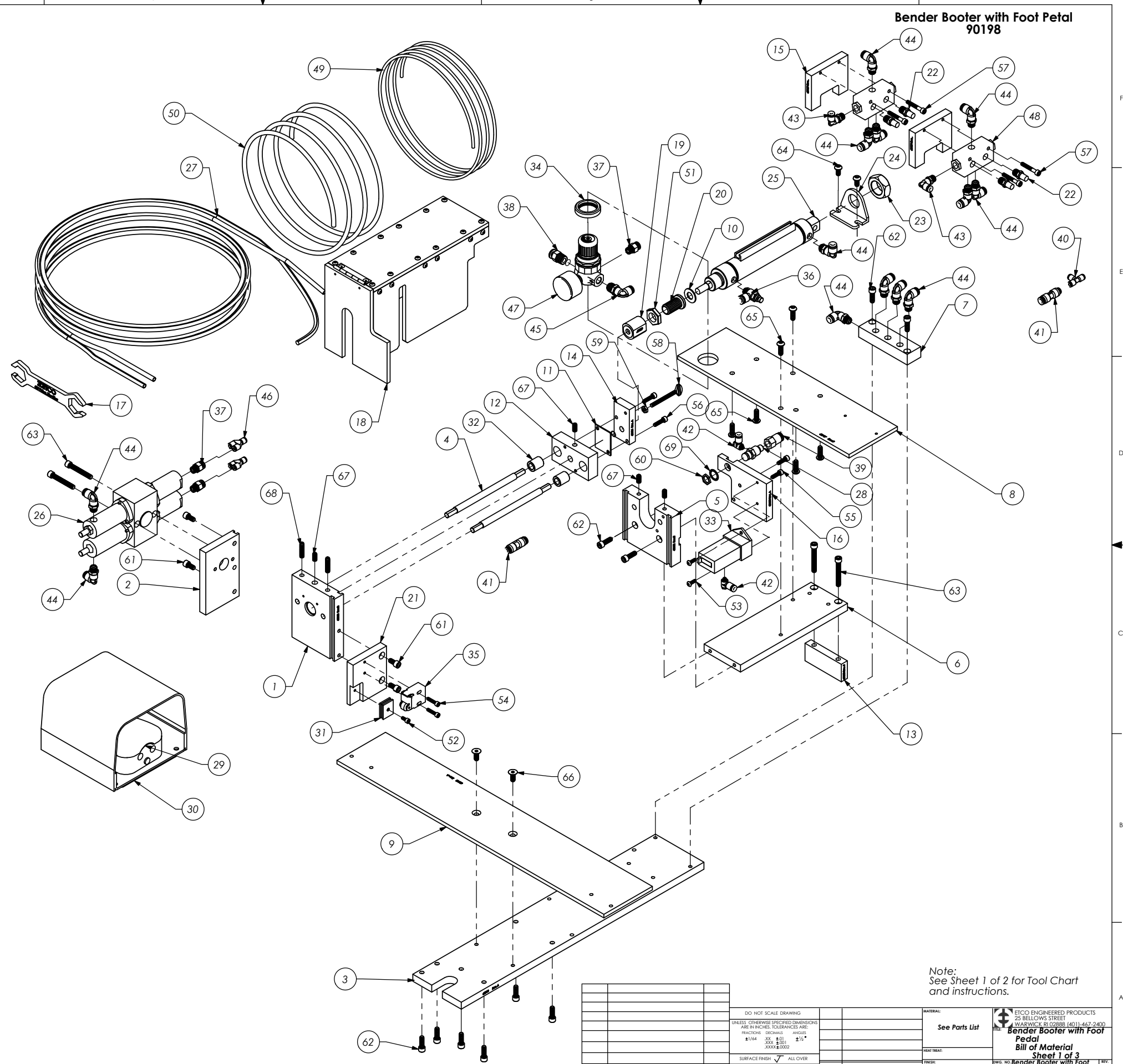


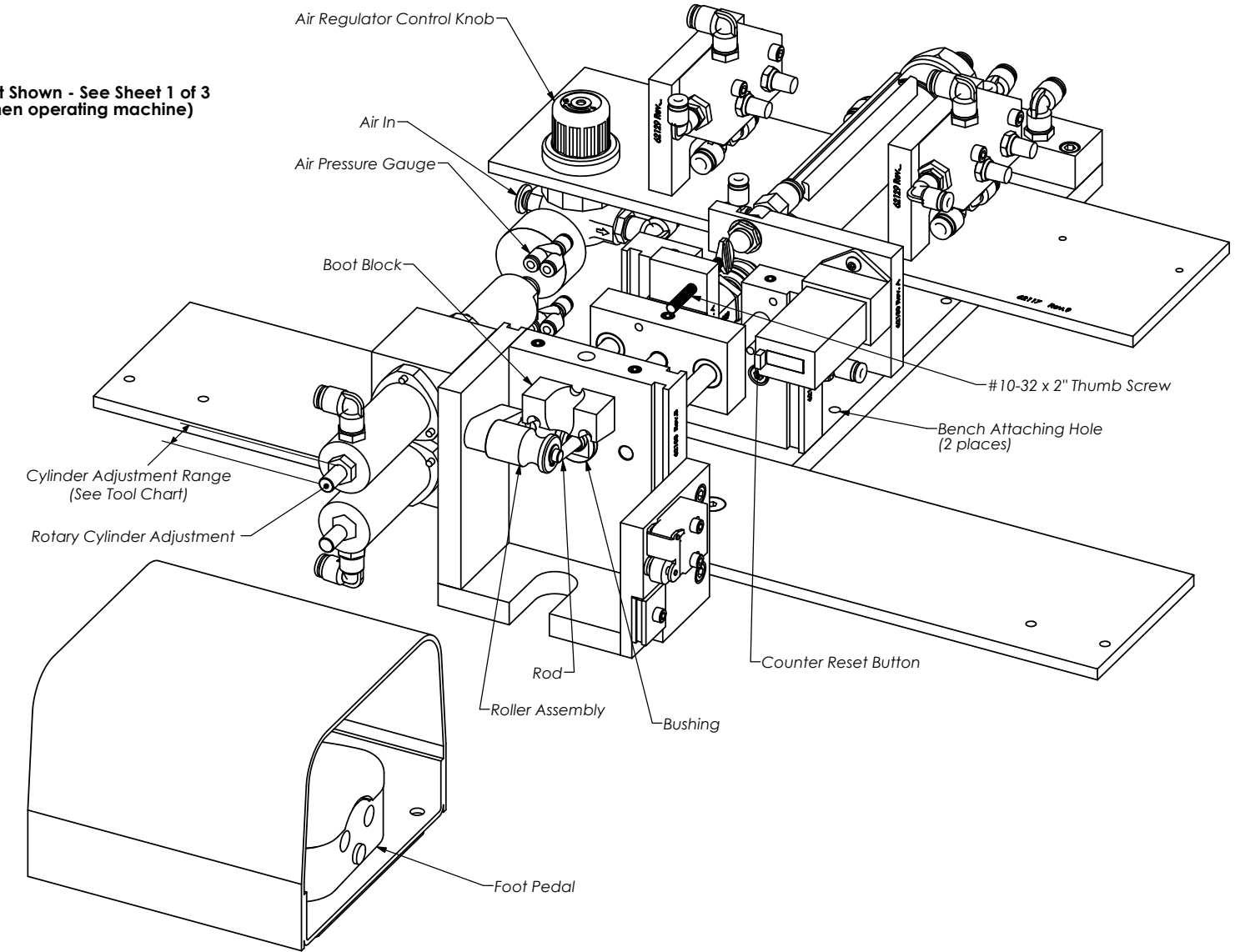
ITEM NO.	Part Code	PART NUMBER	DESCRIPTION	QTY.
1	-	62108	Front Guide Plate	1
2	-	62109	Rotary Cylinder Support	1
3	-	62110	Base Plate	1
4	-	62111	Guide Rod	2
5	-	62112	Rear Guide Plate	1
6	-	62113	Cylinder Mounting Plate	1
7	-	62116	Manifold	1
8	-	62117	Control Mounting Plate	1
9	-	62118	Palm Button Mounting Bracket	1
10	-	62119	Washer	1
11	-	62120	Stop block	1
12	-	62122	Booter Rod Holder	1
13	-	62123	Riser Block	1
14	-	62124	Spacer	1
15	-	62129	Pilot Valve Mounting Block	2
16	-	62130	Air Switch Mount Block	1
17	64106	64106 Wrench	Wrench	1
18	68554	68554 Assy	Booter Bender Guard Assy	1
19	AP 70795	68567	Rod Adjustment Sleeve	1
20	AP 70796	68568	Jam Nut	1
21	100216	100216-Magnet and Switch Support	Magnet and Switch Support	1
22	62168	Allied P-18	1/8-NPT Exhaust Muffler	6
23	62160	D-2545	Hex Nut	1
24	62161	D-8316	Cylinder Mounting Bracket	1
25	62158	MRS-124-DXPZ	Air Cylinder	1
26	62159	PT-074180-A1	Rotary Cylinder	1
27	73782	Clippard 3814-3 (72.00)	Twin 1/4" Air Line 72" Lg	1
28	62162	Humphrey 3P	Humphrey 3P Air Valve	1
29	73781	Linemaster 3C-30A2-S	Foot Pedal Valve	1
30	73780	Linemaster 522-B14	Foot Pedal Guard	1
31	101134	57005K22	Encased Ceramic Magnet	1
32	62156	McMaster Carr #6391K188	Sleeve Bearing	2
33	62143	McMaster Carr #8684T35	Counter	1
34	62323	Norgren 2962-89	Panel Nut	1
35	73345	Parker #PXCM121	Limit Switch	1
36	76268	Pisco JSC250-N1AU	Speed Controller	1
37	73222	Pisco PC250-N1U	1/4" x 1/8" NPT Straight	3
38	64115	Pisco PC250-N2U	Ø1/4" x 1/4-NPT Straight Connector, Black	1
39	62167	Pisco PCF250-N1U	Straight Connector	1
40	63953	Pisco PE156	Ø5/32" Tee Fitting, Green	1
41	100925	Pisco PG250-156	Fitting - Tube Reducer	2
42	75691	Pisco PH156-U10U	5/32" x 10-32 Banjo Fitting	2
43	73803	Pisco PL156-N1U	Ø5/32" x 1/8-NPT Elbow Fitting	2
44	72352	Pisco PL250-N1U	Ø1/4" x 1/8-NPT Elbow Fitting, White	14
45	76192	Pisco PL250-N2U	1/4" x 1/4" NPT Elbow Fitting	1
46	62704	Pisco PY250	Ø1/4" Y-Fitting, White	2
47	62163	R07_USA	Regulator/Gauge	1
48	62165	18SP-4	Pilot Valve	2
49	62171	5_32 inch Polyurethane Air Line Tubing	5/32" Air Line Tubing	1
50	62172	1_4 inch Polyurethane Air Line Tubing	1/4" Air Line Tubing	1
51	62155	5.8-18hn	5/8-18 Hex Nut Stainless Steel	1
52	63161	8-32_38sh	#8-32 x 3/8" Socket Hd Cap Screw	1
53	63787	8-32_50bh	#8-32 x 1/2" Socket Hd Cap Screw	2
54	70293	8-32_75sh	#8-32 x 3/4" Socket Hd Cap Screw	2
55	63532	10-32_63sh	#10-32 x 5/8" Socket Hd Cap Screw	2
56	77396	10-32_75sh	#10-32 x 3/4" Socket Hd Cap Screw	2
57	63167	10-32_1.25sh	#10-32 x 1 1/4" Socket Hd Cap Screw	4
58	63167	10-32_2.00ts	#10-32 x 2" Thumb Screw	1
59	63167	10-32_hn	#10-32 Hex Nut	1
60	78328	15.32_32 hex nut	Hex Nut	1
61	70030	1.4-20_50sh	1/4-20 x 1/2" Socket Hd Cap Screw	3
62	70030	1.4-20_75sh	1/4-20 x 3/4" Socket Hd Cap Screw	10
63	63632	1.4-20_1.93 sh	1/4-20 x 1 15/16" Socket Hd Cap Screw	4
64	63943	1.4-20_50bh	1/4-20 x 1/2" Button Hd Cap Screw	2
65	63943	1.4-20_75bh	1/4-20 x 3/4" Button Hd Cap Screw	6
66	63943	1.4-20_63fh	1/4-20 x 5/8" Flat Hd Cap Screw	2
67	63943	1.4-28_50ss	1/4-28 x 1/2" Socket Set Screw	4
68	63943	1.4-28_1.00ss	1/4-28 x 1" Socket Set Screw	2
69	63943	1.2isw	1/2" Internal Star Washer	1



Note:
See Sheet 1 of 2 for Tool Chart
and instructions.

DO NOT SCALE DRAWING		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		FRACTIONS DECIMALS ANGLES		<small>1/164 .001 .0015</small> <small>XXX .001 .015*</small> <small>XXXXX .0003</small>		SURFACE FINISH <input checked="" type="checkbox"/> ALL OVER		MATERIAL: See Parts List FINISH:		QTY: <input type="text"/> USED ON: <input type="text"/> SCALE: 1:3 CAD FILE: <input type="text"/>		DATE: <input type="text"/> DATE: <input type="text"/> CHECKED BY: <input type="text"/> DATE: <input type="text"/>		ETCO ENGINEERED PRODUCTS 25 BELLOWS STREET WARWICK, RI 02888 (401) 467-2400 Bender Booter with Foot Pedal Bill of Material Sheet 1 of 3 <small>DATE: 3/02/23</small> <small>REV: D</small>		
LVL	REVISION	BY/DATE	APPLICATION	SCALE	CAD FILE	CHECKED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

Safety Guard - Not Shown - See Sheet 1 of 3
(Keep in place when operating machine)



Note:
See Sheet 1 of 3 for exploded view and Parts List
for Bender Booter.

ETCO Incorporated Bender Booter Set-Up and Operating Instructions

- Step 1) Secure Bender Booter to bench using pre-drilled holes in base plate. The front 2" of the machine must overhang the workbench as noted in the machine drawing
- Step 2) Connect Bender Booter to compressed air supply at the regulator. (Air supply should be filtered and capable of maintaining a constant 70-80 PSI.) Adjust regulator between 70-80 PSI.
- Step 3) (Test) Press foot pedal a few times. Rod cylinder will retract to set location and rotary cylinder will rotate counterclockwise.
- Step 4) Place lubricated and pre-heated boot onto the booter rod. Insert terminated wire/terminal onto booter rod and secure into position with pin.
- Step 5) Press foot pedal. The booter rod will pull the wire terminal assembly through the boot and the roller assembly will bend the terminal.
- Step 6) Release the foot pedal and remove the finished assembly.
- Step 7) Inspect finished assembly and adjust rotary cylinder for more or less bend. Note: Bend adjustment is made on the top cylinder of the dual cylinder rotary actuator. To adjust, loosen locking nut and turn adjusting screw to desired length. (Measurement is taken from the tip of the adjusting screw to the flat end of the cylinder as shown in the schematic.) To decrease the bend, turn adjusting screw clockwise. To increase the bend, turn adjusting screw counterclockwise. Be sure to tighten lock nut once desired results have been achieved.
- Step 8) Repeat steps 4-7 until desired results are achieved.
- Step 9) If a Booter Rod is needed for a new operation, the Thumb Screw will need to be adjusted accordingly for proper activation of the Rotary Roller.
- Step 10) Bender Booter is now ready for production.

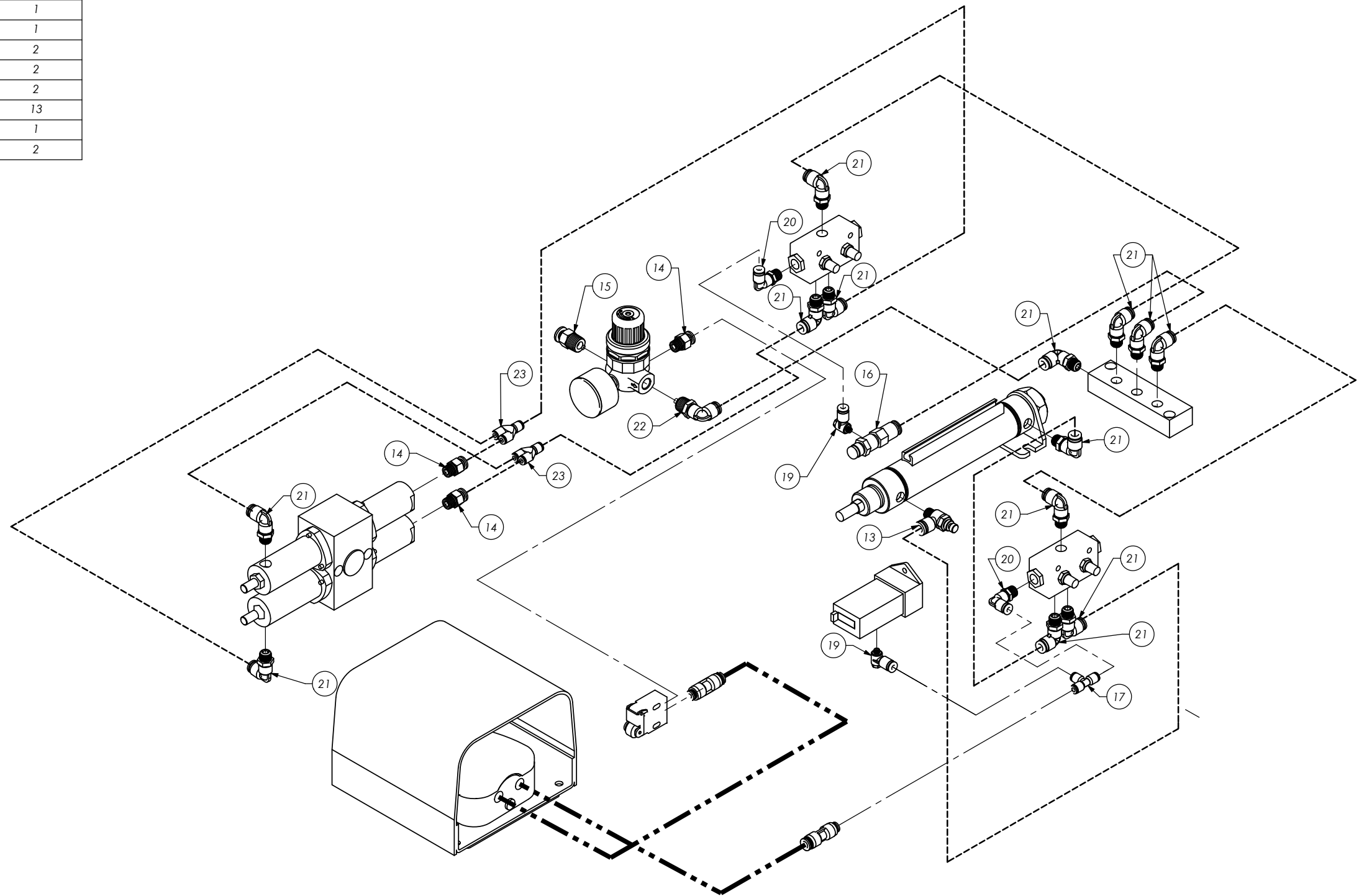
Tool Chart

Terminal	Boot	Cylinder Adjustment Range (Inches) (Reference Only)	Item #	Rod Part Code	Item #	Roller Part Code	Item #	Bushing Part Code	Item #	Boot Block Part Code
CC198	AB9	.540	23	63344	21	68557	22	68589	17	63345
DT7B	CB2	.500-.620	23	68562	21	68557	22	68589	17	62268
DT200B	AB16	.350-.450	23	62564	21	68584	22	68589	17	62268
DT200LB	AB16	.450-.680	23	68720	21	68584	22	68589	17	62268
DT200LB	AB16	.450-.550	23	68720	21	68584	22	68589	17	62268
DT200LB	CB2	.400	23	68720	21	68583	22	68589	17	62268
DT207B			23	68720	21	68583	22	68589	17	62268
DT207LB	CB3	.400	23	68720	21	68583	22	68589	17	62268
DT250B	AB16	.350-.450	23	62300	21	68584	22	68589	17	62268
DT250B	AB20	.400	23	62300	21	68584	22	68589	17	62268
DT257B			23	68586	21	68584	22	68589	17	62268
DT500			23	68688	21	68584	22	68689	17	N/A
DT515	CB8	.200	23	68717	21	68584	22	68689	17	62253
DT515	CB8	.200	23	62254	21	68584	22	68689	17	62253
DT515	Lexington S1800		23	68717	21	68584	22	68689	17	63692
DT589	CB8	.200	23	68688	21	68584	22	68689	17	N/A
DT1000	AB16	.450-.550	23	68740	21	68557	22	68689	17	62268
DT1000	CB66	.400	23	68740	21	68584	22	68689	17	62268
DT1000	Lexington S1755		23	63693	21	68583	22	68689	17	N/A
SP19	AB15	.400	23	68615	21	68614	22	68589	17	N/A
SP19B			23	68615	21	68614	22	68589	17	N/A
SP20	AB7	.380-.400	23	63344	21	68557	22	68589	17	63345
SP19	AB15	.030	23	63984	21	68614	22	63985	17	N/A

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ETCO ENGINEERED PRODUCTS 25 BELLOWS STREET WARWICK, RI 02888 (401) 467-2400		See Parts List on Sheet 1 of 3		Bender Booter with Foot Pedal		Set-up instructions		Sheet 2 of 3		3/02/23		SCJ					

ITEM NO.	PART NUMBER	DESCRIPTION	Bender Booter Air Line schematic QTY.
13	Pisco JSC250-N1AU	Speed Controller	1
14	Pisco PC250-N1U	1/4" x 1/8" NPT Straight	3
15	Pisco PC250-N2U	Ø1/4" x 1/4-NPT Straight Connector, Black	1
16	Pisco PCF250-N1U	Straight Connector	1
17	Pisco PE156	Ø5/32" Tee Fitting, Green	1
18	Pisco PG250-156	Fitting - Tube Reducer	2
19	Pisco PH156-U10U	5/32" x 10-32 Banjo Fitting	2
20	Pisco PL156-N1U	Ø5/32" x 1/8-NPT Elbow Fitting	2
21	Pisco PL250-N1U	Ø1/4" x 1/8-NPT Elbow Fitting	13
22	Pisco PL250-N2U	1/4" x 1/4" NPT Elbow Fitting	1
23	Pisco PY250	Ø1/4" Y-Fitting, White	2

Bender Booter with Foot Petal 90198



- 1.) ----- = 62172: 1/4" Air Line Tubing.
- 2.) ——— = 62171: 5/32" Air Line Tubing.
- 3.) = 73782: 1/4" Twin Air Line Tubing.

DO NOT SCALE DRAWING		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		MATERIAL:	
FRACTIONS	DECIMALS	ANGLES		See Parts List	
1/164	.001	±1/2°		ETCO ENGINEERED PRODUCTS 25 BELLOWS STREET WARWICK, RI 02888 (401) 467-2400	
	.0005			Bender Booter with Foot Pedal Air Line Schematic Sheet 3 of 3	
SURFACE FINISH: ALL OVER		QTY		DRAWN BY: SCJ	
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LVL	REVISION	BY/DATE	APPLICATION	SCALE: 1:3	REV: D