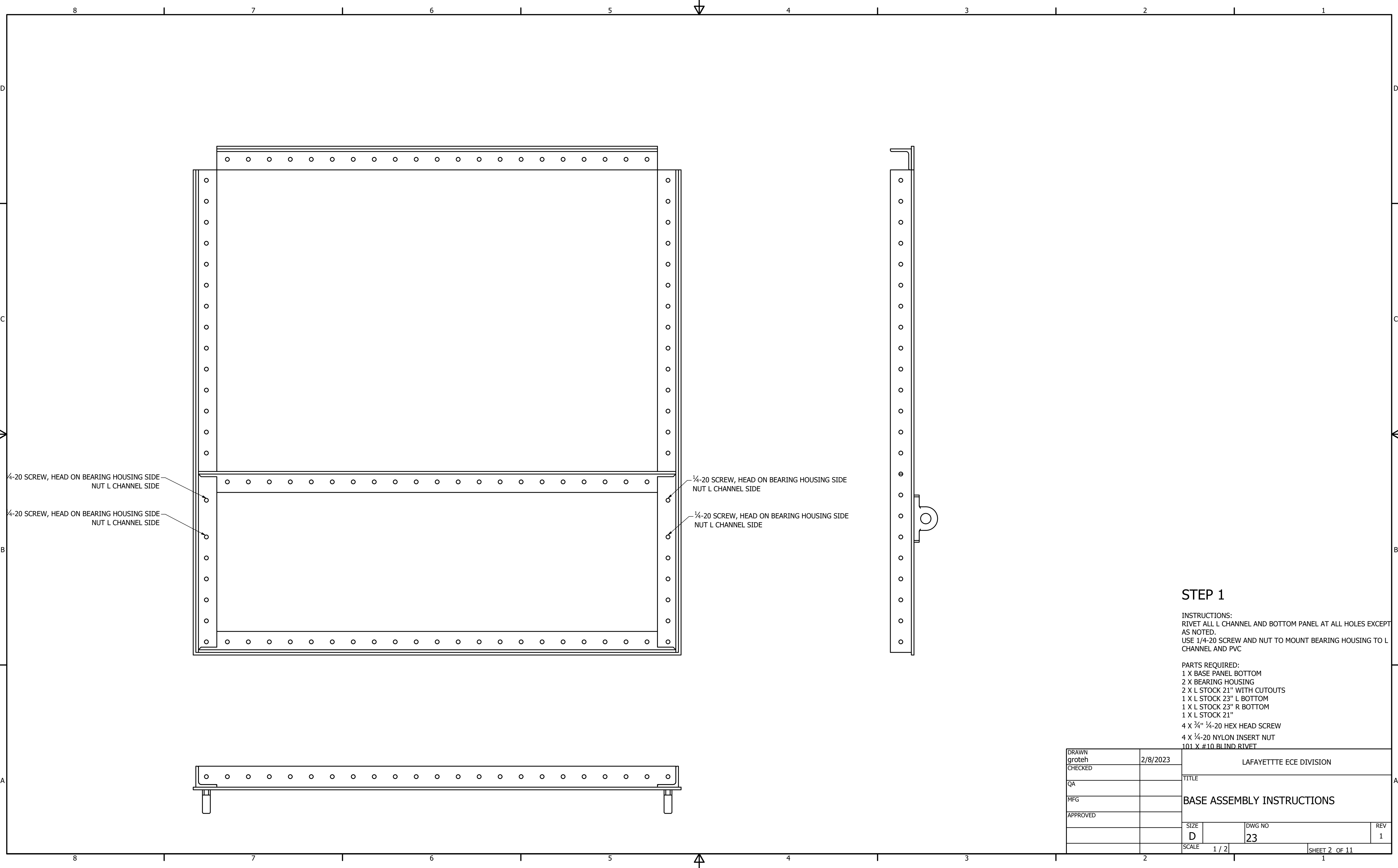


PARTS REQUIRED					PARTS REQUIRED					PARTS REQUIRED				
ITEM	QTY	PART NAME	DESCRIPTION	STEP USED	ITEM	QTY	PART NAME	DESCRIPTION	STEP USED	ITEM	QTY	PART NAME	DESCRIPTION	STEP USED
1	1	BASE PANEL BOTTOM	PVC PANELING	1	16	2	FRONT LEGS	1"x1" ALUMINUM TUBE	3	31	2	BEARING HOUSING	BEARING HOUSING FOR 3/8" WIDE AND 0.5" OD BEARING	1
2	1	BASE PANEL TOP	PVC PANELING	2	17	2	HANDLES	1/2" ALUMINUM TUBE	CUT TO LENGTH IF NEEDED, DRILL HOLES	32	2	WHEEL	SPOKED HOLLOW-TREAD FLAT-FREE WHEEL	8
3	1	BASE PANEL FRONT	PVC PANELING	4	18	3	STANDOFF FROM MOTOR PLATE	#10 STANDOFF, 2 5/8" TOTAL LENGTH	5	33	2	SHAFT COLLAR FOR WHEELS	CLAMPING TWO PIECE SHAFT COLLAR FOR 1/2" DIAMETER	8
4	1	BASE PANEL BACK	PVC PANELING	7	19	2	L STOCK 21" WITH CUTOUTS	L CHANNEL WITH 1" REGULAR HOLE PATTERN	1					
5	1	BASE PANEL LEFT	PVC PANELING	3	20	2	L STOCK 24" THREADED	L CHANNEL WITH 1" REGULAR HOLE PATTERN, ONE SIDE THREADED	3					
6	1	BASE PANEL RIGHT	PVC PANELING	3	21	2	L STOCK 21" THREADED	L CHANNEL WITH 1" REGULAR HOLE PATTERN, ONE SIDE THREADED	2, 4					
7	1	ELECTRONICS HOLDER BOARD	PVC PANELING	6	22	1	L STOCK 23" L BOTTOM	L CHANNEL WITH 1" REGULAR HOLE PATTERN	1					
8	1	MOTOR MOUNT	PVC PANELING	5	23	1	L STOCK 23" R BOTTOM	L CHANNEL WITH 1" REGULAR HOLE PATTERN	1					
9	3	BASE MOUNTED TURRET SLIDERS	ARCS OF PLASTIC THAT SUPPORT TURRET	2	24	1	L STOCK 21"	L CHANNEL WITH 1" REGULAR HOLE PATTERN	1					
10	1	TURRET PULLY	32T PULLY	BORE OUT CENTER	25	2	L STOCK 8"	L CHANNEL WITH 1" REGULAR HOLE PATTERN	3					
11	1	10T PULLY	10T PULLY	5	26	1	L STOCK 7"	L CHANNEL WITH 1" REGULAR HOLE PATTERN	6					
12	1	AXLE SHAFT	STEEL 1/2" SHAFT	CUT TO LENGTH	27	2	L STOCK 5"	L CHANNEL WITH 1" REGULAR HOLE PATTERN	5, 6					
13	1	TURRET SHAFT	6" KEY STOCK	CUT HOLE, OFF CENTER	28	1	L STOCK 1"	L BRACKET	6					
14	1	MOTOR TO PULLY ADAPTER	MACHINED SHAFT END	5	29	2	L STOCK 6.125"	L CHANNEL WITH 1.75" REGULAR HOLE PATTERN	3					
15	2	TURRET SHAFT BUSHING	BUSHINGS TO HOLD TURRET SHAFT	2, 5	30	2	SHAFT COLLAR FOR TURRET SHAFT	SET SCREW SHAFT COLLAR FOR 1-5/8" DIAMETER	?					

FASTENERS REQUIRED					
ITEM	QTY	PART NAME	DESCRIPTION	MATERIAL	STEP USED
?????		#10 BLIND RIVET	ALUMINUM BLIND RIVET, 3/16" DIAMETER, FOR 0.126"-0.25" MATERIAL THICKNESS	MCMaster SUPPLIED ALUMINUM RIVETS, 3/16" DIAMETER (97447A050)	1, 2, 3, 4, 5, 6
?????		3/8" 10-32 FLAT HEAD SCREW	FLAT HEAD SCREW 10-32 THREAD SIZE, 3/8" LONG	MCMaster SUPPLIED BLACK-OXIDE ALLOY STEEL HEX DRIVE FLAT HEAD SCREW (91253A001)	2, ?????
3		1/2" 10-32 BUTTON HEAD SCREW	BUTTON HEAD SCREW 10-32 THREAD SIZE, 1/2" LONG	MACHINE SHOP SUPPLIED BLACK-OXIDE ALLOY STEEL HEX DRIVE BUTTON HEAD SCREW	5
3		1/4" 10-32 BUTTON HEAD SCREW	BUTTON HEAD SCREW 10-32 THREAD SIZE, 1/4" LONG	MACHINE SHOP SUPPLIED BLACK OXIDE ALLOY STEEL HEX DRIVE BUTTON HEAD SCREW	5
4		2 3/4" 10-32 BUTTON HEAD SCREW	BUTTON HEAD SCREW 10-32 THREAD SIZE, 2 3/4" LONG	MACHINE SHOP SUPPLIED BLACK-OXIDE ALLOY STEEL HEX DRIVE BUTTON HEAD SCREW	3
3		1 1/4" 1/4-20 SOCKET HEAD SCREW	SOCKET HEAD SCREW 1/4-20 THREAD SIZE, 1 1/4" LONG	MCMaster OR MACHINE SHOP SUPPLIED STEEL HEX DRIVE SOCKET HEAD SCREW	5
4		3/4" 1/4-20 HEX HEAD SCREW	HEX HEAD SCREW 1/4-20 THREAD SIZE, 3/4" LONG	MCMaster OR MACHINE SHOP SUPPLIED STEEL HEX HEAD SCREW	2
????		#10 WASHER	WASHER FOR #10 SCREW SIZE, 0.203" ID, 0.438" OD	MCMaster SUPPLIED ALUMINUM WASHER (93286A011)	2, 3, 4, ?????
3		1/4-20 WASHER	WASHER FOR 1/4" SCREW SIZE	MCMaster OR SHOP SUPPLIED WASHER	5
????		10-32 NYLON INSERT NUT	THIN NYLON INSERT NUT	MCMaster SUPPLIED LOW-STRENGTH STEEL THIN NYLON-INSERT LOCKNUT	2, 3, ?????
3		1/4-20 NYLON INSERT NUT	NYLON INSERT NUT	MCMaster OR SHOP SUPPLIED STEEL NYLON-INSERT LOCKNUT	2, 5
1		TUBE	RTV SILICONE ADHESIVE	SHOP SUPPLIED RTV SILICONE	2, 5

DRAWN	groteh	2/8/2023	LAFAYETTE ECE DIVISION		
CHECKED			TITLE		
QA			BASE ASSEMBLY INSTRUCTIONS		
MFG					
APPROVED					
			SIZE	DWG NO	REV
			D	23	1
			SCALE	SHEET 1 OF 11	



1/4-20 SCREW, HEAD ON BEARING HOUSING SIDE
NUT L CHANNEL SIDE

1/4-20 SCREW, HEAD ON BEARING HOUSING SIDE
NUT L CHANNEL SIDE

1/4-20 SCREW, HEAD ON BEARING HOUSING SIDE
NUT L CHANNEL SIDE

1/4-20 SCREW, HEAD ON BEARING HOUSING SIDE
NUT L CHANNEL SIDE

STEP 1

INSTRUCTIONS:
RIVET ALL L CHANNEL AND BOTTOM PANEL AT ALL HOLES EXCEPT AS NOTED.
USE 1/4-20 SCREW AND NUT TO MOUNT BEARING HOUSING TO L CHANNEL AND PVC

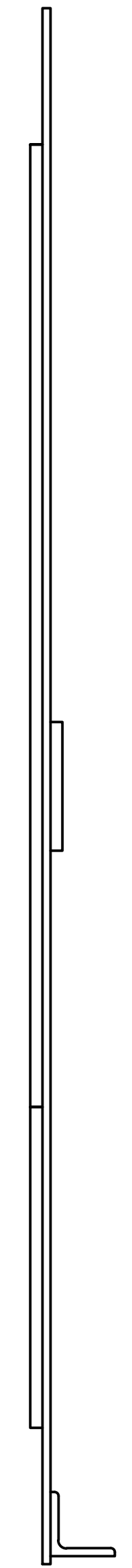
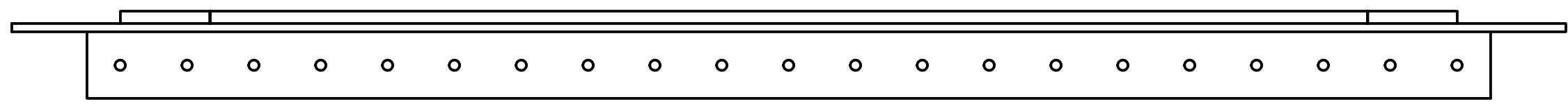
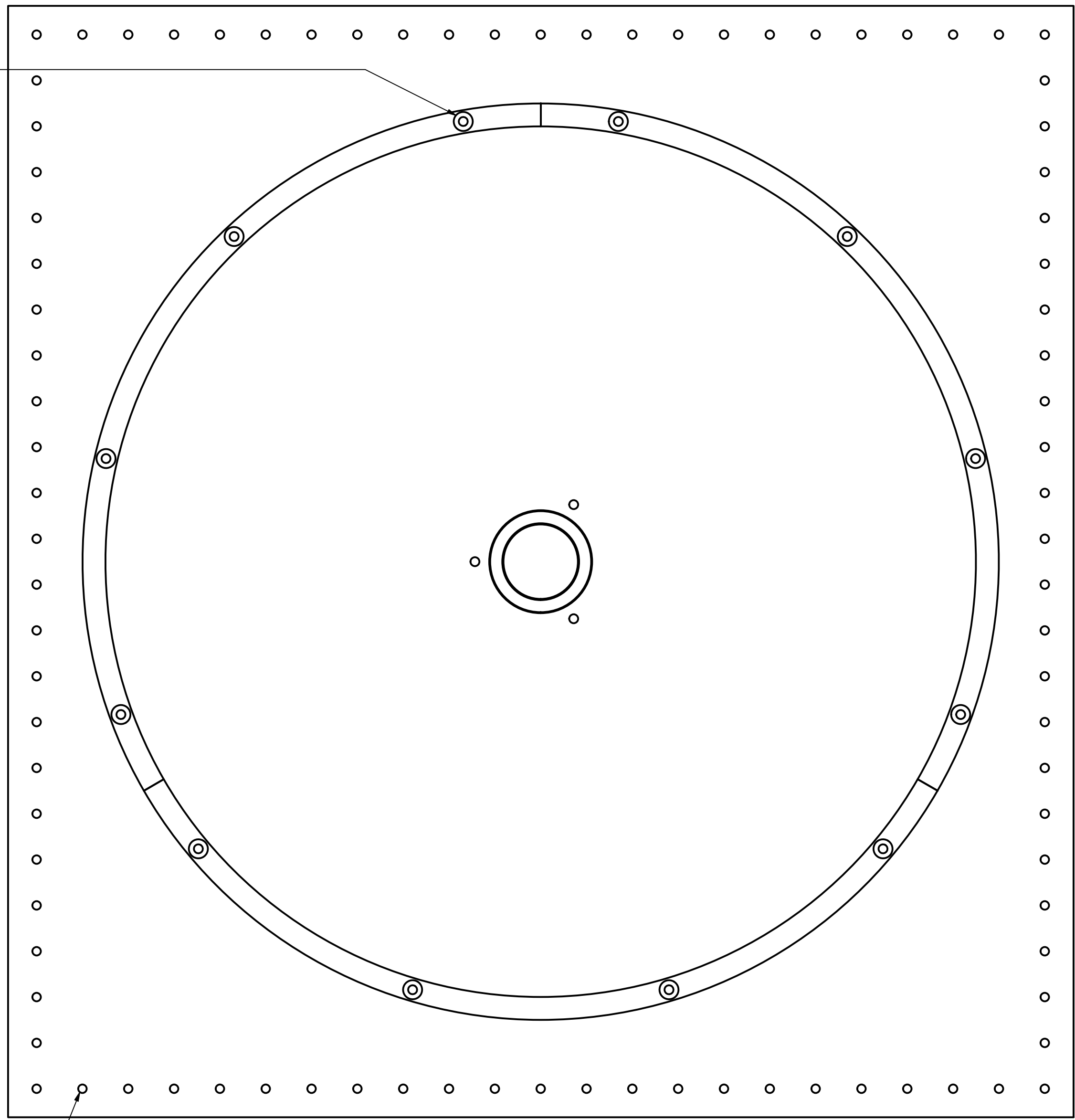
- PARTS REQUIRED:
 1 X BASE PANEL BOTTOM
 2 X BEARING HOUSING
 2 X L STOCK 21" WITH CUTOUTS
 1 X L STOCK 23" L BOTTOM
 1 X L STOCK 23" R BOTTOM
 1 X L STOCK 21"
 4 X 3/4" 1/4-20 HEX HEAD SCREW
 4 X 1/4-20 NYLON INSERT NUT
 101 X #10 BLIND RIVET

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
CHECKED		TITLE		
QA		BASE ASSEMBLY INSTRUCTIONS		
MFG		SIZE	DWG NO	REV
APPROVED		D	23	1
		SCALE	1 / 2	SHEET 2 OF 11

8 7 6 5 4 3 2 1

12 X 3/8" 10-32 FLAT HEAD SCREW, 10-32 NYLON INSERT NUT, #10 WASHER
SANDWICH UHMW AND PVC BETWEEN SCREW HEAD, WASHER AND NUT

21 X #10 RIVET



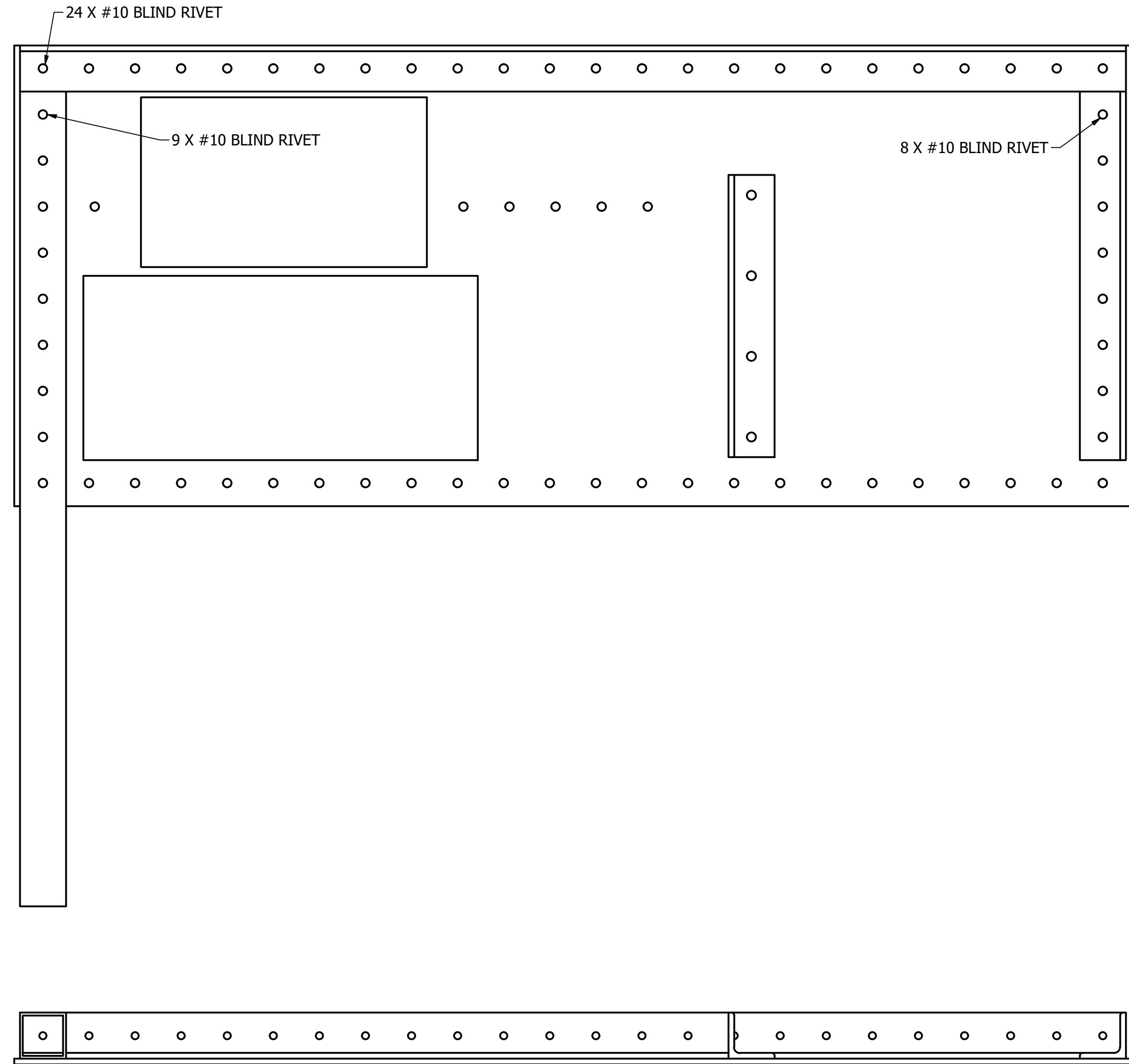
STEP 2

INSTRUCTIONS:
 USE RTV SILICONE TO ADHERE TURRET SHAFT BUSHING TO BASE
 PANEL TOP. LET CURE FOR 24 HOURS
 RIVET L STOCK TO PVC PANEL
 SCREW UHMW TO PVC WITH FULLY COUNTERSUNK HEADS

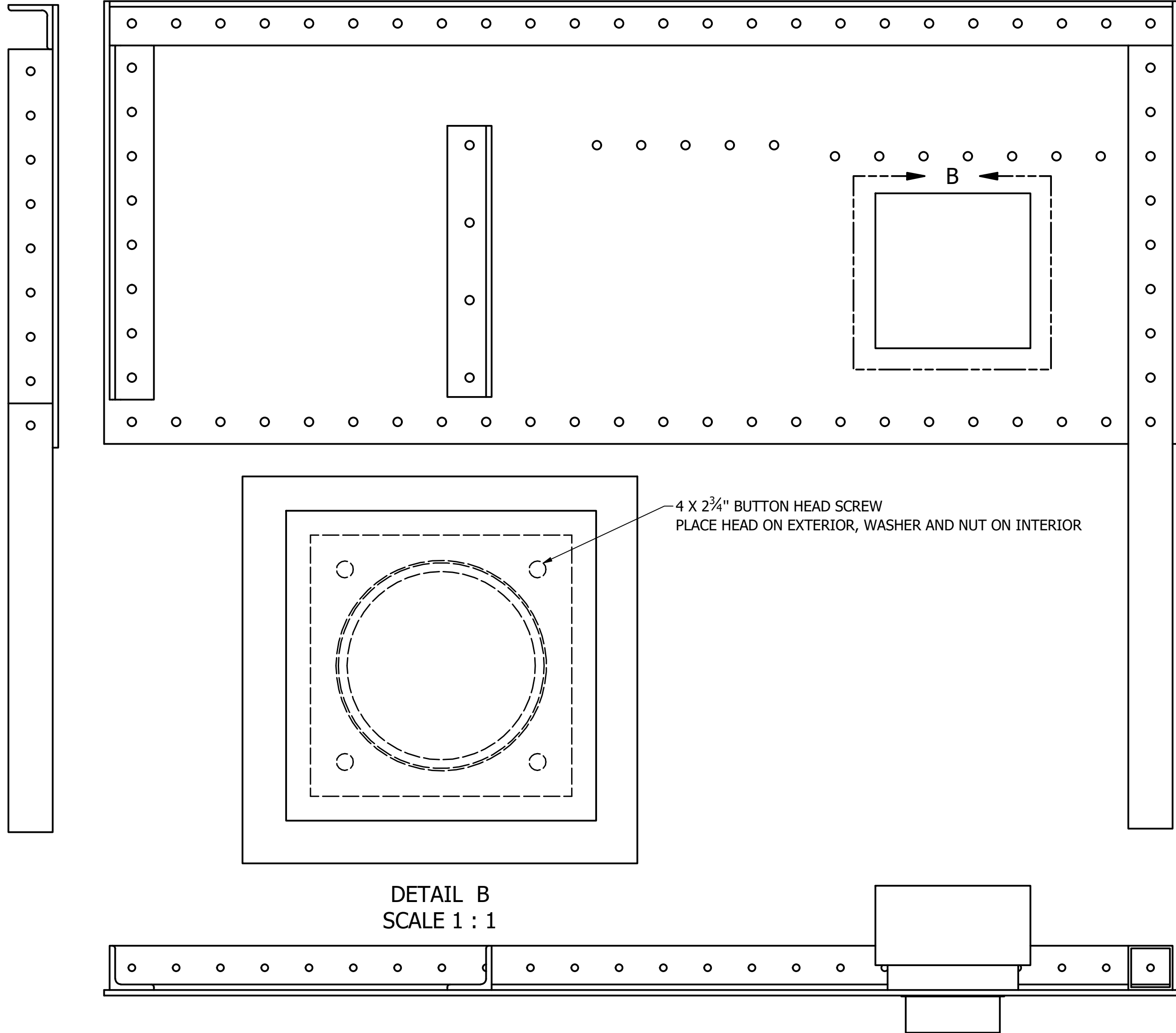
PARTS REQUIRED:
 1 X BASE PANEL TOP
 1 X L STOCK 21" THREADED
 3 X BASE MOUNTED TURRET SLIDERS
 1 X TURRET SHAFT BUSHING
 21 X #10 BLIND RIVET
 12 X 3/8" 10-32 FLAT HEAD SCREW
 12 X 10-32 NYLON INSERT NUT
 12 X #10 WASHER
 RTV SILICONE

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
CHECKED		TITLE		
QA		BASE ASSEMBLY INSTRUCTIONS		
MFG		SIZE D	DWG NO 23	REV 1
APPROVED		SCALE 1 / 2	SHEET 3 OF 11	

8 7 6 5 4 3 2 1



LEFT SIDE
 1 X BASE PANEL LEFT
 1 X FRONT LEG
 1 X L STOCK 24" THREADED
 1 X L STOCK 8"
 1 X LCD
 42 X #10 BLIND RIVET



DETAIL B
 SCALE 1 : 1

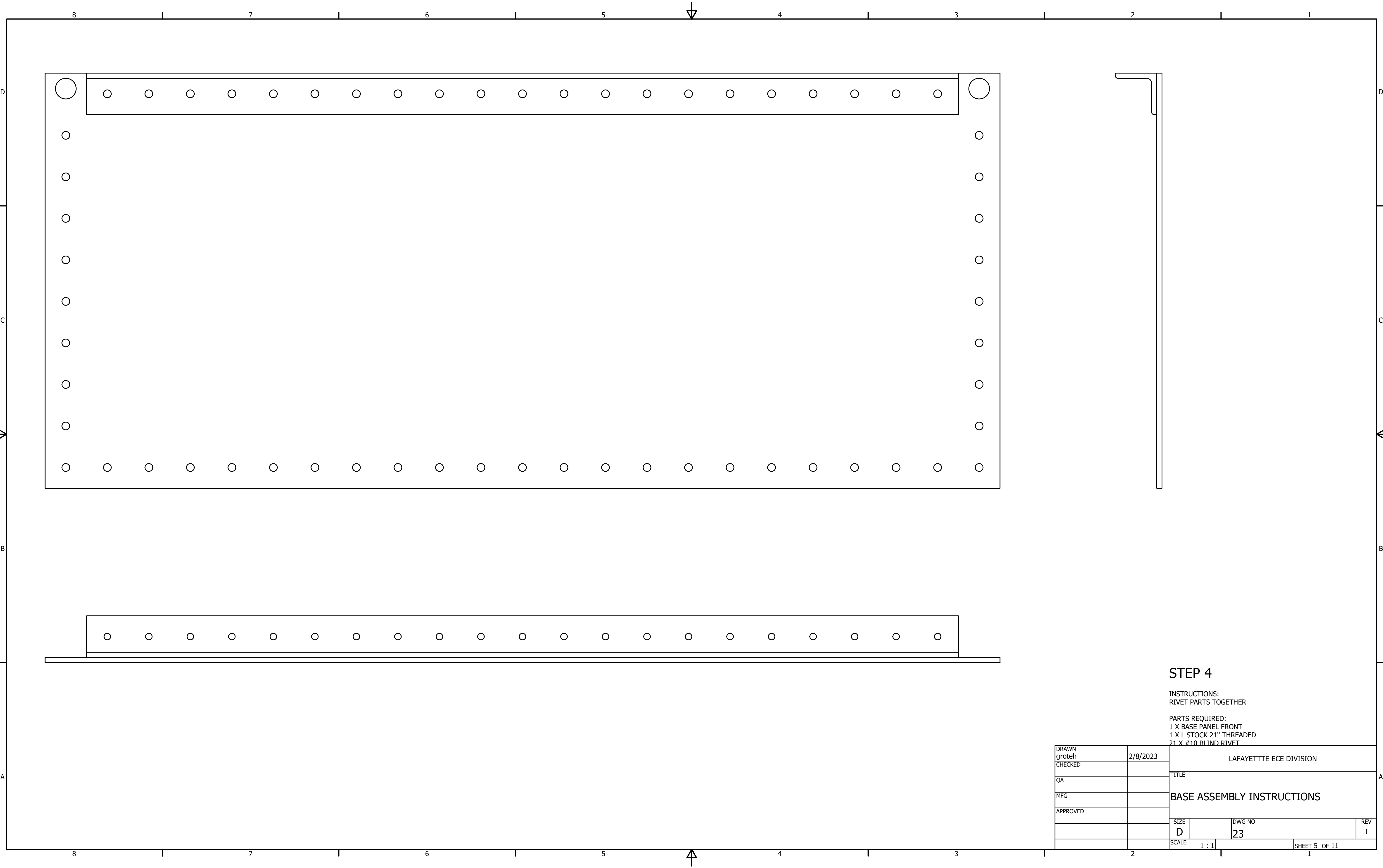
RIGHT
 1 X BASE PANEL RIGHT
 1 X FRONT LEG
 1 X L STOCK 24" THREADED
 1 X L STOCK 8"
 1 X MAIN POWER SWITCH
 4 X 2 3/4" 10-32 BUTTON HEAD SCREW
 4 X #10 WASHER
 4 X #10-32 NYLON INSERT NUT
 42 X #10 BLIND RIVET

STEP 3

INSTRUCTIONS:
 RIVET FRONT LEG, L STOCK 8" TO LEFT/RIGHT PANEL
 RIVET L STOCK 24" THREADED WITH THREADS ON SIDE NOT FACING PVC TO BOTH SIDES
 ATTACH LCD TO LEFT SIDE TOP CUT OUT
 ATTACH MAIN POWER SWITCH TO RIGHT SIDE

PARTS REQUIRED:
 1 X BASE PANEL LEFT
 1 X BASE PANEL RIGHT
 2 X L STOCK 24" THREADED
 2 X L STOCK 8"
 2 X L STOCK 6.125"
 2 X FRONT LEGS
 1 X LCD
 1 X MAIN POWER SWITCH
 4 X 2 3/4" 10-32 BUTTON HEAD SCREW
 4 X #10 WASHER
 4 X #10-32 NYLON INSERT NUT
 82 X #10 BLIND RIVET

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION	
CHECKED		TITLE	
QA		BASE ASSEMBLY INSTRUCTIONS	
MFG		SIZE D	DWG NO 23
APPROVED		SCALE 1 / 2	REV 1
		SHEET 4 OF 11	

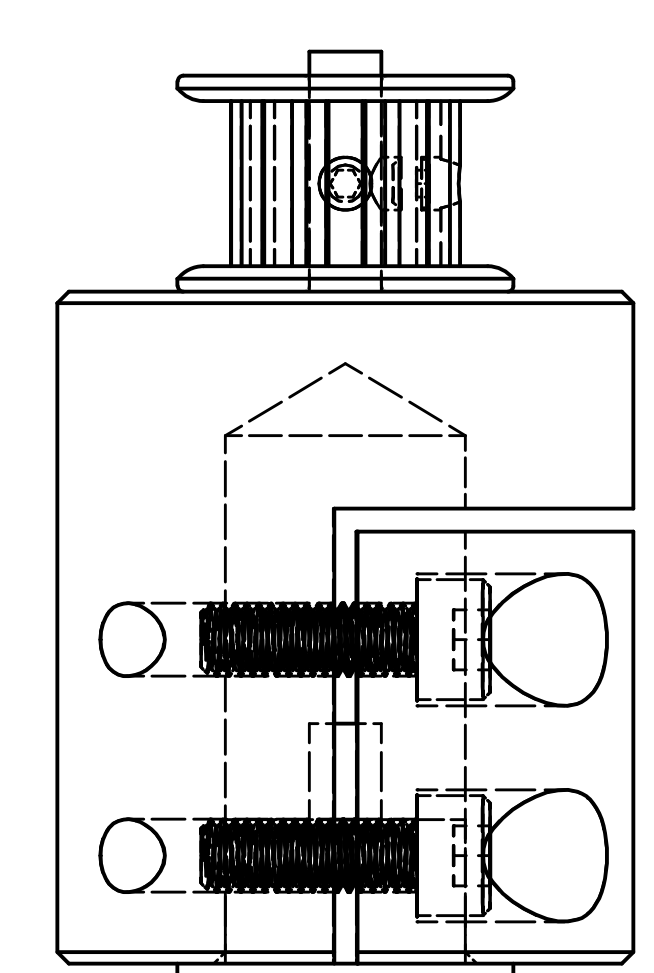
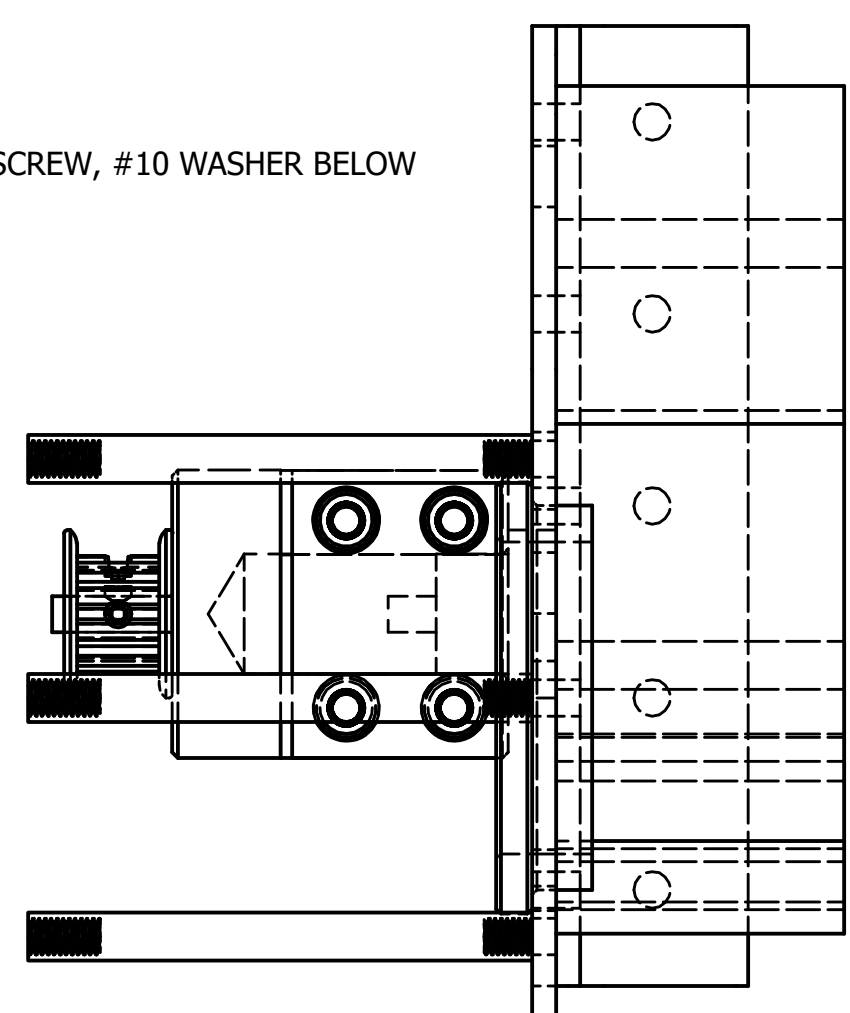
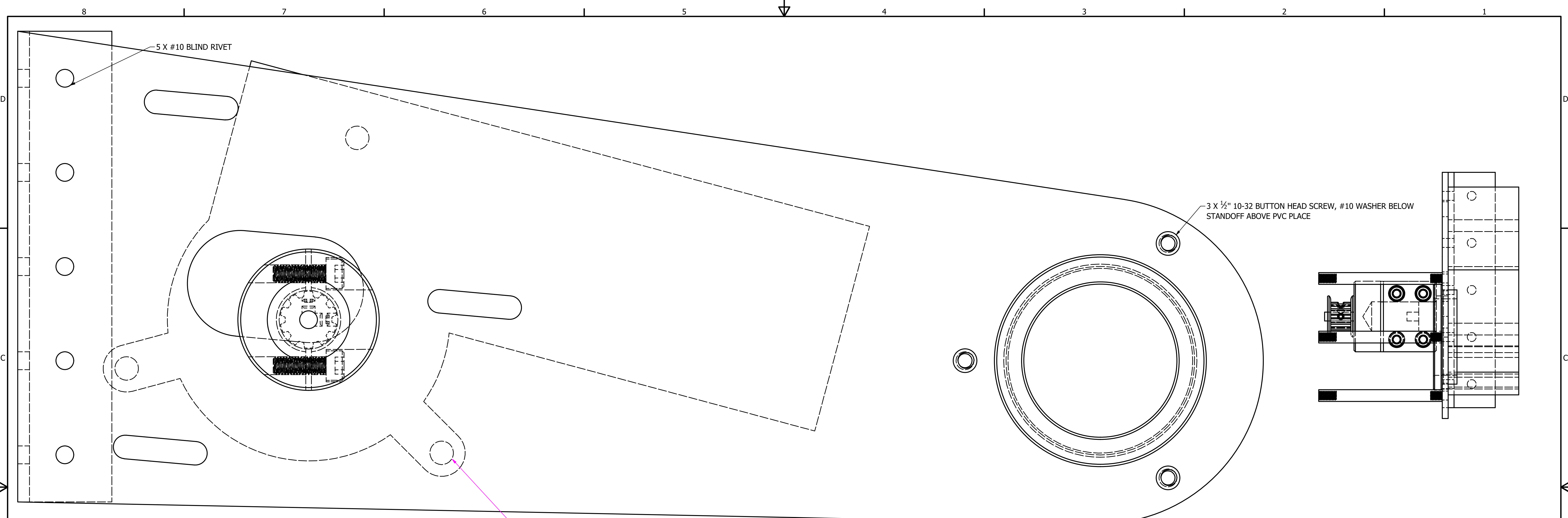


STEP 4

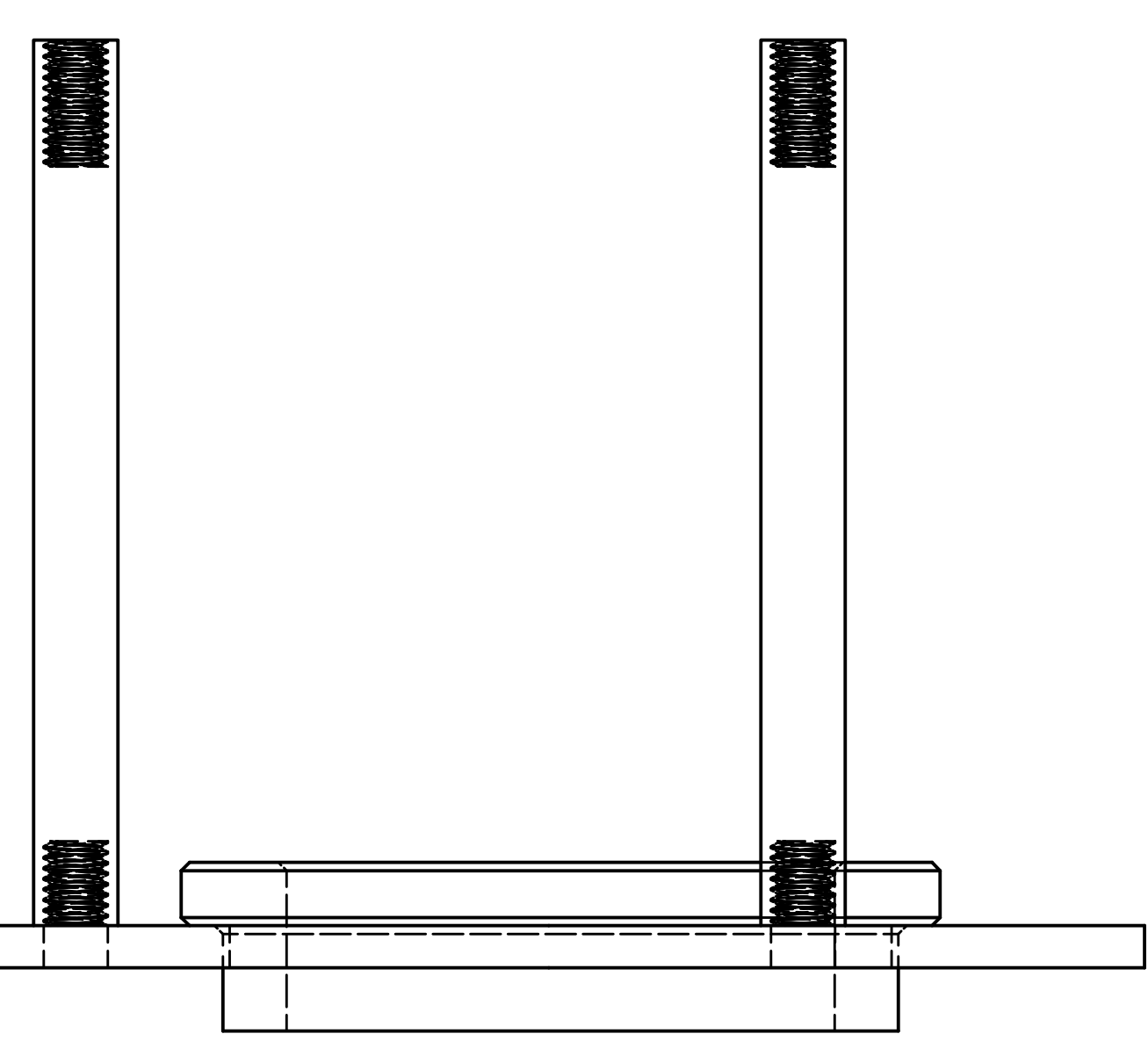
INSTRUCTIONS:
RIVET PARTS TOGETHER

PARTS REQUIRED:
1 X BASE PANEL FRONT
1 X L STOCK 21" THREADED
21 X #10 BLIND RIVET

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
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QA		BASE ASSEMBLY INSTRUCTIONS		
MFG				
APPROVED				
		SIZE D	DWG NO 23	REV 1
		SCALE 1 : 1		SHEET 5 OF 11



3 X 1 1/4" 1/4-20 SOCKET HEAD SCREW, 1/4" WASHER, 1/4-20 NYLON INSERT NUT
 PLACE SCREW HEAD INTO WINDOW MOTOR, WASHER AND NUT ON MOUNTING PLATE

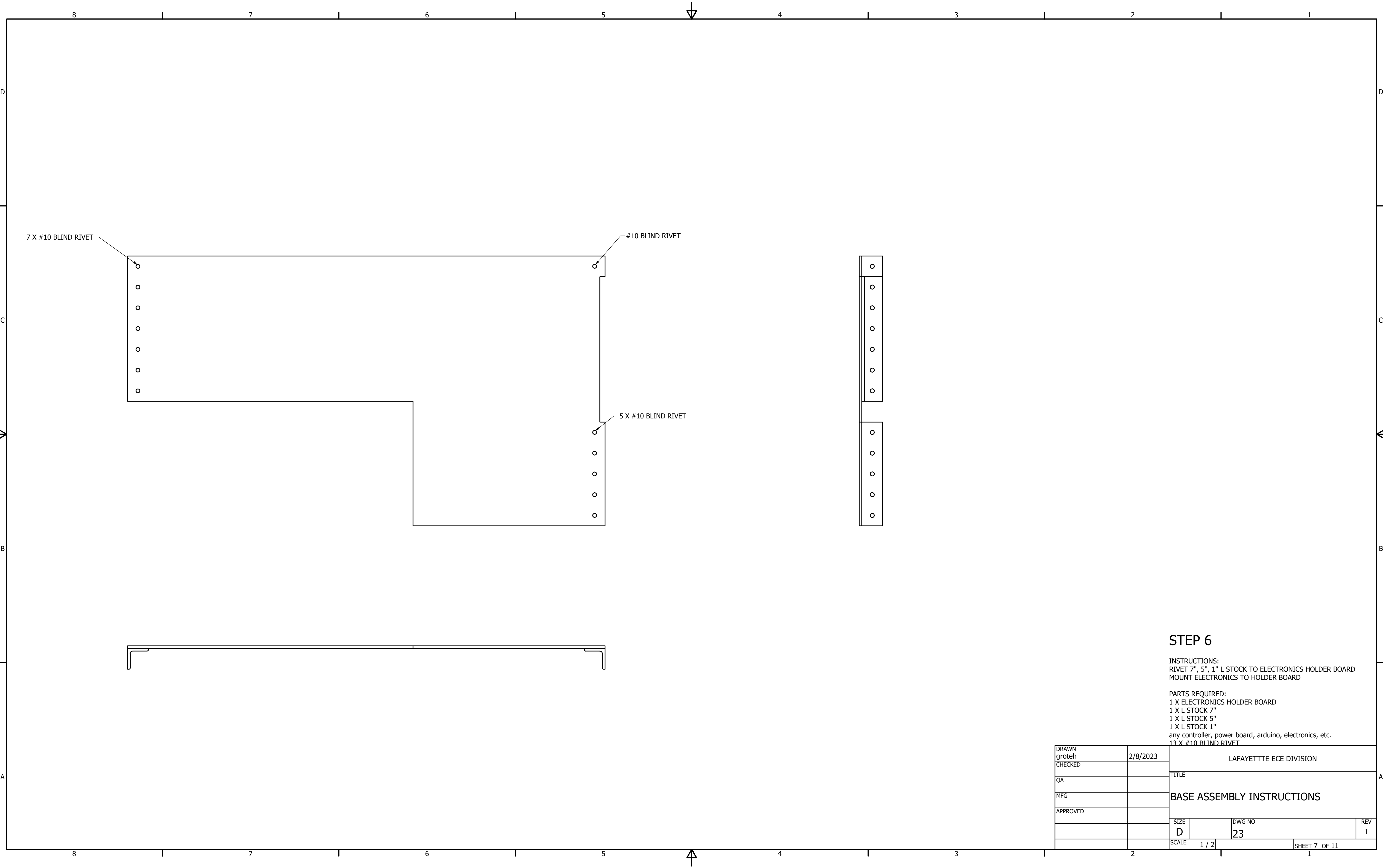


STEP 5

INSTRUCTIONS:
 USE RTV SILICONE TO ADHERE TURRET SHAFT BUSHING TO MOTOR MOUNT PANEL. LET CURE FOR 24 HOURS
 SCREW WINDOW MOTOR TO MOTOR MOUNT PLATE WITH 1/4-20 SCREWS, WASHERS, AND NUTS
 SCREW STANDOFFS AROUND TURRET SHAFT BUSHING WITH 1/2" 10-32 BUTTON HEAD SCREWS. USE #10 WASHERS
 MOUNT MOTOR TO PULLY ADAPTER TO WINDOW MOTOR OUTPUT SHAFT. SCREW INTO PLACE
 MOUNT 10T PULLY TO MOTOR TO PULLY ADAPTER. SCREW INTO PLACE

PARTS REQUIRED:
 1 X MOTOR MOUNT
 1 X TURRET SHAFT BUSHING
 1 X WINDOW MOTOR
 1 X MOTOR TO PULLY ADAPTER
 1 X 10T PULLY
 3 X STANDOFF FROM MOTOR PLATE
 3 X #10 WASHER
 3 X 1/4" WASHER
 3 X 1/2" 10-32 BUTTON HEAD SCREW
 3 X 1 1/4" 1/4-20 SOCKET HEAD SCREW
 3 X 1/4-20 NYLON INSERT NUT

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION	
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QA		BASE ASSEMBLY INSTRUCTIONS	
MFG		SIZE D	DWG NO 23
APPROVED		SCALE 2 : 1	REV 1
		SHEET 6 OF 11	

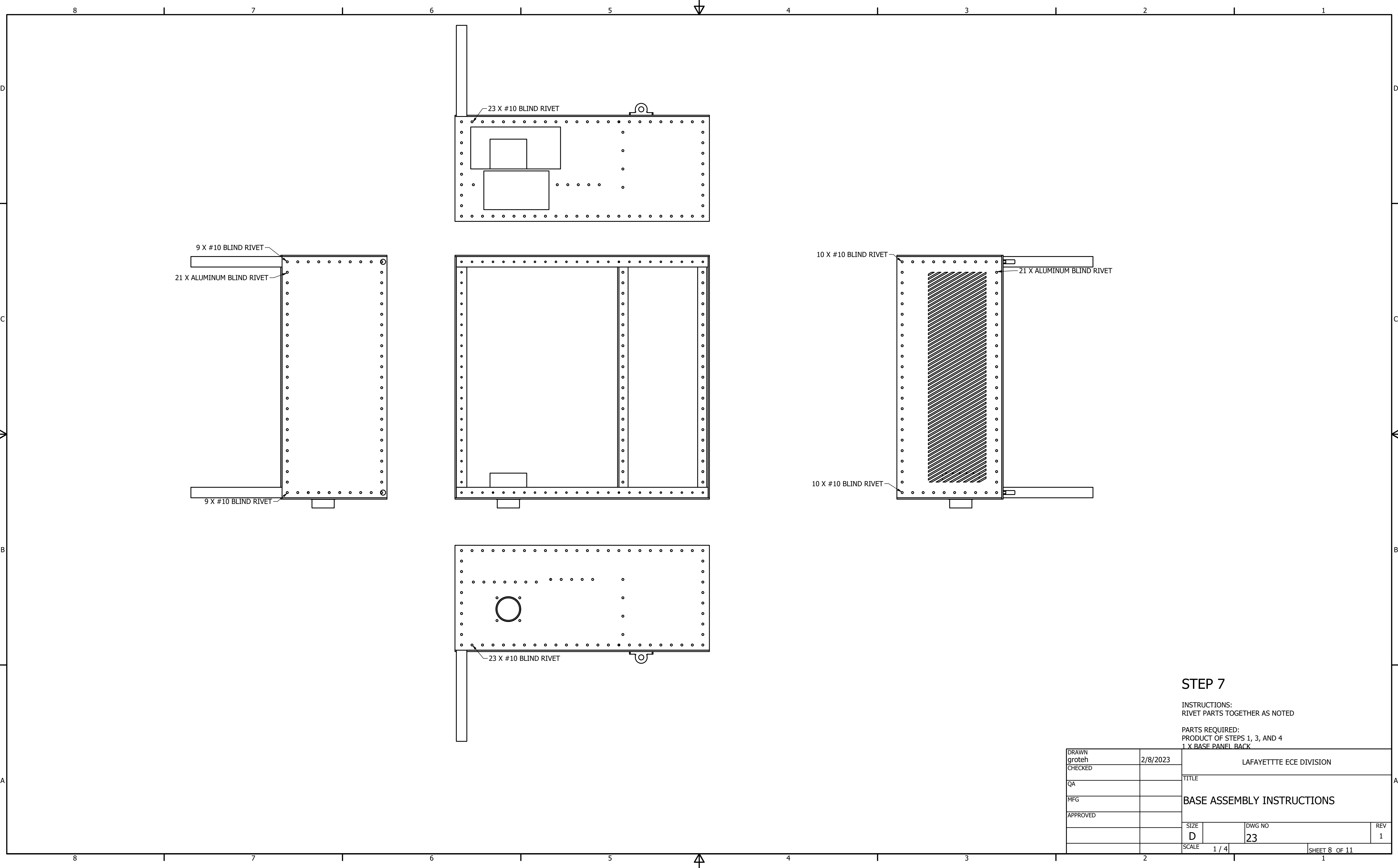


STEP 6

INSTRUCTIONS:
 RIVET 7", 5", 1" L STOCK TO ELECTRONICS HOLDER BOARD
 MOUNT ELECTRONICS TO HOLDER BOARD

PARTS REQUIRED:
 1 X ELECTRONICS HOLDER BOARD
 1 X L STOCK 7"
 1 X L STOCK 5"
 1 X L STOCK 1"
 any controller, power board, arduino, electronics, etc.
 13 X #10 BLIND RIVET

DRAWN	groteh	2/8/2023	LAFAYETTE ECE DIVISION		
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QA			BASE ASSEMBLY INSTRUCTIONS		
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			SCALE	1 / 2	
			SHEET 7 OF 11		

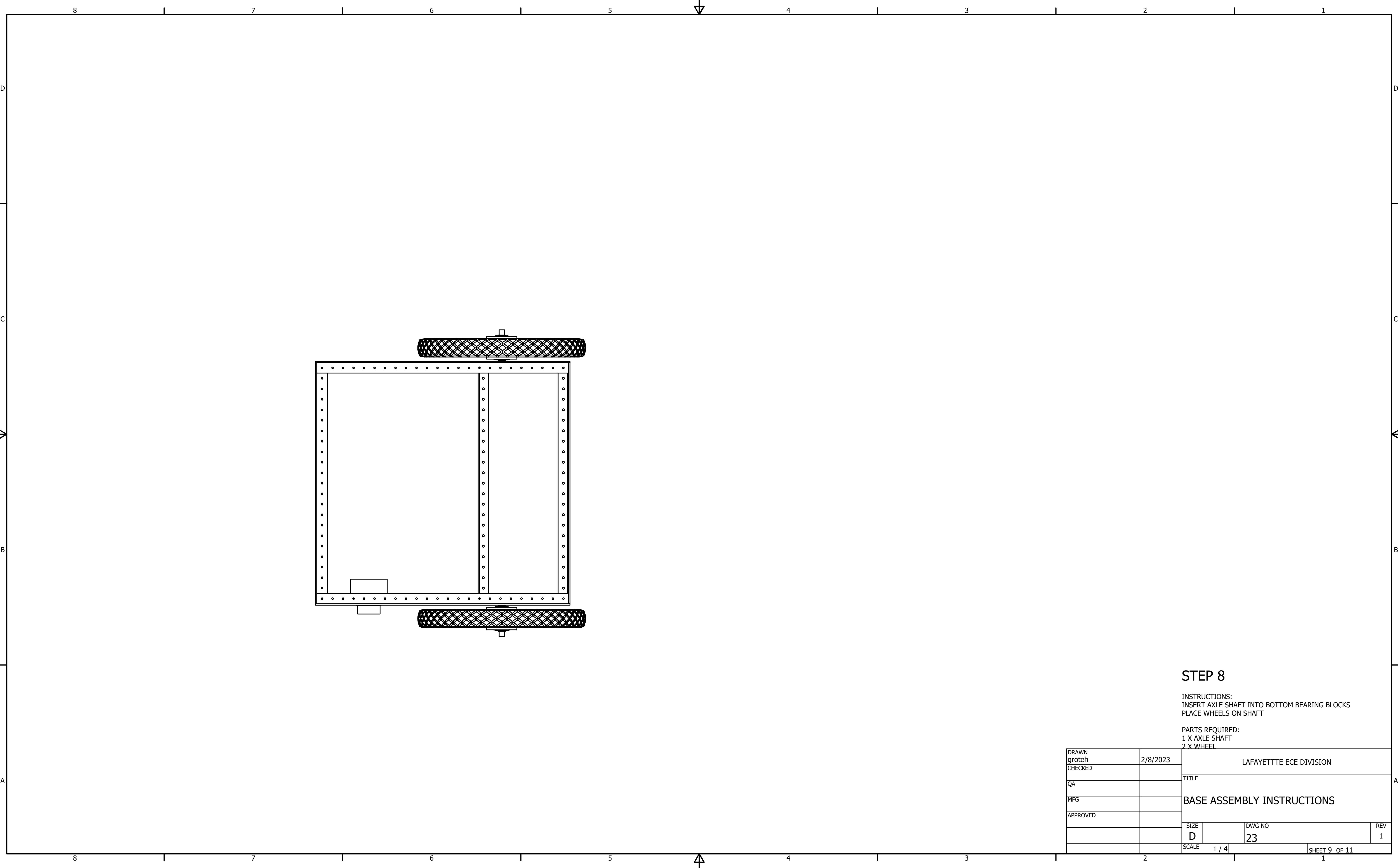


STEP 7

INSTRUCTIONS:
RIVET PARTS TOGETHER AS NOTED

PARTS REQUIRED:
PRODUCT OF STEPS 1, 3, AND 4
1 X BASE PANEL BACK

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
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QA		BASE ASSEMBLY INSTRUCTIONS		
MFG		SIZE	DWG NO	REV
APPROVED		D	23	1
		SCALE	1 / 4	SHEET 8 OF 11

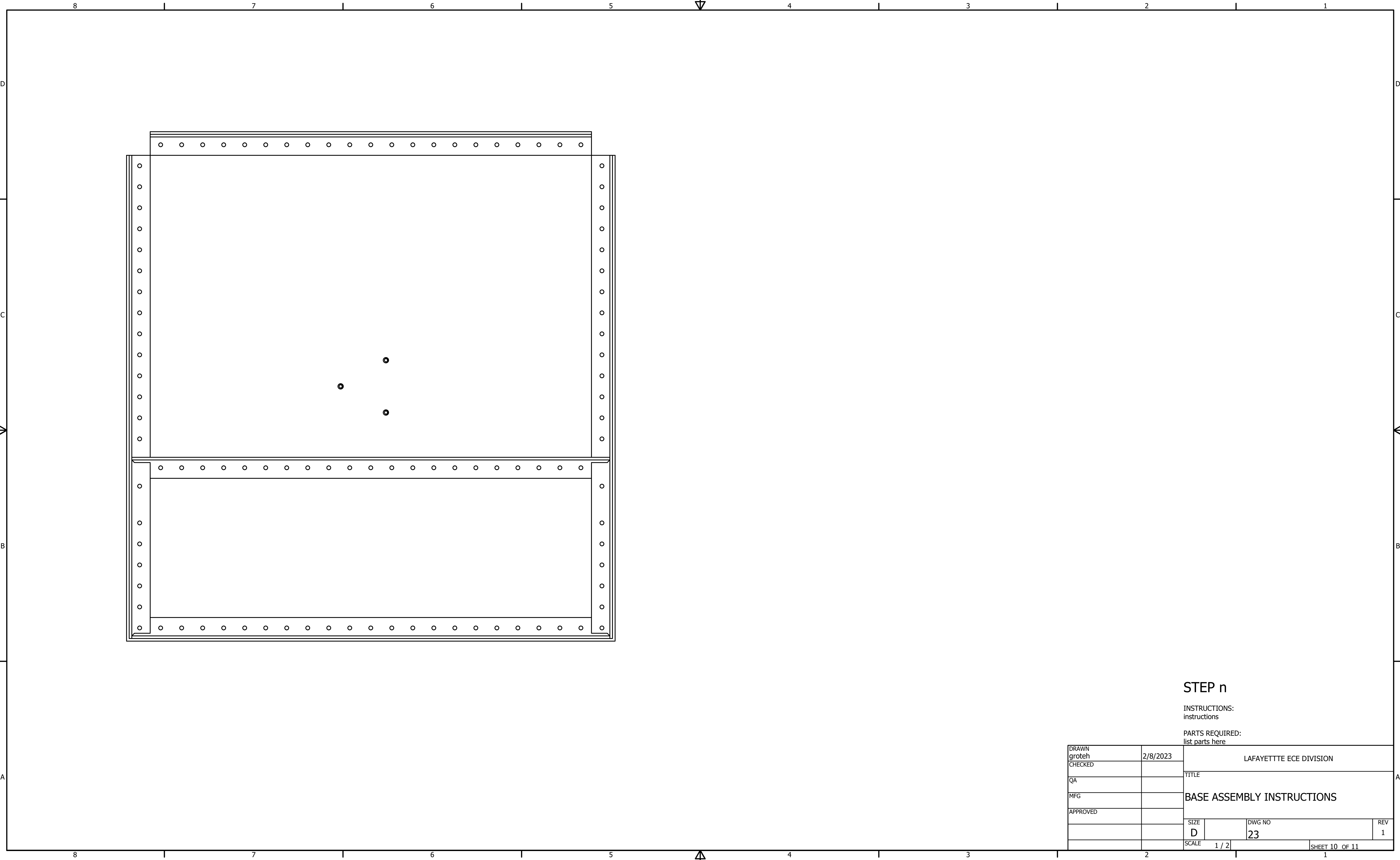


STEP 8

INSTRUCTIONS:
 INSERT AXLE SHAFT INTO BOTTOM BEARING BLOCKS
 PLACE WHEELS ON SHAFT

PARTS REQUIRED:
 1 X AXLE SHAFT
 2 X WHEEL

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
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QA		BASE ASSEMBLY INSTRUCTIONS		
MFG				
APPROVED				
		SIZE D	DWG NO 23	REV 1
		SCALE 1 / 4	SHEET 9 OF 11	

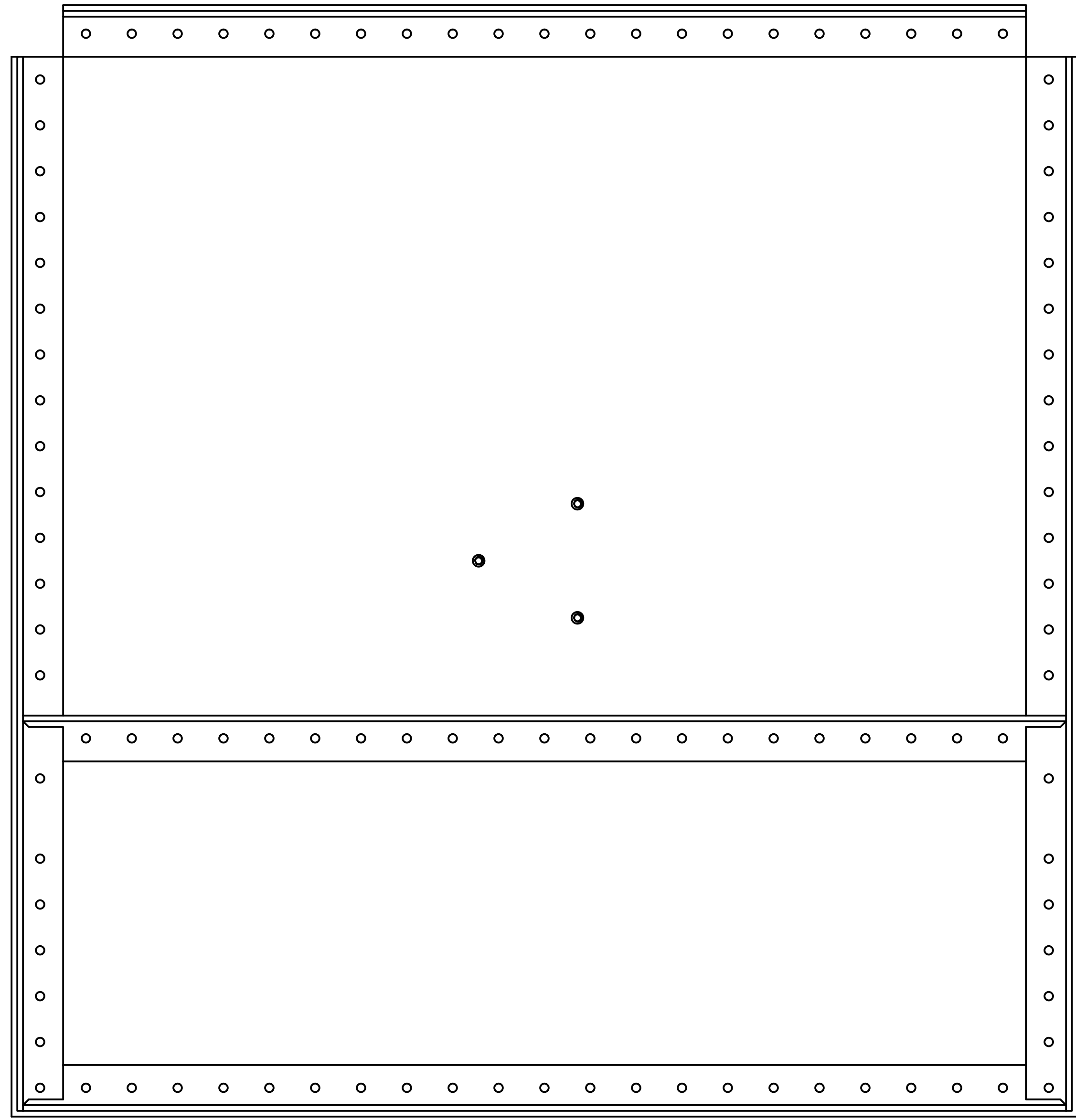


STEP n

INSTRUCTIONS:
instructions

PARTS REQUIRED:
list parts here

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
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QA		BASE ASSEMBLY INSTRUCTIONS		
MFG				
APPROVED				
		SIZE D	DWG NO 23	REV 1
		SCALE 1 / 2		SHEET 10 OF 11



STEP n

INSTRUCTIONS:
instructions

PARTS REQUIRED:
list parts here

DRAWN groteh	2/8/2023	LAFAYETTE ECE DIVISION		
CHECKED		TITLE		
QA		BASE ASSEMBLY INSTRUCTIONS		
MFG				
APPROVED				
		SIZE D	DWG NO 23	REV 1
		SCALE 1 / 2		SHEET 11 OF 11