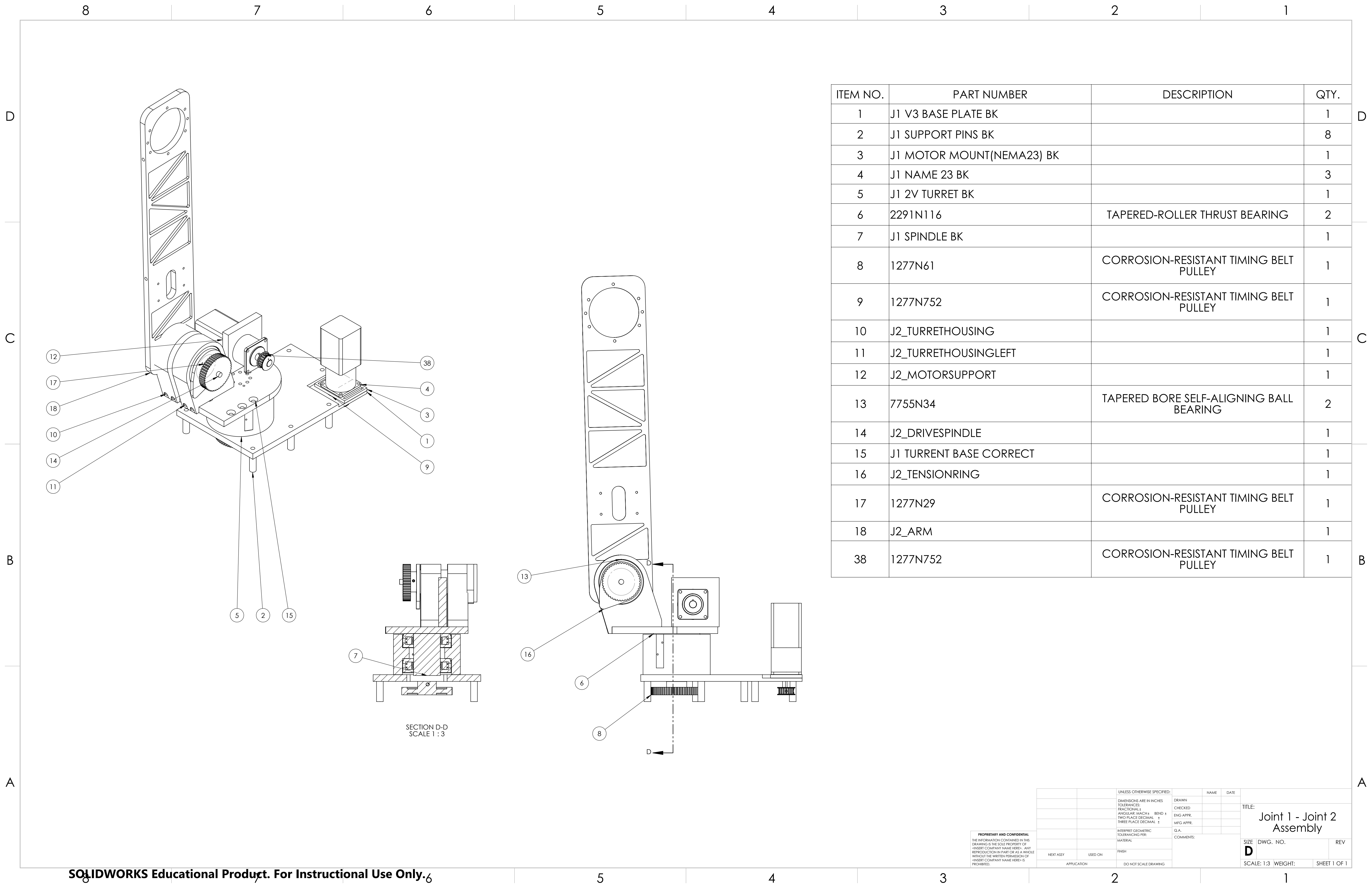


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	J1 V3 Base Plate BK		1
2	J1 Support Pins BK		8
4	J1 Name 23 BK		3
5	J1 2V Turret BK		1
6	2291N116	Tapered-Roller Thrust Bearing	2
7	J1 Spindle BK		1
8	1277N61	Corrosion-Resistant Timing Belt Pulley	1
9	1277N752	Corrosion-Resistant Timing Belt Pulley	1

<div>PROPRIETARY AND CONFIDENTIAL</div> <div>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF "INSERT COMPANY NAME HERE". ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF "INSERT COMPANY NAME HERE" IS PROHIBED.</div>			UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div>TITLE:</div> <div>Joint 1 Section View</div>	<div>SIZE</div> <div>DWG. NO.</div>	<div>REV</div>	
			DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN						
				CHECKED						
				ENG. APPR.						
				MFG. APPR.						
			INTERPRET GEOMETRIC TOLERANCING PER:	G.A.						
			MATERIAL	COMMENTS:						
	NEXT ASSY	USED ON	FINISH							
	APPLICATION	DO NOT SCALE DRAWING								
								SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

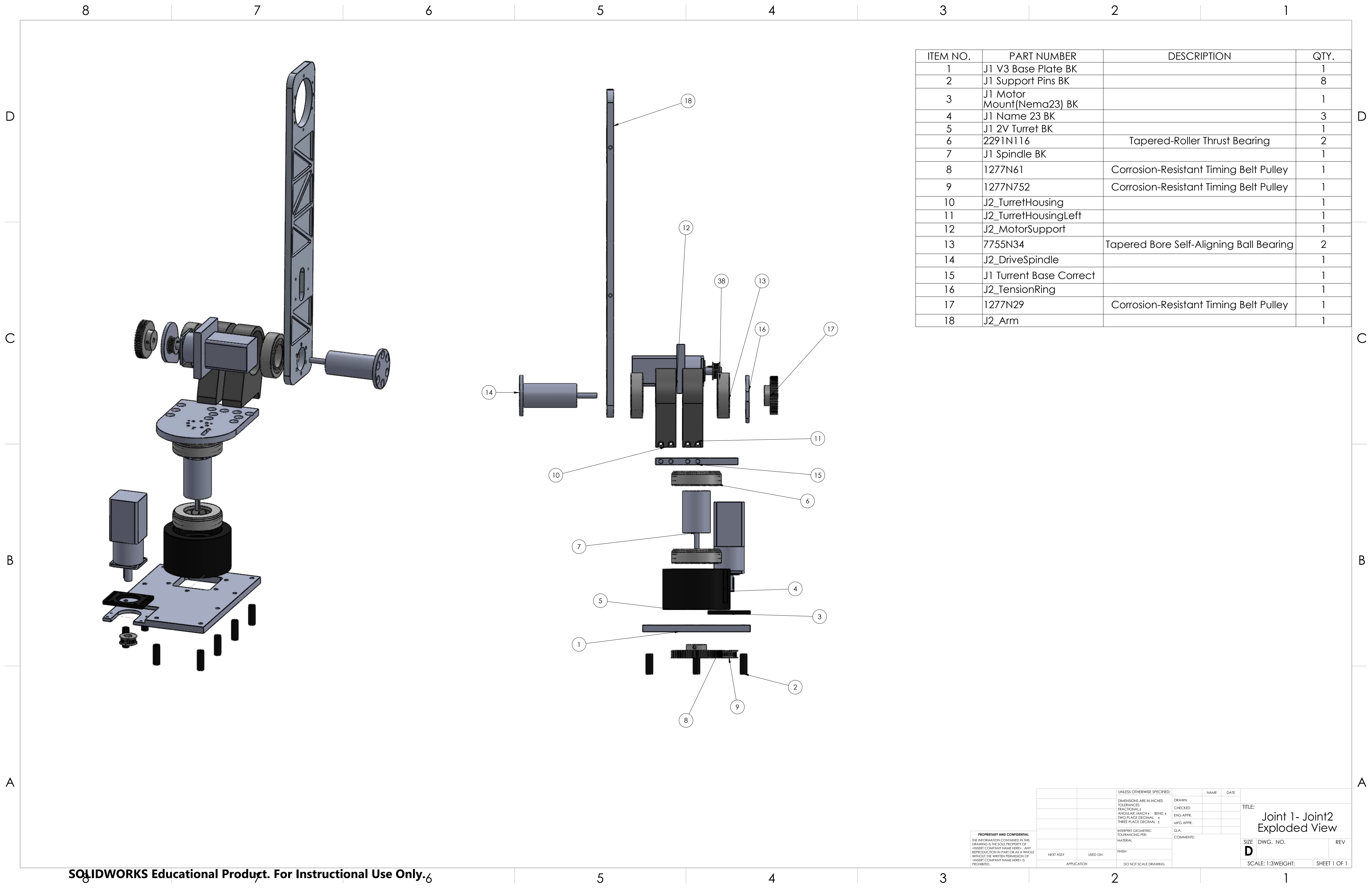


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	J1 V3 BASE PLATE BK		1
2	J1 SUPPORT PINS BK		8
3	J1 MOTOR MOUNT(NEMA23) BK		1
4	J1 NAME 23 BK		3
5	J1 2V TURRET BK		1
6	2291N116	TAPERED-ROLLER THRUST BEARING	2
7	J1 SPINDLE BK		1
8	1277N61	CORROSION-RESISTANT TIMING BELT PULLEY	1
9	1277N752	CORROSION-RESISTANT TIMING BELT PULLEY	1
10	J2_TURRETHOUSING		1
11	J2_TURRETHOUSINGLEFT		1
12	J2_MOTORSUPPORT		1
13	7755N34	TAPERED BORE SELF-ALIGNING BALL BEARING	2
14	J2_DRIVESPINDE		1
15	J1 TURRENT BASE CORRECT		1
16	J2_TENSIONRING		1
17	1277N29	CORROSION-RESISTANT TIMING BELT PULLEY	1
18	J2_ARM		1
38	1277N752	CORROSION-RESISTANT TIMING BELT PULLEY	1

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
«INSERT COMPANY NAME HERE». ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
«INSERT COMPANY NAME HERE» IS
PROHIBITED.

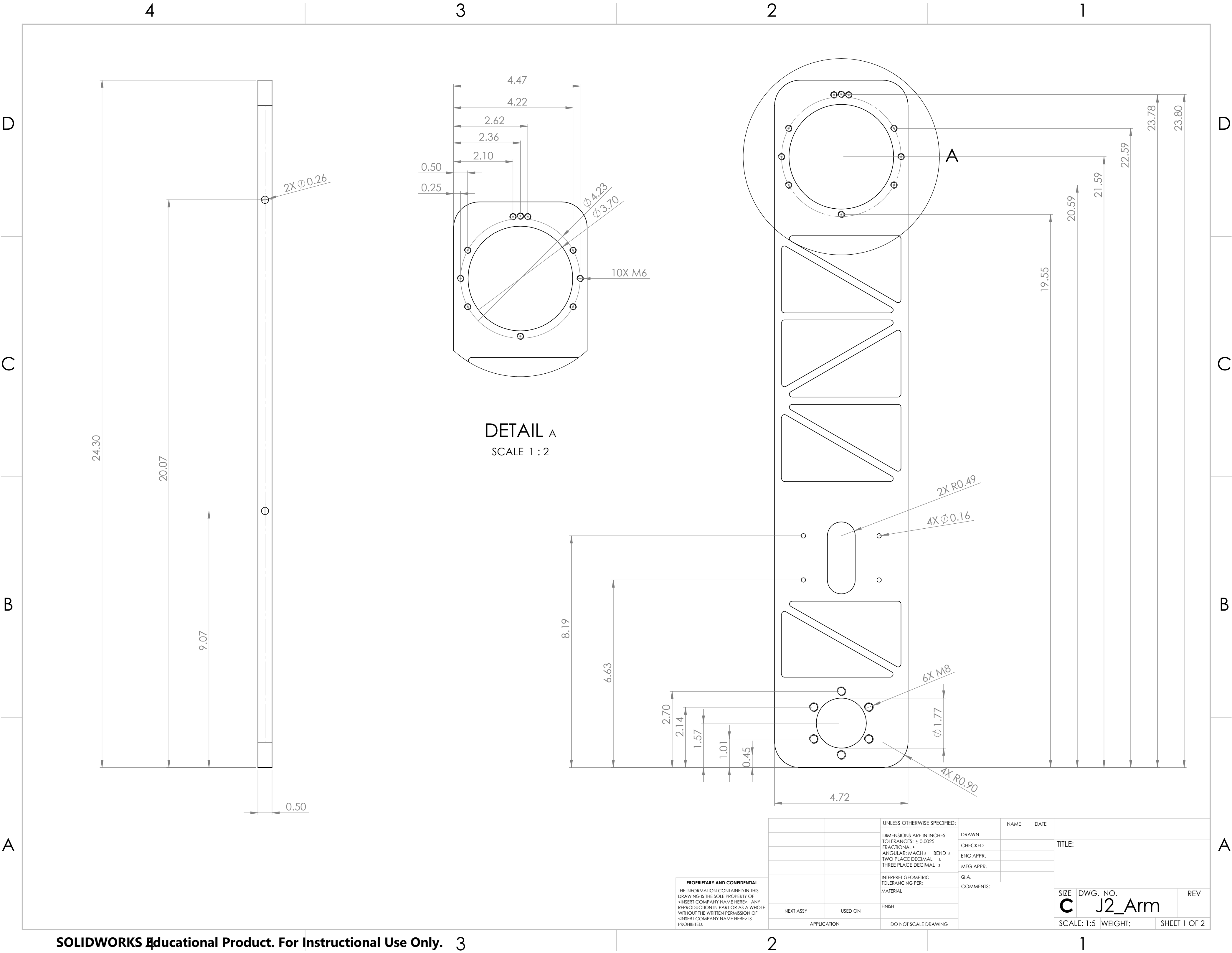
		UNLESS OTHERWISE SPECIFIED:	DRAWN	NAME	DATE	
		DIMENSIONS ARE IN INCHES	CHECKED			
		FRACTIONAL: \pm	ENG APPR.			
		TOLERANCES:	MFG APPR.			
		ANGULAR: MACH \pm BEND \pm				
		TWO PLACE DECIMAL \pm				
		THREE PLACE DECIMAL \pm				
		INTERPRET GEOMETRIC				
		TOLERANCING PER:				
		MATERIAL				
		FINISH				
NEXT ASSY	USED ON					
APPLICATION	DO NOT SCALE DRAWING					

TITLE:		
Joint 1 - Joint 2 Assembly		
SIZE	DWG. NO.	REV
D		
SCALE: 1:3	WEIGHT:	SHEET 1 OF 1

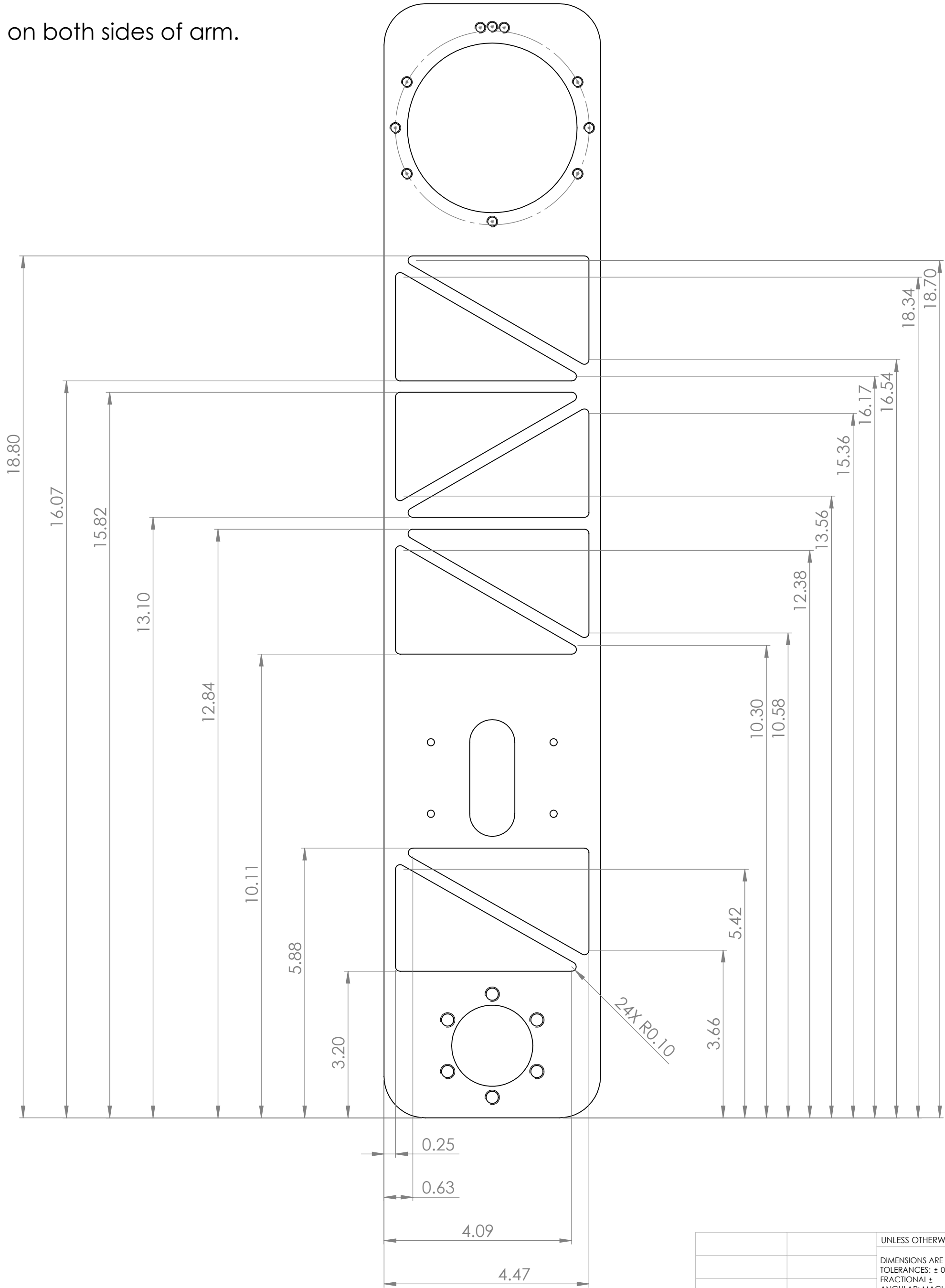


PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
«INSERT COMPANY NAME HERE». ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
«INSERT COMPANY NAME HERE» IS
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE: Joint 1- Joint2 Exploded View	
		DIMENSIONS ARE IN INCHES	DRAWN				
		TOLERANCES:	CHECKED				
		FRACTIONAL: ±	ENG APPR.				
		ANGULAR: MAACH ± BEND ±	MFG APPR.				
		TWO PLACE DECIMAL ±				SIZE DWG. NO. REV	
		THREE PLACE DECIMAL ±					
		INTERPRET GEOMETRIC TOLERANCING PER:					
		MATERIAL		COMMENTS:		D	
		FINISH					
NEXT ASSY	USED ON					SCALE: 1:3WEIGHT: SHEET 1 OF 1	
APPLICATION		DO NOT SCALE DRAWING					



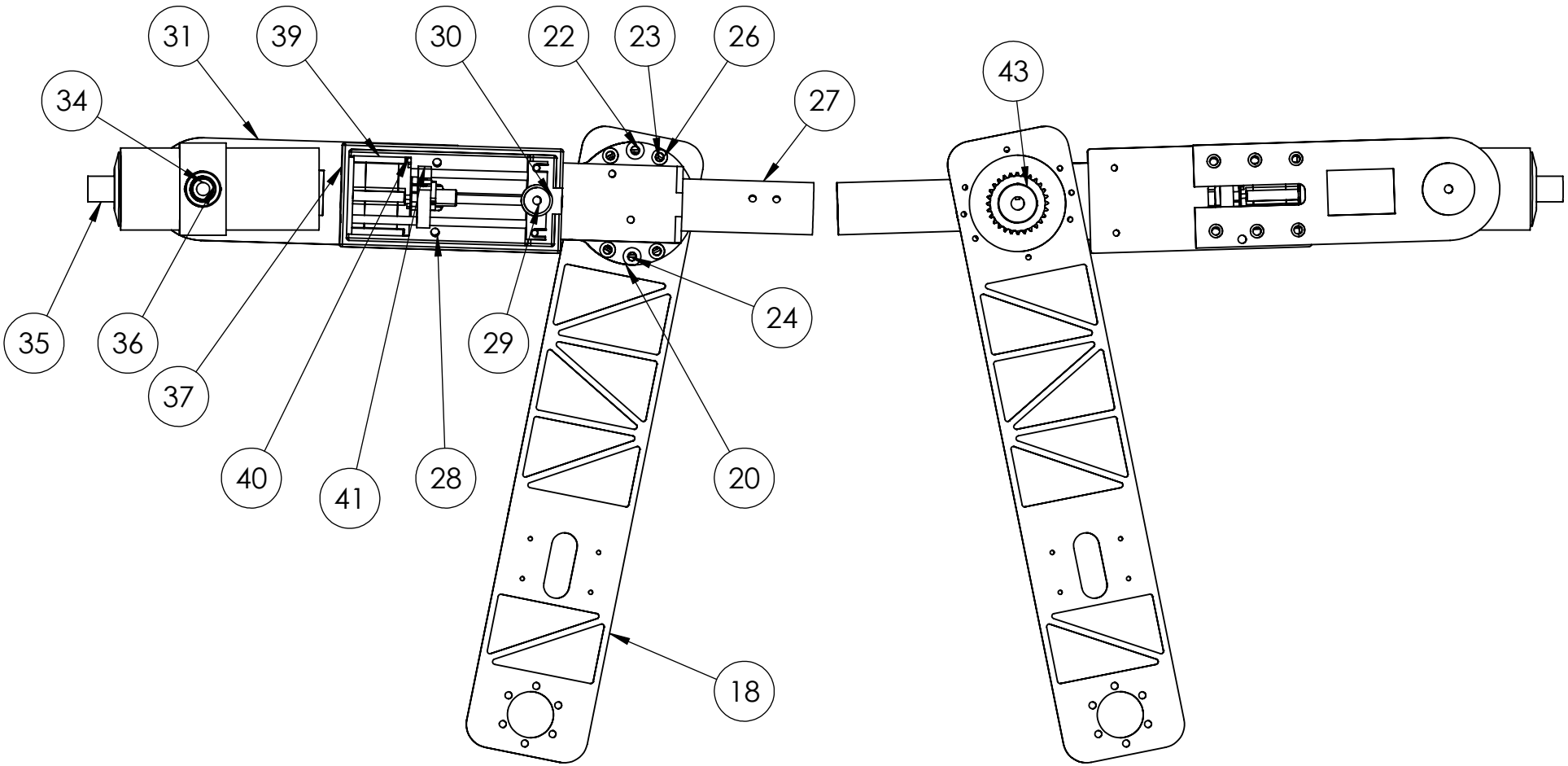
Notes:
① Machine out triangles 0.200 inches deep on both sides of arm.



PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
<INSERT COMPANY NAME HERE>. ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
<INSERT COMPANY NAME HERE> IS
PROHIBITED.

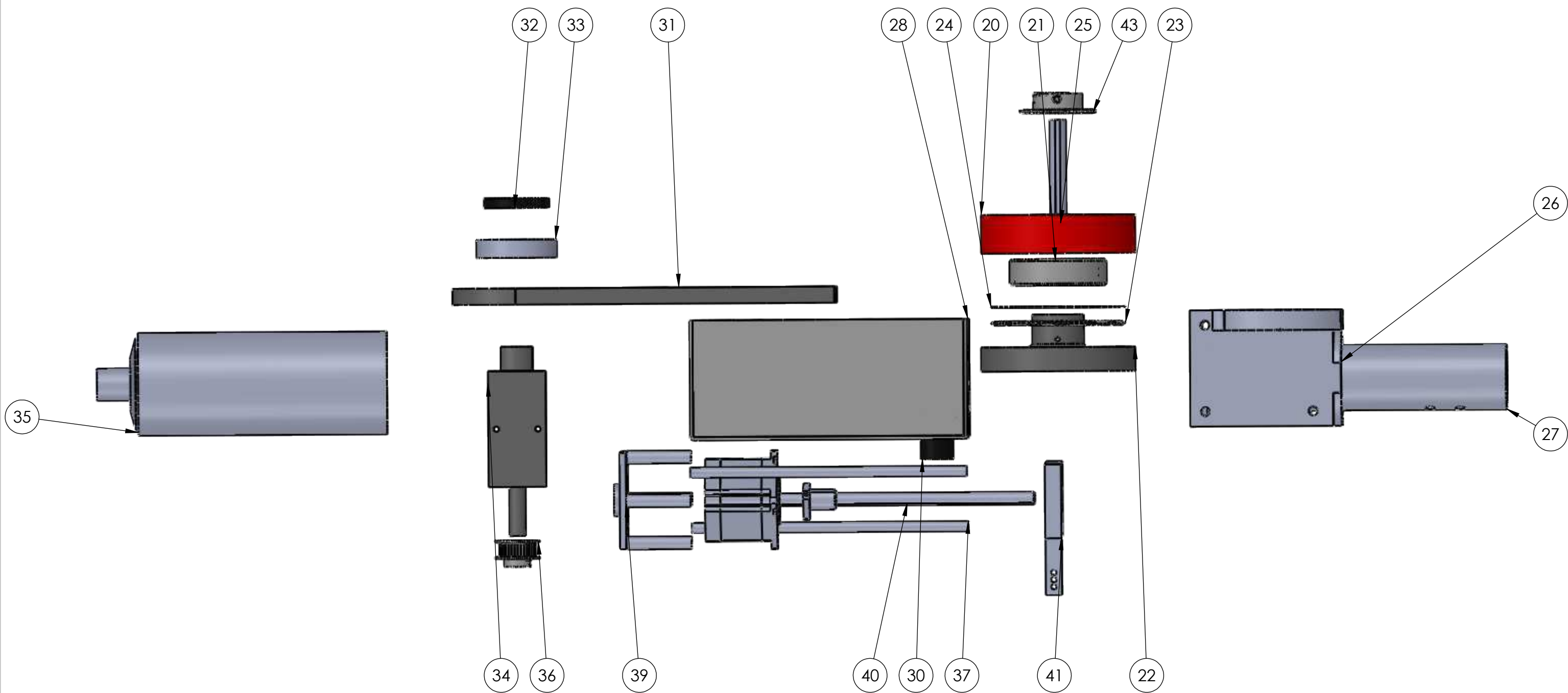
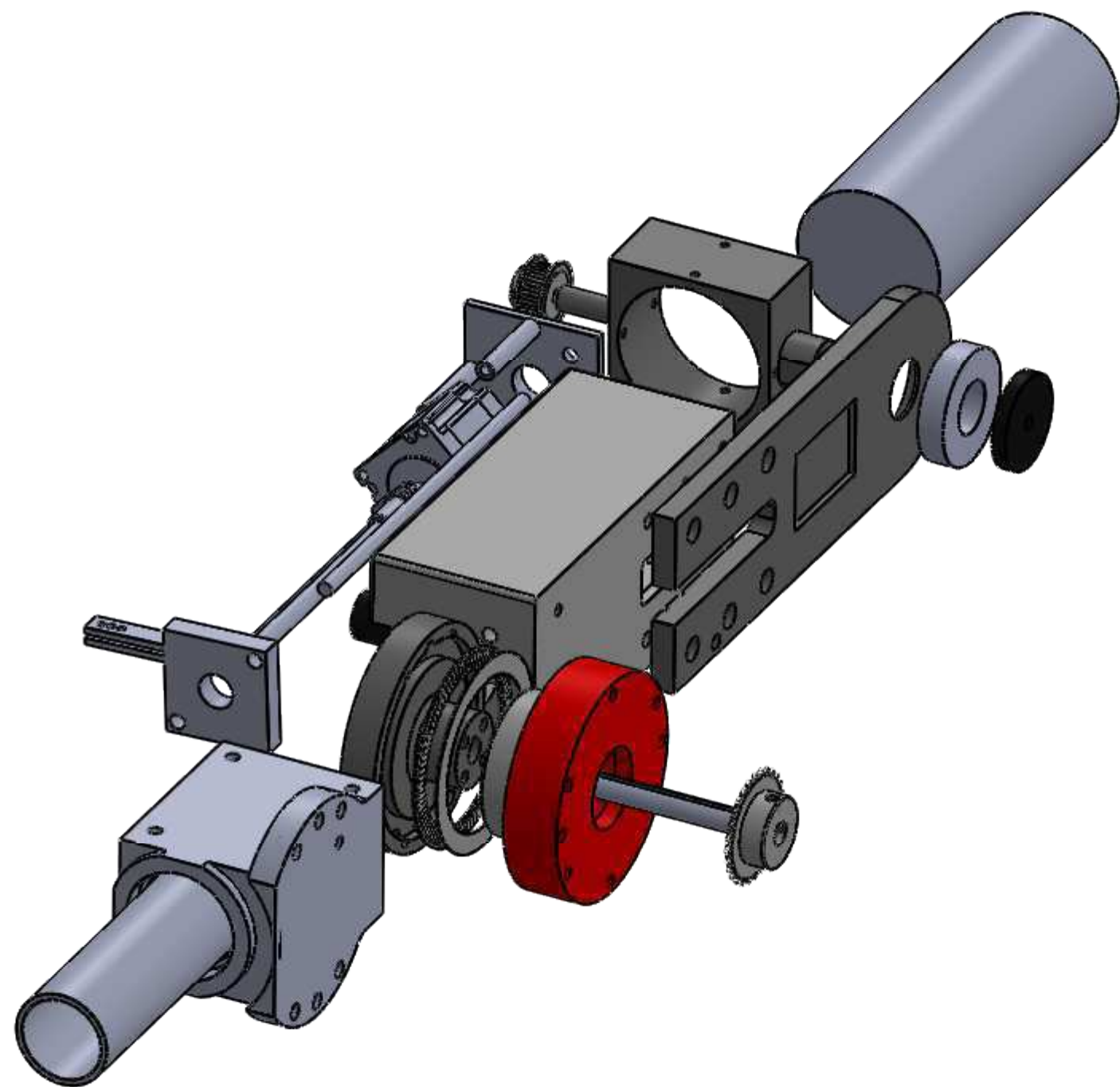
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:		
		DIMENSIONS ARE IN INCHES	DRAWN					
		TOLERANCES: ± 0.0025	CHECKED					
		FRACTIONAL ±	ENG APPR.					
		ANGULAR: MACH ± BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.					
		THREE PLACE DECIMAL ±	COMMENTS:			SIZE DWG. NO. REV C J2_Arm		
		INTERPRET GEOMETRIC						
		TOLERANCING PER:						
		MATERIAL						
		FINISH				SCALE: 1:5 WEIGHT: SHEET 2 OF 2		
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
18	J2_Arm		1
19	J3 Motor Mount(Nema23)		1
20	J3 Bearing Cup		1
21	60715K31	One-Piece Steel Thrust Ball Bearing	1
22	J3 Spindle		1
23	5909K955	Needle-Roller Thrust Bearing	1
24	5909K975	1/32" Thick Washer for 3-1/4" Shaft Diameter Needle-Roller Thrust Bearing	1
25	J3 Key Shaft		1
26	J4 Turret Housing		1
27	J4 Main Shaft		1
28	J5 Housing Box		1
29	J5 Idler Tension BK		1
30	J5 Bearing Post		1
31	J6 Main Bearing Arm BK		1
32	J6 Bearing Cap BK		1
33	J6 Taper Roller Bearing Filler 5709K431		1
34	J6 Housing Piece BK		1
35	Spindle		1
36	1277N47	Corrosion-Resistant Timing Belt Pulley	1
37	J5 Guide Rod		2
39	J4 motor support		1
40	J5_Nema23		1
41	J5 Guide Piece BK		1
43	2737T212	Roller Chain Sprocket	1



PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	
		DIMENSIONS ARE IN INCHES	DRAWN			
		TOLERANCES:	CHECKED			TITLE:
		FRACTIONAL ±	ENG APPR.			
		ANGULAR: MACH ± BEND ±	MFG APPR.			
		TWO PLACE DECIMAL ±	Q.A.			
		THREE PLACE DECIMAL ±	COMMENTS:			
		INTERPRET GEOMETRIC TOLERANCING PER:				
		MATERIAL				SIZE DWG. NO. REV
NEXT ASSY	USED ON	FINISH				B7 Full Assembly
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:10 WEIGHT: SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
19	J3 Motor Mount(Nema23)		1
20	J3 Bearing Cup		1
21	60715K31	One-Piece Steel Thrust Ball Bearing	1
22	J3 Spindle		1
23	5909K955	Needle-Roller Thrust Bearing	1
24	5909K975	1/32" Thick Washer for 3-1/4" Shaft Diameter Needle-Roller Thrust Bearing	1
25	J3 Key Shaft		1
26	J4 Turret Housing		1
27	J4 Main Shaft		1
28	J5 Housing Box		1
29	J5 Idler Tension BK		1
30	J5 Bearing Post		1
31	J6 Main Bearing Arm BK		1
32	J6 Bearing Cap BK		1
33	J6 Taper Roller Bearing Filler 5709K431		1
34	J6 Housing Piece BK		1
35	Spindle		1
36	1277N47	Corrosion-Resistant Timing Belt Pulley	1
37	J5 Guide Rod		2
38	1277N752	Corrosion-Resistant Timing Belt Pulley	1
39	J4 motor support		1
40	J5_Nema23		1
41	J5 Guide Piece BK		1
42	2737T107	Roller Chain Sprocket	1
43	2737T212	Roller Chain Sprocket	1

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
«INSERT COMPANY NAME HERE». ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
«INSERT COMPANY NAME HERE» IS
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	
		DIMENSIONS ARE IN INCHES	DRAWN			
		TOLERANCES:	CHECKED			
		FRACTIONAL: ±	ENG APPR.			
		ANGULAR: MAACH ± BEND ±	MFG APPR.			
		TWO PLACE DECIMAL ±				
		THREE PLACE DECIMAL ±				
		INTERPRET GEOMETRIC TOLERANCING PER:				
		MATERIAL				
		FINISH				
NEXT ASSY	USED ON					
APPLICATION	DO NOT SCALE DRAWING					

TITLE:
**Joint 3 - Joint 5
Exploded View**

SIZE DWG. NO. REV
D

SCALE: 1:3 WEIGHT: SHEET 1 OF 1

D

D

C

C

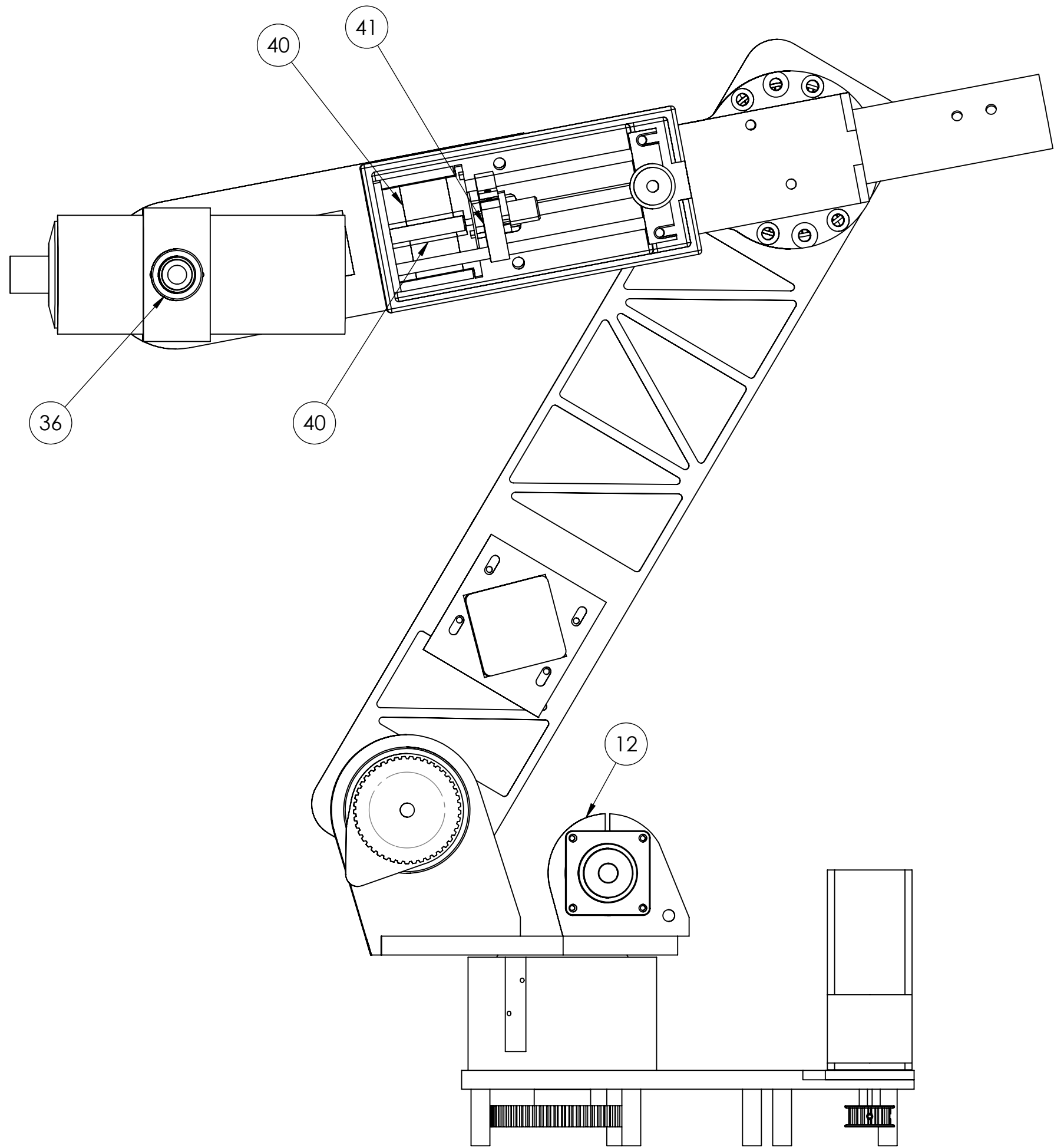
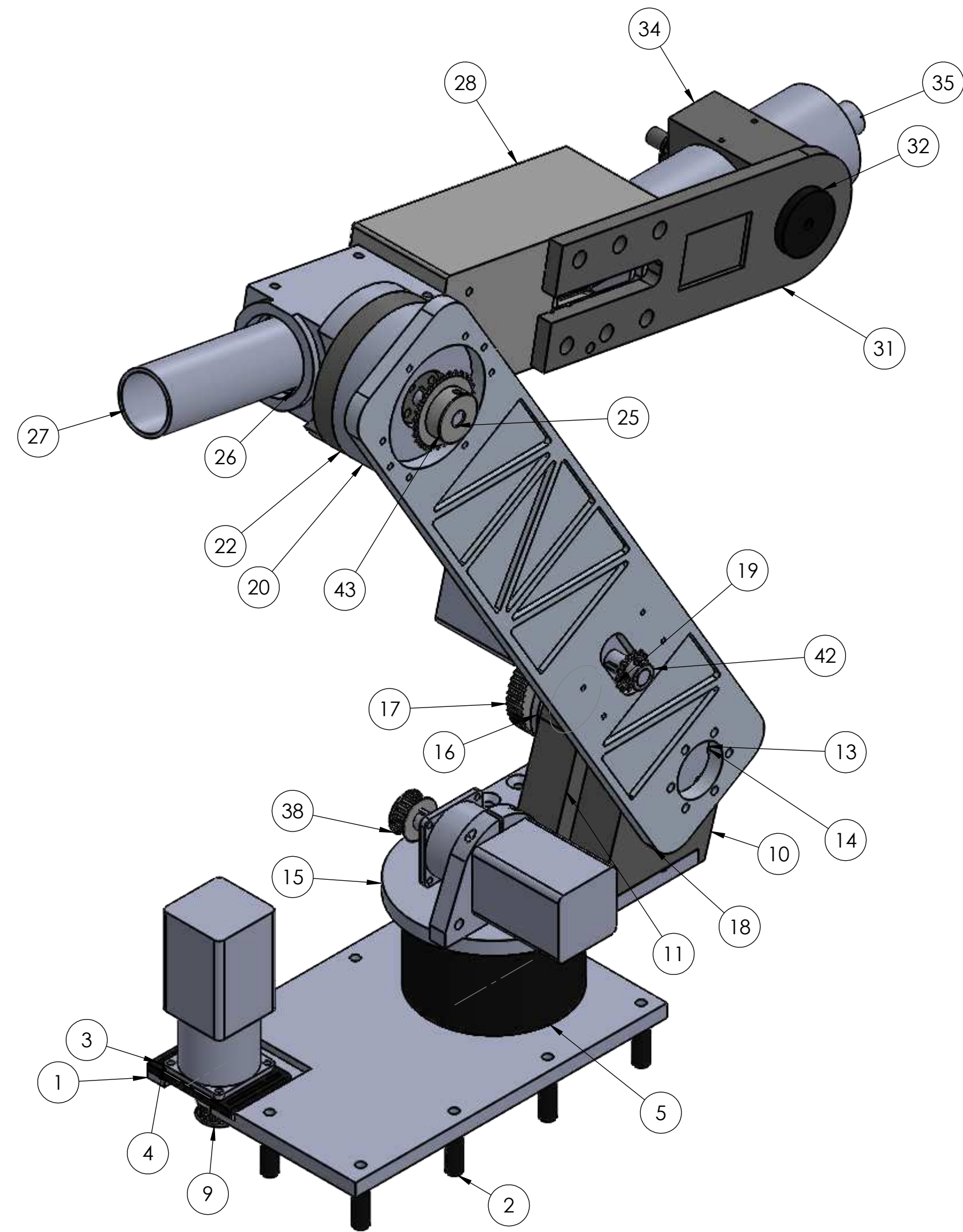
B

B

A

A

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	J1 V3 Base Plate BK		1
2	J1 Support Pins BK		8
3	J1 Motor Mount(Nema23) BK		1
4	J1 Name 23 BK		3
5	J1 2V Turret BK		1
6	2291N116	Tapered-Roller Thrust Bearing	2
7	J1 Spindle BK		1
8	1277N61	Corrosion-Resistant Timing Belt Pulley	1
9	1277N752	Corrosion-Resistant Timing Belt Pulley	1
10	J2_TurretHousing		1
11	J2_TurretHousingLeft		1
12	J2_MotorSupport		1
13	7755N34	Tapered Bore Self-Aligning Ball Bearing	2
14	J2_DriveSpindle		1
15	J1 Turrent Base Correct		1
16	J2_TensionRing		1
17	1277N29	Corrosion-Resistant Timing Belt Pulley	1
18	J2_Arm		1
19	J3 Motor Mount(Nema23)		1
20	J3 Bearing Cup		1
21	60715K31	One-Piece Steel Thrust Ball Bearing	1
22	J3 Spindle		1
23	5909K955	Needle-Roller Thrust Bearing	1
24	5909K975	1/32" Thick Washer for 3-1/4" Shaft Diameter Needle-Roller Thrust Bearing	1
25	J3 Key Shaft		1
26	J4 Turret Housing		1
27	J4 Main Shaft		1
28	J5 Housing Box		1
29	J5 Idler Tension BK		1
30	J5 Bearing Post		1
31	J6 Main Bearing Arm BK		1
32	J6 Bearing Cap BK		1
33	J6 Taper Roller Bearing Filler 5709K431		1
34	J6 Housing Piece BK		1
35	Spindle		1
36	1277N47	Corrosion-Resistant Timing Belt Pulley	1
37	J5 Guide Rod		2
38	1277N752	Corrosion-Resistant Timing Belt Pulley	1
39	J4 motor support		1
40	J5_Nema23		1
41	J5 Guide Piece BK		1
42	2737T107	Roller Chain Sprocket	1
43	2737T212	Roller Chain Sprocket	1



PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
«INSERT COMPANY NAME HERE». ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
«INSERT COMPANY NAME HERE» IS
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MAACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN CHECKED ENG APPR. MFG APPR.	NAME DATE	
		INTERPRET GEOMETRIC TOLERANCING PER: MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION	DO NOT SCALE DRAWING				

SIZE	DWG. NO.	REV
Full Assembly		
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1