

Superfinisher

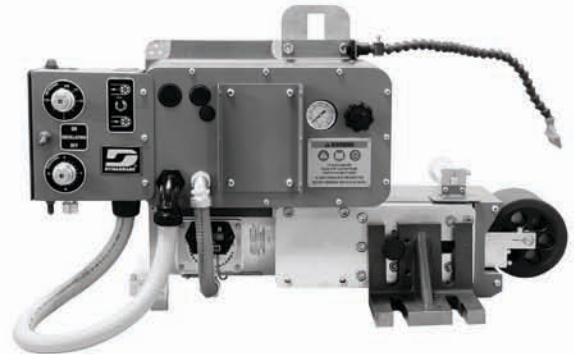
Tool Manual - Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL

Models:

64000 (120v) 1 Phase 60 Hz

64001 (230v) 1 Phase 60 Hz









FIND THE MOST CURRENT OFFERING OF SUPPORT DOCUMENTS AND ACCESSORIES @ WWW.DYNABRADE.COM

⚠ WARNING

Read and understand this tool manual before operating the tool. Follow all safety rules for the protection of operating personnel as well as adjacent areas. For safety information, refer to Safety Requirements for the Use, Care and Protection of Abrasive Wheels - ANSI B7.1, Code of Federal Regulation - CFR 29 Part 1910, European Committee for Standards (EN) Hand Held Electric Motor Operated Tools - Safety Requirements and applicable State and Local Regulations.

SAFETY LEGEND

	⚠ WARNING Read and understand tool manual before work starts to reduce risk of injury to operator, visitors and tool.	⚠ WARNING Practice safety requirements. Work alert. have proper attire and do not operate tools under the influence of alcohol or drugs	
	⚠ WARNING Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1	⚠ WARNING Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or Local statutes, ordinances and/or regulations	
	⚠ WARNING Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law	⚠ WARNING Electric shock hazard. Avoid bodily contact with grounded objects, bodies of water. Do not damage cord set.	

⚠ WARNING

Some dust created by sanding, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- * Lead from lead-based paints
- * Crystalline silica from bricks and cement and other masonry products
- * Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

GENERAL SAFETY INSTRUCTIONS

Carefully Read and save all instructions before operating or servicing any Dynabrade® Abrasive Power Tool. Products offered by Dynabrade are not to be modified, converted or otherwise altered from the original design without expressed written consent from Dynabrade, Inc.

Warning: When using electric tools, basic safety precautions should always be followed to reduce the risk of a fire, electric shock, and personal injury, including the following:

1. **Keep work area clean.** Cluttered areas and benches invite accidents.
2. **Consider work area environment.** Do not expose tools to rain. Keep work area well lit. Do not use power tools in damp or wet locations. Do not use tools in the presence of flammable liquids or gases.
3. **Guard against electric shock.** Be certain machine is adequately grounded before operating.

(continued on next page)

4. **Keep children away.** Do not let visitors contact tool. All visitors should be kept away from work area.
5. **Do not force tool.** It will do a better and safer job at its intended rate.
6. **Use the right tool.** Do not force a small tool or attachment to do the job of a heavy duty tool. Do not use tool for purposes not intended.
7. **Dress properly.** Do not wear loose fitting clothing or jewelry. Clothes can be caught in moving parts. Wear protective hair covering to contain long hair.
8. **Use safety glasses.** Also use face-shield or dust mask if operation area is dusty.
9. **Do not abuse cord.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
10. **Do not overreach.** Keep proper footing and balance at all times.
11. **Maintain tools with care.** Keep tools clean for better use and safer performance. Follow instructions for changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
12. **Do not leave tool running.** Disconnect tools when not in use, before servicing, when changing belts, contact arms, etc.
13. **Remove keys and wrenches.** Form a habit of checking to see that all keys and adjusting wrenches are removed from tool before turning it on.
14. **Avoid accidental starting.** Be sure switch is off when plugging in.
15. **Out-door use extension cords.** When tool is used outdoors, use only extension cord suitable for outdoor use. They should be marked with the suffix W-A (for UL) or W (for CSA in Canada).
16. **Stay alert.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
17. **Check damaged parts.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of moving parts, binding of moving parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced. Do not use tool if switch does not turn tool on or off.
18. **Avoid gaseous areas.** Do not operate electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks can ignite fumes.
19. **Do not alter or misuse tool.** This tool is precision built. Any alteration or modification not specified is misuse and may result in a dangerous condition. Only these accessories and attachments that are found in this instruction manual are acceptable for use with this tool. The use of any other accessory or attachment might present a risk to the operator.
20. **Replacement parts.** When servicing, use only identical replacement parts. When ordering replacement parts, please specify model and serial numbers of your machine.
21. **Do not operate tool without guards.** Always replace guards after changing contact arm or abrasive belt.
22. **Do not mix grind material.** There is a potential combustion hazard if ferrous and non-ferrous grinding dust is mixed. Clean inside machine between materials.
23. **Use hearing protection.** Permanent hearing loss can result from high process noise levels.
24. **Use correct width abrasive belt.** Using abrasive belt that is narrower than the contact wheel can cause snagging of the workpiece.
25. **Mount tool securely.** Always fasten tool to bench or other support structure to prevent tipping.

Voltage Warning:

Before connecting the tool to a power source (receptacle, outlet, etc.), be sure the voltage supplied is the same as what is specified on the nameplate of the tool. A power source with greater than that specified for tool can result in **serious injury** to the user as well as damage to the tool. Using a power source with voltage less than the nameplate rating is harmful to the tool's motor. If in doubt, **do not plug in the tool.**

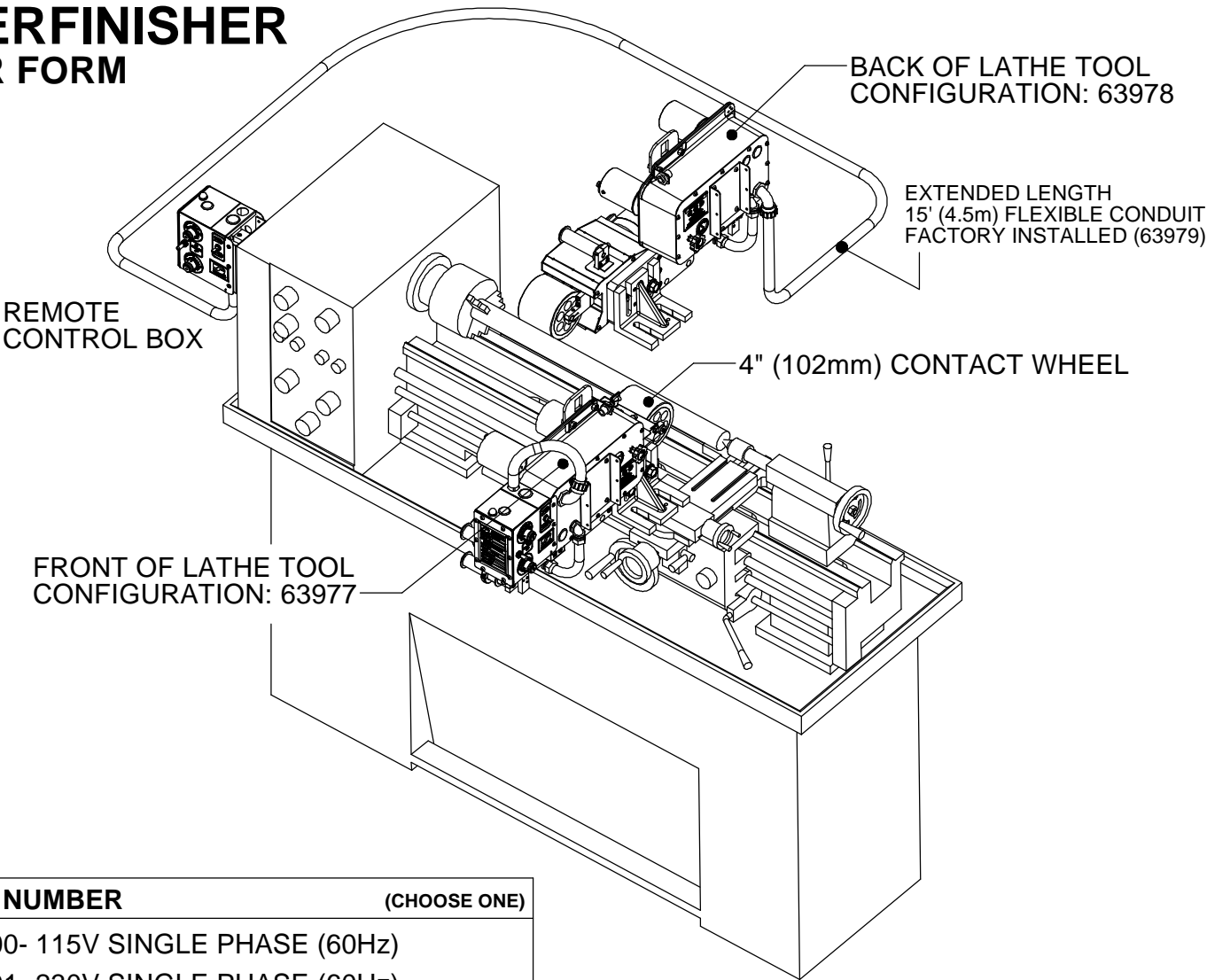
Polarized Plugs:

To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

Warning: Keep extension away from the immediate working area.

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ORDER FORM



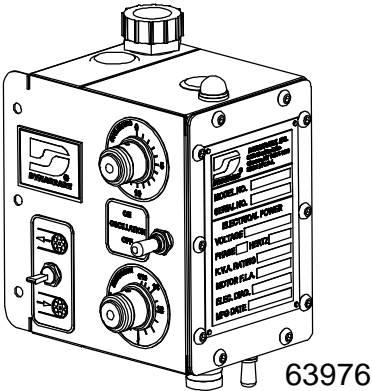
MODEL NUMBER	(CHOOSE ONE)
<input type="checkbox"/> 64000- 115V SINGLE PHASE (60Hz)	
<input type="checkbox"/> 64001- 230V SINGLE PHASE (60Hz)	
<input type="checkbox"/> 64003- 230V SINGLE PHASE (50Hz)	

CONTROL BOX CONFIGURATION	(CHOOSE ONE)
<input type="checkbox"/> 63975 RIGHT SIDE CONTROL KNOBS	
<input type="checkbox"/> 63976 LEFT SIDE CONTROL KNOBS	

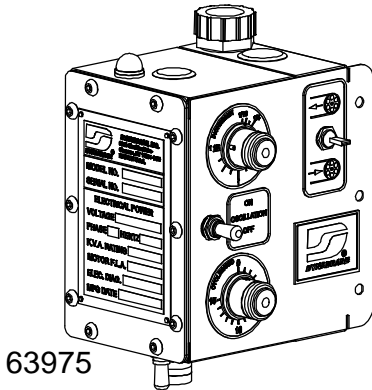
TOOL CONFIGURATION	(CHOOSE ONE)
<input type="checkbox"/> 63977 FRONT OF LATHE	
<input type="checkbox"/> 63978 BACK OF LATHE	

DUROMETER	CONTACT WHEEL WIDTH (CHOOSE ONE)			
	1" (25mm)	2" (51mm)	3" (76mm)	4" (102mm)
	50 <input type="checkbox"/> 63980	<input type="checkbox"/> 63983	<input type="checkbox"/> 63986	<input type="checkbox"/> 63989
	70 <input type="checkbox"/> 63981	<input type="checkbox"/> 63984	<input type="checkbox"/> 63987	<input type="checkbox"/> 63990
	90 <input type="checkbox"/> 63982	<input type="checkbox"/> 63985	<input type="checkbox"/> 63988	<input type="checkbox"/> 63991

OPTIONAL	(ADDITIONAL COST)
<input type="checkbox"/> 63979 15' (4.5m) FLEXIBLE CONDUIT	

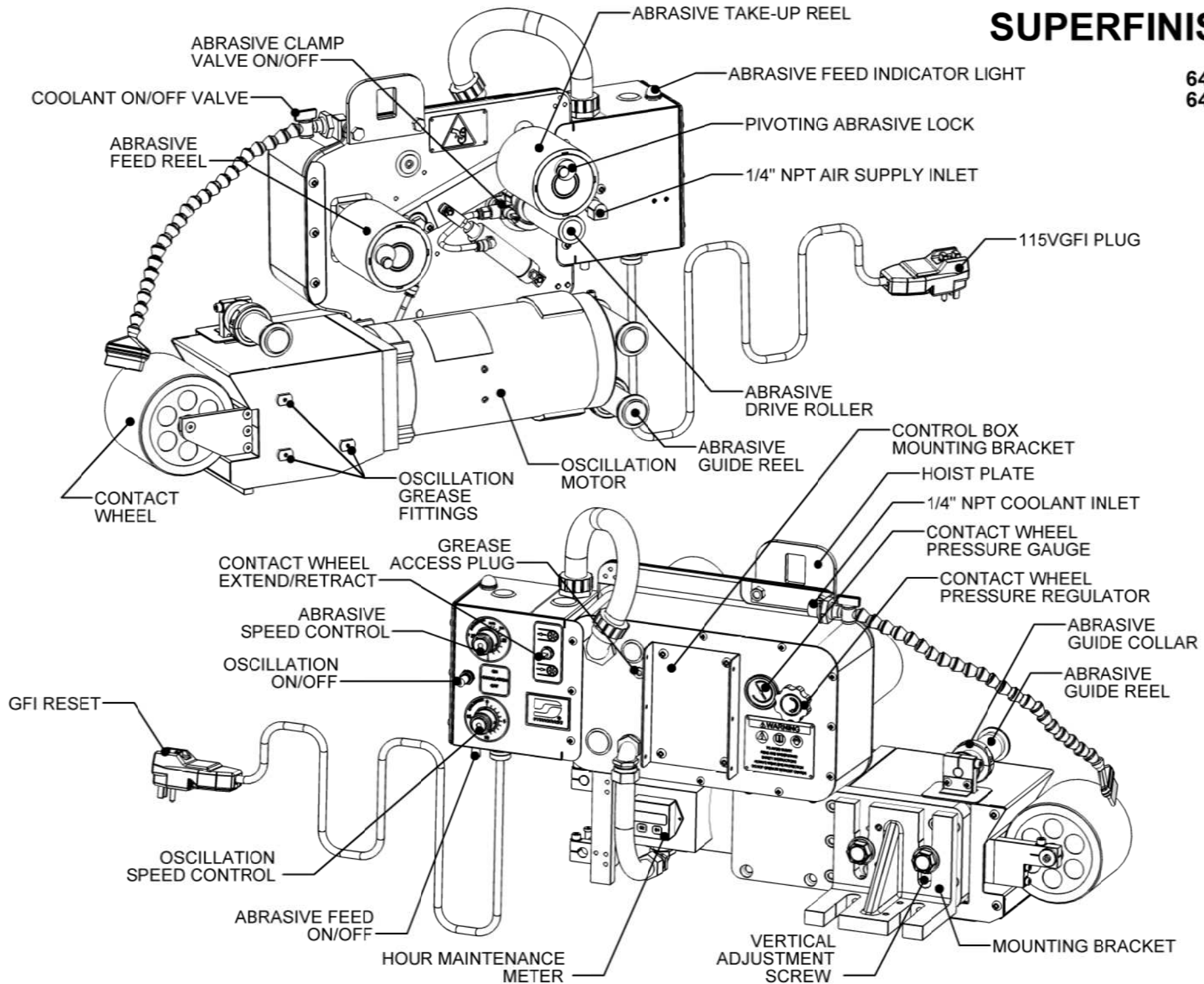


OPERATOR CONTROL KNOBS CAN BE FACTORY ASSEMBLED ON EITHER RIGHT OR LEFT SIDE OF CONTROL BOX.



SUPERFINISHER

64000 115V
64001 230V



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TOOL SETUP

STEP 1: Remove mounting bracket (98342) from tool (**Figure 1**).

STEP 2: Attach mounting bracket to lathe, making sure to keep parallel to lathe axis within (.005) (**Figure 2**).

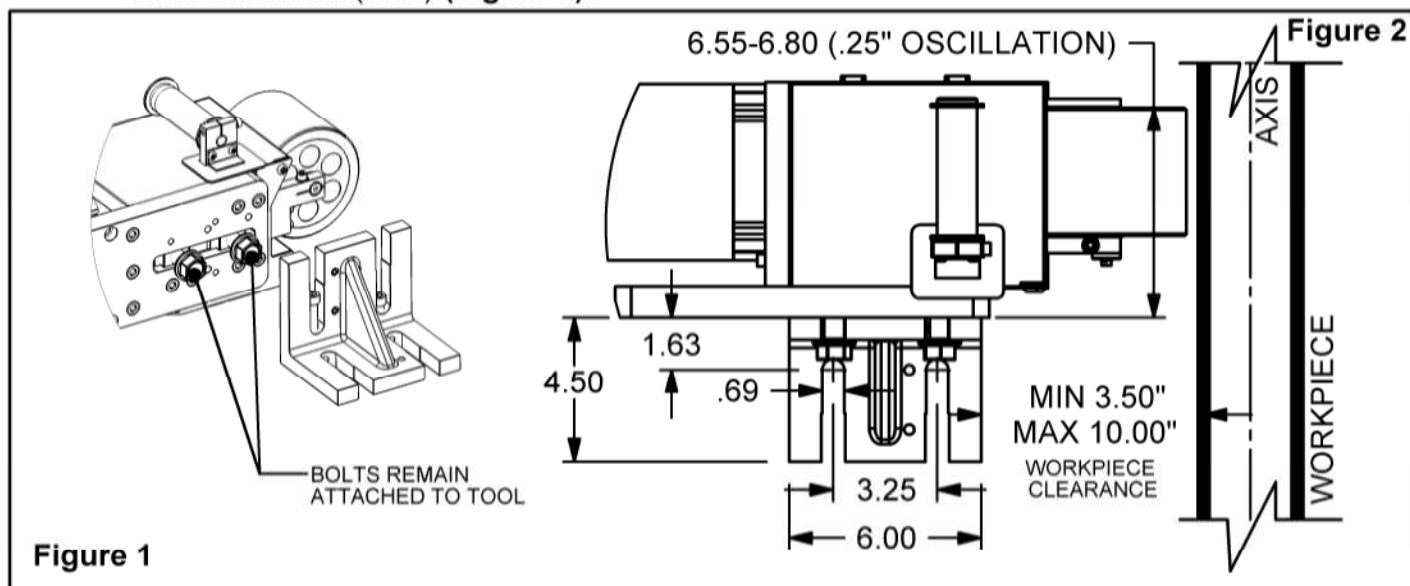


Figure 1

STEP 3: Use lift hook and insert tool back into mounting bracket (**Figure 4**).

Note: Centerline of contact wheel to be aligned with center of workpiece as shown (**Figure 4**). Use the socket head cap screw internal to the slot of the mounting bracket for adjusting vertical height before inserting tool (**Figure 3**).

STEP 4: Tighten each 5/8" bolt to a torque setting of 75 ft-lbs.

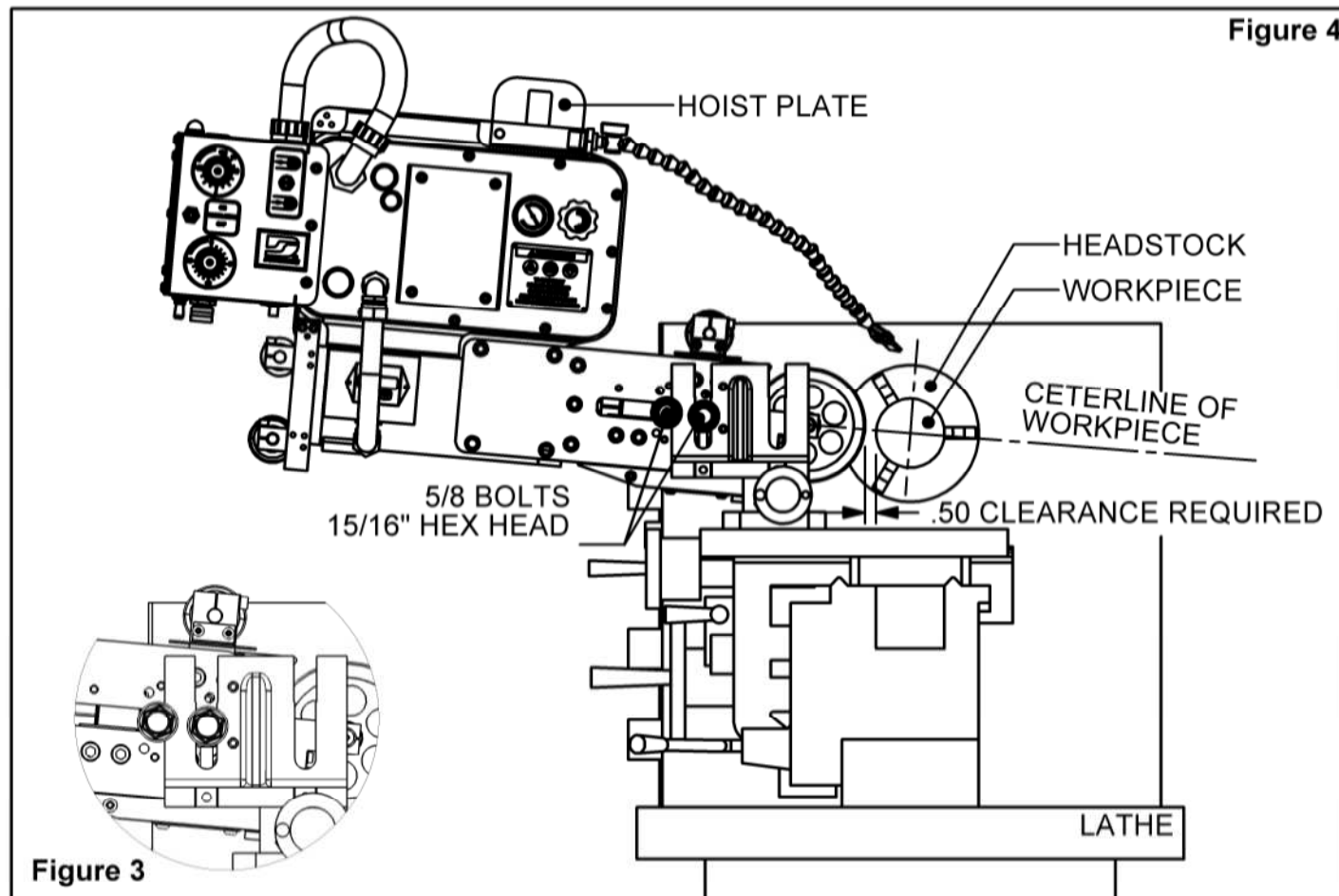


Figure 4

Figure 3

SUPERFINISHER

TOOL OPERATION

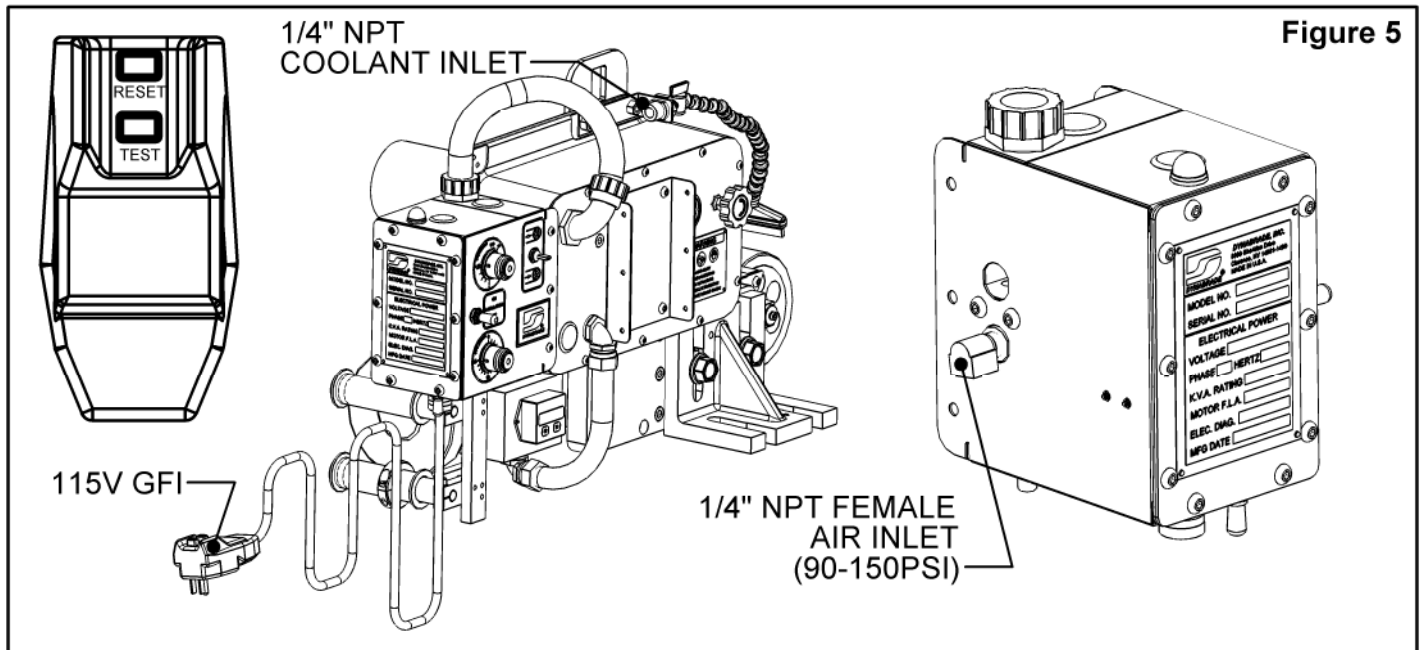
STEP 6: Supply Air, Filtered Coolant and Electric as indicated below (**Figure 5**).

Air Pressure: Min 90 psi, Max 150 psi

Coolant: A staged filtration system is recommended, that will filter out particles at least as small as the finest micron abrasive being used.

Electric: 64000- 115V/Single Phase, 64001- 230V/Single Phase

*Note: Be sure to **"RESET"** GFI before operating tool.

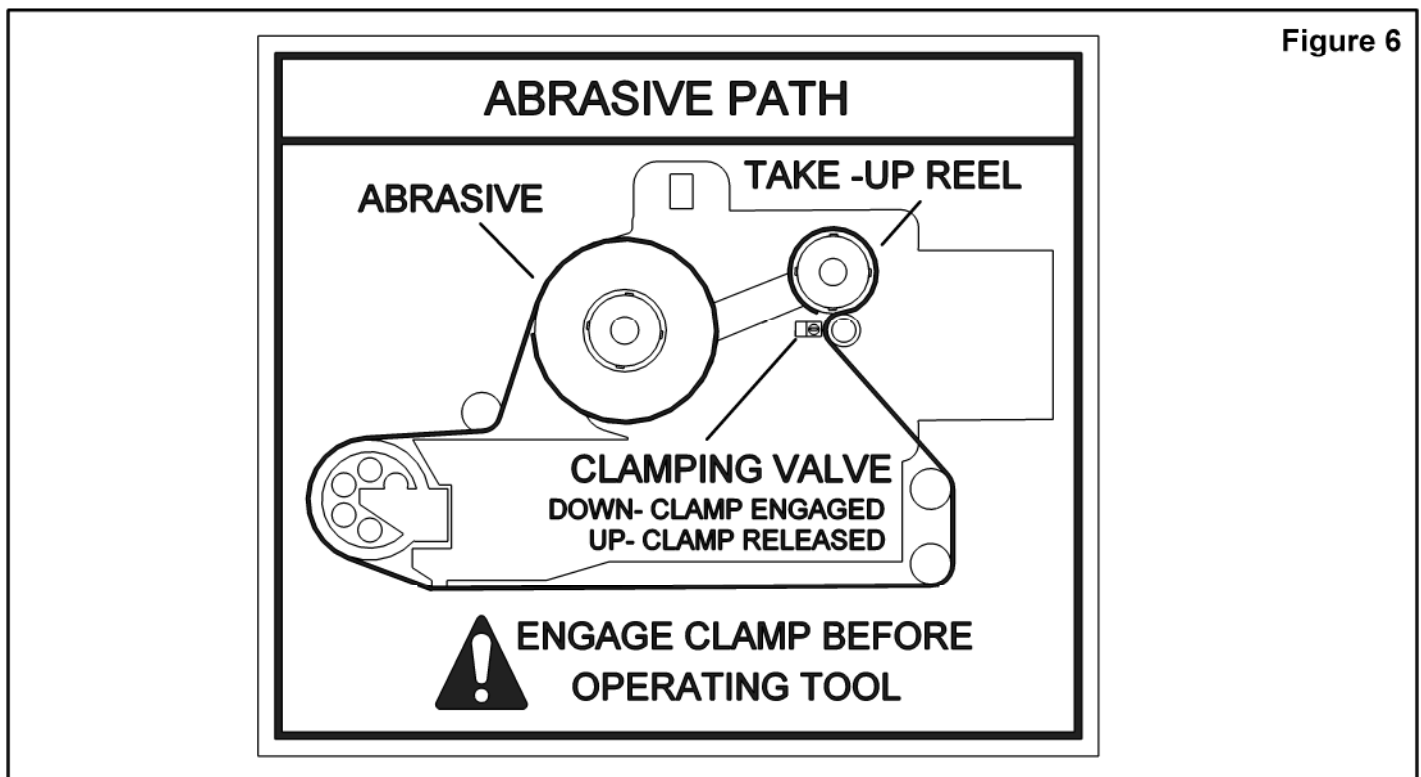


STEP 7: Install your abrasive on the tool as shown (**Figure 6**).

STEP 8: Engage Abrasive Clamping Valve after installing abrasive.



Abrasive Clamping Valve must be in the **"ON"** position before operating tool.



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TOOL OPERATION

STEP 9: Set your regulator pressure using the following chart shown right.

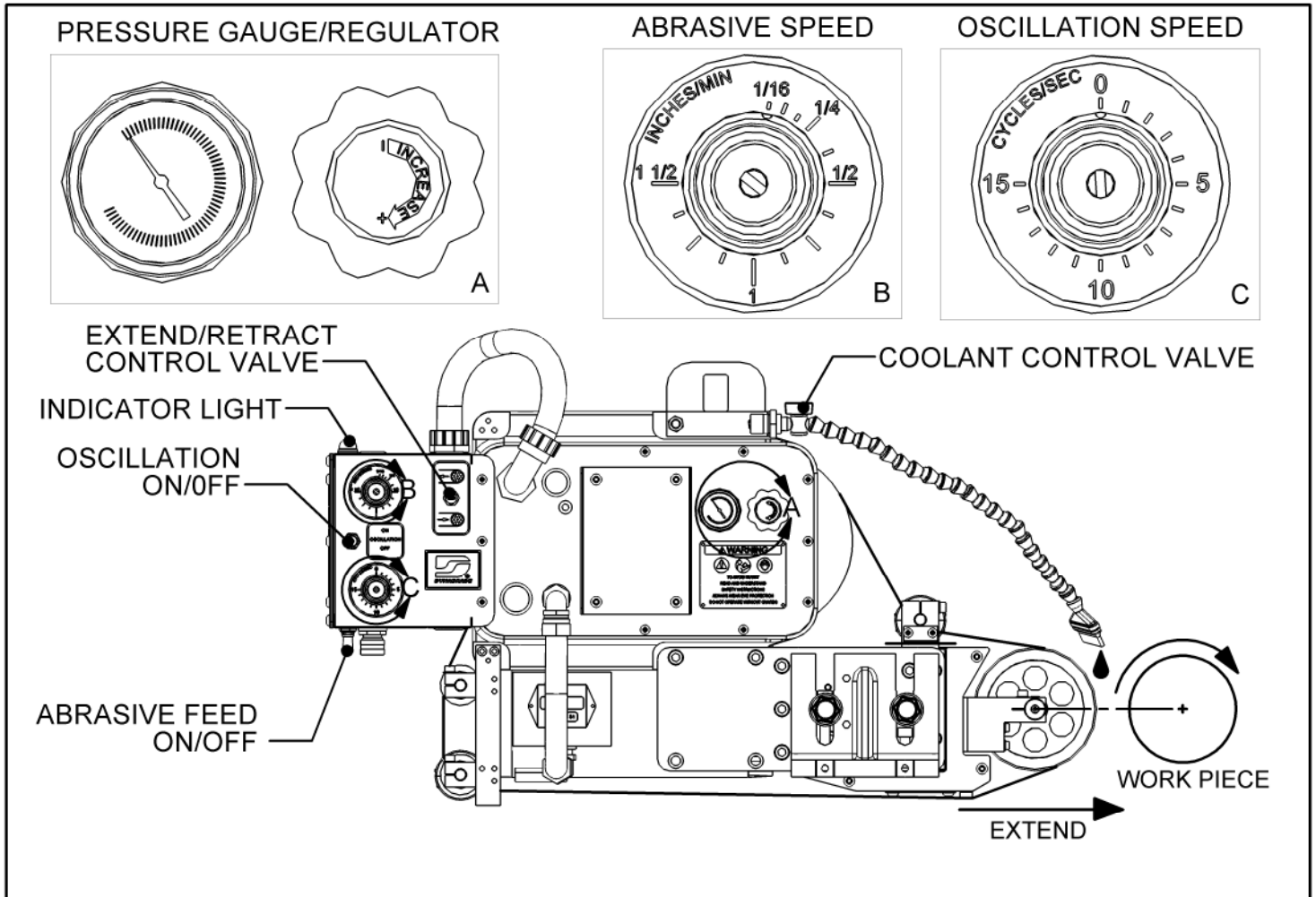
STEP 10: Set your Abrasive Speed Control by aligning notch with desired speed (See parameter guide).

STEP 11: Set your Oscillation Speed by aligning notch with desired speed (See parameter guide).

Contact Wheel Width

Durometer	1"	2"	3"	4"
50	15	30	45	60
70	20	40	60	80
90	25	50	75	100

INDICATES PSI AS REGISTERED ON PRESSURE GAUGE



STEP 12: Position Superfinisher at Tailstock end of work piece.

STEP 13: Turn lathe on, making sure work piece is turning in proper direction as shown.

STEP 14: Turn on filtration/coolant system.

STEP 15: Turn abrasive feed switch to "ON".

*Note: (A green indicator light located at top of control box will illuminate when abrasive feed is "ON")

STEP 16: Extend contact wheel into work piece.

STEP 17: Turn Oscillation switch to "ON".

STEP 18: Traverse down the work piece and return back to the starting position.

STEP 19: Retract contact wheel.

STEP 20: Turn oscillation off.

STEP 21: Turn off abrasive feed, lathe and filtration/coolant system.

The Superfinisher is equipped with a Maintenance Hour Meter which is factory set for 10 hour intervals. This meter is self powered by an internal lithium battery (15,000 Hour Life) and counts time when oscillation motor is running. The meter is used to alert maintenance personnel that a time interval has expired and the scheduled maintenance should be performed.

Note: Instructions have been provided for re-setting or customized setting of this unit if required. (See page 7 of 8).

Before each use:

Inspect the contact wheel, guide reels and abrasive reels for signs of binding and/or excessive play. Repair or replace worn parts as necessary.

The meter will count in ascending order and the **SERVICE** icon will appear at every 10 hour mark.

10 HOUR INTERVAL

Grease Oscillation Fittings using Dynabrade Push-Type Grease Gun (95541) and Lubricant (95542) (**Figure 1**)

100 HOUR INTERVAL

Grease Worm Gear using Dynabrade Push-Type Grease Gun (95541) and Lubricant (95542) (**Figure 2**)

After each service, follow Step 4, "**Resetting the Service Icon**" found on page on page 7 of 8.

FIGURE 1

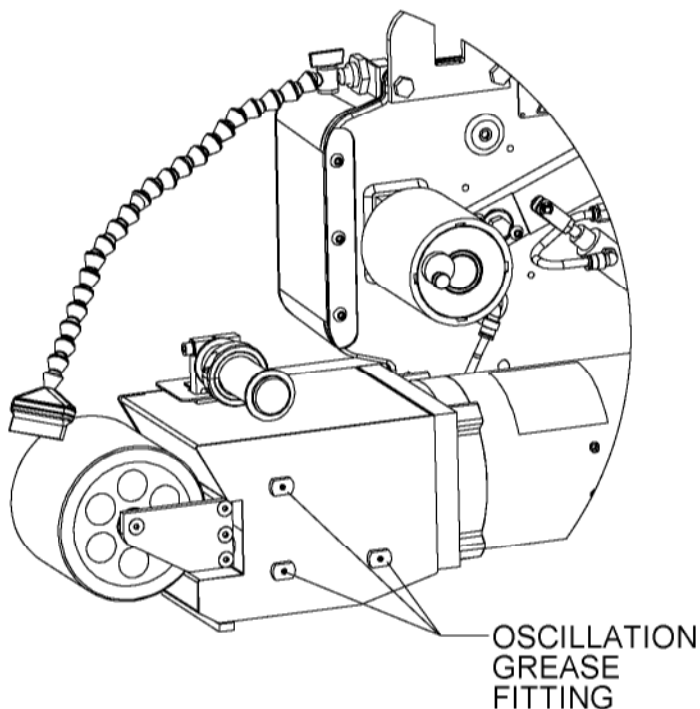
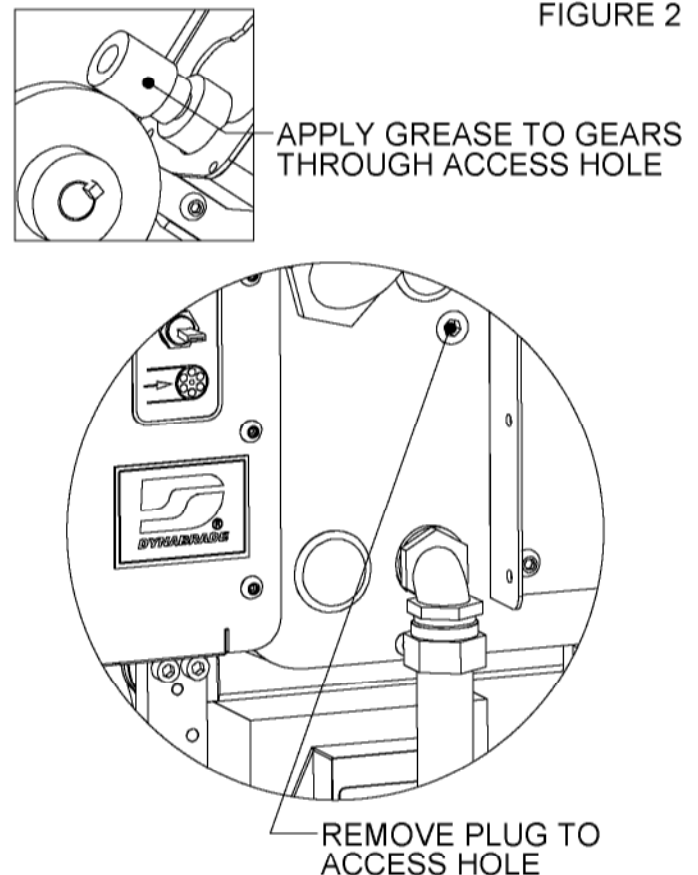


FIGURE 2



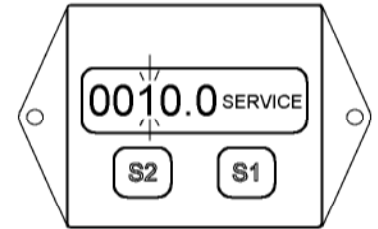
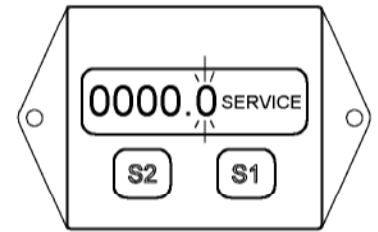
SUPERFINISHER

MAINTENANCE HOUR METER

Note: Before getting started, all settings must be completed while motor is off. Also, be aware that you will only have 15 seconds between steps to complete each setting before the device automatically returns to the main **HOURS** icon.

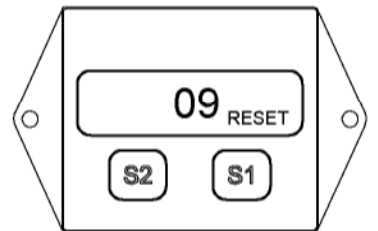
SETTING THE MAINTENANCE INTERVAL TIMER:

STEP 1: PRESS AND HOLD DOWN THE S2 BUTTON UNTIL THE **SERVICE** ICON IS DISPLAYED AND THEN RELEASE. THE RIGHT MOST DIGIT WILL BE FLASHING AND INDICATES A FRACTION OF AN HOUR. IN ORDER TO SHIFT LEFT TO A FULL HOUR DIGIT, YOU MUST PRESS AND HOLD THE S2 BUTTON UNTIL THE DESIRED UNIT IS FLASHING AND THEN RELEASE. CONTINUE BY PRESSING AND HOLDING THE S1 BUTTON UNTIL YOU REACH THE DESIRED NUMBER (1-9) THAT IS REQUIRED. ONCE YOU HAVE REACHED YOUR DESIRED SETTING, ALLOW YOUR UNIT TO SIT IDOL AND YOUR METER WILL RETURN TO THE **HOURS** ICON IN APPROXIMATELY 15 SECONDS.



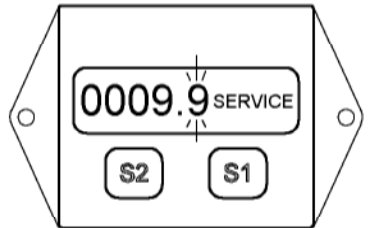
ACTIVATING THE MAINTENANCE INTERVAL TIMER:

STEP 2: PRESS AND HOLD THE S1 AND S2 BUTTONS SIMULTANEOUSLY. THE **RESET** ICON WILL DISPLAY AFTER APPROXIMATELY 5 SECONDS. CONTINUE TO HOLD UNTIL THE UNITS INCREMENT THROUGH 9 AND RETURNS BACK TO THE **HOURS** ICON. COMPLETE BY RELEASING BOTH BUTTONS.



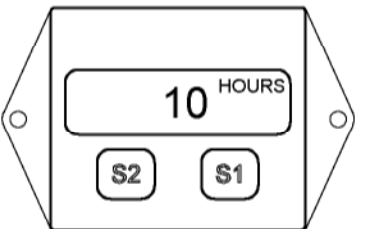
VIEWING THE MAINTENANCE INTERVAL TIMER:

STEP 3: PRESS AND HOLD THE S2 BUTTON TO VIEW THE **SERVICE** ICON AND THE REMAINING TIME OF YOUR MAINTENANCE INTERVAL. RELEASE BUTTON AND ALLOW YOUR UNIT TO SIT IDOL AND YOUR METER WILL RETURN TO THE **HOURS** ICON IN APPROXIMATELY 15 SECONDS.



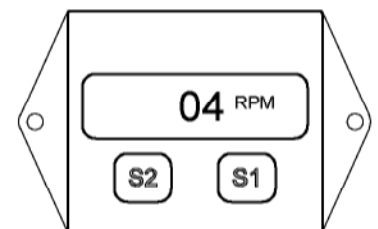
RESETTING THE SERVICE ICON:

STEP 4: ONCE THE INTERVAL TIME IS COMPLETE, THE **SERVICE** ICON WILL DISPLAY ON YOUR SCREEN. YOU WILL NEED TO PERFORM THE FOLLOWING OPERATION TO RESET THE MAINTENANCE FOR ANOTHER INTERVAL. PRESS AND HOLD THE S1 AND S2 BUTTONS SIMULTANEOUSLY. THE **RESET** ICON WILL DISPLAY AFTER APPROXIMATELY 5 SECONDS. CONTINUE TO HOLD UNTIL THE UNITS INCREMENT THROUGH 9 AND RETURNS BACK TO THE **HOURS** ICON. COMPLETE BY RELEASING BOTH BUTTONS.



TO RESET TOTAL HOURS AND MAINTENANCE TIME:

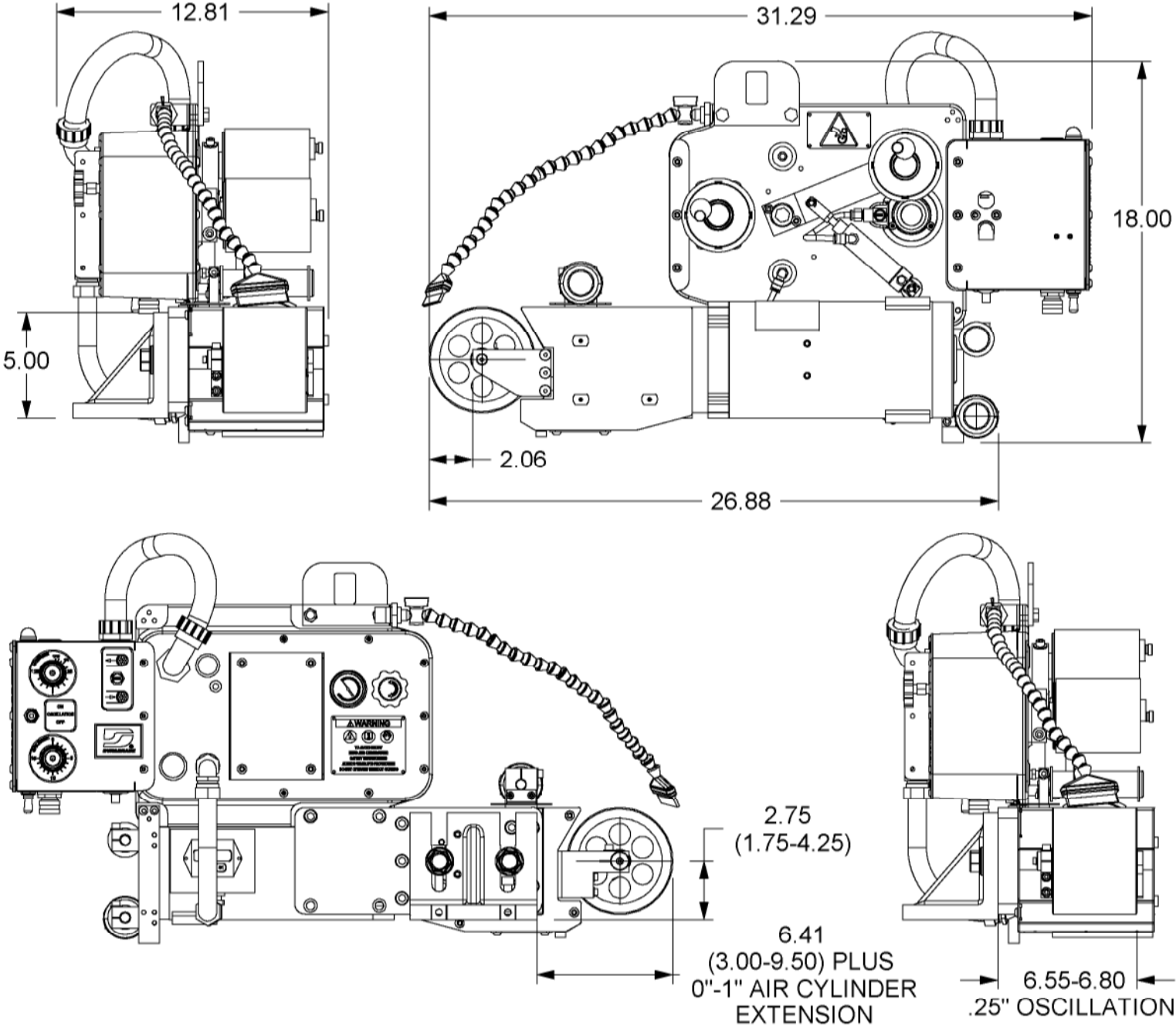
STEP 5: PRESS AND HOLD THE S1 BUTTON UNTIL THE **RPM** ICON APPEARS AND **05** IS DISPLAYED. RELEASE THE S1 BUTTON AND APPROXIMATELY 10 SECONDS LATER, THE DISPLAY WILL RETURN TO THE **HOURS** ICON. PRESS AND HOLD THE S1 AND S2 BUTTONS SIMULTANEOUSLY AND THE **RESET** ICON WILL DISPLAY AFTER APPROXIMATELY 5 SECONDS. CONTINUE TO HOLD UNTIL THE UNITS INCREMENT THROUGH 9 AND RETURNS BACK TO THE **HOURS** ICON. COMPLETE BY RELEASING BOTH BUTTONS. CONTINUE BY HOLDING BUTTON S1 UNTIL THE **RPM** ICON AND **04** IS DISPLAYED. RELEASE S1 AND DISPLAY WILL DEFAULT BACK TO THE **HOURS** ICON.



IF DISPLAY GOES BLANK, PRESS AND HOLD S1 UNTIL **HOURS** ICON RE-APPEARS. RESET THE UNIT STARTING AGAIN AT STEP 1.

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DETAILS/DIMENSIONS

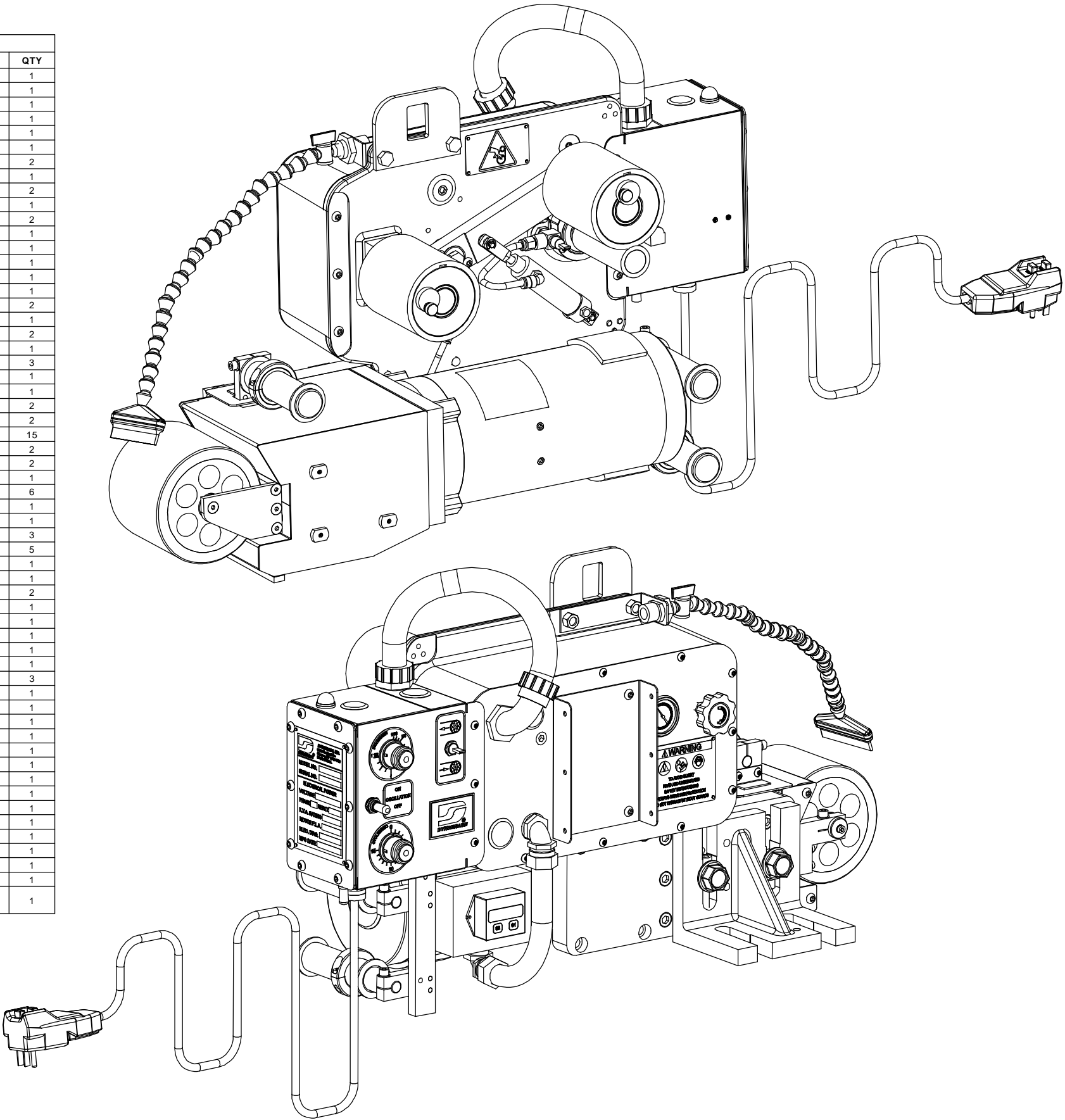


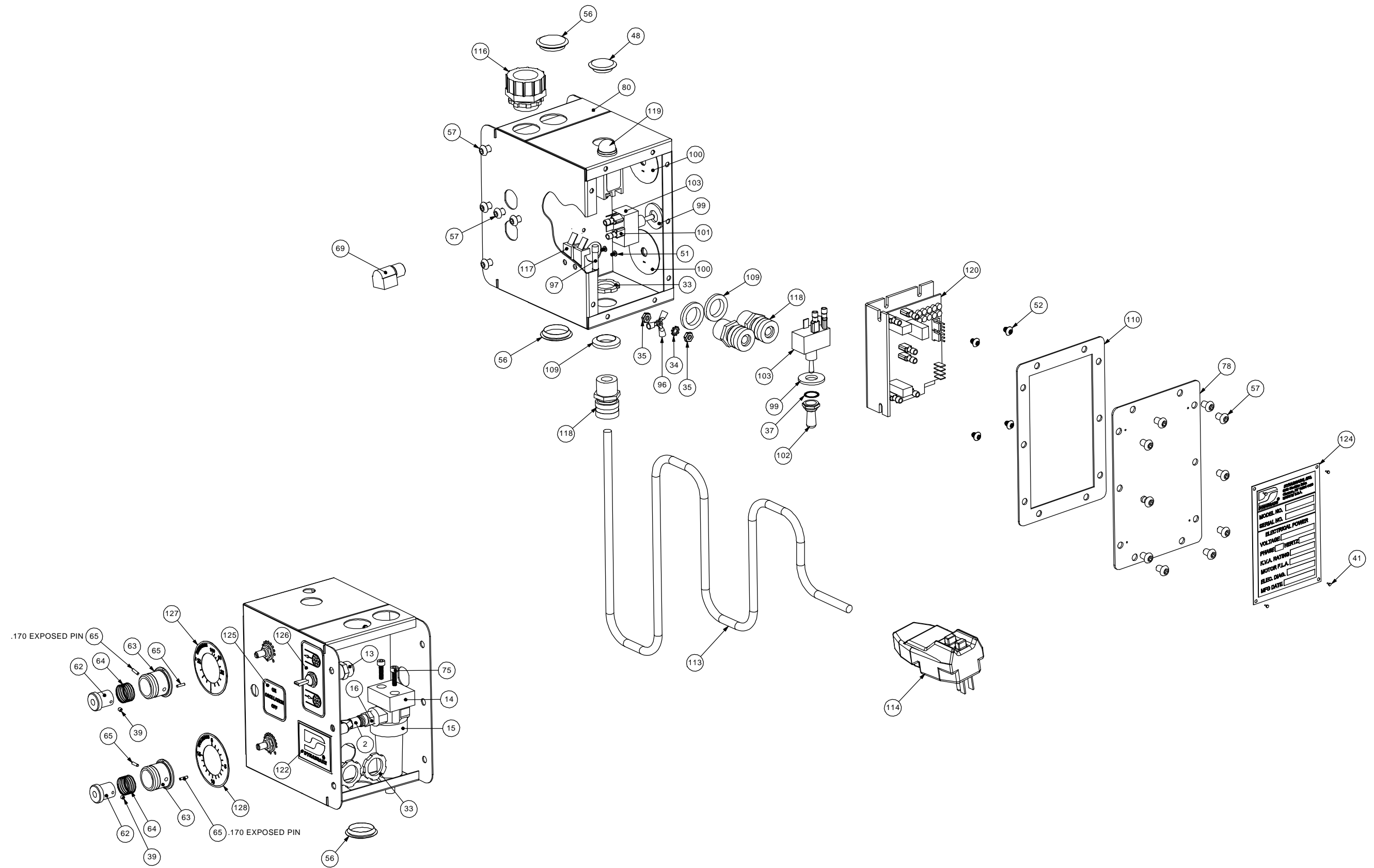
Ø.28 THRU
TYP 4 PLACES

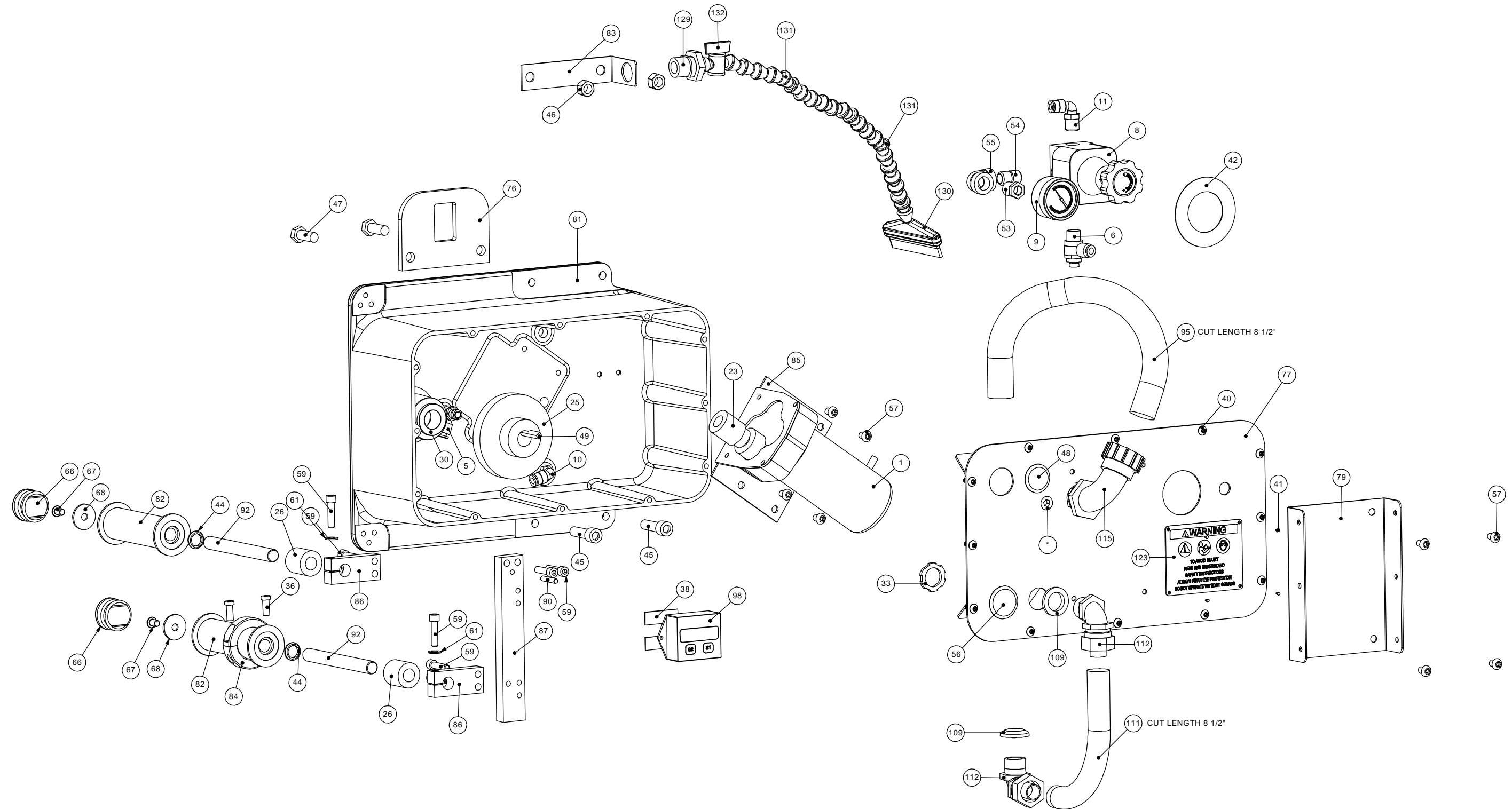
CONTROL BOX
REMOTE MOUNTING
PLATE

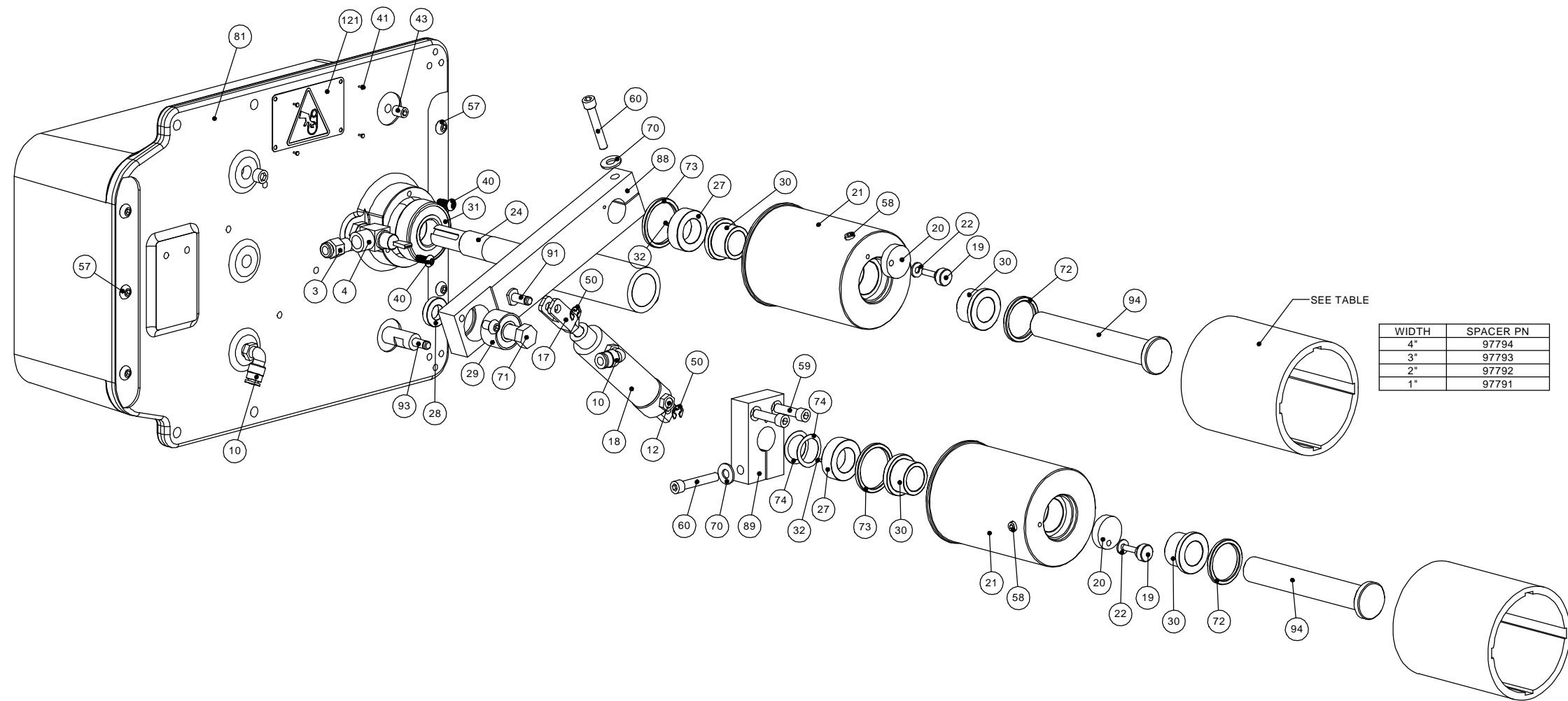
BILL OF MATERIALS			
ITEM	P/N	DESCRIPTION	QTY
1	98033	DRIVE MOTOR	1
2	98348	1/4" QUICK WYE CONNECT	1
3	97827	MALE FITTING, 1/8" MALE NPT X 1/4" INSTANT TUBE	1
4	97114	AIR VALVE	1
5	97987	FLOW VALVE	1
6	98349	FLOW VALVE	1
7	95955-90	1/4" TUBING (FT)	10
8	97820	REGULATOR	1
9	95696	PRESSURE GAUGE	1
10	97828	90DEG QUICK CONNECT, 1/4"	3
11	97826	90DEG QUICK CONNECT, 1/4"	1
12	97889	CYLINDER EXHAUST, 1/8" NPT	1
13	97695	AIR VALVE	1
14	64034	FILTER BLOCK	1
15	97821	FILTER	1
16	97825	STRAIGHT QUIK CONNECT, 1/4"	1
17	98333	PISTON ROD CLEVIS	1
18	98334	1 1/16" BORE AIR CYLINDER	1
19	53219	KNOB, SS, 8-32	2
20	64027	ABRASIVE LOCKING CAM	2
21	64023	ABRASIVE REEL HUB	2
22	96427	#8 FLAT WASHER	2
23	66519	WORM GEAR	1
24	64020	DRIVE SHAFT, URETHANE	1
25	66520	WORM GEAR	1
26	64089	GUIDE REEL SPACER	2
27	64025	REEL POST SPACER	2
28	64031	CLAMP SPACER	1
29	56133	BEARING	1
30	97531	3/4" FLANGED BUSHING	5
31	97501	BEARING	1
32	64026	REEL SPACER PIN	2
33	98746	1/2" LOCK NUT	4
34	97325	#10 External Star Washer	1
35	97213	10-32 HEX NUT	2
36	97214	1/4-28 X 5/8" LOW HEAD SCS	4
37	97123	LOCKING STAR WASHER	2
38	98257	3M VHB (FT)	2
39	97124	6-32 x 1/8" Set Screw	2
40	97673	10-32 x 1/2" BHSCS	15
41	95442	STICK SCREW	12
42	97000	REGULATOR GASKET	1
43	95177	5/16-18 X 3/8 SET SCREW	1
44	97812	OIL SEAL, 1/2" SHAFT	2
45	97667	3/8-16 x 1 1/4" SHCS, ZINC	2
46	97217	3/8 - 16 HEX NUT	2
47	95208	3/8-16 x 1" HEX HEAD BOLT	2
48	97167	7/8" PLUG	2
49	97460	CHAMFER KEY	1
50	66299	E-STYLE RETAINING CLIP, 7/32 SHAFT, .188 GROOVE	2
51	97126	6-32 x 3/16" BHCS, SS	2
52	96492	#10 x 1/4" BLK-OXIDE STEEL BUTTON SHCS	4
53	95084	1/4 NPT MALE TO 1/8 NPT FEMALE	1
54	95078	1/4" NIPPLE	1
55	95089	ELBOW 1/4" NPT X 1/4" NPT	1
56	97168	1 3/32" PLUG	3
57	97146	1/4-20 x 3/8" BHCS	31
58	97130	8-32 x 1/4" SHCS	2
59	97668	1/4 -20 X 1" SHCS	10
60	97148	1/4-20 x 1 1/2" SHCS	2
61	95175	1/4" WASHER, .50" OD, ZINC	2
62	64065	DIAL POST	2
63	64066	KNOB	2
64	97691	SPRING	2
65	97690	3/32" x 3/8" DOWEL PIN	4
66	64044	PLUG	2
67	97013	1/4-20 x 3/8" BHCS	2
68	97314	.281 ID X 1" OD X .080 THK FENDER WASHER	2
69	96063	1/4" MALE x 1/4" FEMALE 90°ELBOW, BRASS	1
70	95935	1/4" WASHER	2
71	97697	7/16-20 x 1 1/4" HEX BOLT	1
72	97665	OUTER SEAL	2
73	97666	OIL SEAL	2
74	97317	WAVE WASHER	2
75	95390	10-32 x 5/8" SHCS	2

BILL OF MATERIALS			
ITEM	P/N	DESCRIPTION	QTY
76	64054	HOIST PLATE	1
77	64021	UPPER COVER	1
78	64072	CONTROL BOX COVER	1
79	64067	BRACKET	1
80	64035	CONTROL BOX	1
81	64011	UPPER HOUSING	1
82	64090	GUIDE SLEEVE	2
83	64099	WATER LINE BRACKET	1
84	98443	SHAFT COLLAR	2
85	98338	"L" BRACKET KIT, MOTOR MOUNT	1
86	64050	GUIDE REEL CLAMP	2
87	64045	GUIDE REEL ARM	1
88	64030	CLAMP BAR	1
89	64022	POST SUPPORT	1
90	95316	3/16" X 1" DOWEL PIN	1
91	64046	UPPER CLAMP POST	1
92	64049	GUIDE REEL POST, REAR	2
93	64033	CLAMP POST	1
94	64024	REEL POST	2
95	97171	Flex Conduit	1
96	98611	WIRE TERMINAL	3
97	98043	12 Amp Fuse	1
98	98332	MOTOR HOUR METER	1
99	97067	RUBBER WASHER	2
100	64064	CONTROL GASKET	2
101	98613	INSULATED FEMALE BARREL TERMINAL	15
102	98499	PROTECTIVE SWITCH SLEEVE	2
103	98369	TOGGLE SWITCH	2
104	98616	CRIMP ON WIRE CONNECT	1
105	98416	IEC 3 WIRE CORD (FT)	6
106	98408	#16 WHITE WIRE (FT)	1
107	98405	#16 BLACK WIRE (FT)	1
108	98617	INSULATED MALE CONNECT	3
109	98751	1/2" SEALING RING	5
110	98336	COVER GASKET, CONTROL BOX	1
111	98403	FLEXIBLE CONDUIT, GREY SHIELD	1
112	98735	90° CONDUIT ELBOW	2
113	98418	CORD, 16/3 SJT X 9'10"	1
114	64138	90° GFCI PLUG, 120V 15AMPS	1
115	97169	90° x 3/4 PVC CONDUIT ELBOW	1
116	97170	3/4 STRAIGHT PVC CONDUIT COUPLER	1
117	64847a	FUSE BLOCK	1
118	98788	.187-.312 ALUM. STRAIN RELIEF	3
119	97693	GREEN INDICATOR LIGHT	1
120	97727	M2-D MINARIK DUAL DRIVE 120/230 VAC	1
121	64840	BELT WARNING PLATE	1
122	64929	DESCRIPTION PLATE, COMPANY LOGO	1
123	64930	WARNING LABEL, EYE PROTECTION	1
124	65059	DESCRIPTIVE PLATE, ELECTRICAL DATA	1
125	97122	OSCILLATION ON/OFF	1
126	64097	PNUEMATIC SWITCH LABEL, CW EXTEND	1
127	64037	DRIVE CONTROL LABEL	1
128	64036	OSCILLATION CONTROL LABEL	1
129	98344	BULKHEAD, 1/4" FEM x 1/4" FEM	1
130	98347	LOC-LINE SWIVEL NOZZLE, 2 1/2"	1
131	98345	1/4" LOC-LINE, (FT)	1
132	98346	1/4" LOC-LINE FLOW VALVE	1
133	64000-00 OSC SUB ASSY	SUPERFINISHER	1









BILL OF MATERIALS				
ITEM	P/N	DESCRIPTION	QTY	
1	98240	DC MOTOR FOR 115V	1	
2	97889	CYLINDER EXHAUST, 1/8" NPT	1	
3	64051	PANCAKE CYLINDER	1	
4	97663	DOUBLE ROW BEARING	2	
5	97667	3/8-16 x 1 1/4" SHCS, ZINC	14	
6	95393	Helicoil, 1/4-20 x .375	4	
7	95136	Helicoil, 10-32 x .285	22	
8	01041	GREASE FITTING	3	
9	95175	1/4" WASHER, .50" OD, ZINC	2	
10	64056	GREASE FITTING PLUG	3	
11	97587	10-32 x 1 1/2" SHCS, ZINC	4	
12	95935	1/4" WASHER	3	
13	97828	90DEG QUICK CONNECT, 1/4"	1	
14	95205	1/4-20 x 3/4" FHCS	4	
15	97013	1/4-20 x 3/8" BHCS	1	
16	64044	PLUG	1	
17	97314	.281 ID X 1" OD X .080 THK FENDER WASHER	1	
18	64071	GUARD, END CAP	1	
19	64059	MAIN OSSC. GUARD	1	
20	64069	GUIDE REEL GUARD	1	
21	64068	GUARD CAP	1	
22	64082	ADJUSTMENT PLATE	1	
23	64078	RIGID CONTACT ARM	1	
24	64080	ADJUSTABLE CONTACT ARM	1	
25	64038	LOWER BODY PLATE	1	
26	64041	OSCILLATION POST CLAMP	3	
27	64043	MOTOR MOUNT PLATE	1	
28	64081	CONTACT SLIDE ROD	2	
29	64039	GUIDE REEL POST, FRONT	1	
30	98341	.375" x 2.00" GUIDE PIN	2	
31	64092	CYLINDER PUSH ROD	1	
32	64042	OSCILLATION POST	2	
33	64086	OSCILLATION CAM/ FRONT END	1	
34	64087	OSCILLATION CAM/ BASE	1	
35	64084	CONTACT SLIDE SUPPORT, REAR	1	
36	64070	GUIDE STRIP	1	
37	64053	COUNTER BALANCE	1	
38	64090	GUIDE SLEEVE	1	
39	64088	ABRASIVE GUIDE MOUNT PLATE	1	
40	64074	CAM LINK	2	
41	64075	LINKAGE SUPPORT ARM	1	
42	64073	CROSS BRACE	1	
43	64077	UPPER OSC. GUIDE ARM	2	
44	64079	BACK PLATE	1	
45	64083	CONTACT SLIDE SUPPORT, REAR	1	
46	64076	LOWER OSC. GUIDE ARM	2	
47	95536	1/4 - 20 x 5/8" SHCS	2	
48	98257	3M VHB (FT)	1	
49	64052	GUSSET	1	
50	97209	1/4-20 X 3/4 SET SCREW, DOG POINT	1	
51	95177	5/16-18 X 3/8 SET SCREW	2	
52	64132	GROMMET	1	
53	97812	OIL SEAL, 1/2" SHAFT	1	
54	97317	WAVE WASHER	1	
55	64047	INTERNAL GUARD	1	
56	95164	1/8" x 1" L, ROLL PIN	1	
57	98342	MOUNTING ANGLE PLATE	1	
58	64063	5/8-11 x 1 3/4" FLANGE HEX HEAD BOLT	2	
59	64062	T-NUT	2	
60	97035	3/8 - 16 x 2" SHCS	1	
61	97638	10-32 x 2" SHCS, ZINC	2	
62	97546	#8 FLAT WASHER	4	
63	98340	.75 OD x .625 ID x .50 L, IGLIDE BEARING	14	
64	97146	1/4-20 x 3/8" BHCS	7	
65	97586	6-32 x 1/2" FHCS, ZINC	4	
66	97668	1/4 -20 X 1" SHCS	9	
67	97584	10-32 x 1/2" SHCS, ZINC	19	
68	63974	LOCK DOWN WASHER	1	
69	97301	#10 LOCKWASHER	1	
70	97673	10-32 x 1/2" BHSCS	2	
71	97530	.375 ID, OILITE BEARING	4	
72	97752	Washer	2	
73	97753	DOG EAR RETAINING CLIP	2	
74	97050	8-32 x 3/4" SHCS, STAINLESS STEEL	2	
75	97112	1/4 - 20 x 3/8" SET SCREW	3	
76	97148	1/4-20 x 1 1/2" SHCS	1	
77	63971	OSCILLATION POST	1	
78	97537	5/8 ID X 3/8 OILITE BEARING	2	
79	97319	WAVE WASHER	2	

