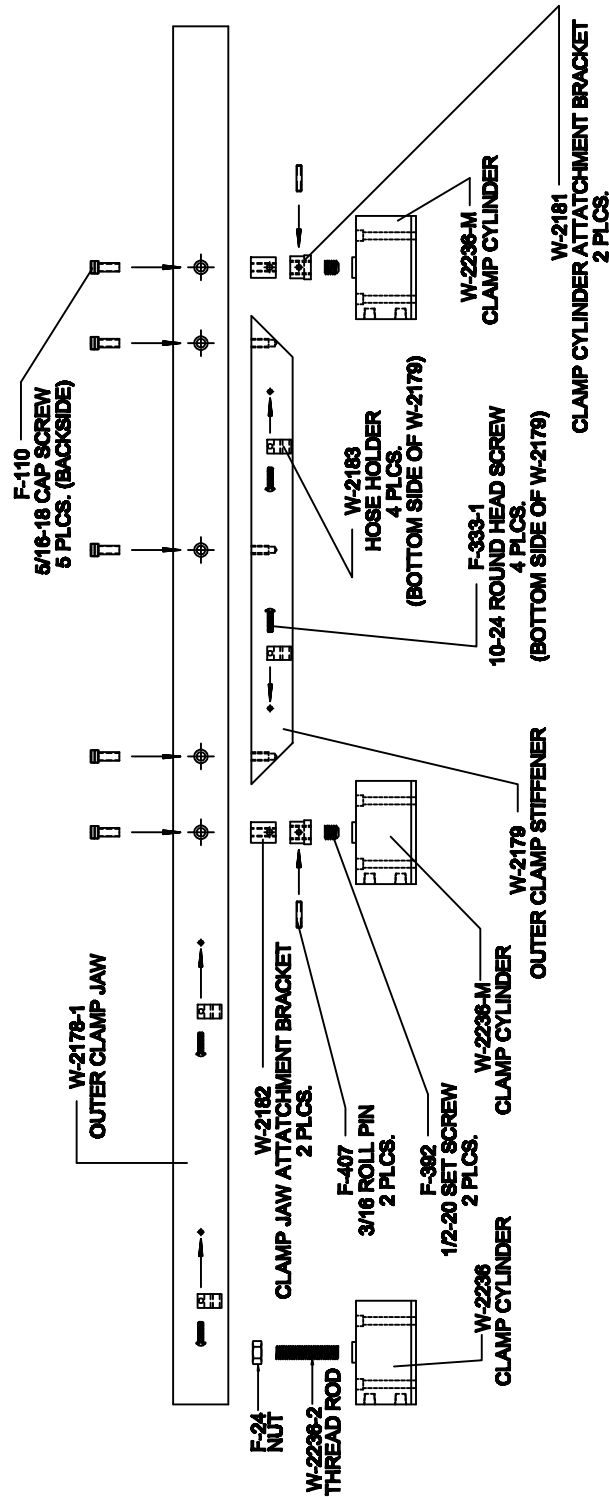
CLAMP ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	F-24	1/2-20 NUT
5	F-110	5/16-18 CAP SCREW
2	F-392	1/2-20 SET SCREW
4	F-333-1	10-24 ROUND HEAD SCREW
2	F-407	3/16 ROLL PIN
1	W-2178-1	OUTER CLAMP JAW
1	W-2179	OUTER CLAMP STIFFENER
2	W-2181	CLAMP CYLINDER ATTACHMENT BRACKET
2	W-2182	CLAMP JAW ATTACHMENT BRACKET
4	W-2183	HOSE HOLDER
1	W-2236	CLAMP CYLINDER
2	W-2236-M	CLAMP CYLINDER
1	W-2236-2	CYLINDER ADJUSTMENT BOLT



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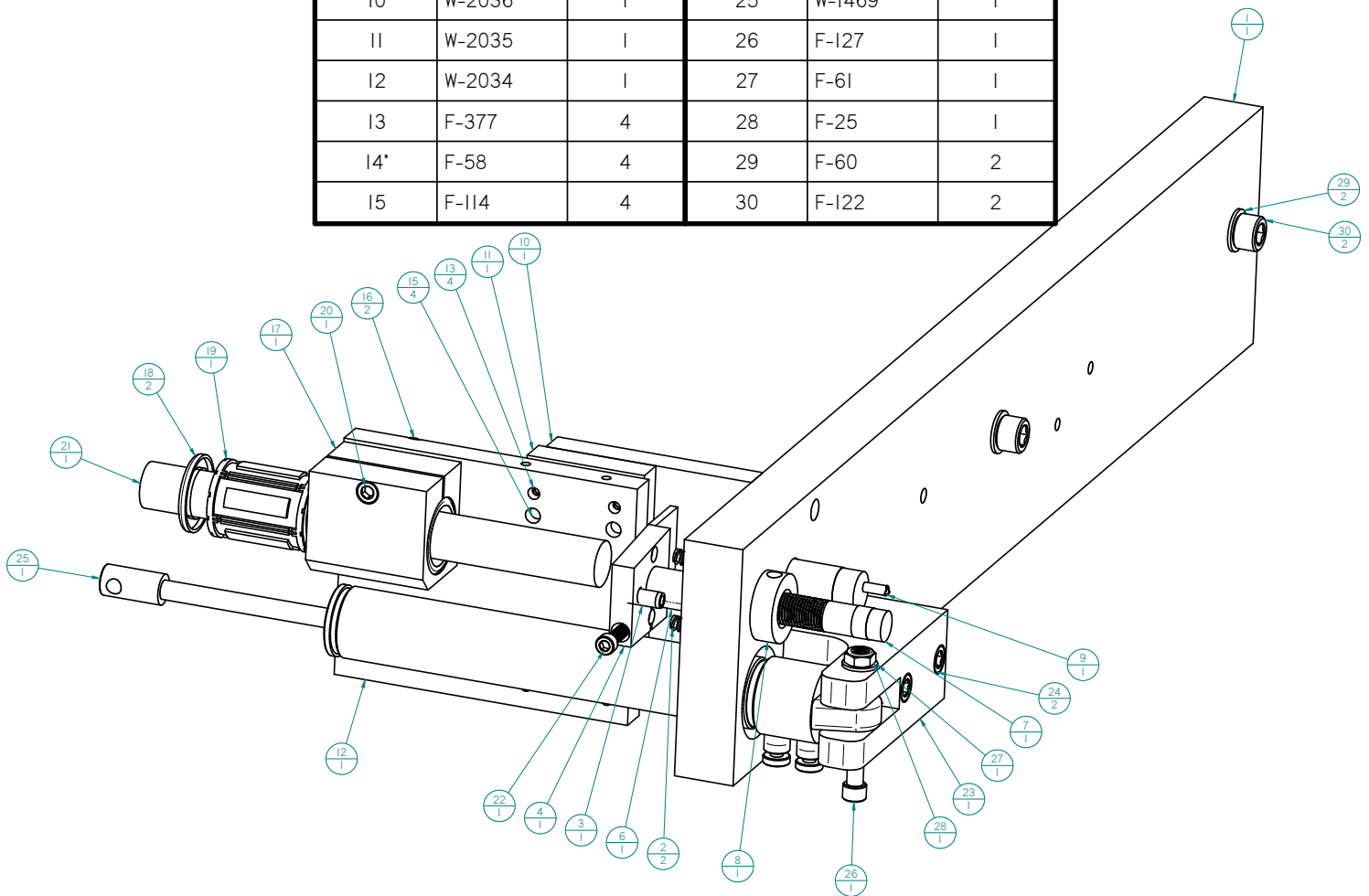
TOP VIEW OF CLAMP ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

INDEX ASSEMBLY

Item Number	PART #	Quantity	Item Number	PART #	Quantity
1	W-2031	1	16	F-313	2
2	W-382	2	17	C-5053	1
3	F-410	1	18	W-513	2
4	W-2452	1	19	W-514	1
5*	F-378	1	20	F-102	1
6	W-2453	1	21	W-508	1
7	W-2124	1	22	F-140	1
8	W-2454	1	23	W-2032	1
9	W-1404	1	24	F-113-1	2
10	W-2036	1	25	W-1469	1
11	W-2035	1	26	F-127	1
12	W-2034	1	27	F-61	1
13	F-377	4	28	F-25	1
14*	F-58	4	29	F-60	2
15	F-114	4	30	F-122	2



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

W-1902-P QUAD DUAL SIDE GRINDER

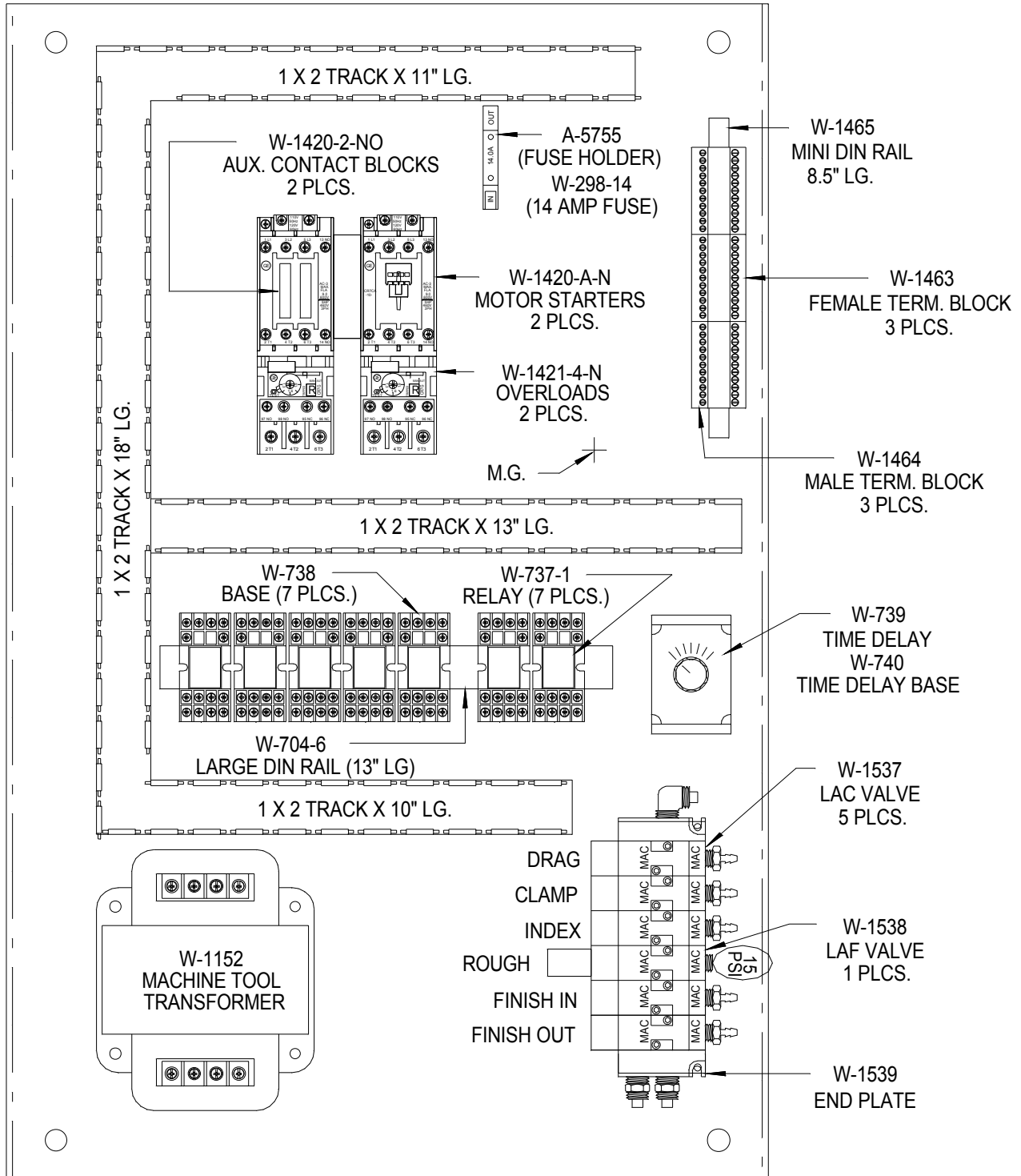
SUB PANEL ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	A-5755	FUSE HOLDER
2	F-11	10-24 NUT
18	F-56	#10 SAE WASHER
18	F-333	10-24 X 3/8 SCREW
1	F-337	10-24 X 1-1/4 SCREW
2	F-345	8-32 X 3/8 SCREW
2	F-357	10-24 X 1-1/2 SCREW
1	W-298-14	14 AMP FUSE
1	W-2202-Q	SHEET METAL PANEL
7	W-737-1	RELAY W/LIGHT
7	W-738	RELAY BASE
13"	W-704-6	LARGE DIN RAIL
1	W-739	TIME DELAY
1	W-740	TIME DELAY BASE
1	W-1152	MACHINE TOOL TRANSFORMER
52"	W-1446	1" X 2" SLA TRACK
2	W-1420-2-NO	AUX. CONTACT BLOCK
2	W-1420-A-N	MOTOR STARTER
2	W-1421-4-N	OVERLOAD
3	W-1463	FEMALE TERMINAL BLOCKS
3	W-1464	MALE TERMINAL BLOCK
8.5"	W-1465	MINI DIN RAIL
5	W-1537	LAC VALVES
1	W-1538	LAF VALVES
1 SET	W-1539	END PLATE



W-1902-P QUAD DUAL SIDE GRINDER

SUB PANEL ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

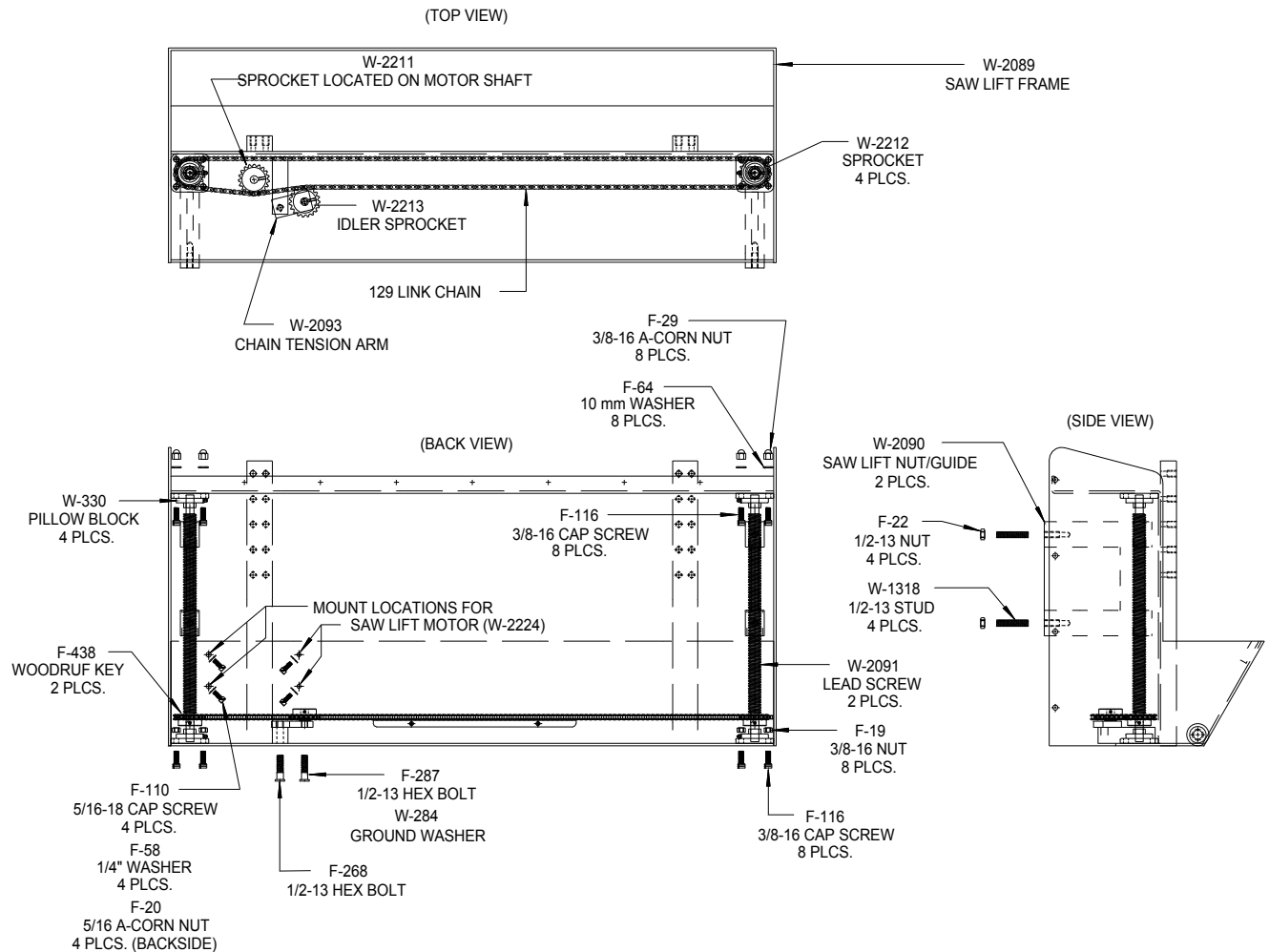
SAW LIFT ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	F-19	3/8-16 NUT
4	F-20	5/16-18 A-CORN NUT
4	F-22	1/2-13 NUT
8	F-29	3/8-16 A-CORN NUT
4	F-58	1/4" WASHER
4	F-110	5/16-18 CAP SCREW
16	F-116	3/8-16 CAP SCREW
1	F-268	1/2-13 HEX BOLT
1	F-287	1/2-13 HEX BOLT
8	F-64	10mm WASHER
2	F-438	WOODRUF KEY
4	W-284	GROUND WASHER
4	W-330	5/8 BORE PILLOW BLOCK
4	W-1318	1/2-13 STUD
1	W-2089	SAW LIFT FRAME
2	W-2090	SAW LIFT NUT/GUIDE
2	W-2091	LEAD SCREW
1	W-2093	CHAIN TENSION ARM
1	W-2211	DRIVE SPROCKET
4	W-2212	SPROCKET
1	W-2213	IDELER SPROCKET
1	W-2224	SAW LIFT DRIVE MOTOR



W-1902-P QUAD DUAL SIDE GRINDER

SAW LIFT ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

SAW CARRIER ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
2	F-170	5/8 X 1-1/4 SHOULDER BOLT
2	F-268	1/2-13 HEX HEAD BOLT
8	F-316	1/2-13 FLAT HEAD BOLT
2	W-2095	SAW ATTACH ROCKER
2	W-2096	ROCKER BUSHING
4	W-2097	FRONT SAW GUIDE
4	W-2231	1/8 X 1/4 X 2 CARBIDE BLANK

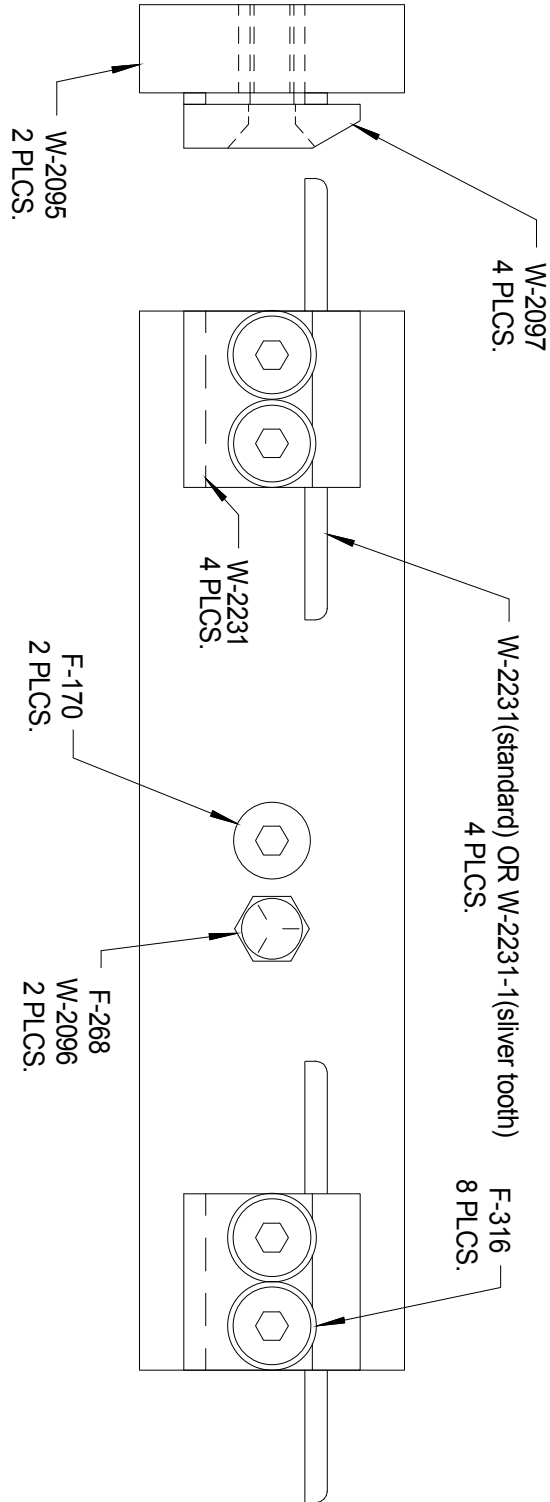


RIGHT

MACHINE

W-1902-P QUAD DUAL SIDE GRINDER

SAW CARRIER ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

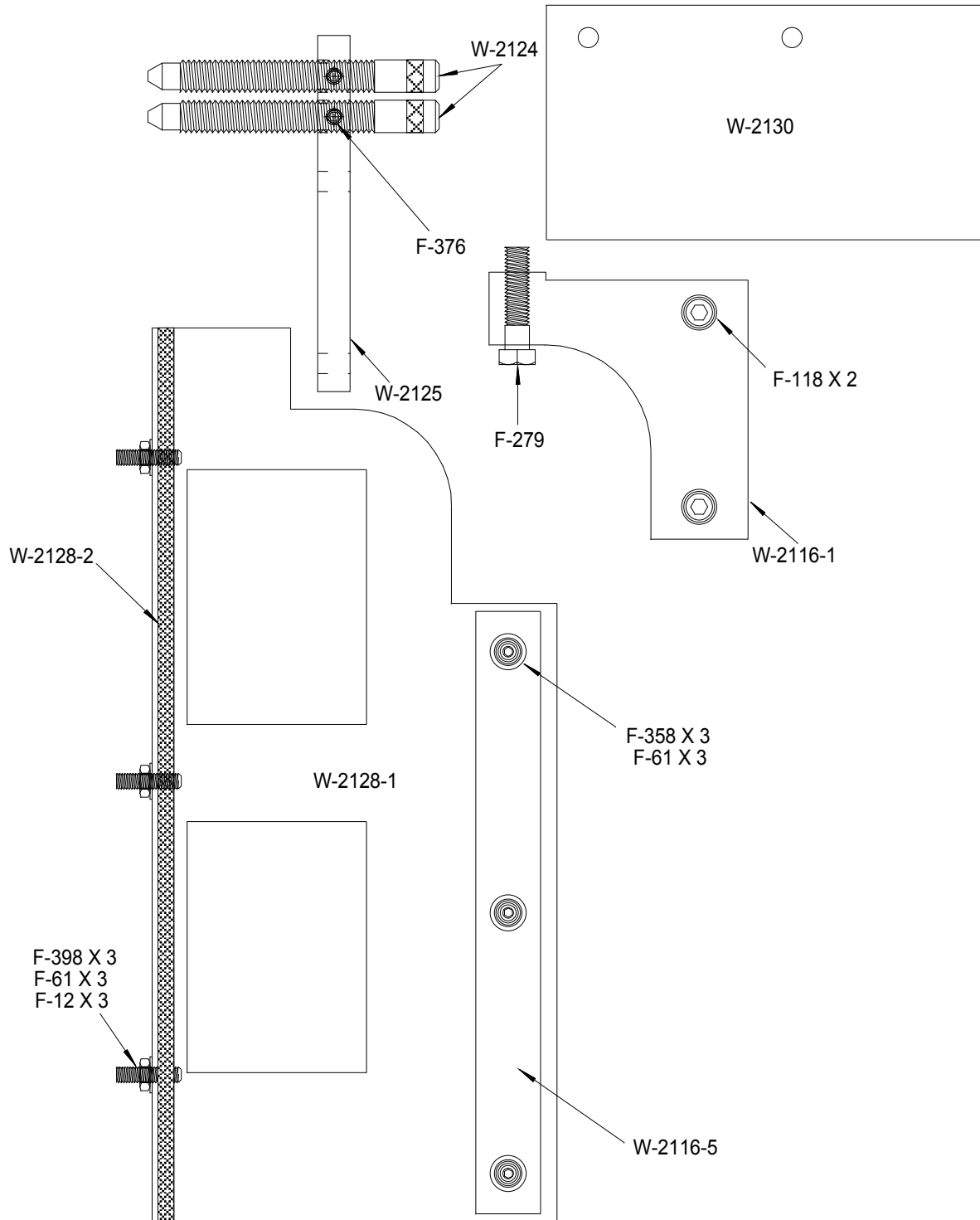
GRINDING HEAD COVERS

QTY	PART NUMBER	DESCRIPTION
3	F-12	1/4-20 JAM NUT
3	F-61	#12 WASHER
2	F-118	3/8 - 16 X 1-1/4 SHCS
1	F-279	3/8 - 16 X 1-1/2 HEX HEAD
3	F-358	1/4-20 X 1/2 BUTTON HEAD
2	F-376	1/4-20 X 1/2 SET SCREW
3	F-398	1/4-20 X 1 SET SCREW
1	W-2116-1	SUPPORT GUSSET
1	W-2116-5	RUBBER FLAP CLAMP
2	W-2124	DEPTH STOP
1	W-2125	STOP BRACKET
1	W-2128-1	BOTTOM COVER
1	W-2128-2	RUBBER FLAP CLAMP
1	W-2130	TRACK COVER



W-1902-P QUAD DUAL SIDE GRINDER

GRINDING HEAD COVERS



W-1902-P QUAD DUAL SIDE GRINDER

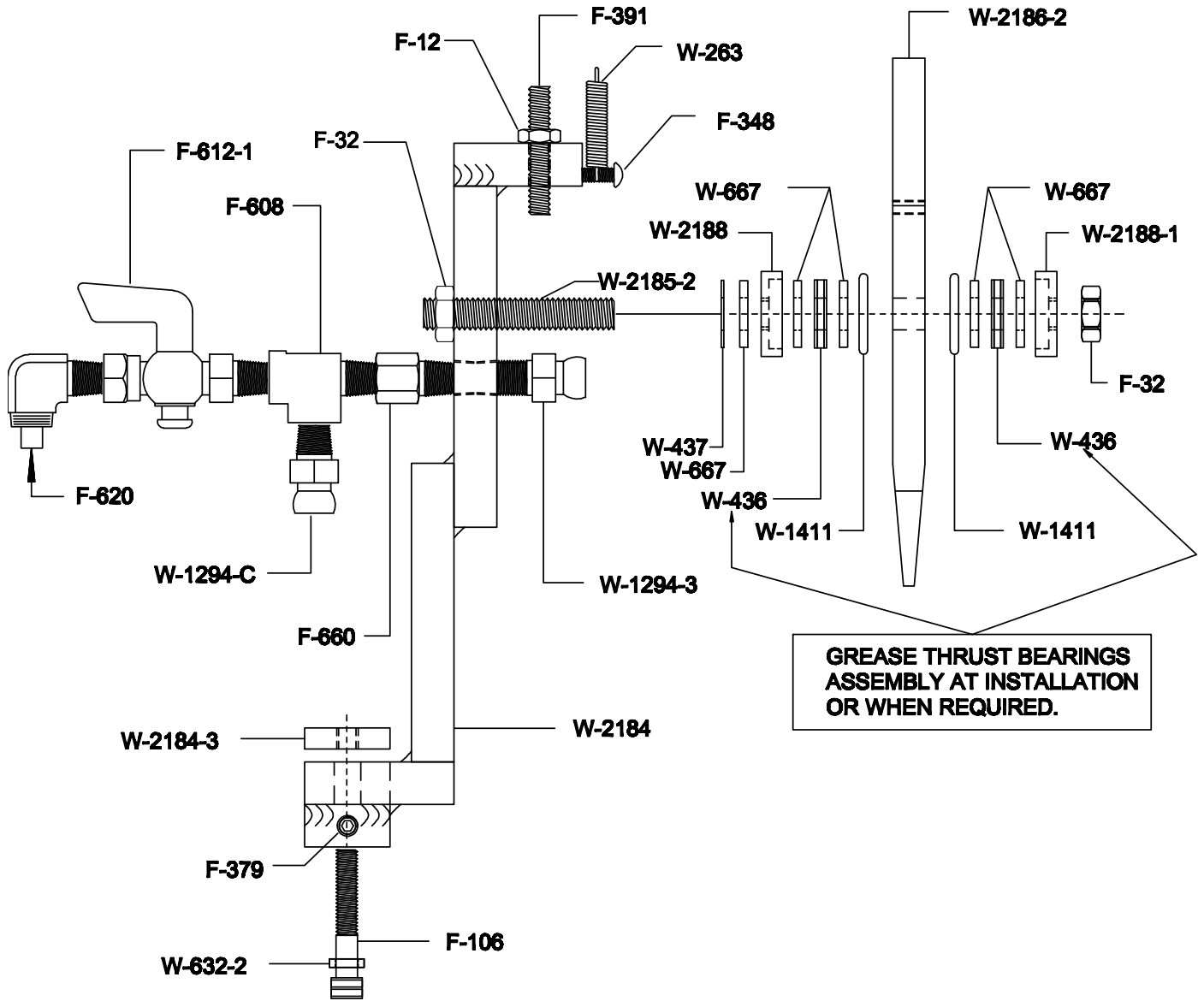
FEED FINGER ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
1	F-12	1/4-20 JAM NUT
1	F-32	3/8-24 JAM NUT
1	F-38	3/8-24 NYLOCK NUT
1	F-102	1/4-20 X 3/4 SHCS
1	F-106	1/4-20 X 1-1/2 SHCS
1	F-379	1/4-20 X 5/8 SET SCREW
1	F-391	1/4-20 X 1-1/2 SET SCREW
1	F-608	FITTING
1	F-612-1	SHUT OFF VALVE 1/4 NPT
1	F-620	ELBOW FITTING
1	F-660	FITTING
1	W-263	SPRING
2	W-436	BEARING
1	W-437	WASHER (BEARING RACE)
1	W-632-2	SPACER
5	W-667	GROUND WASHER
1	W-1294-C	1/8 NPT CONNECTOR
1	W-1294-3	COOLANT FITTINGS
2	W-1411	RUBBER O-RING
1	W-2184	FINGER BRACKET
1	W-2184-3	HOLD DOWN STRAP
1	W-2185	FINGER PIVOT
1	W-2186-2	FEED FINGER
2	W-2188-1	BEARING COVER



W-1902-P QUAD DUAL SIDE GRINDER

FEED FINGER ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

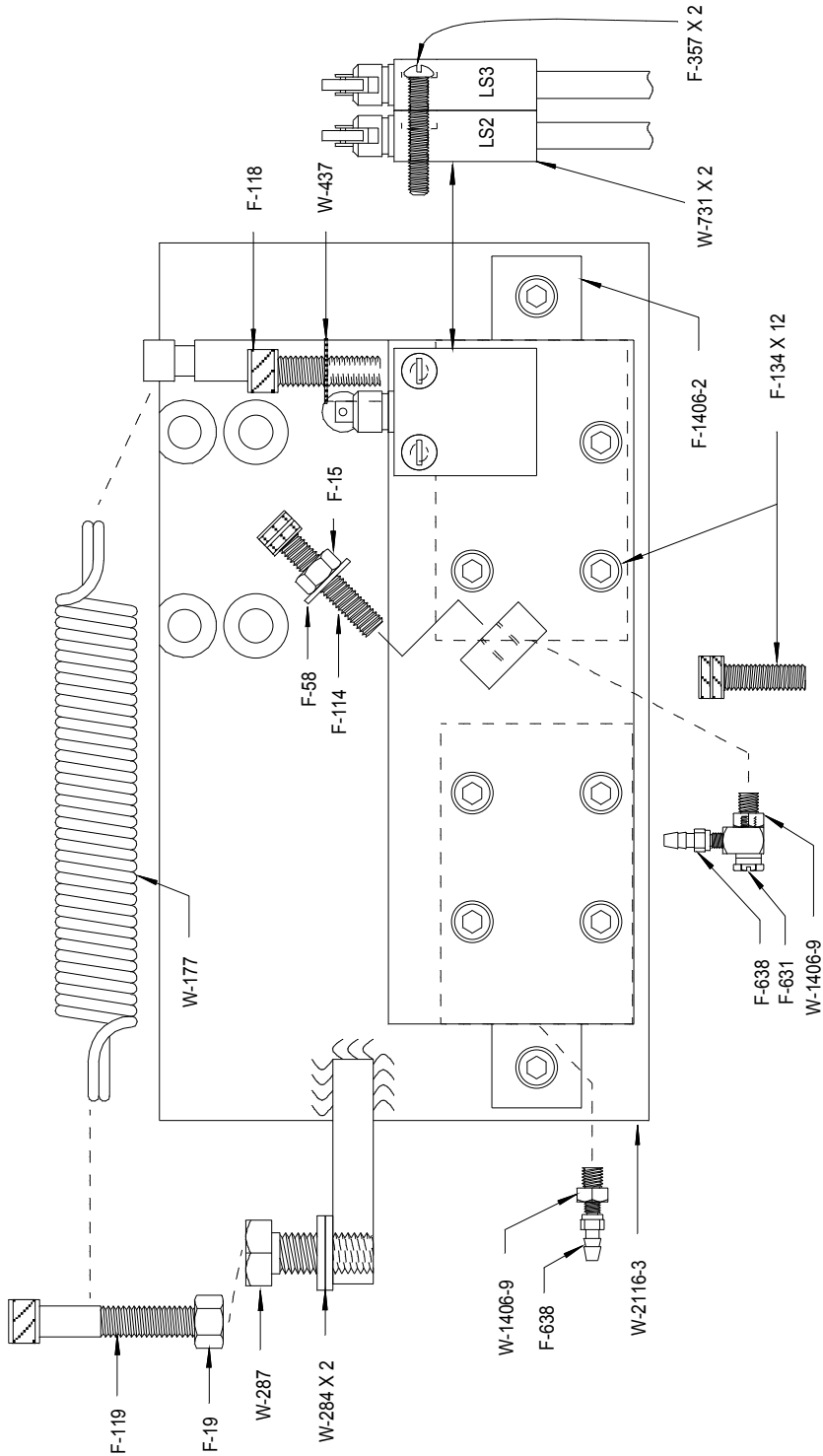
HEAD FEED UP AND DOWN

QTY	PART NUMBER	DESCRIPTION
1	F-15	1/4-20 JAM NUT
1	F-19	3/8-16 NUT
1	F-58	1/4 WASHER
1	F-114	5/16-18 X 1-1/2 SHCS
1	F-118	3/8 - 16 X 1-1/4 SHCS
1	F-119	3/8-16 X 2-1/4 SHCS
12	F-134	8mm X 25mm SHCS
1	F-287	1/2-13 HEX HEAD BOLT
2	F-357	10-24 X 1-1/2 RND HEAD SLOT
1	F-631	FITTING
2	F-638	BARBED FITTING
1	W-177	SPRING
2	W-284	GROUND WASHER
1	W-437	WASHER (BEARING RACE)
2	W-731	MICRO SWITCH
1	W-1406-2	TRUCKS AND RAIL
1	W-1406-9	LUBRICATOR BOLT
1	W-2116-3	TRACK MOUNT



W-1902-P QUAD DUAL SIDE GRINDER

HEAD FEED UP AND DOWN



W-1902-P QUAD DUAL SIDE GRINDER

OIL POT INFEED

QTY	PART NUMBER	DESCRIPTION
1	F-22	1/2-13 JAM NUT
1	F-24	1/2-20 JAM NUT
1	F-31	1/2-13 ACORN NUT
1	F-41	1/2-13 HYDRA-LOK NUT
1	F-42	1/2-20 HYDRA-LOK NUT
2	F-608	FITTING
2	F-614	HEX NIPPLE
5	F-617	BUSHING
4	F-622	1/8 NPT X 3/8 NPT CONNECTOR
2	F-634	1/8 NPT PLUG
2	F-638	BARBED FITTING
1	F-663	NIPPLE
2	W-730-1	AIR FITTING
2	W-757	O-RING
2	W-1009	VALVE
1	W-1009-1	SOLENOID
2	W-1158	O-RING
1	W-1171	BOTTOM LARGE END CAP
1	W-1172	TOP END CAP
1	W-2194	STUD
1	W-2195	OIL TUBE
1	W-2196	OIL TUBE
1	W-2486-2	OIL POT BRACKET



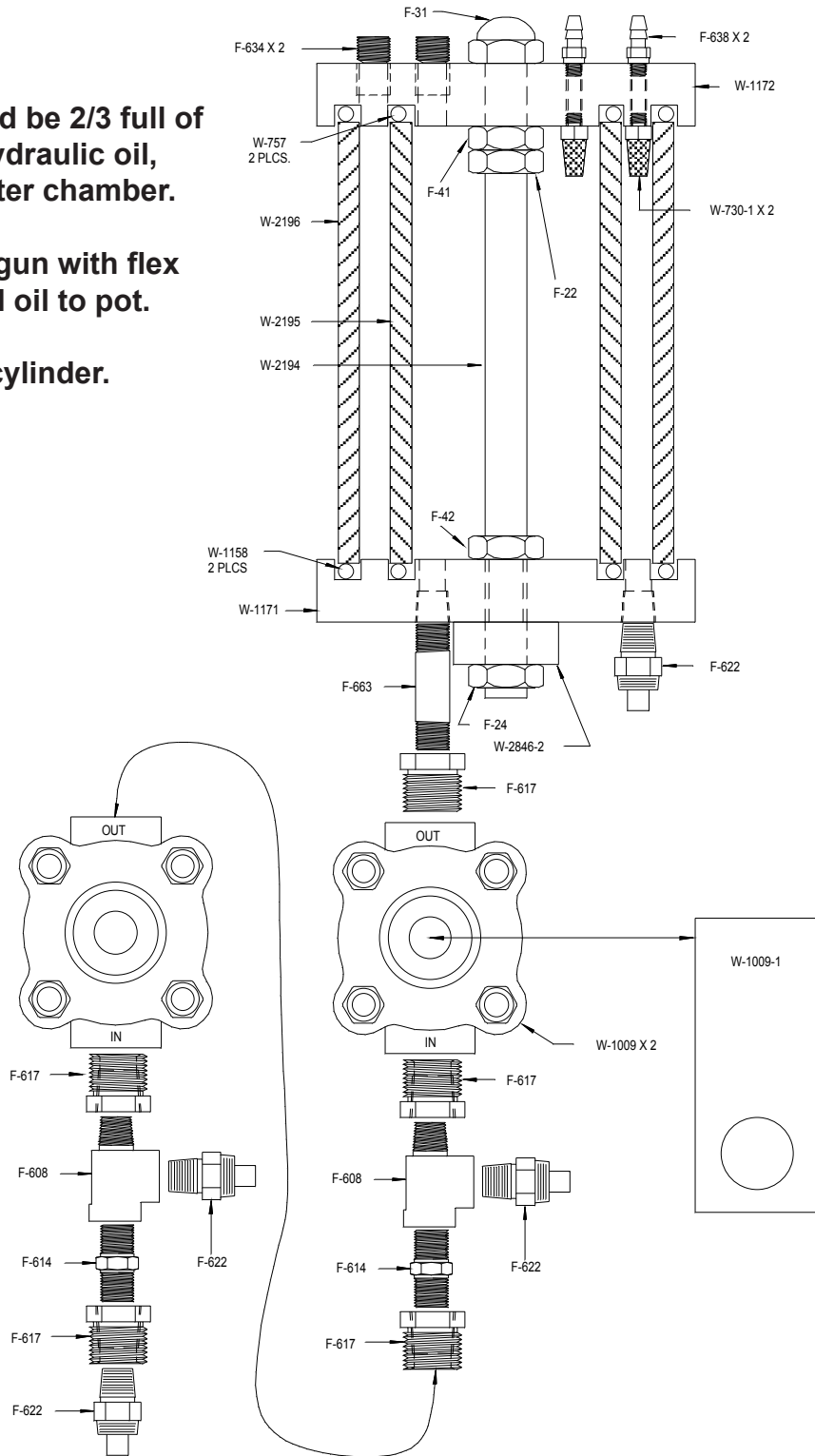
W-1902-P QUAD DUAL SIDE GRINDER

OIL POT INFEED ASSEMBLY

Oil pot should be 2/3 full of AW32 10w hydraulic oil, inner and outer chamber.

Use suction gun with flex tubing to add oil to pot.

Air bleed at cylinder.



W-1902-P QUAD DUAL SIDE GRINDER

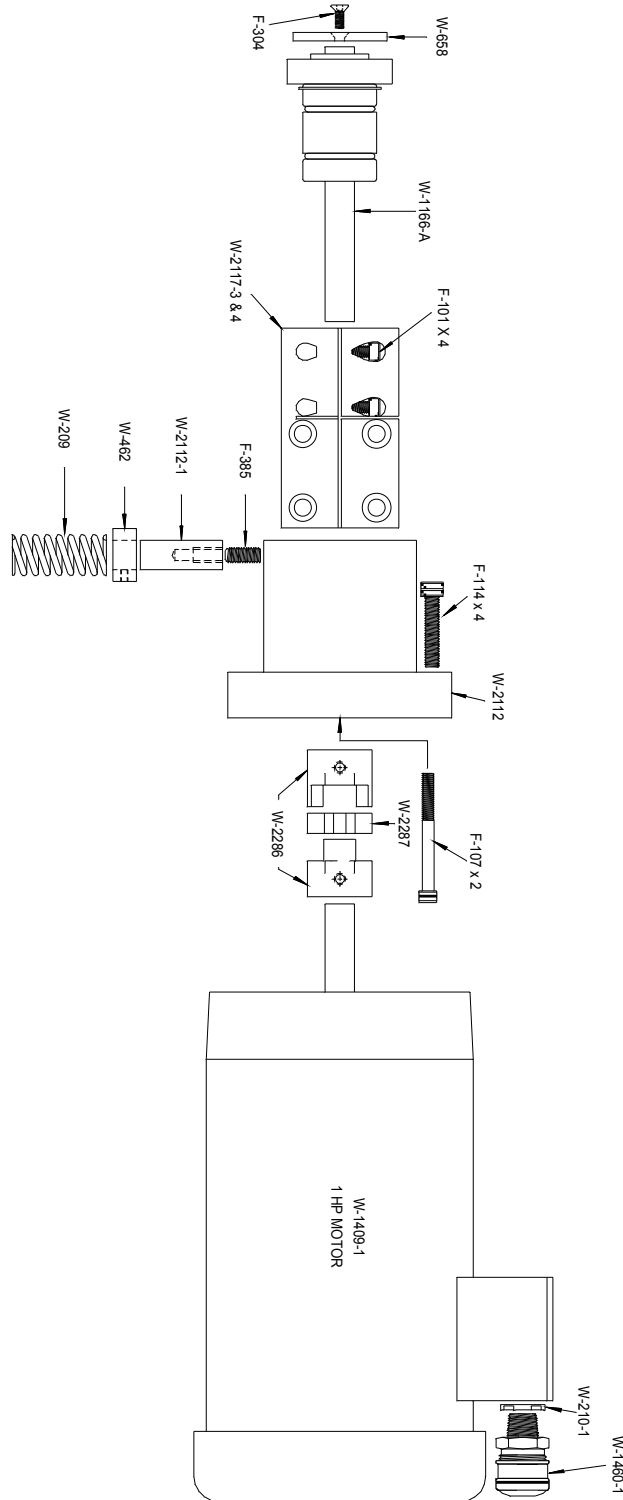
SPINDLE MOTOR ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
8	F-101	1/4-20 X 5/8 SHCS
4	F-107	1/4-20 X 20 SHCS
8	F-114	5/16-18 X 1-1/2 SHCS
2	F-304	10-24 X 1/2 SHCS
2	F-385	5/16-18 X 3/4 SET SCREW
2	W-209	INFEEED SPRING
2	W-210-1	LOCK NUT FOR W-1460-1
2	W-462	5/8 COLLAR
2	W-658	WHEEL NUT
2	W-1166-A	SPINDLE ASSEMBLY
2	W-1409-1	1 HP MOTOR
2	W-1460-1	CORD GRIP
2	W-2286	COUPLING
2	W-2287	SPIDER GEAR
2	W-2112	MOTOR ADAPTER
2	W-2112-1	SPRING POLE
2	W-2117-3	SPINDLE HOUSING
2	W-2117-4	SPINDLE HOUSING



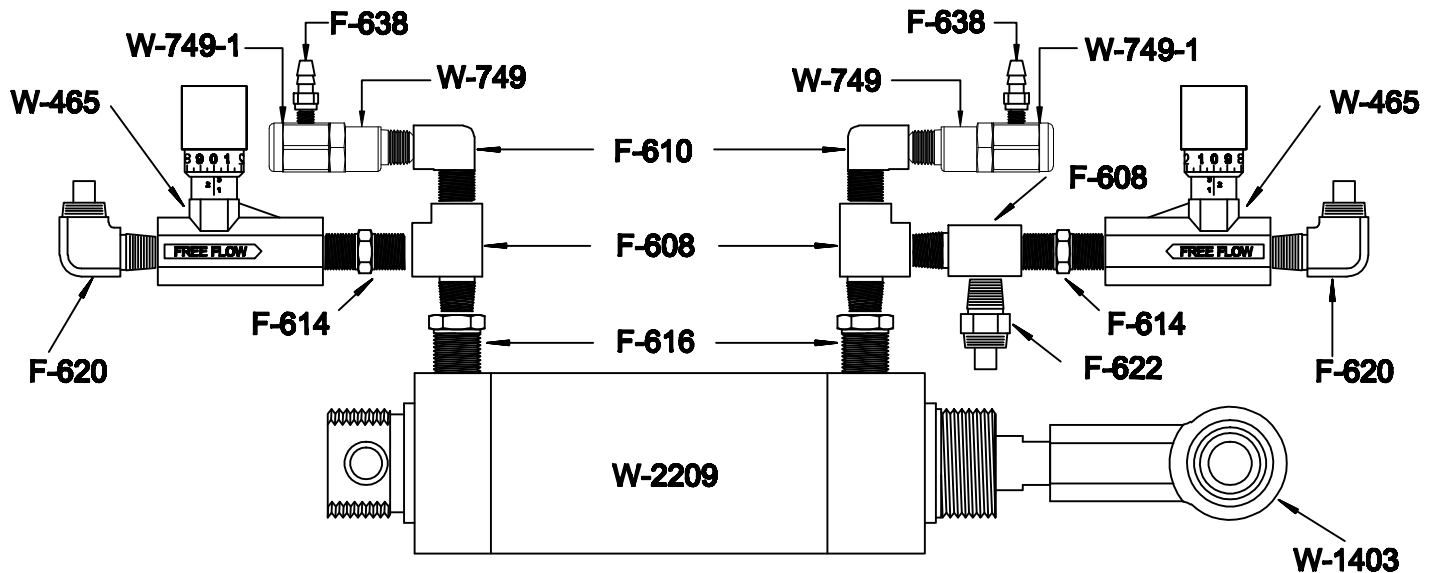
W-1902-P QUAD DUAL SIDE GRINDER

SPINDLE MOTOR ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

HEAD FEED CYLINDER ASSEMBLY



HEAD FEED CYLINDER ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
3	F-608	FITTINGS
1	F-610	1/8 NPT FITTING
2	F-614	1/8 NPT HEX NIPPLE
1	F-616	1/8 TO 1/4 BUSHING
2	F-620	ELBOW FITTING
1	F-622	1/8 X 3/8 NPT MALE CONNECTOR
2	F-638	BARBED FITTING
2	W-465	FLOW CONTROL
2	W-749	BLEEDER VALVE
1	W-1403	ROD END
1	W-2209	AIR CYLINDER

W-1902-P QUAD DUAL SIDE GRINDER

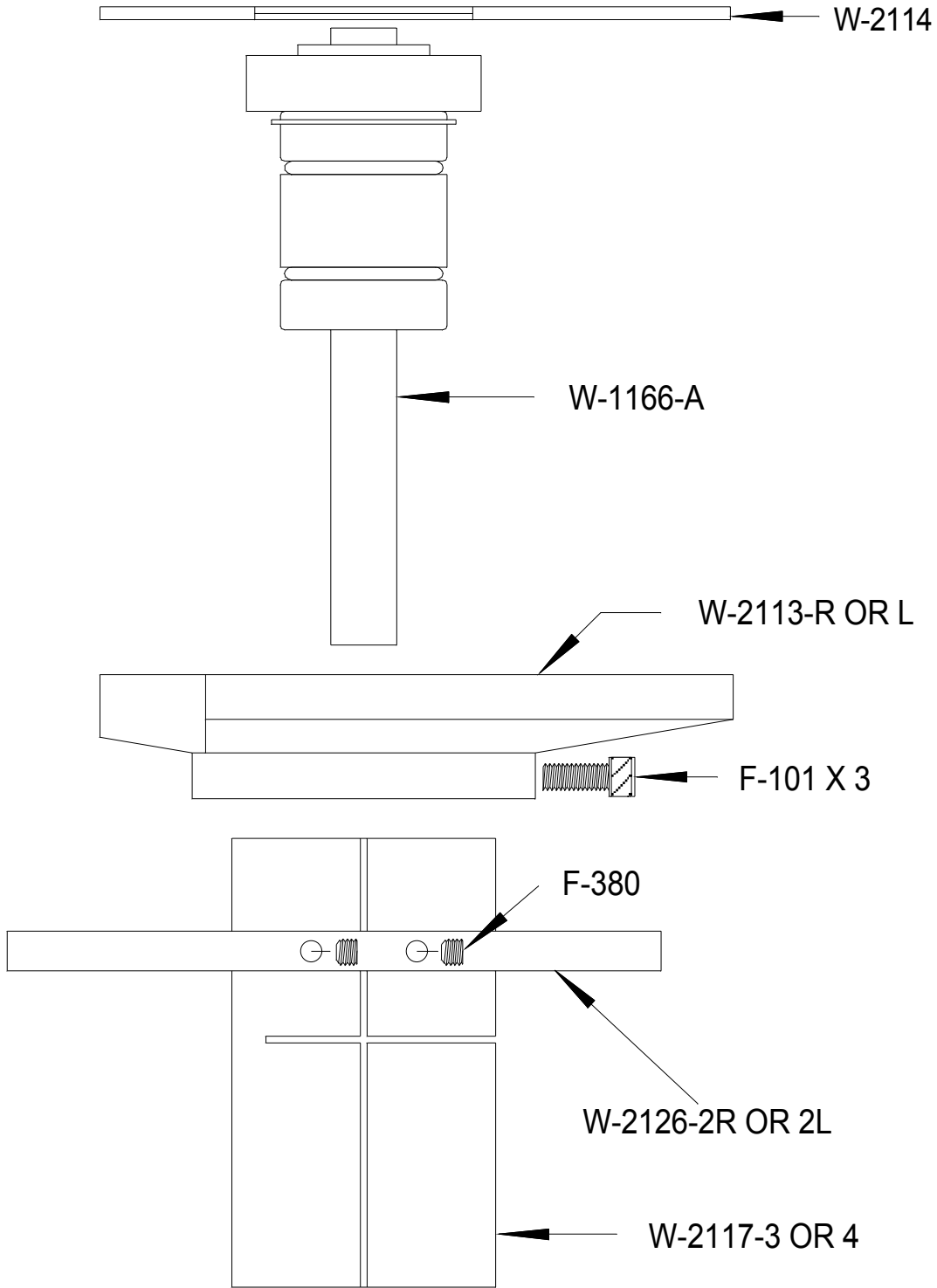
SPINDLE GUARD HOUSING

QTY	PART NUMBER	DESCRIPTION
6	F-101	1/4-20 X 5/8 SHCS
4	F-380	1/4-20 X 1/4 SET SCREW
2	W-1166-A	SPINDLE ASSEMBLY
1	W-2113-R	RIGHT WHEEL GUARD
1	W-2113-L	LEFT WHEEL GUARD
2	W-2114	SIDE WHEEL COVER
1	W-2117-3	RIGHT SPINDLE HOUSING
1	W-2117-4	LEFT SPINDLE HOUSING
1	W-2126-2R	RIGHT SPINDLE SHIELD
1	W-2126-2L	LEFT SPINDLE SHIELD



W-1902-P QUAD DUAL SIDE GRINDER

SPINDLE GUARD HOUSING



W-1902-P QUAD DUAL SIDE GRINDER

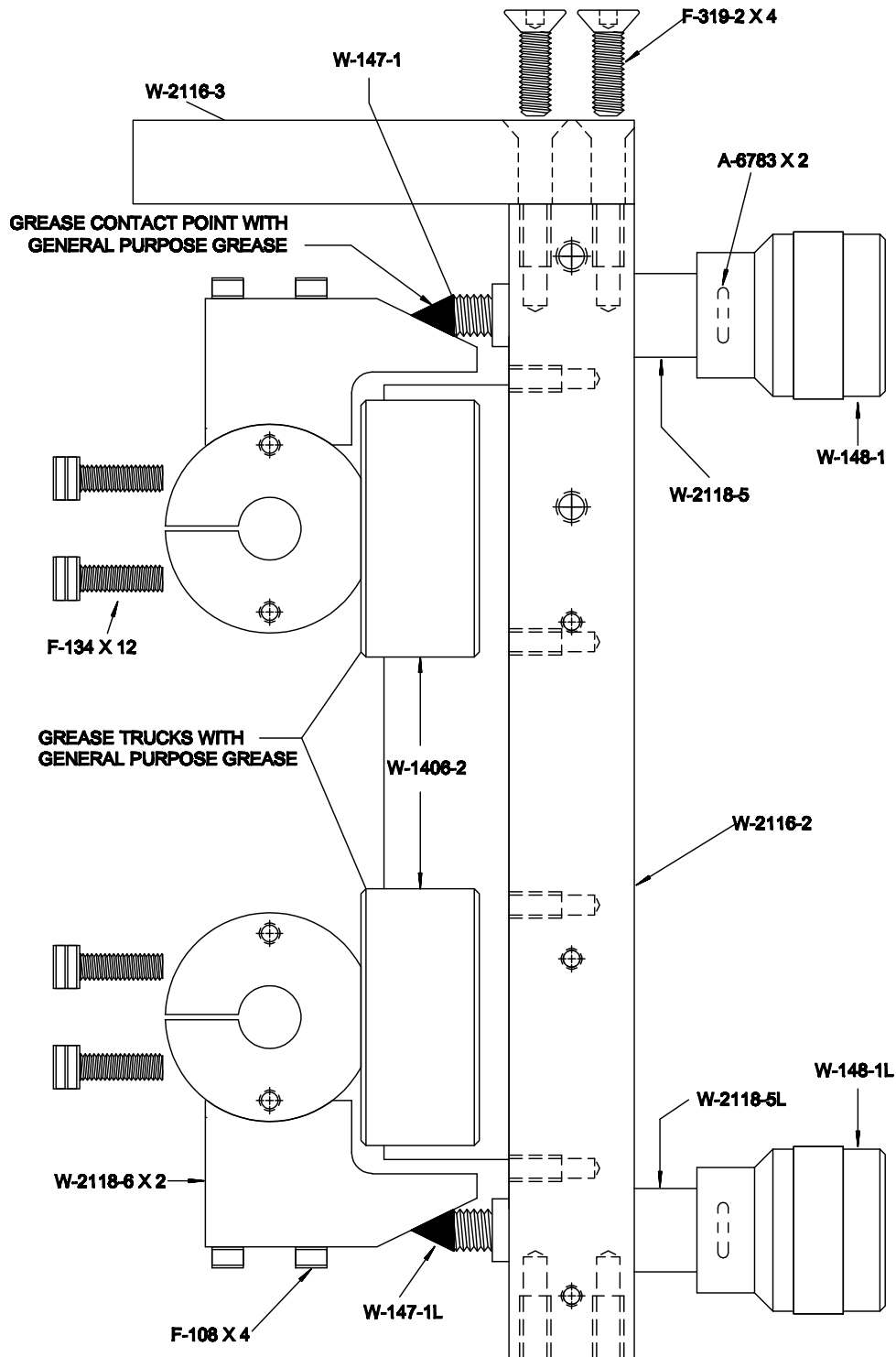
HEAD INFEED ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
2	A-6783	RUBBER O-RING
4	F-108	1/4-20 X 2 SHCS
12	F-134	8mm X 25mm SHCS
4	F-319-2	3/8-16 X 1 FLAT HEAD
1	W-147-1	LEAD SCREW (R.H)
1	W-147-1L	LEAD SCREW (L.H)
1	W-148-1	HAND FEED KNOB (R.H)
1	W-148-1L	HAND FEED KNOB (L.H)
1	W-1406-2	TRUCKS AND RAIL
1	W-2116-2	TRACK MOUNT
1	W-2116-3	TRACK MOUNT(LEFT END)
1	W-2118-5	STAND OFF KNOB (R.H)
1	W-2118-5L	STAND OFF KNOB (L.H)
2	W-2118-6	LEAD SCREW TARGET



W-1902-P QUAD DUAL SIDE GRINDER

HEAD IN FEED ASSEMBLY



W-1902-P QUAD DUAL SIDE GRINDER

INDEX

A

AIR REQUIREMENTS 4

C

COMMON REPLACEMENT PARTS 5

Control Joy Switch 9

CONTROL PANEL 8, 9

CONVERSION CHART 16

COOLANT 7

Coolant Concentrate 5

CRATE SIZE 4

E

ear protection 2

ELECTRICAL SCHEMATICS 17

eye protection 2

G

GRINDING WHEELS 7

L

LIMITED WARRANTY 1

LOADING SAW 12, 13

Load Meter 9

M

MACHINE CONTROLS 11

MAINTENANCE 6

O

Open position 9

OPTIONAL SAW SIZE 4

OPTIONAL VOLTAGE 4

OPTIONS 5



W-1902-P QUAD DUAL SIDE GRINDER

INDEX

P

PARTS LIST 22
PRE SET UP 7

R

RADIAL 13
RADIAL ANGLE 15, 16
Run position 9

S

SAFETY RULES 2, 3
Saw Carrier 5
SHIPPING WEIGHT 4
SIDE DIAL INDICATOR 21
SPECIFICATIONS 4
SPINDLE MOTORS 4
STANDARD SAW SIZE 4
STANDARD VOLTAGE 4
Stands 5

T

TANGENTIAL 14
TANGENTIAL ANGLE 15, 16
Tooth Counter 9
TOOTH GEOMETRY 14, 15
Totalizer Counter 5

W

WARRANTY 1

