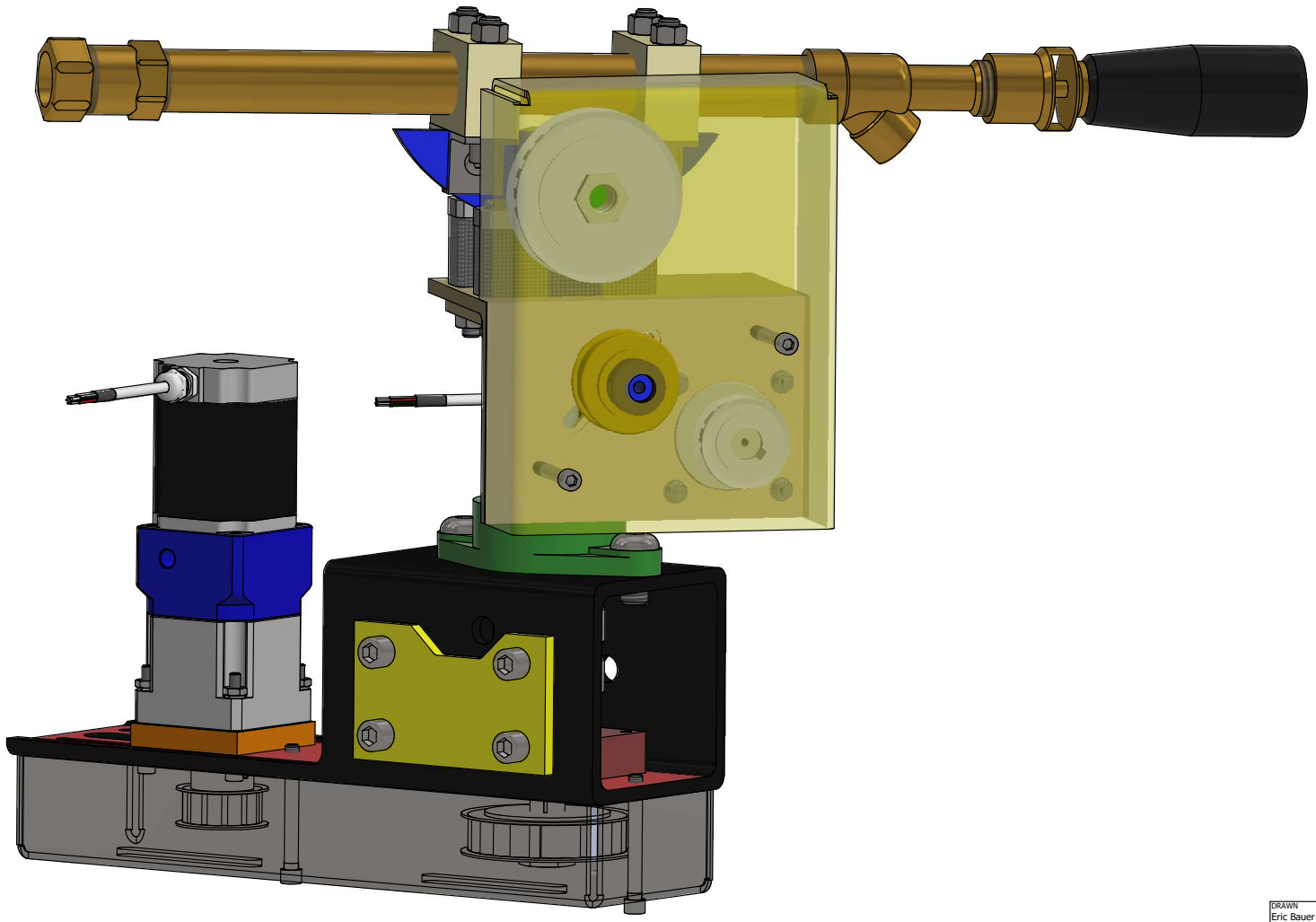

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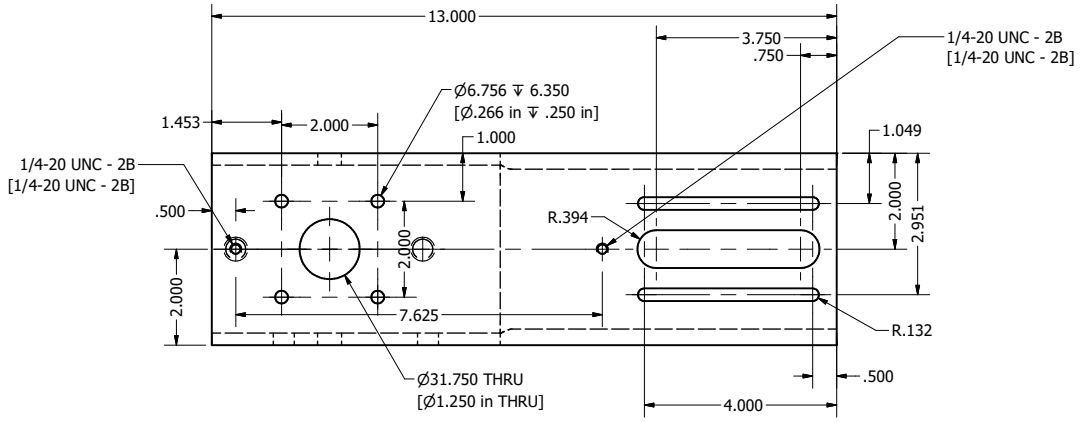
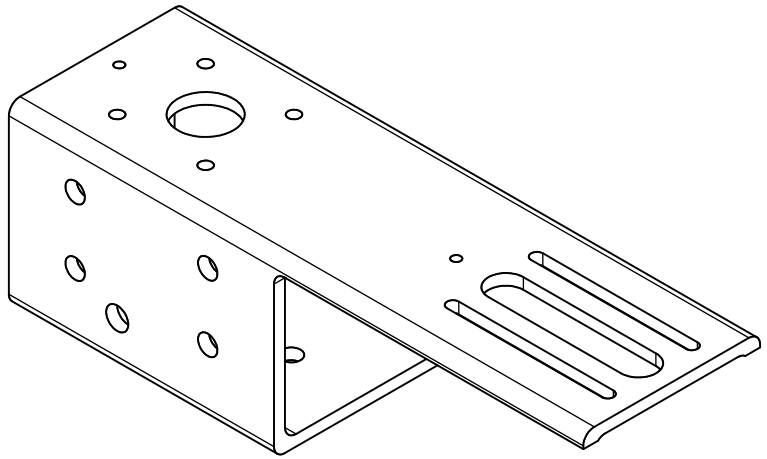
DRAWN	Eric Bauer	7/10/2023
CHECKED		
QA		
MFG		
APPROVED		

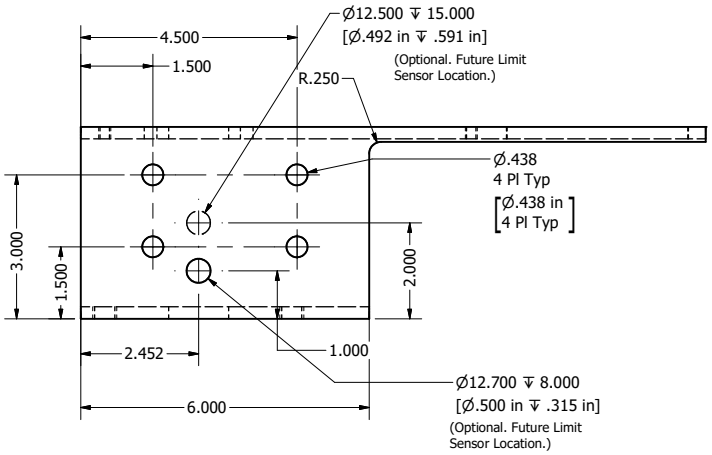
TITLE: Orchard Sprayer-Stepper Control

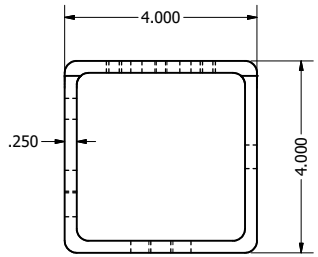
SIZE: D | DWG NO: OrchardSprayer-1 | REV: 1.1

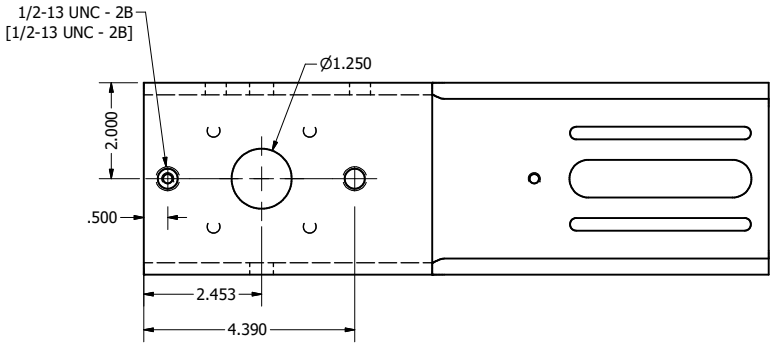
SCALE | SHEET 1 OF 19











Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE		
QA		Bearing Tube		
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 2 OF 19	

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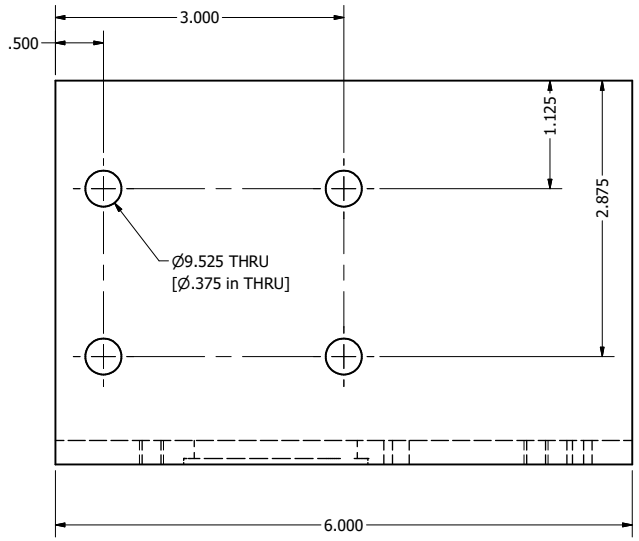
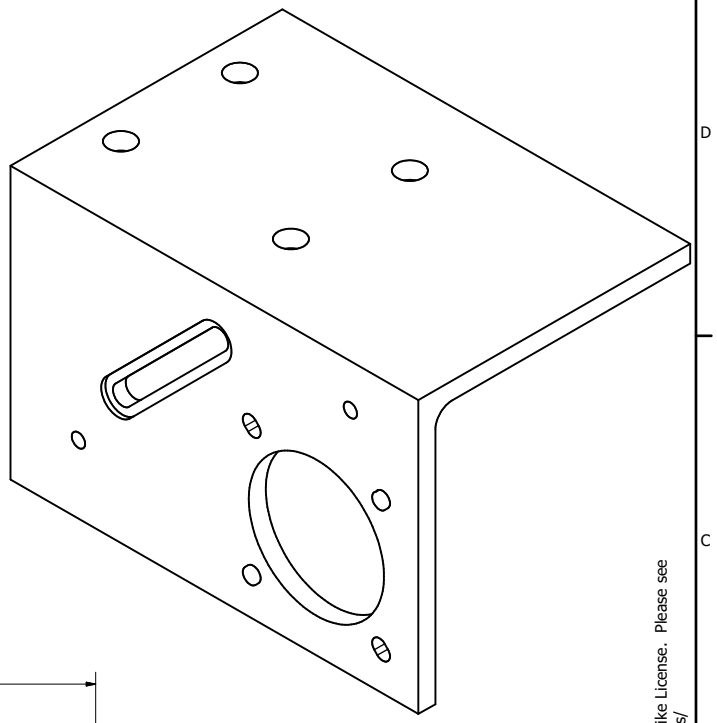
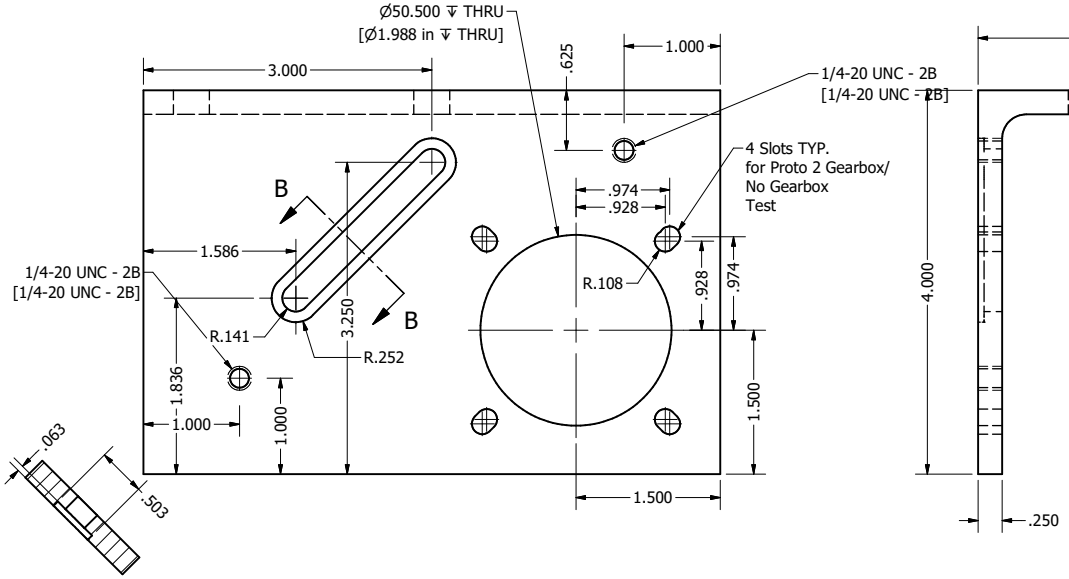
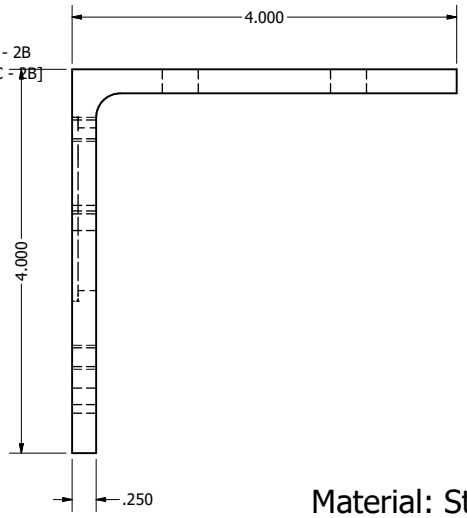






SECTION B-B
SCALE 1 : 1



Material: Steel
Finish: Paint
Qty: 1

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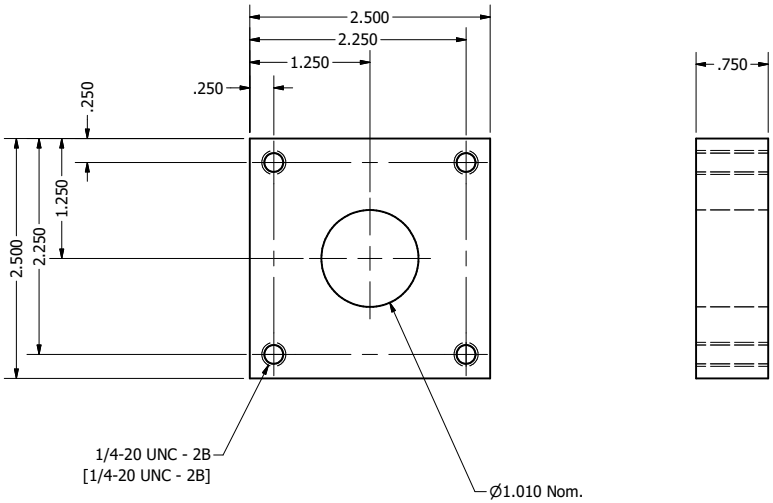
DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE Base Angle		
QA				
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 3 OF 19	



Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Bearing Block
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 4 OF 19

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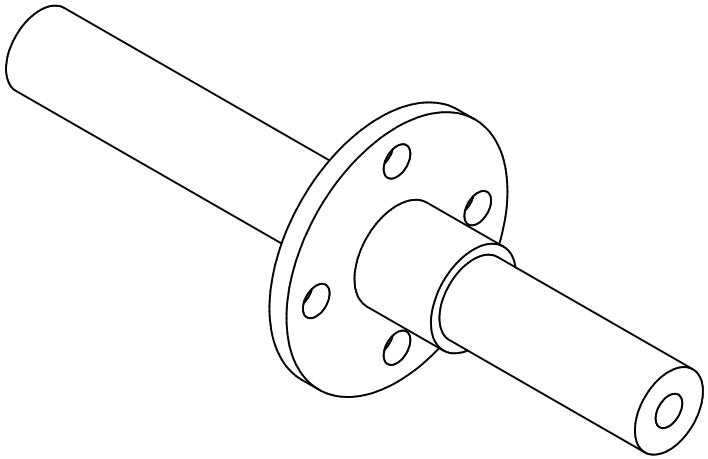

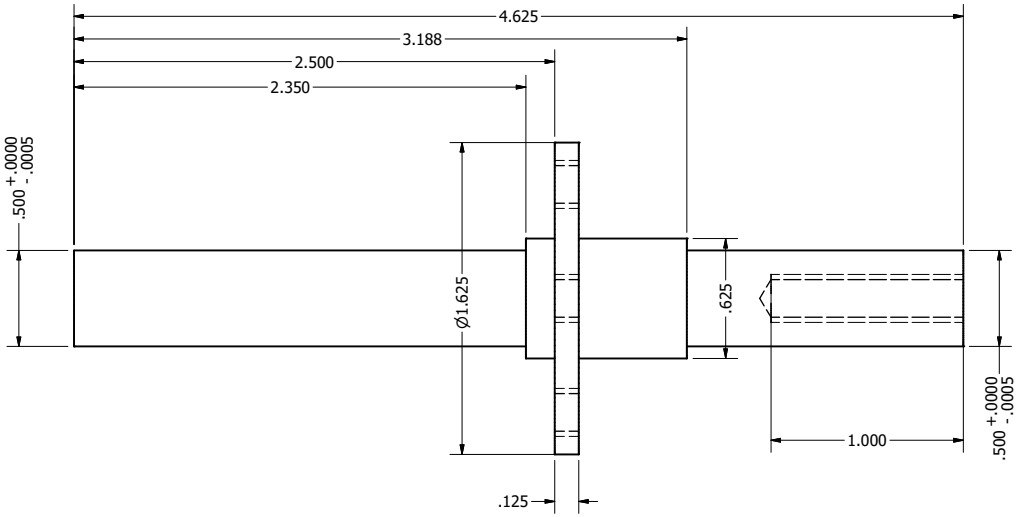

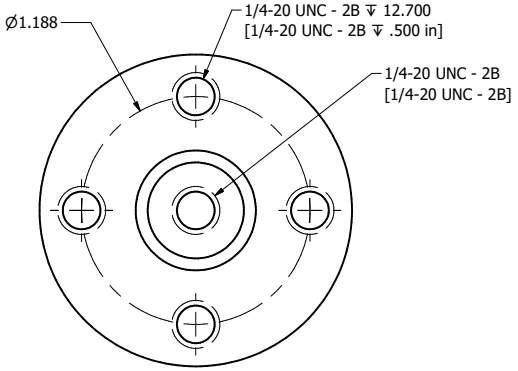

Material: Steel
Finish: Black Oxide
Qty: 1

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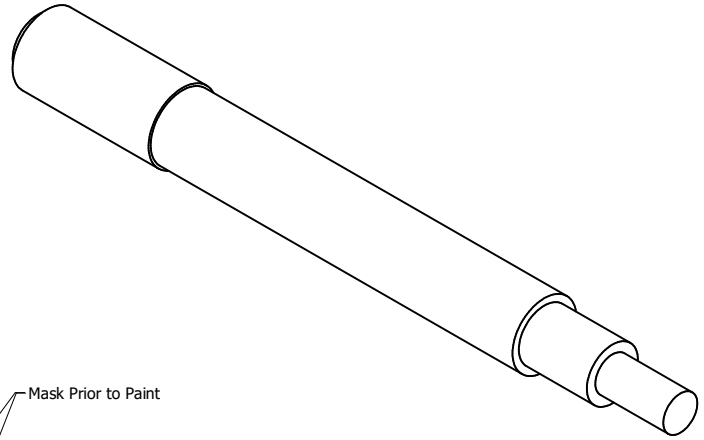
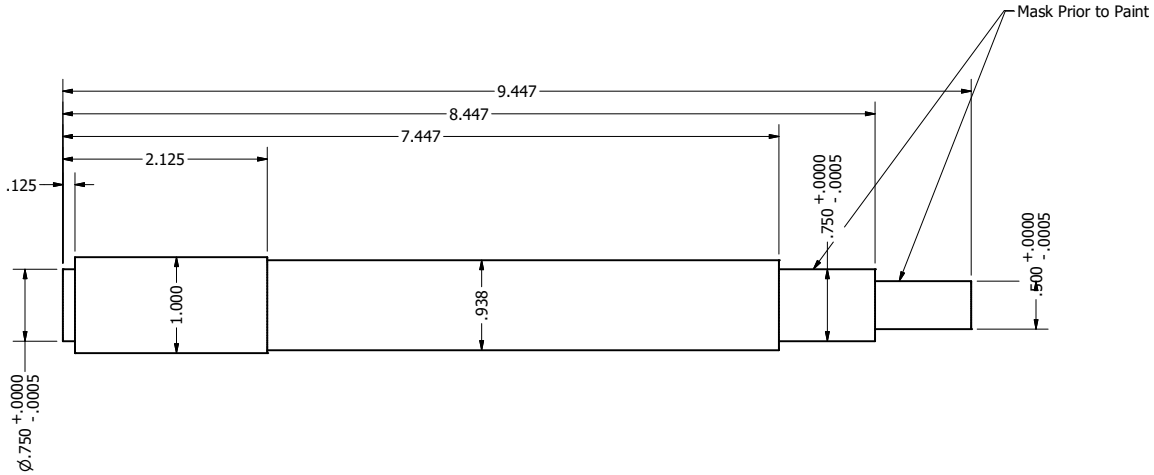
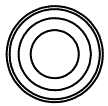
DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Pivot Shaft
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 5 OF 19







Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE		
QA		Rotation Shaft		
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 6 OF 19	

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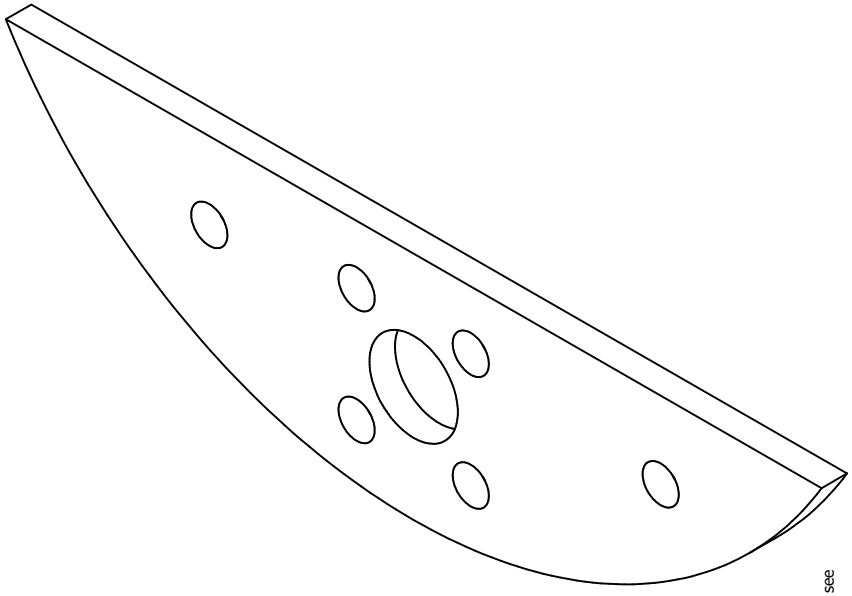

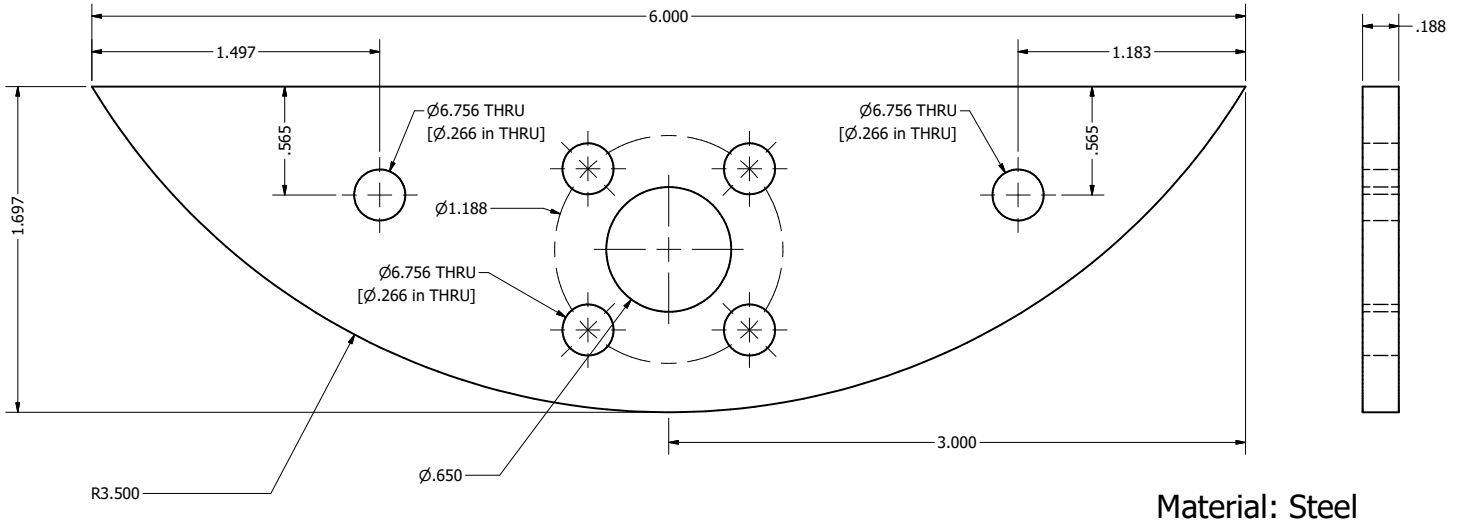

Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE		
QA		Gun Flange		
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 7 OF 19	

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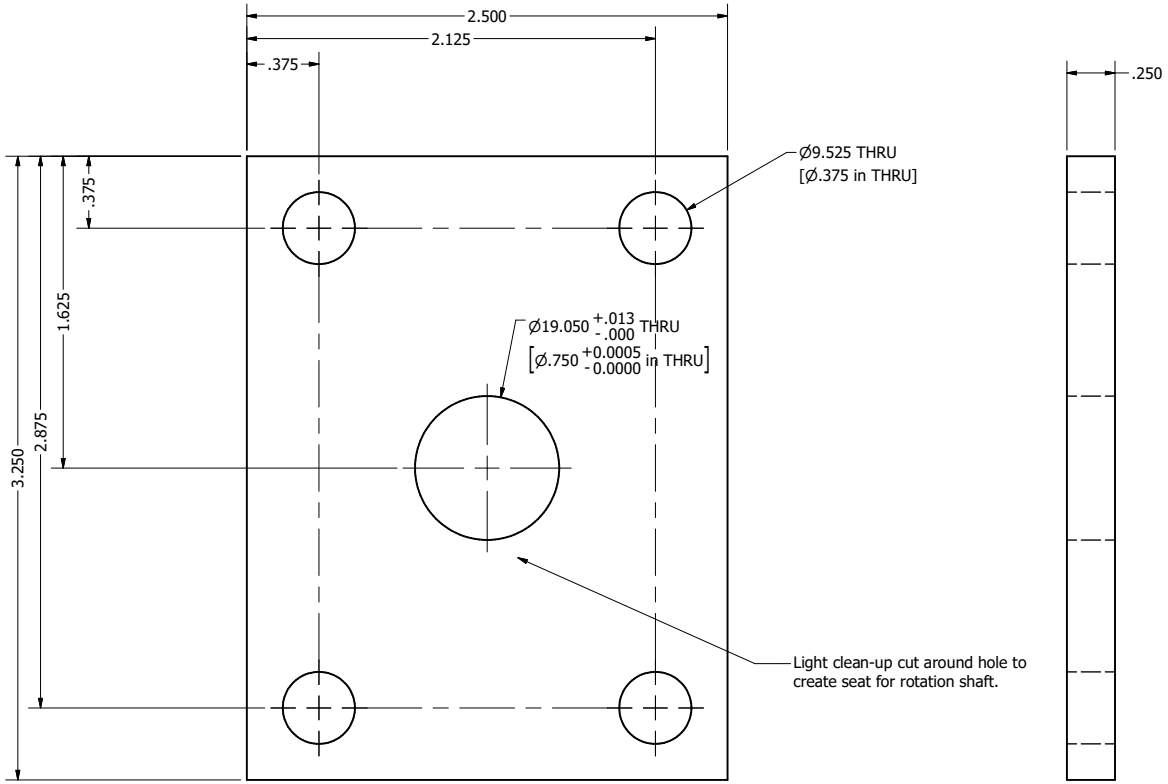
This plate to be welded to the rotation shaft prior to paint.



Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Rotation Plate
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 8 OF 19

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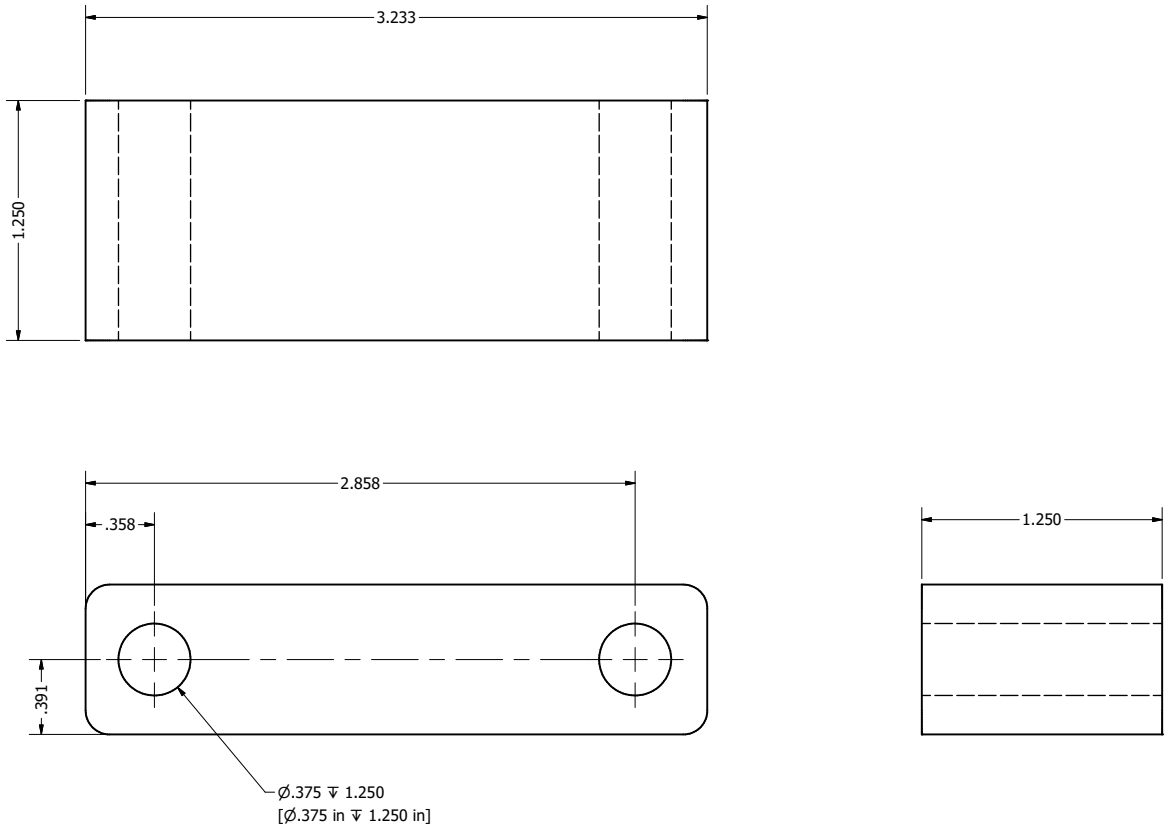

Material: Steel
Finish: Paint
Qty: 2

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Bearing Spacer
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 9 OF 19

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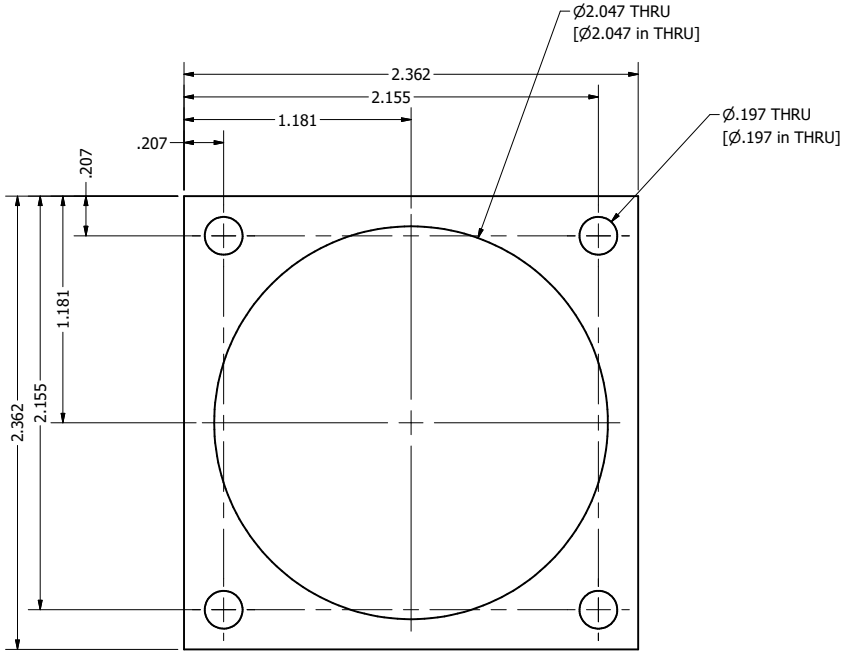

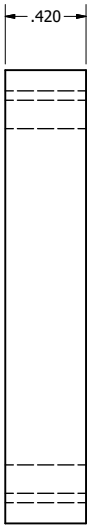

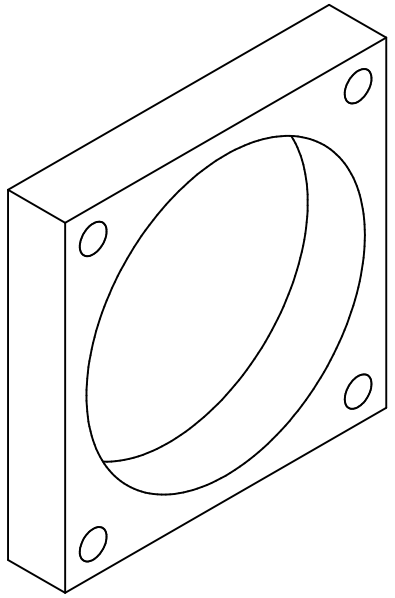

Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Gearbox Spacer Plate
QA		
MFG		
APPROVED		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 10 OF 19

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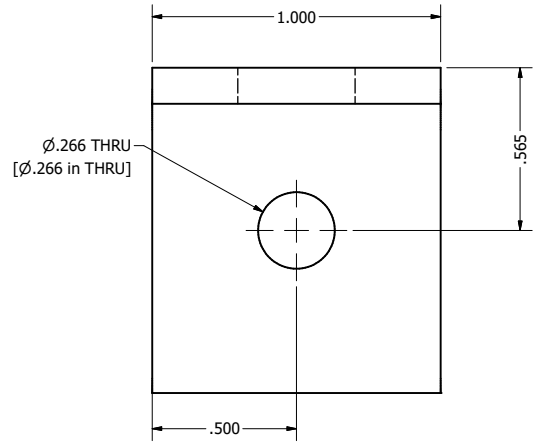

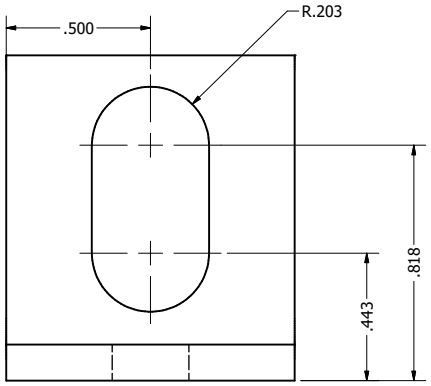

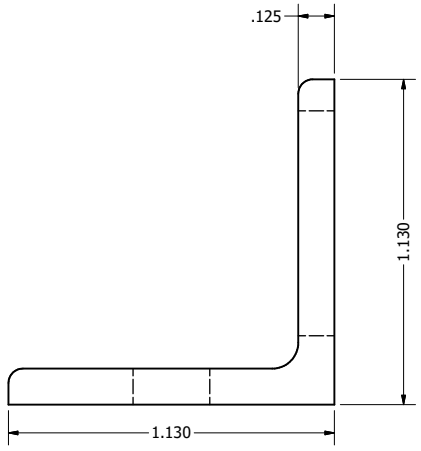

Material: Steel
Finish: Paint
Qty: 4

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Gun Clamp Support
QA		
MFG		
APPROVED		
		SIZE C / DWG NO OrchardSprayer-1 / REV 1.1
		SCALE / SHEET 11 OF 19

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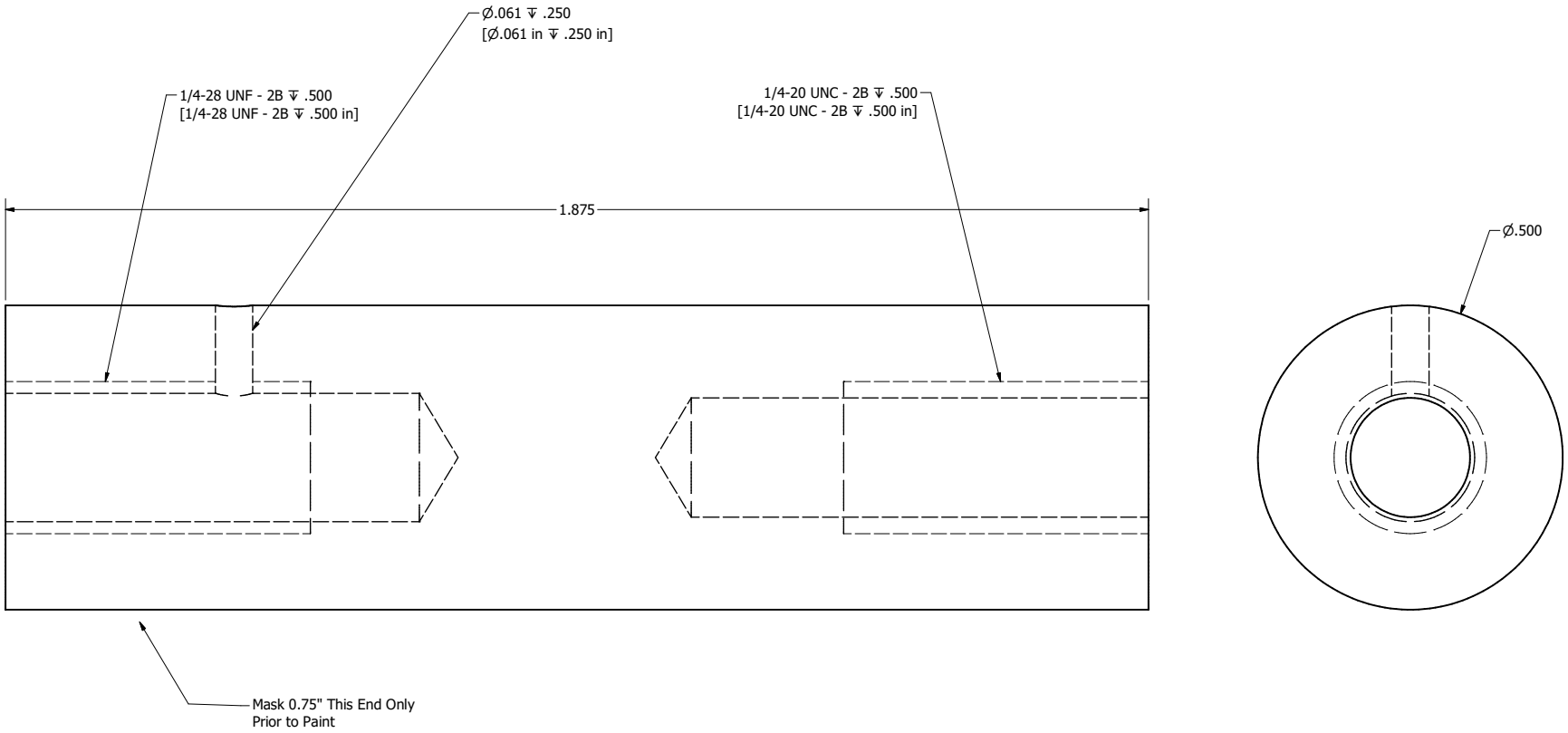

Material: Steel
Finish: Paint
Qty: 1

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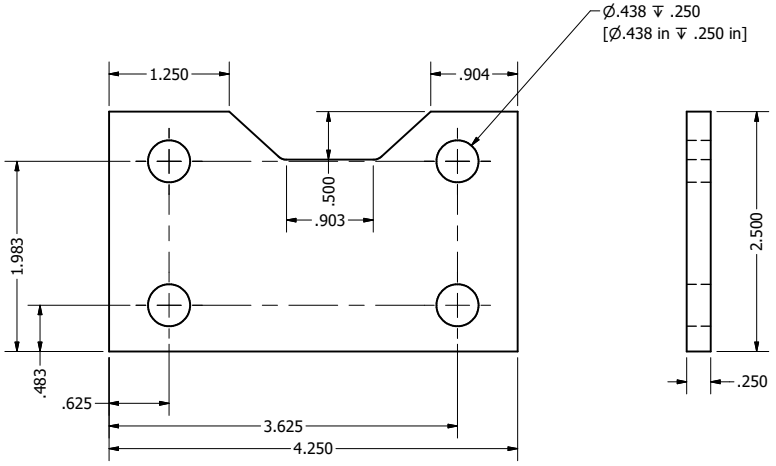
DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE		
QA		Idler Shaft		
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 12 OF 19	

This plate is intended to be welded to the bumper attachment structure and then bolted to the bearing tube.



Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023			
CHECKED		TITLE		
QA		Bumper Attach Pad		
MFG				
APPROVED		SIZE C	DWG NO OrchardSprayer-1	REV 1.1
		SCALE	SHEET 13 OF 19	

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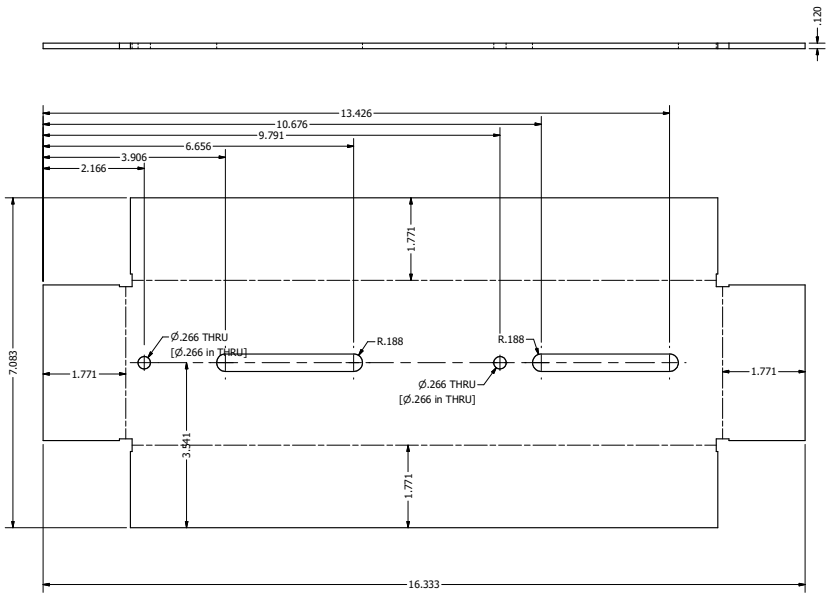
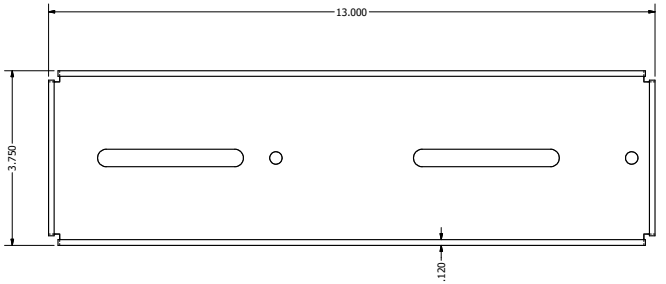
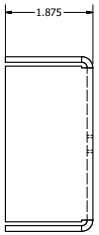
NOTE: Weld all
seams complete







Material: Steel
Finish: Paint
Qty: 1

DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: BeltGuard_Bottom
QA		
MFG		
APPROVED		
		SIZE D · DWG NO OrchardSprayer-1 · REV 1.1
		SCALE · SHEET 14 OF 19

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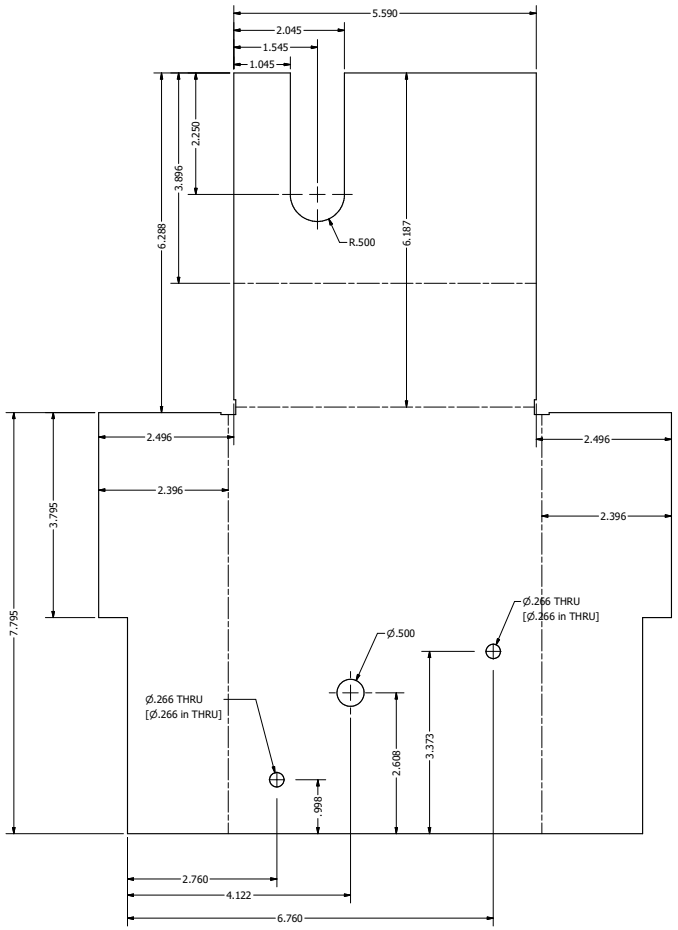
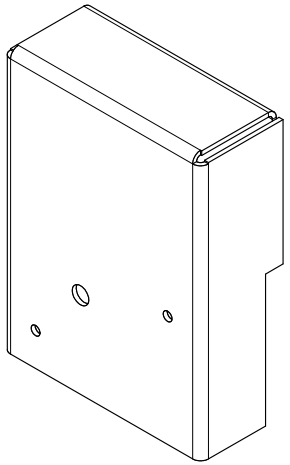
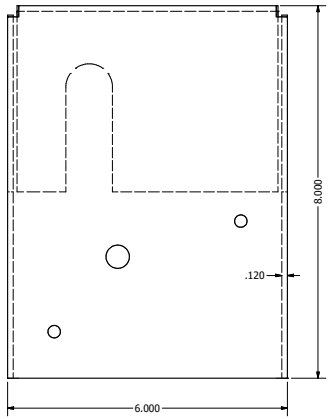
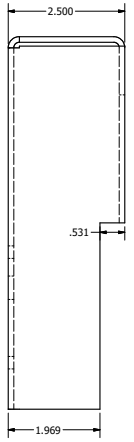
NOTE: Weld all
seams complete









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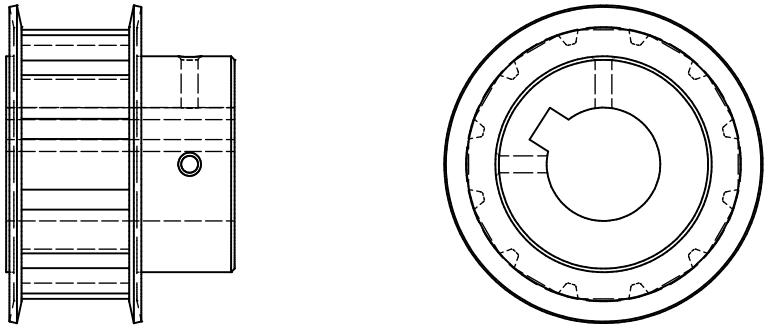
DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: BeltGuard_Upper
QA		
MFG		
APPROVED		
		SIZE D · DWG NO OrchardSprayer-1 · REV 1.1
		SCALE · SHEET 15 OF 19



Automation Direct Pulley APB12L050BF-375
Bore for slip fit with gear box shaft
Broach keyway as needed.

Qty: 2

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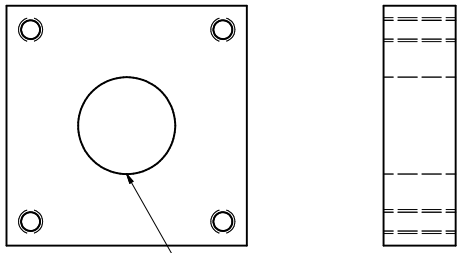
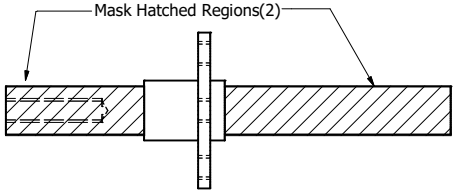
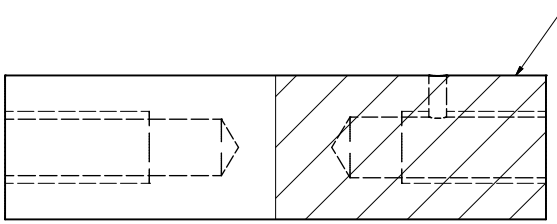
DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Timing Pulley Modifications
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 16 OF 19



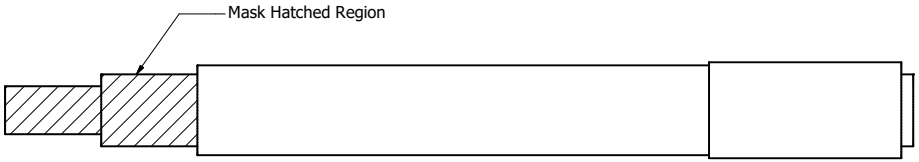
This part has a bronze bushing pressed into it and has been welded into the Bearing Tube





All Parts Not Shown

Protect All Tapped Holes



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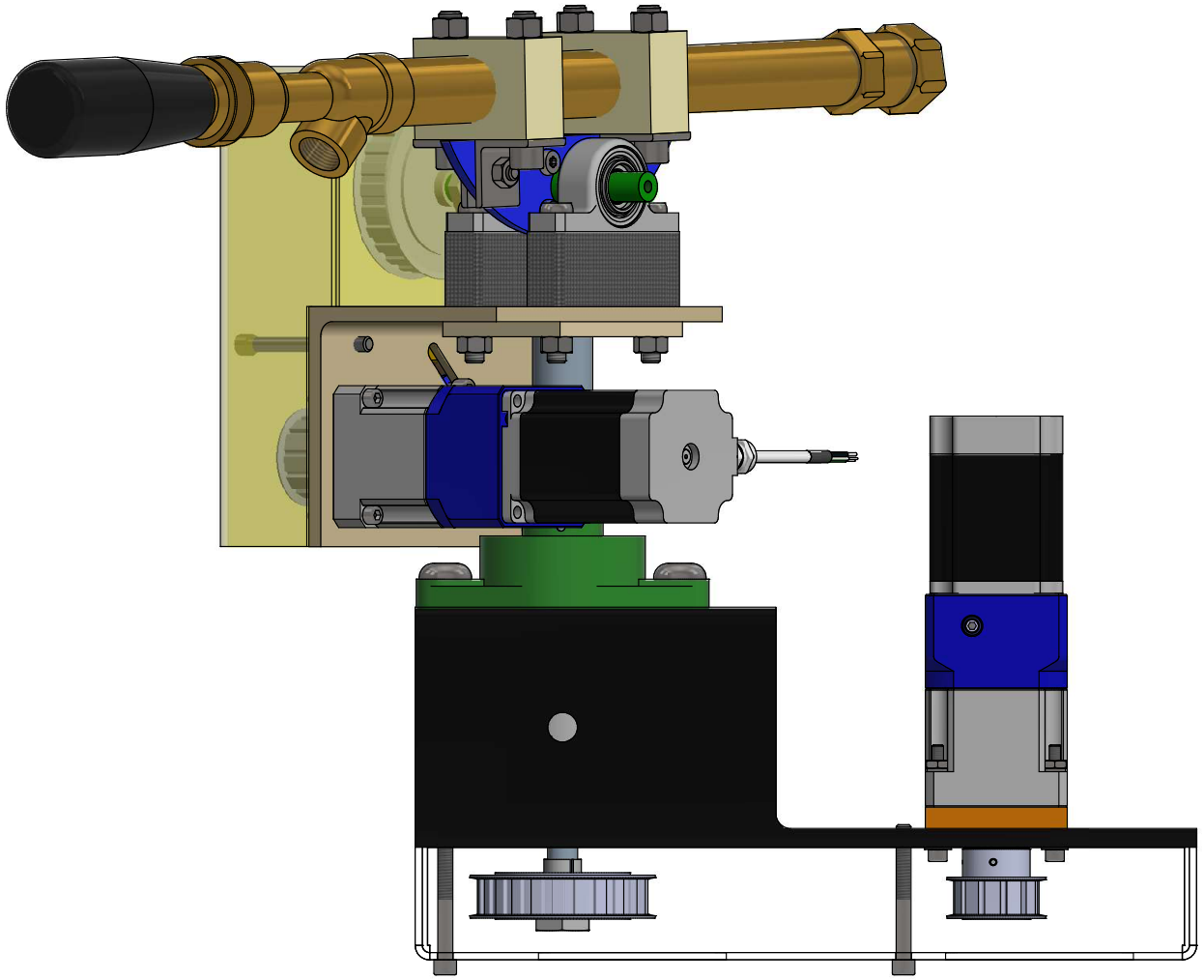
DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Paint Masking Details
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 17 OF 19



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DRAWN	Eric Bauer	7/10/2023	
CHECKED			
QA			
MFG			
APPROVED			

TITLE

SIZE	DWG NO	REV
D	OrchardSprayer-1	1.1

SCALE

SHEET 18 OF 19

PARTS LIST

ITEM	QTY	PART NUMBER	STOCK NUMBER	DESCRIPTION	VENDOR
1	1	WandRotator			
1.1	1	BearingTube			
1.2	1	SKF UCFT205-15	McMaster 5968K111	Flange Bearing	McMaster-Carr
1.3	1	BearingBlock			
1.4	2	S25CY9-PC6464		Shaft Collar	Stock Drive Products
1.6	2	ANSI B18.3 - 1/2 - 13 x 1, HSBHCSI		Hexagon Socket Button Head Cap Screw	
1.7	1	RotationShaft			
1.8	1	0435437		Brass Bushing	Fastenal
1.9	1	TopRotationPlate			
2	1	PivotAssy			
2.1	1	BaseAngle			
2.2	2	BearingSpacer_C			
2.4	1	PivotShaft			
2.5	1	Gun Pivot Flange Plate			
2.6	4.000 in	AISC - L 1.13 x 1.13 x 1/8 - 1	(L 1 1/8 x 1 1/8 x 1/8)	Angle Steel	
2.7	1	43229	A 6Z 9-016NID	Idler Pulley	Stock Drive Products
2.8	1	IdlerShaft			
2.3	1	ANSI B18.3 - 1/4 - 20 UNC - 1/4 HS HCS		Hexagon Socket Head Cap Screw	
2.9	2	6240K17	6240K17	Set Screw Shaft Collar	McMaster-Carr
2.11	2	2031N14_Mounted Open Needle-Roller Bearing.ipt	2031N14	Mounted Open Needle-Roller Bearing	McMaster-Carr
2.13	4	ANSI B18.3 - 1/4-20 UNC - 0.375, SSBHCSI		Hexagon Socket Head Cap Screw	
2.12	2	Unbrako - 1/4 x 3/4		Hexagon Socket Button Head Cap Screw	
4	2	23Y65206S-CS4		Stepper Motor	Anaheim Automation
5	2	GBPH-0601-NP-010-AA231-250		Gearbox	Anahiem Automation
6	1	Gearbox Spacer Plate			
7	1	GunJet_SSCAA2-60 Spray Gun 24"	AA260	Sprayer Wand	SprayerDepot.com
8	2	3015T96		Pipe Clamp Block	McMaster-Carr
11	4	ANSI B18.2.2 - 5/16 - 18, HNI		Hex Nuts (Inch Series) Hex Nut	
15	1	AttachmentPlate-Upper			
17	8	ANSI B18.2.2 - 3/8 - 16, HNI		Hex Nuts (Inch Series) Hex Nut	
18	2	APB12L050BF-375		Timing Pulley	AutomationDirect.com
19	2	A 6T 4-H24DF5024		Timing Pulley	Stock Drive Products
20	2	A_7Z37-040670		Shaftloc Coupling	Stock Drive Products
22	4	ANSI B18.3 - 3/8 - 16 UNC - 1 HS HCS		Hexagon Socket Head Cap Screw	
25	4	ANSI B18.3 - 3/8 - 16 UNC - 2 1/4 HS HCS		Hexagon Socket Head Cap Screw	
26	2	ANSI B18.2.2 - 1/4 - 20, HNI		Hex Nuts (Inch Series) Hex Nut	
27	1	BeltGuard_Bottom			
28	2	ANSI B18.3 - 1/4 - 20 UNC - 2 1/4 HS HCS		Hexagon Socket Head Cap Screw	
29	1	BeltGuard_Top			
30	2	ANSI B18.3 - 1/4 - 20 UNC - 2 1/2 HS HCS		Hexagon Socket Head Cap Screw	
31	4	ANSI B18.3 - 10-32 UNF - 1.25 HS HCS		Hexagon Socket Head Cap Screw	
32	4	ANSI B18.3 - 10-32 UNF - 1.75 HS HCS		Hexagon Socket Head Cap Screw	
33	8	SAE J773b - No. 10. SAE Type L. narrow		Conical Spring Washer	
34	4	IFI 100/107 - No. 10 - 32 Top Insert Type		Prevailing Torque Type Hex Nut	
35	4	ANSI B18.3 - 5/16-18 UNC - 2.5, SSBHCSI		Hexagon Socket Head Cap Screw	
36	4	ASME B18.21.1 - No.10, HHSLW		Heavy Helical Spring Lock Washers(Inch Series)	
37	4	ASME B18.6.3 - 10-32		Chamfered Bottom Hex Machine Screw Nuts	

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DRAWN Eric Bauer	7/10/2023	
CHECKED		TITLE: Full BOM
QA		
MFG		
APPROVED		
		SIZE C | DWG NO OrchardSprayer-1 | REV 1.1
		SCALE | SHEET 19 OF 19