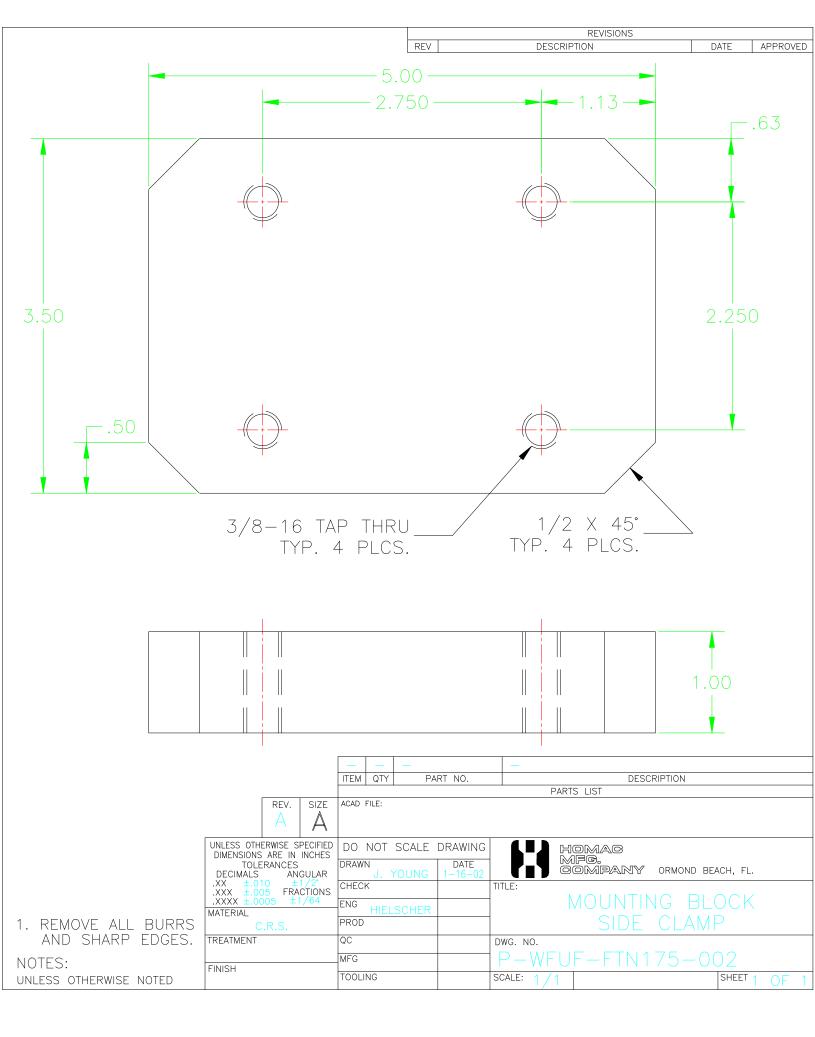
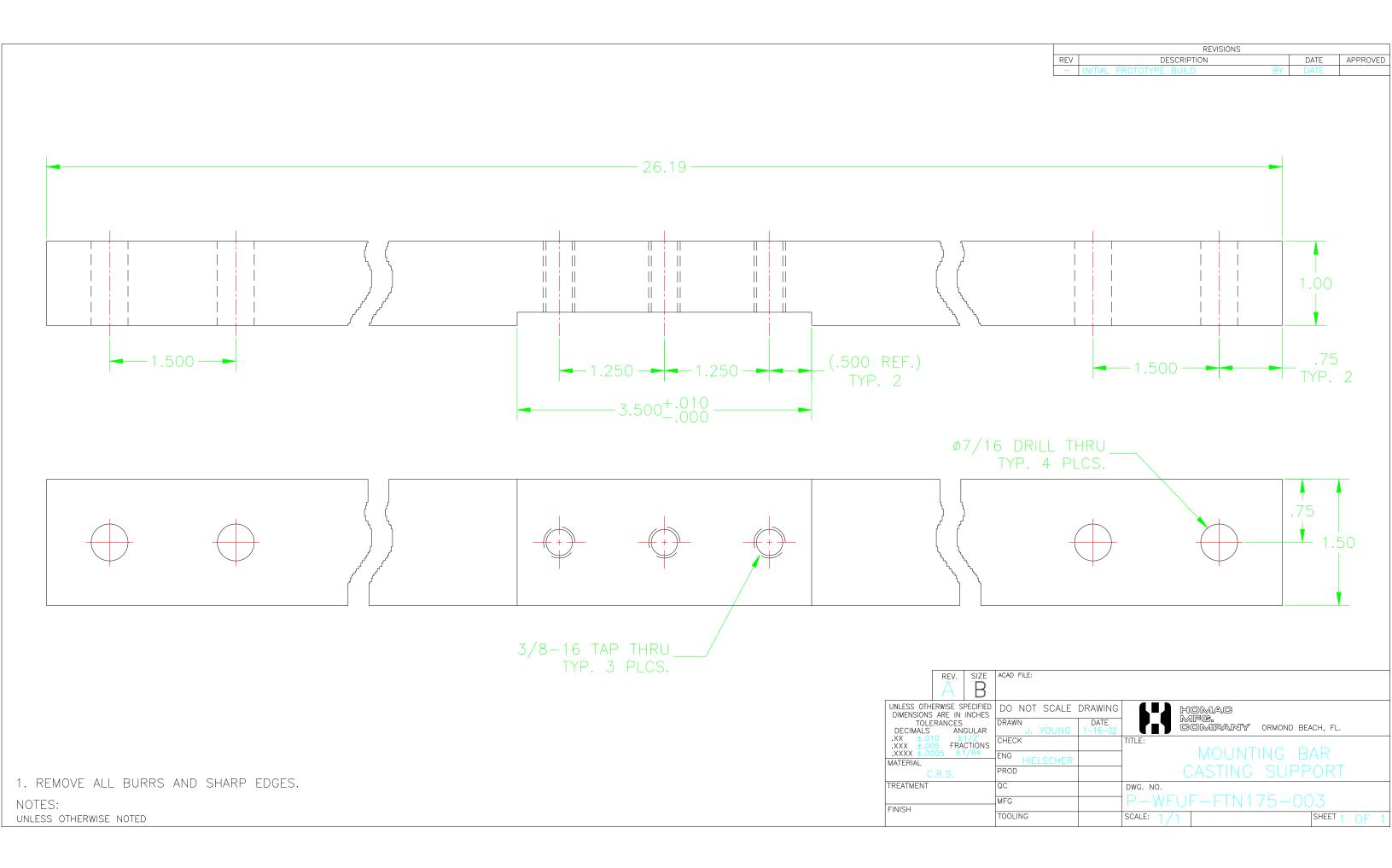
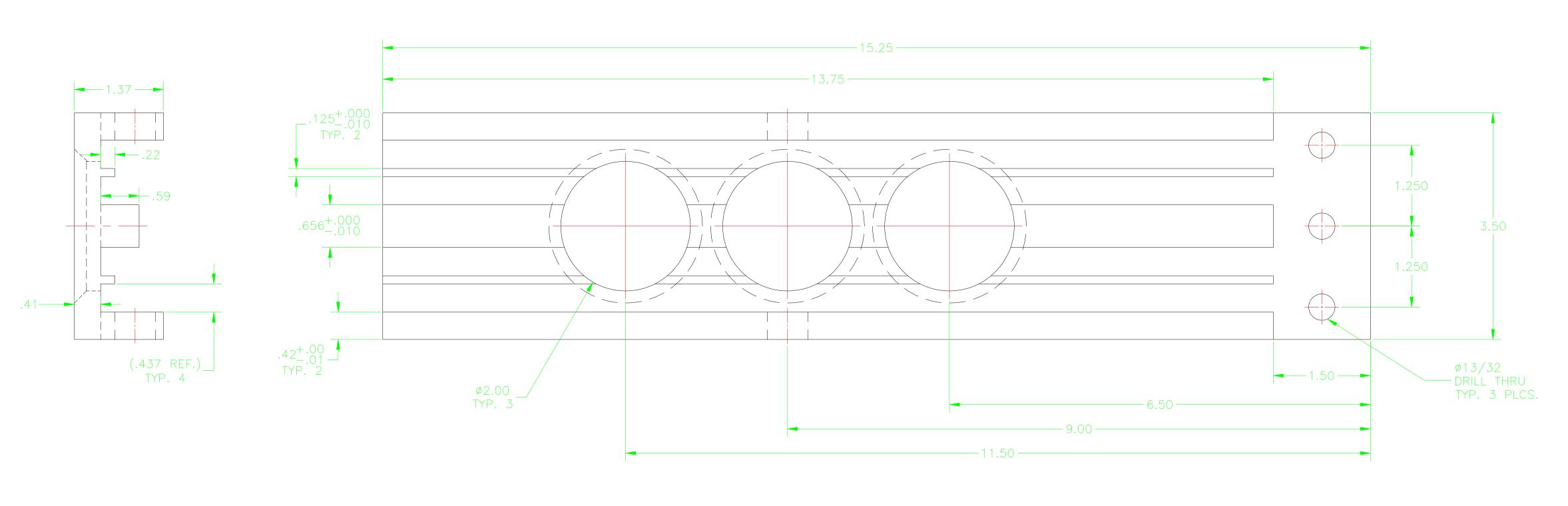


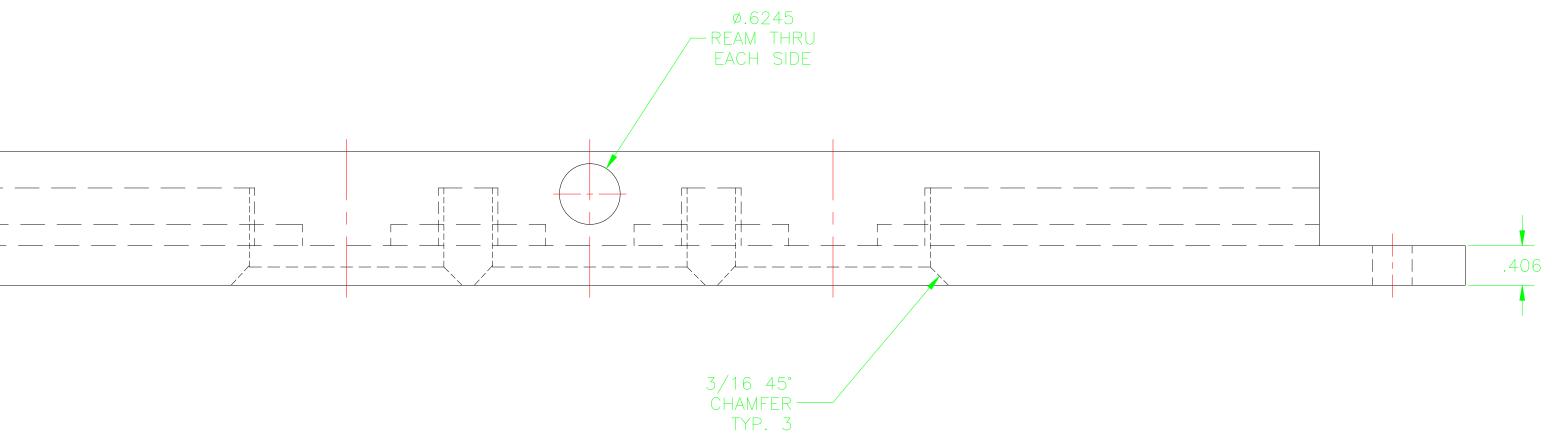
.E:	
OT SCALE DRAWING	HOMAG
J. YOUNG 1-18-02	GOMPANY ORMOND BEACH, FL.
HIELSCHER	UPPER FRAME ASSEMBLY
	3D PERSPECTIVE VIEW
	DWG. NO.
	A-WFUF-FTN-175-001
3	SCALE: NTS SHEET 1 OF 1

4	CL-6-DPZ (CARR LANE)	Diamond Locating Pin						
1	CL-14-TP (CARR LANE	ø1/2"6"Long Locating "T"Pin						
2	CL-100-VCC (CARR LANE)	1000 Lbs CAM Action CLAMP						
2	CL-650-SPC (CARR LANE)	16,000 Lbs Push/Pull Clamp						
2	_	ø5/8" x 1" Long Dowell Pin						
4	06891253 (MSC)	1/2" Extra Thick Flat Washer						
4	82428251 (MSC)	1/2—20 Flange Nut						
1	06056584 (MSC	1/2-20 304 Stainless Steel threaded Rod						
2	P-WFUF-FTN-175-008	TOP PLATE Clamping Blocks						
2	P-WFUF-FTN-175-007	Side Clamping Blocks						
1	P-WFUF-FTN-175-006	Plate Locator for even number of Fingers on Casting						
1	P-WFUF-FTN-175-005	Plate Locator for Odd Number of fingerson Casting						
1	P-WFUF-FTN-175-004	Casting Locator & Support						
1	P-WFUF-FTN-175-003	Casting Support Mounting Bar						
2	P-WFUF-FTN-175-002	Side ClampMounting Blocks						
1	P-WFUF-FTN-175-001	Upper Frame Weldment						
QTY	PART NO.	Description						
	PARTS LIST							





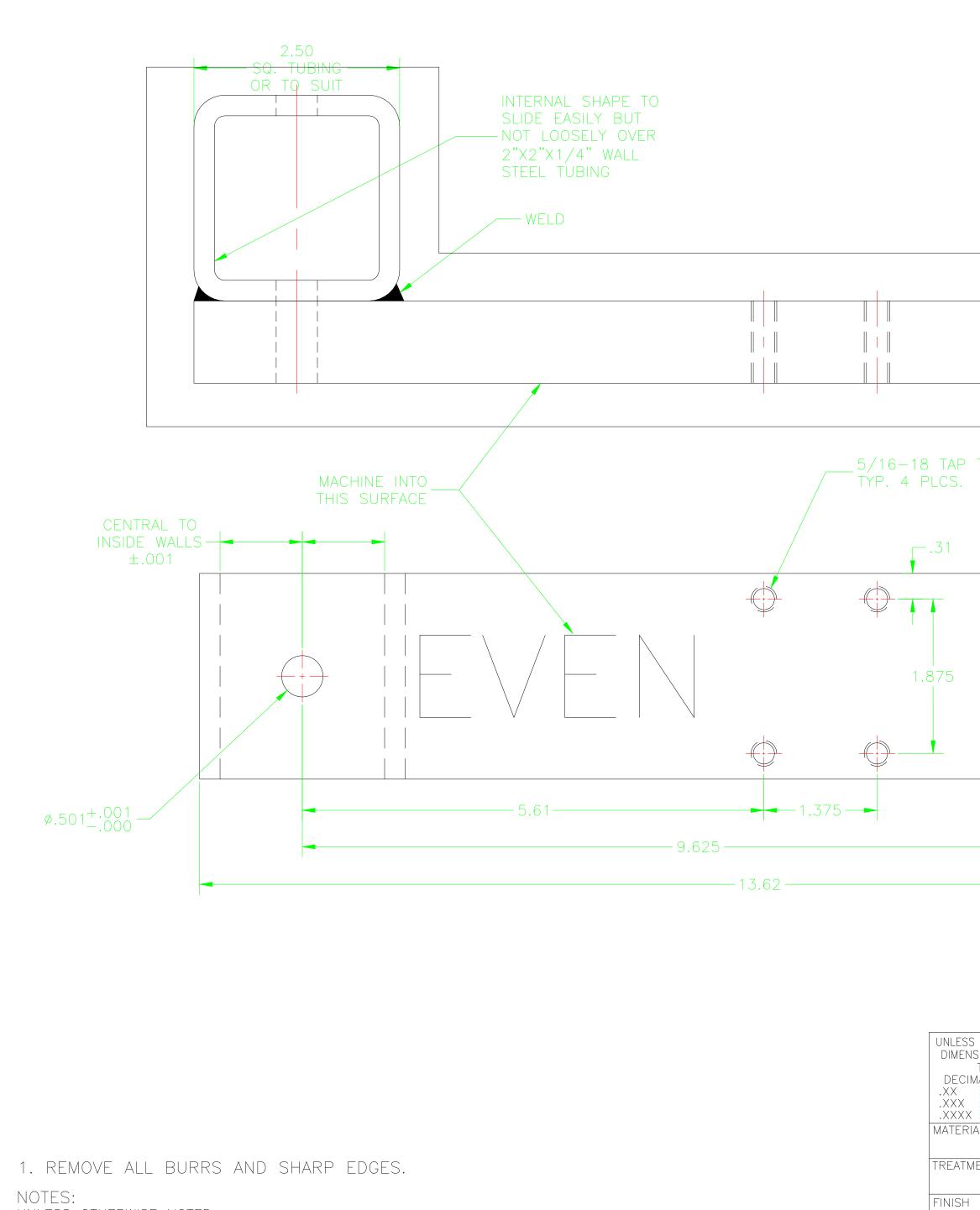




	rev.	SIZE	ACAD FIL
UNLESS OTHI DIMENSIONS			DO N
DECIMALS			DRAWN
.XX ±.0 .XXX ±.00 .XXX ±.00	)5 FRA		CHECK
MATERIAL	<u> </u>		ENG
Н	.R.S.		PROD
TREATMENT			QC
   FINISH			MFG
			TOOLING

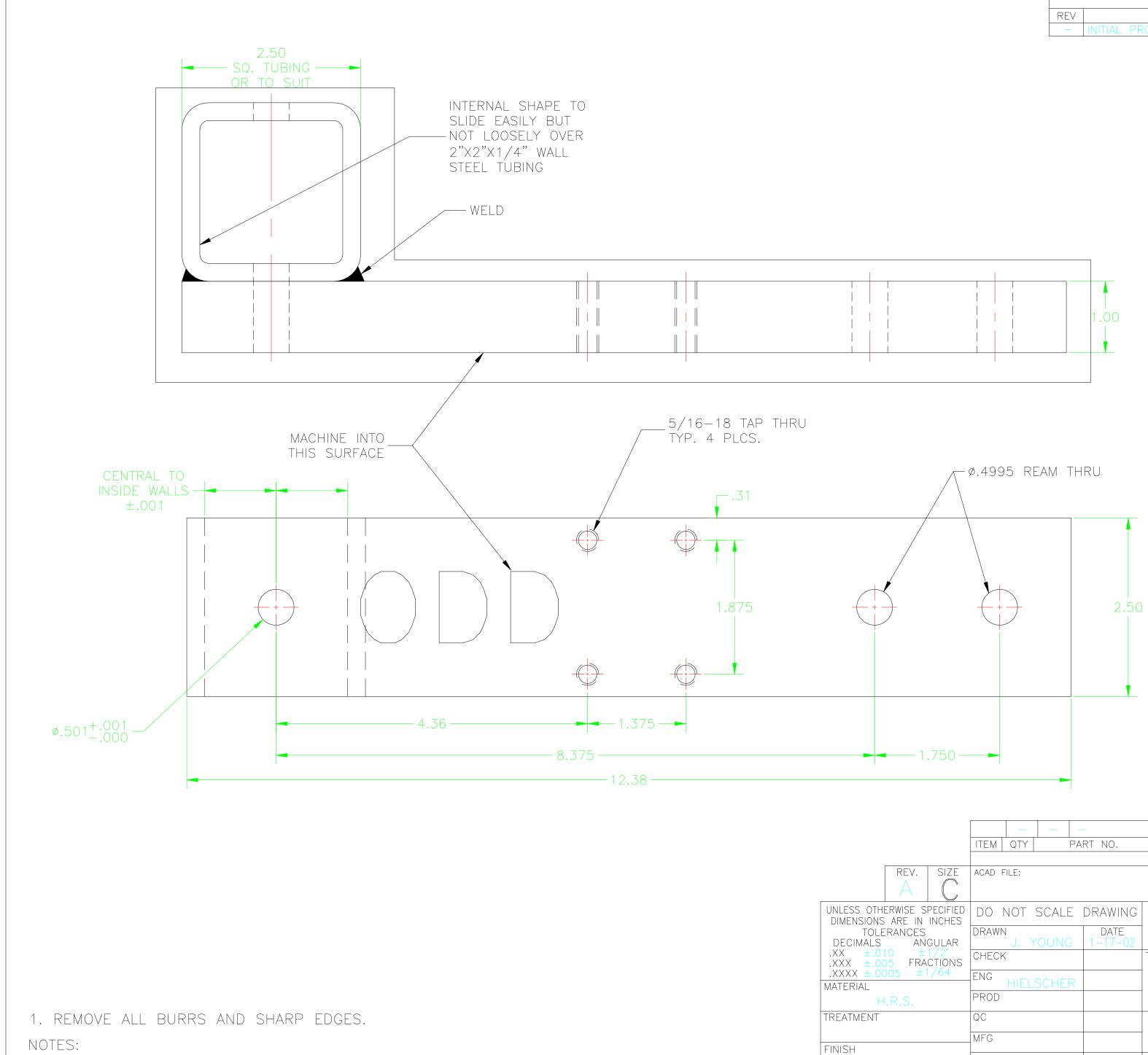
	REVISIONS		
REV	DESCRIPTION	DATE	APPROVED
	INITIAL PROTOTYPE BUILD BY	DATE	

ILE:			
NOT SCALE	DRAWING	HOMAG	
J. YOUNG	DATE 1-16-02	GOMPANY ORMOND BEACH, FL.	
·		TITLE:	
HIELSCHER		CASTING LOCATOR	
		AND SUPPORT	
		DWG. NO.	
		P-WFUF-FTN-175-004	
NG		SCALE: 1/1 SHEET 1 OF	1



UNLESS OTHERWISE NOTED

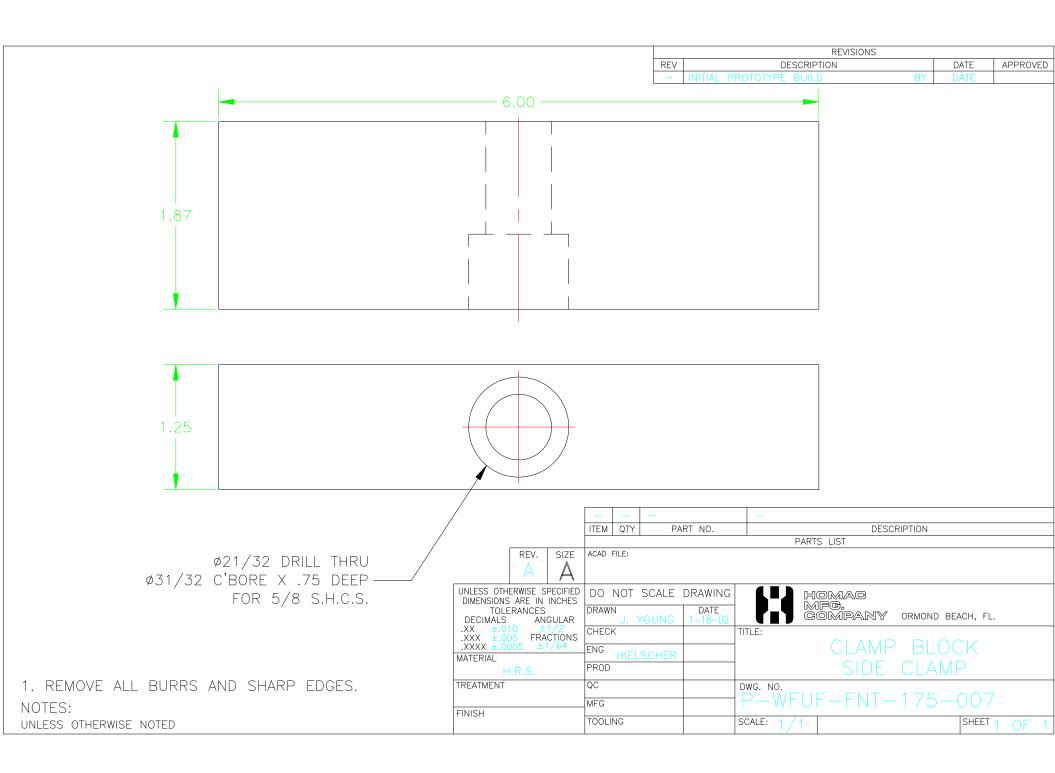
				REVISIONS		
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+	$\rightarrow$		2.	50		
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	1.700	I				
	ITEM QTY	PART NO.		DESCR		
		PART NO.	PA	RTS LIST	IFTION	
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S OTHERWISE SPECIFIED	DO NOT SC	CALE DRAWIN		HOMAG		
ISIONS ARE IN INCHES TOLERANCES	DRAWN J. YOU	DATE		MFG. Company	ORMOND BF.	ACH, FL.
$\begin{array}{llllllllllllllllllllllllllllllllllll$	CHECK		TITLE:			
±.005 FRACTIONS ±.0005 ±1/64 IAL	ENG HIELSC	HER	T PLAT	E LOCATO	R&	SUPPORT
H.R.S.	PROD		FOR	EVEN FIN	IGER	CASTINGS
/ENT	QC MFG		DWG. NO.		-175	5 - 006
	TOOLING		SCALE: 1 / 1			
						SHEET 1 OF 1

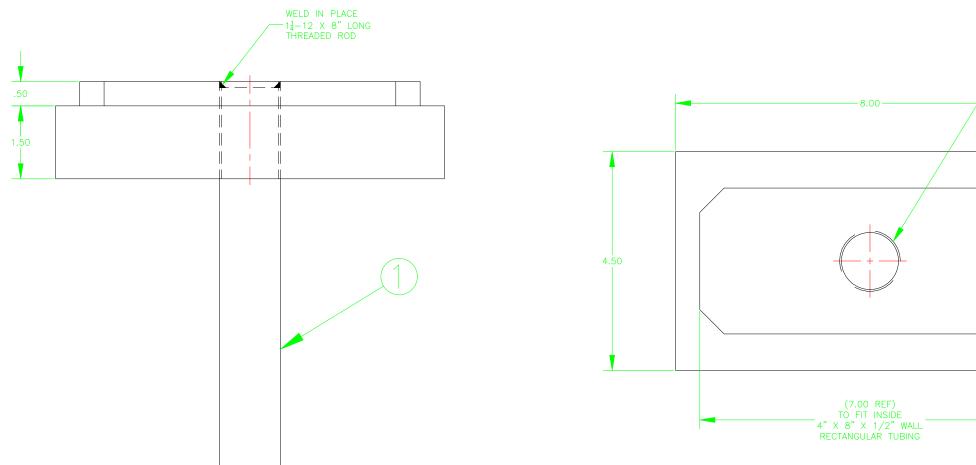


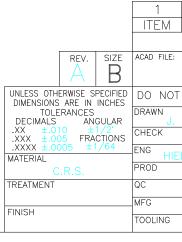
UNLESS OTHERWISE NOTED

<b>-</b> 1.750 —			-				
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ESS OTHERWISE SPECIFIED ENSIONS ARE IN INCHES	DO NO	DT S	CALE	DRAWING		Н	OMAC
TOLERANCES CIMALS ANGULAR		J. Y(	DUNG	DATE 1-17-02	┦		IFG. OMPANY ormond beach, fl.
±.010 ±1/2° x ±.005 FRACTIONS	CHECK				TITLE:	. — —	
XX ±.0005 ±1/64 ERIAL	ENG H	IIELS	CHER		ΡL		LOCATOR & SUPPORT
H.R.S.	PROD				FC	R (	odd finger castings
TMENT	QC				DWG. NO		
	MFG				P-	WFL	JF-FTN-175-005
ŝH	TOOLING				SCALE:	1/1	SHEET 1 OF 1

					REVISIONS		
		REV	1	DESCRIP		DATE	APPROVED
			INITIAL PROT			BY DATE	7.1 HOVED
ø1.50			TAP P				
.75							
			ADT NO	_	DECODIDE	1011	
		ITEM QTY P	PART NO.	PARTS	DESCRIPT 5 LIST	ION	
		ACAD FILE:					
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DO NOT SCALE	DRAWING		omac –		
		DRAWN J. YOUNG	DATE 1-18-02		omac FG. Ompany or	MOND BEACH, FI	
	.XX ±.010 ±1/2* .XXX ±.005 FRACTIONS .XXXX ±.0005 ±1/64	CHECK					
	$\begin{array}{c} 1.0005 \pm 1/64 \\ \hline \text{MATERIAL} \end{array}$	ENG HIELSCHER			CLAMP		
	C.R.S.	PROD		Т	op plate	E CLAM	P
1. REMOVE ALL BURRS AND SHARP EDGES.		QC	DWC	G. NO.			
NOTES:		MFG	+ P	-WFUF	F - FNT - 1	75-008	3
UNLESS OTHERWISE NOTED	FINISH	TOOLING	SCA				1 OF 1
UNLESS OTTERWISE NOTED				<u> </u>			I UF I



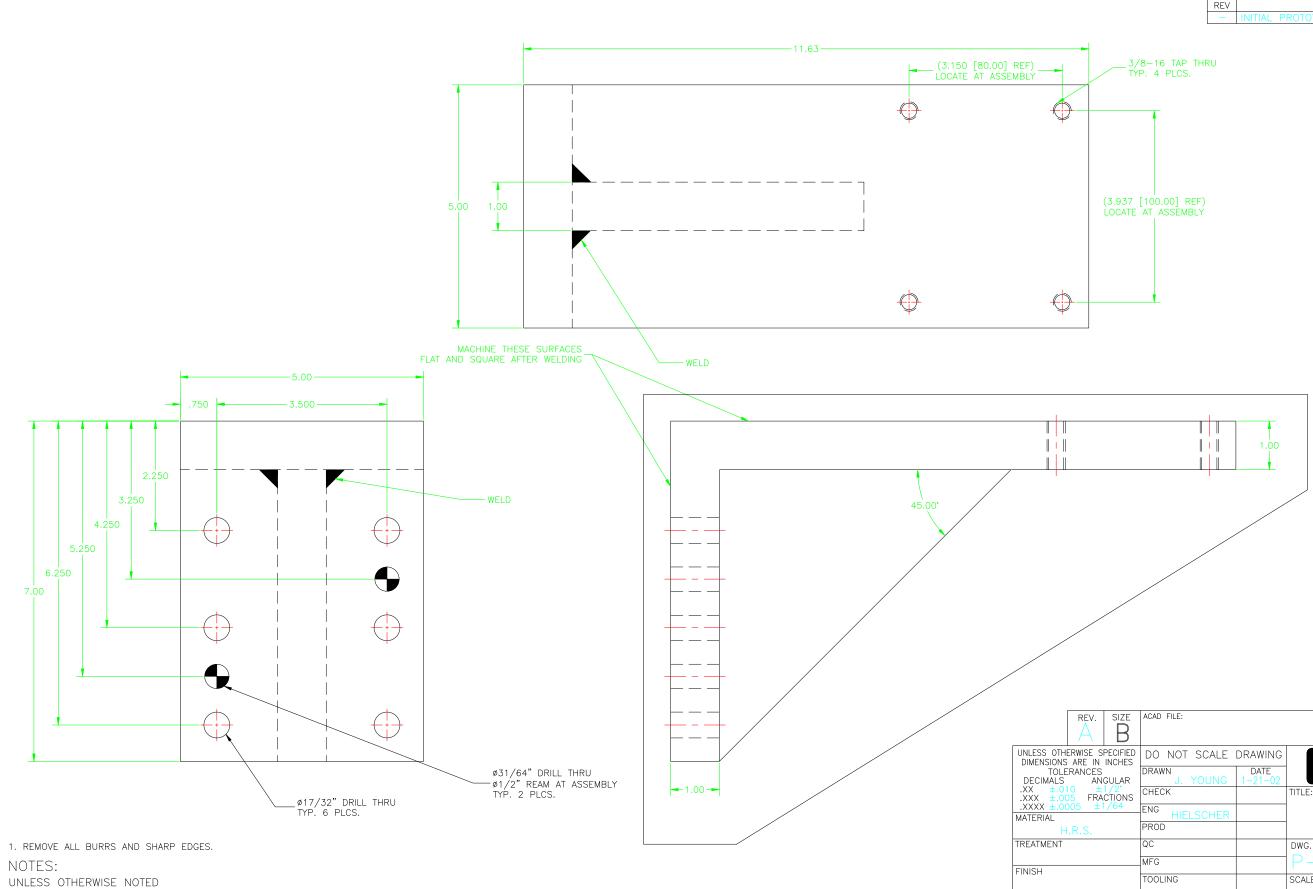




		REVIS	IONS		
REV		DESCRIPTION		DATE	APPROVED
_	LINIHAL F	ROTOTYPE BUILD	BY	DATE	
1	- 12 TAP	тырн			
/ "	4-12 IAI	THKO			
		A			
	$\mathbf{i}$	Ī			
		(3.00 R TO FIT IN	EF) SIDF		
		4" X 8" X 1/	2" WALL		
		RECTANGULAR	IUBING		
_ /					
/		L			
		$\backslash$			
		1/2" X 45*			
		CHAMFER TYP. 4			
		111. 4			
	90032A		1-1/4-12		d Rod
QTY	F	PART NO.		cription	
		PARTS LIS	ST		
SCALE	DRAWING	II Homa	G		
	DATE	MFG. COMP			
OUNG	1-18-02	TITLE:	CKMON	D BEACH, FL	•
		MID FR	AME FN	ID PL	ATE
SCHER		PIVOT A	SSEMRI	Y SC	RFW
		DWG. NO.			· 、
		P-WFMF-F	TN-175	5-002	
	+	SCALE: 1 (O		CUEET	

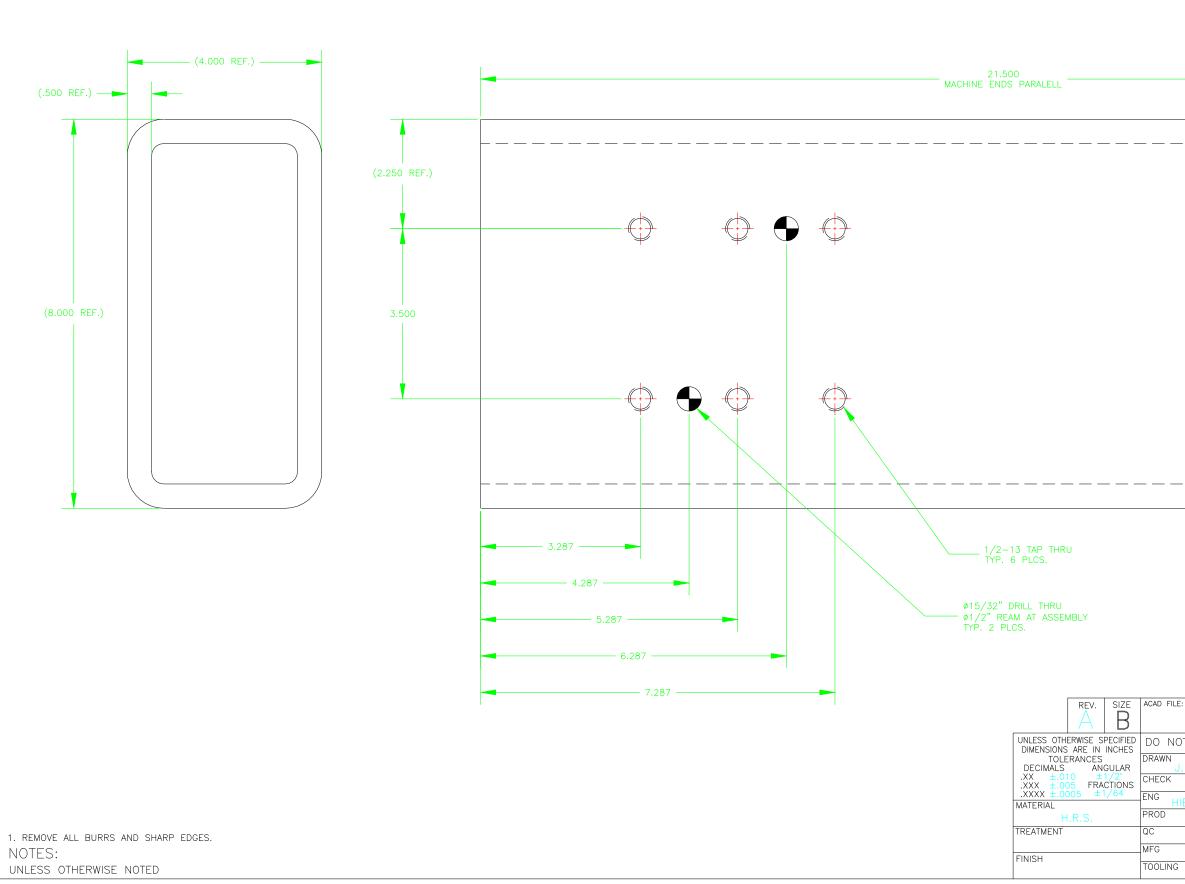
SCALE: 1/2

SHEET 1

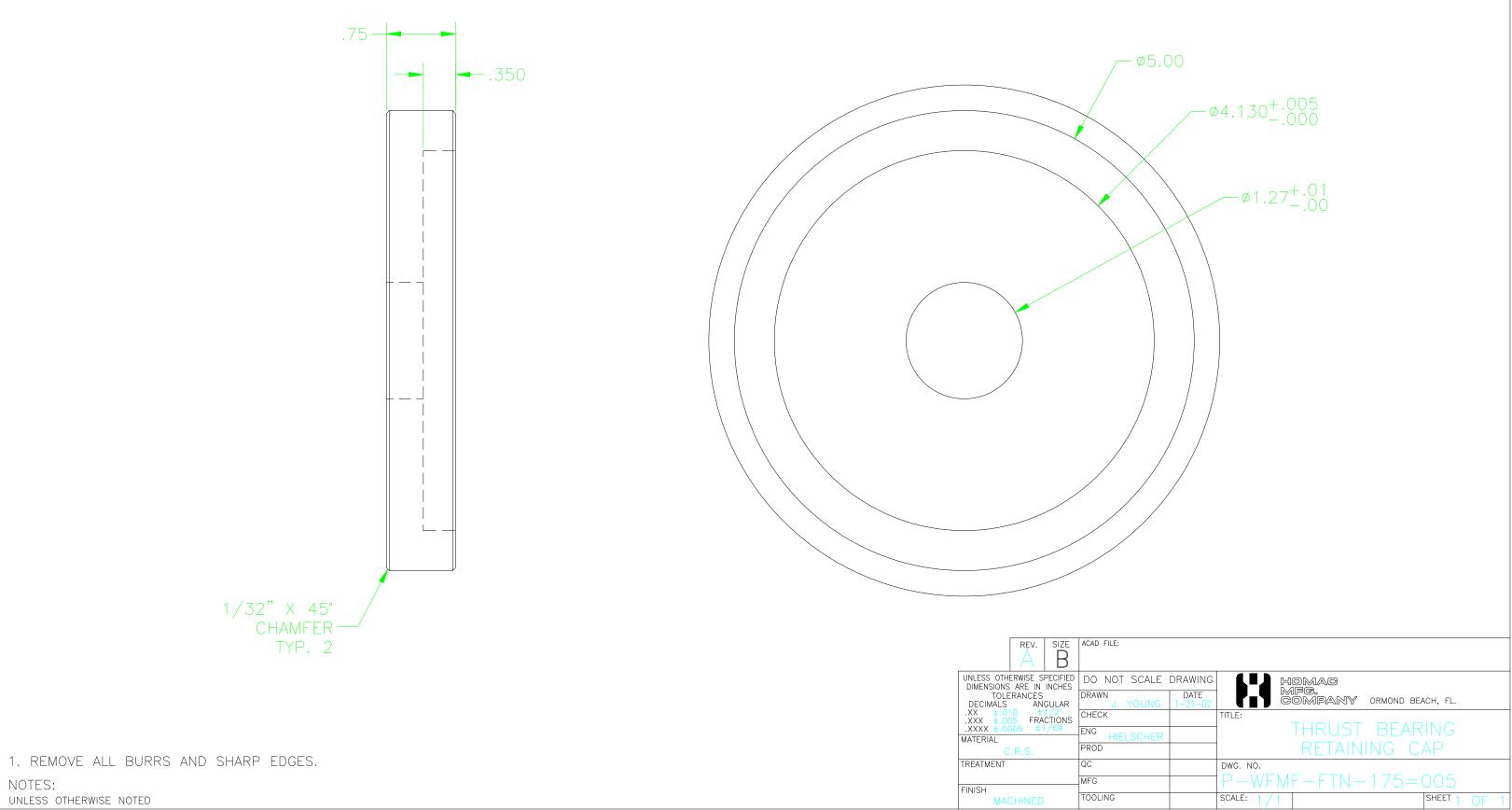


	REVISIONS		
REV	DESCRIPTION	DATE	APPROVED
	INITIAL PROTOTYPE BUILD BY	DATE	

OT SCALE	DRAWING	Homag Meg.
J. YOUNG	DATE 1-21-02	COMPANY ORMOND BEACH, FL.
		TITLE:
		GEARMOTOR MOUNT
HELSCHER		GLARINOTOR MOUNT
		ANGLE PLATE WELDMENT
		DWG. NO.
		P-WFMF-FTN-175-004
G		SCALE: 1/2 SHEET 1 OF 1

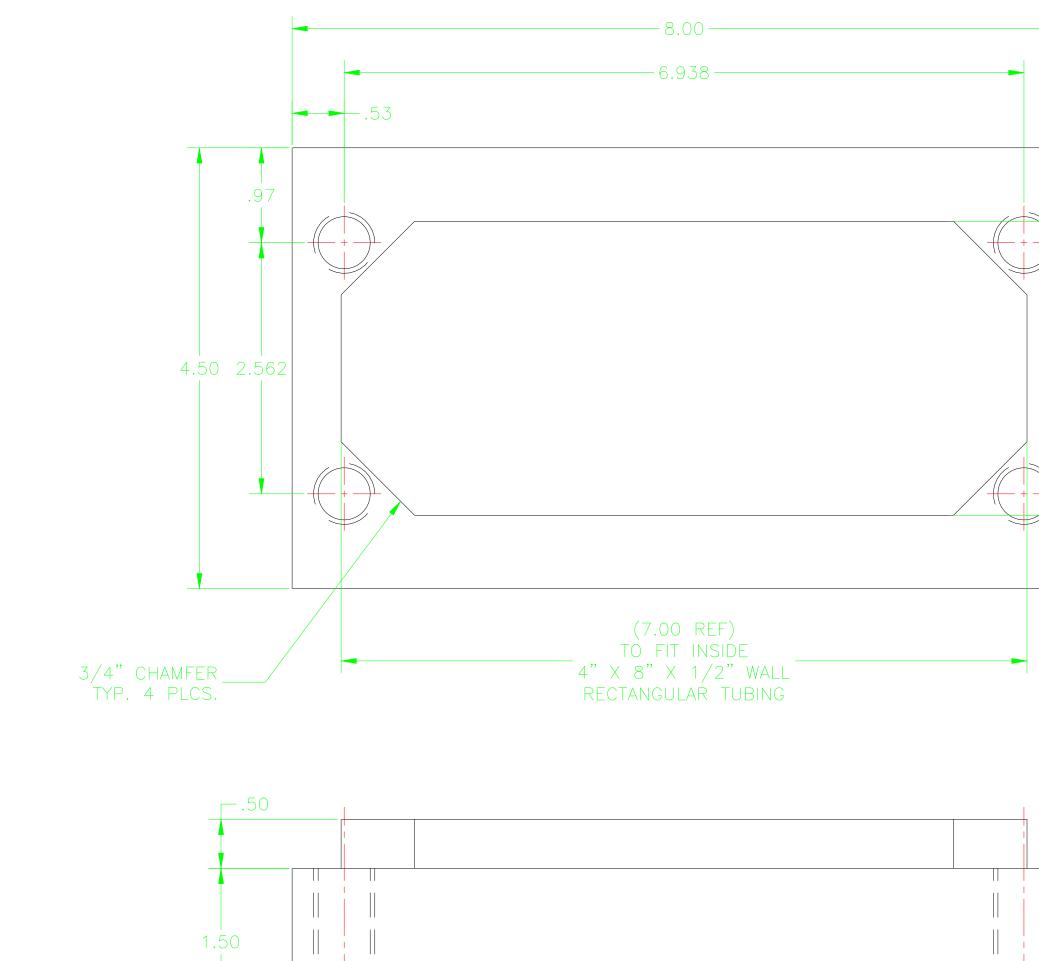


				REVISIONS			
	REV					DATE	APPROVED
	_	INTIAL F	PROTOTYPE BUILE	J	BY	DATE	
Ξ:							
DT SC	ALE	DRAWING		omac			
		DATE		FG. DMPANY (			
J. YOI	JNG	1-21-02			JKMUND E	BEACH, FL	
					TURA	лі т	UBE
IELSC	HER		MAIN	I SIKUL	IUKA		
			I MID	) FRAME	ASS	SEME	3LY
			DWG. NO.				
			P-WFM	F-FTN-	175-	-001	
			SCALE: 1/2			SHEET	1 OF 1
							I UF L



REVISIONS						
REV	DESCRIPTION	DATE	APPROVED			
—	INITIAL PROTOTYPE BUILD BY	DATE				

DRAWING						
DATE 1-21-02		ompany	ORMOND BEA	ACH, FL.		
	TITLE:					
		THRUST	BEAR	ING		
		RETAIN	ING C	ĄР		
	DWG. NO.					
	P-WFM	F-FTN-	175 = 0	005		
	SCALE: 1/1			SHEET 1	OF	1
	DATE	DATE 1-21-02 TITLE: DWG. NO. P-WFM	DATE 1-21-02 TITLE: THRUST RETAIN DWG. NO. P-WFMF-FTN-	DATE 1-21-02 TITLE: THRUST BEAR RETAINING C, DWG. NO. P-WFMF-FTN-175=0	DATE 1-21-02 TITLE: THRUST BEARING RETAINING CAP DWG. NO. P-WEME-FTN-175=005	DATE 1-21-02 TITLE: THRUST BEARING RETAINING CAP DWG. NO. P-WFMF-FTN-175=005



1. REMOVE ALL BURRS AND SHARP EDGES. NOTES: unless otherwise noted

	(3.00 REF)	
4' R	TO FIT INSIDE ' X 8" X 1/2" WALL ECTANGULAR TUBING	
	5/8-11 TAP THRU TYP. 4 PLCS.	
REV. SIZE	ITEM QTY PART NO.	DESCRIPTION PARTS LIST
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS ANGULAR .XX ±.010 ±1/2° .XXX ±.005 FRACTIONS .XXXX ±.0005 ±1/64 MATERIAL	DO NOT SCALE DRAWING DRAWN DATE J. YOUNG 1-18-02 CHECK ENG HIELSCHER	TITLE: MID FRAME END PLATE
C.R.S. / H.R.S. TREATMENT FINISH MACHINED	PROD QC MFG TOOLING	PILLOW BLOCK MOUN DWG. NO. P-WFMF-FTN-175-003 SCALE: 1/1 SHEET 1 OF 1

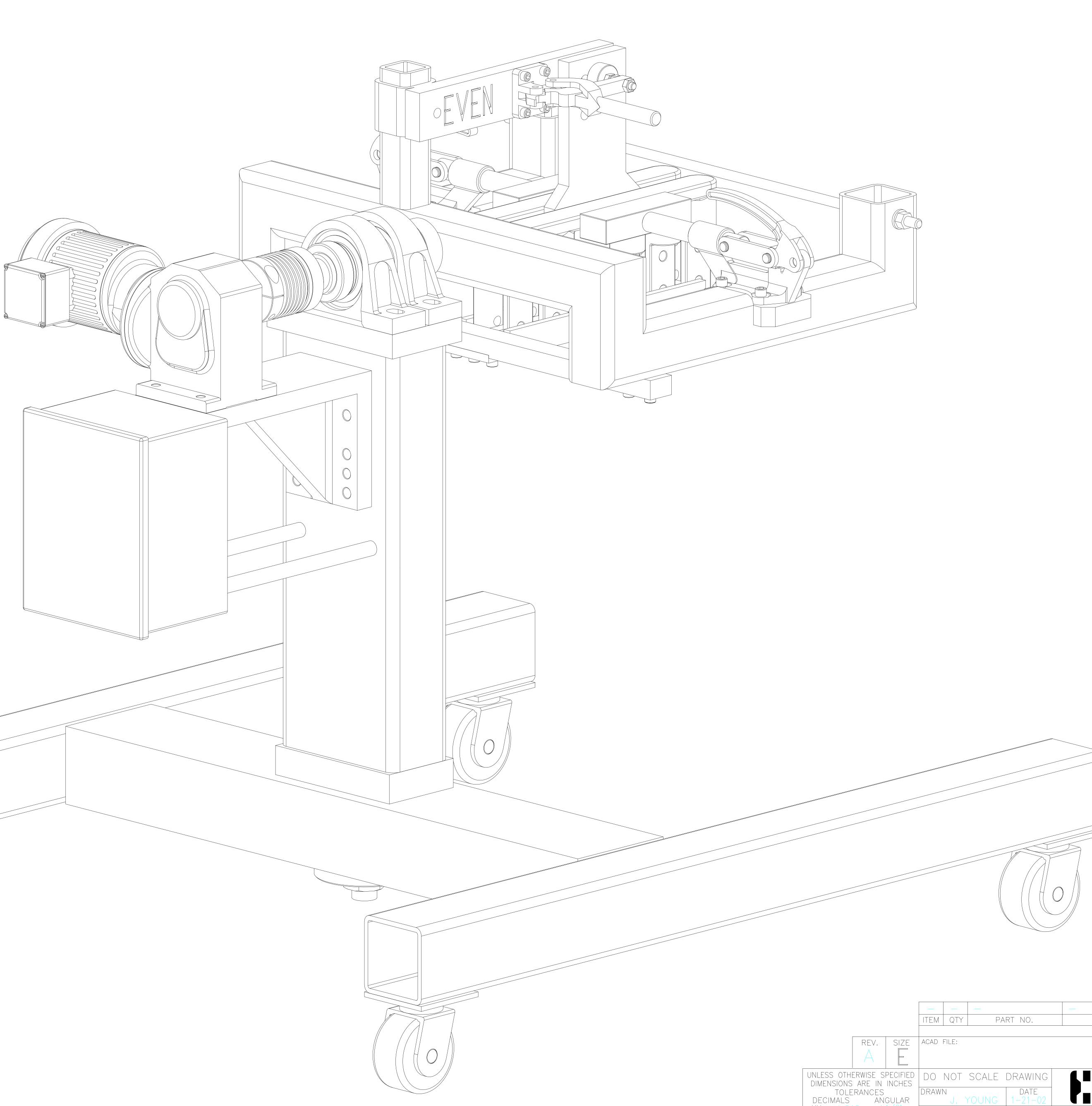
REVISIONS

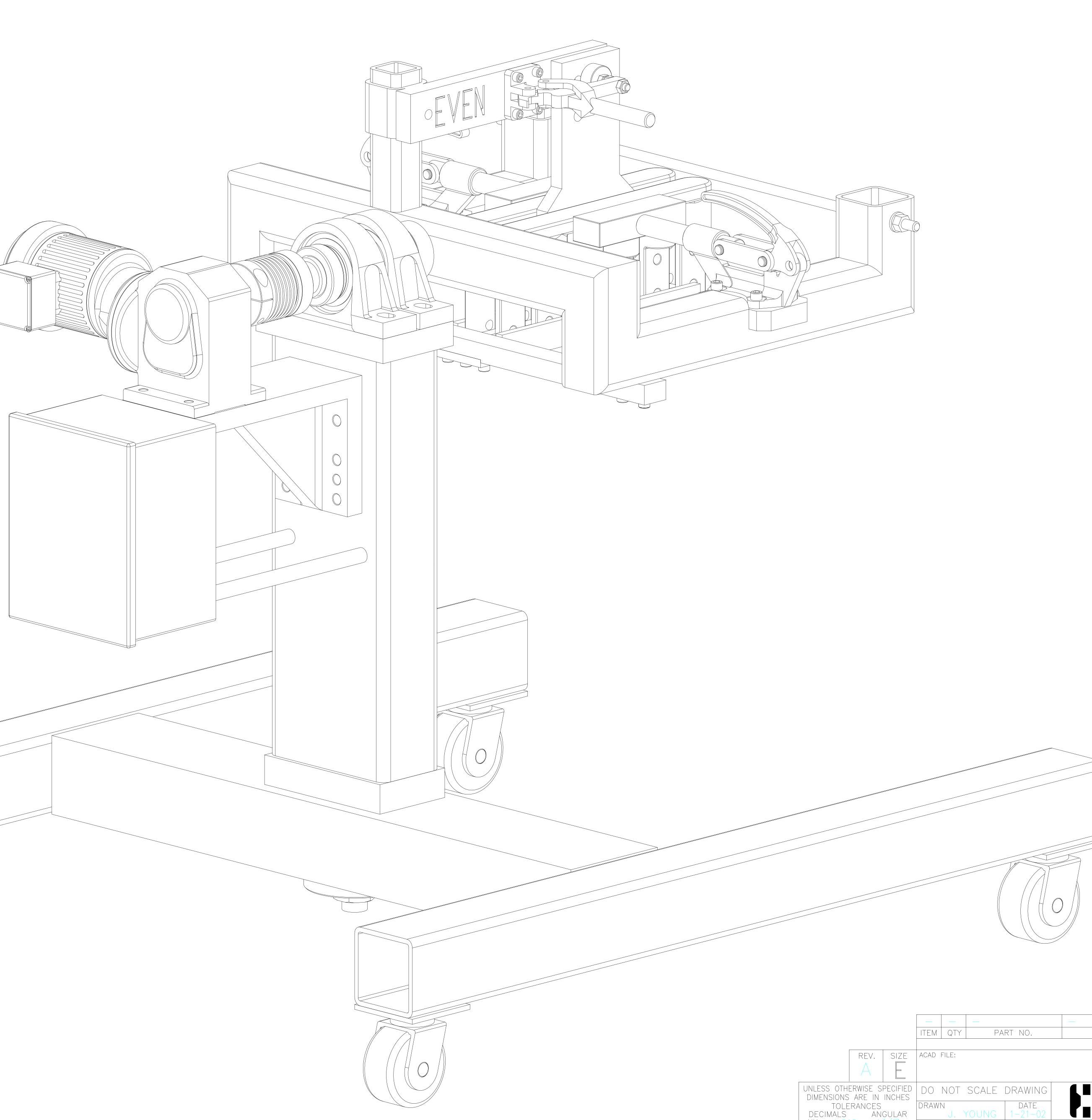
DATE

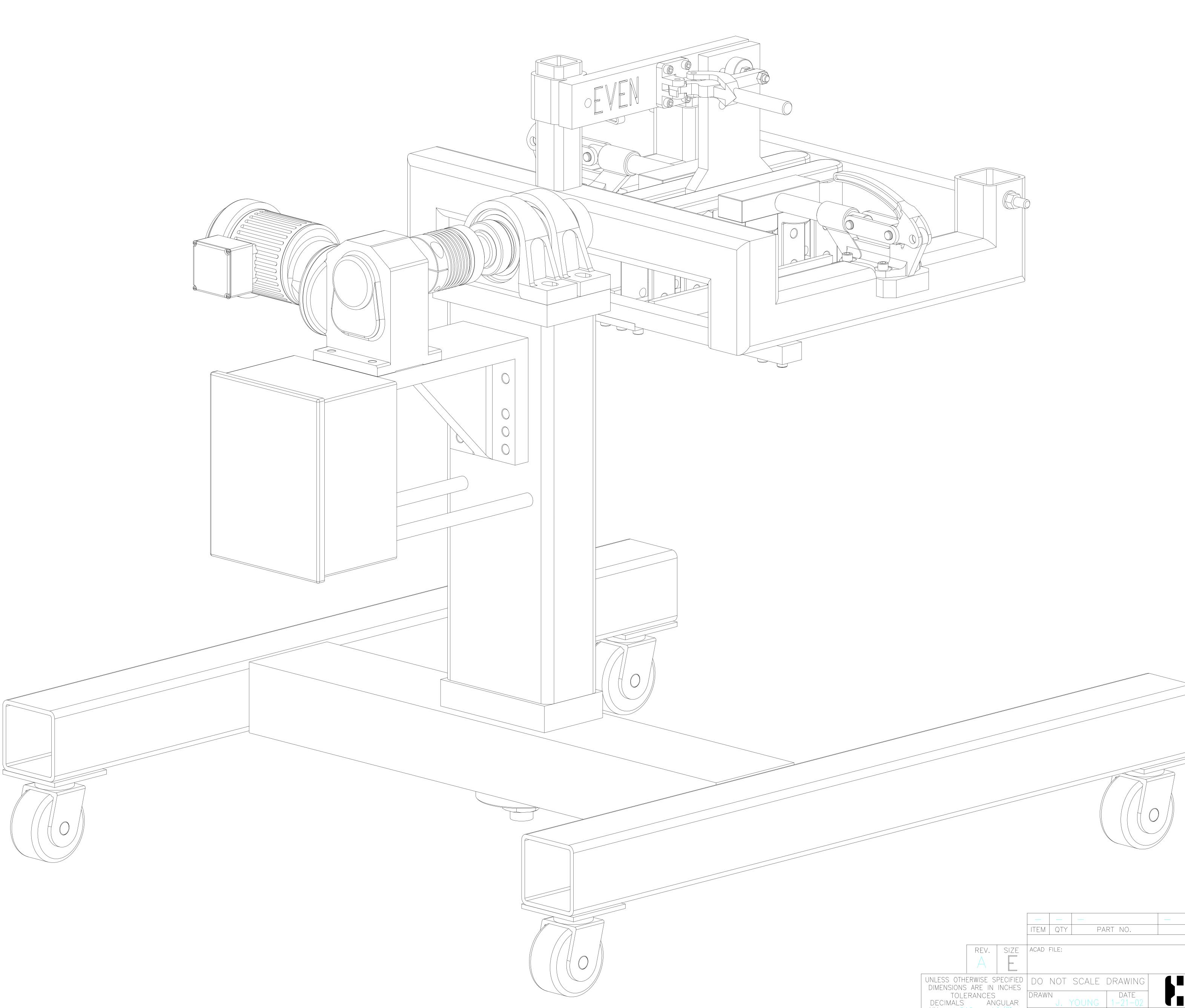
APPROVED

DESCRIPTION

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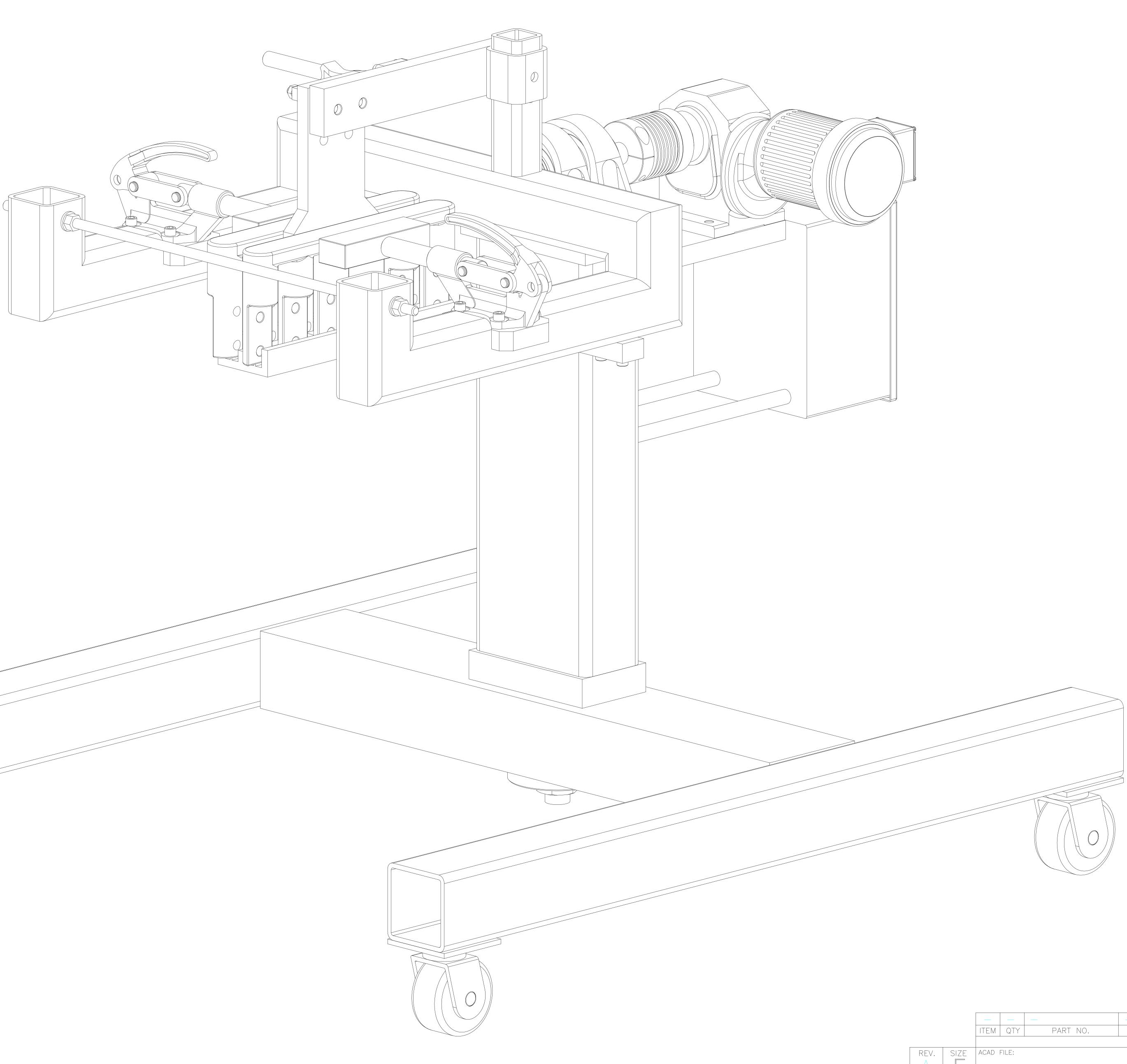


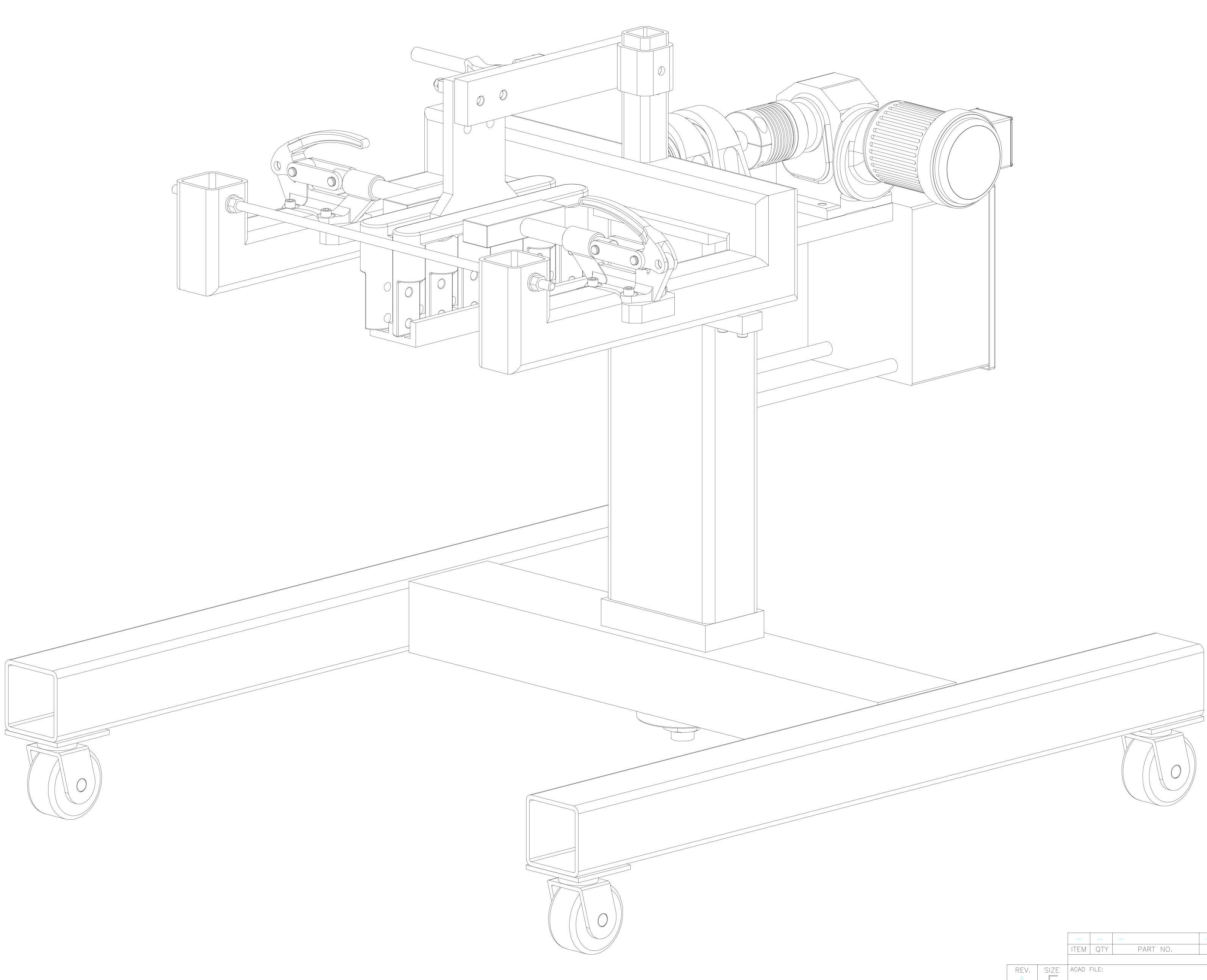




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	ITEM QTY	PART NO.	DESCRIPTION	
REV. SIZE	ACAD FILE:		PARTS LIST	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS ANGULAR	DRAWN	SCALE DRAWING Date OUNG 1-21-02	HOMAG MFG. COMPANY ORMOND BEACH, FL.	
.XX ±.010 ±1/2° .XXX ±.005 FRACTIONS .XXXX ±.0005 ±1/64 MATERIAL	CHECK ENG HIELS	SCHER	TITLE: 3D PERSPECTIVE	
	PROD		REAR VIEW	
TREATMENT	QC		DWG. NO.	
	MFG		1 AR - WF - FTN - 175 - 002	
FINISH	TOOLING		SCALE: NTS SHEET 1 0	F 1

REVISIONS			
DESCRIPTION		DATE	APPROVED
BUILD	BY	DATE	

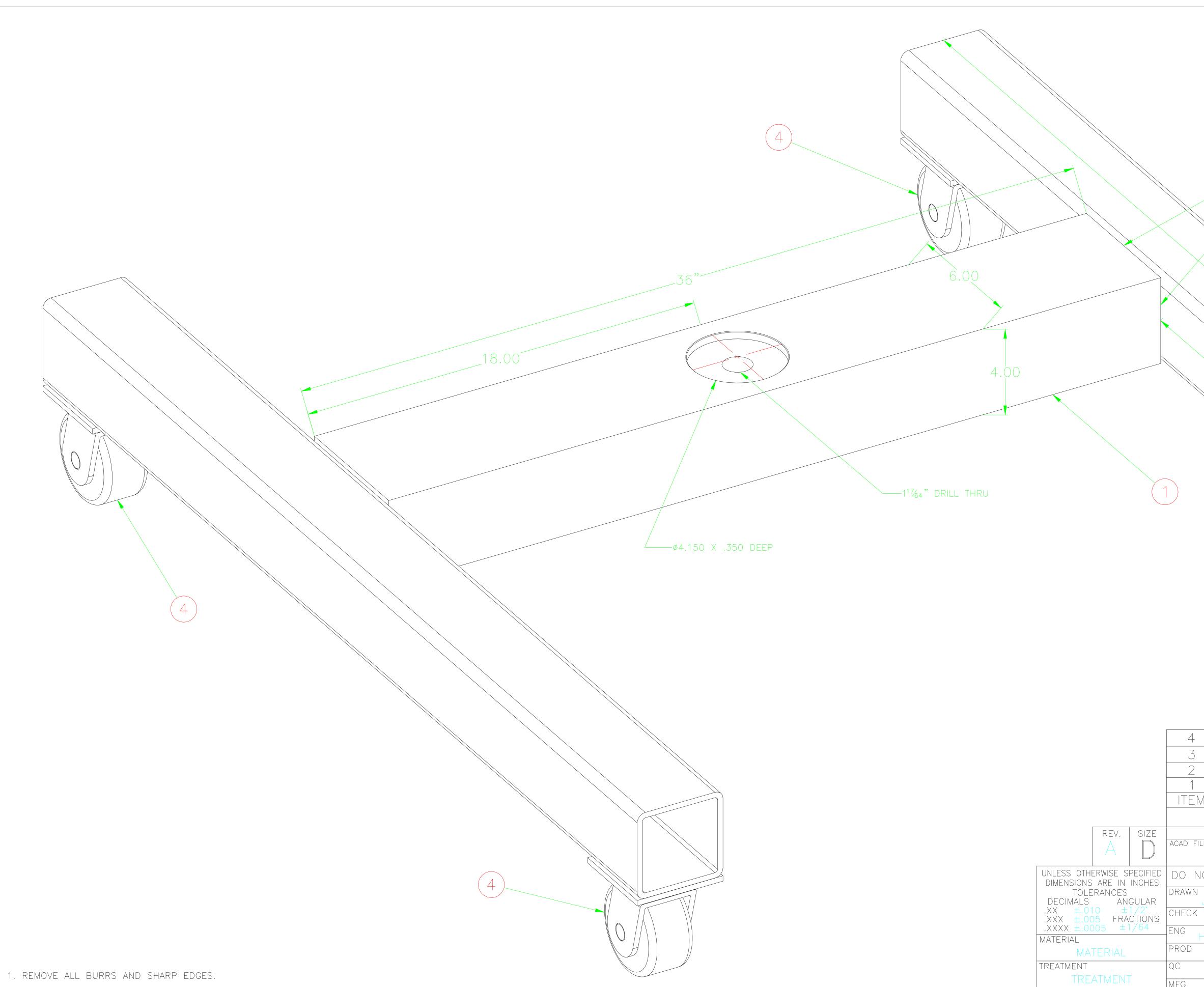




			ITEM	QTY	PA	RT NO.	
	REV.	SIZE	ACAD	FILE:			
UNLESS OTH DIMENSIONS			DO	NOT	SCALE	DRAWING	
TOLE DECIMALS	ERANCES AN	gular	DRAWI		OUNG	DATE 1-21-02	
.XX ±.0 <sup>7</sup> .XXX ±.00	D5 FRA	CTIONS	CHEC	<			TITLE:
.XXXX ±.00	JU5 II	1/04	ENG	HIEL	SCHER		
			PROD				
TREATMENT			QC				DWG. NO.
FINISH			MFG				AR-
			TOOLI	NG			SCALE: N

DESCRIPTION PARTS LIST	
HOMAG MFG. COMPANY ORMOND 3D PERSPE(	
-WF-FTN-175-	$ \vee$
ITS	SHEET 1 OF 1

REVISIONS			
DESCRIPTION		DATE	APPROVED
BUILD	BY	DATE	



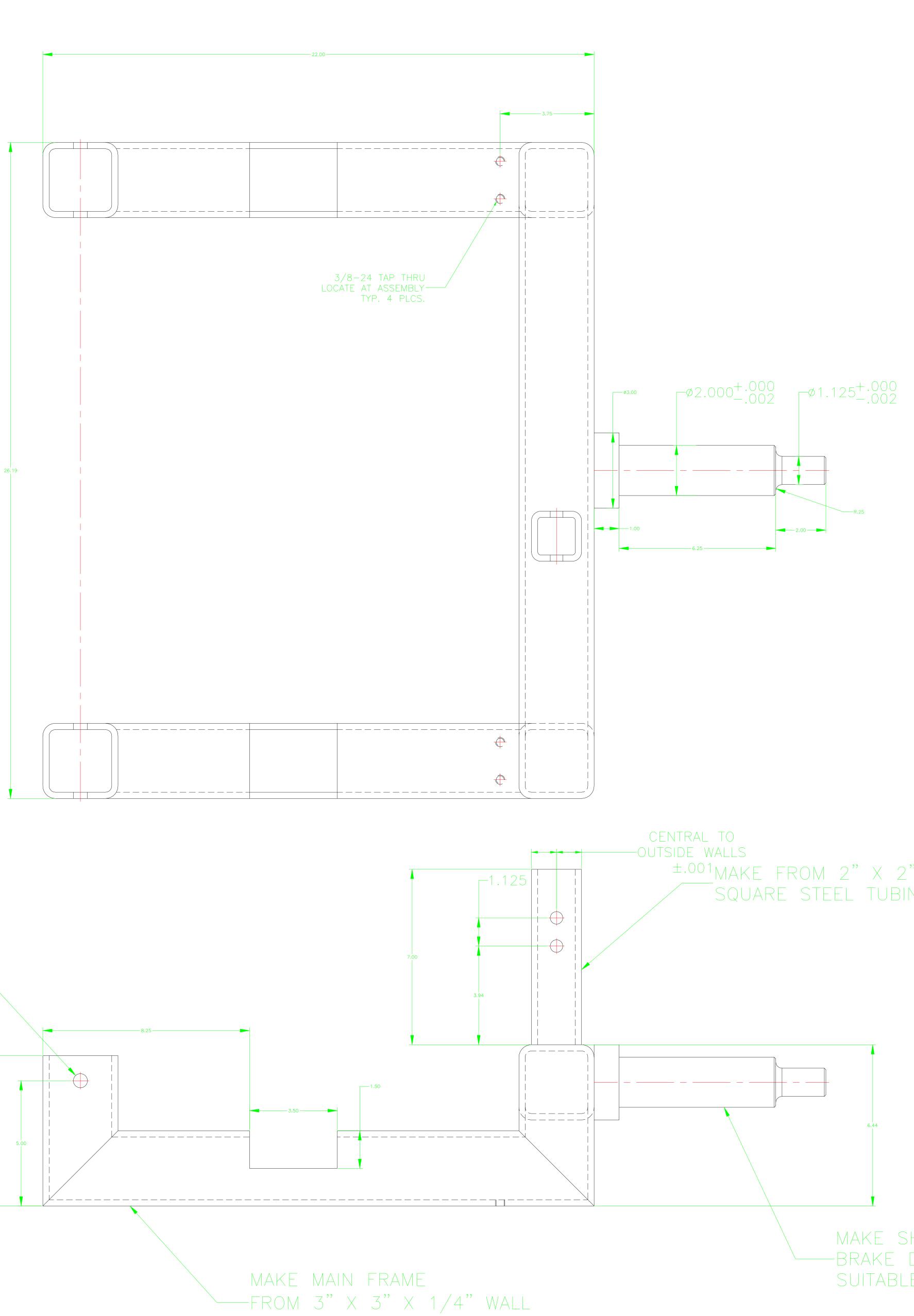
	3	2	660278	48 (MSC)	Medium duty truck caster, Swivel with brake
	2	2		_	Legs 4"x4'x1/2" WALLx48" Long Square Tube
	1	1		—	Crossmember 4"x6"x30" Long C.R.S Bar stock
	ITEM	QTY	PAR	T NO.	DESCRIPTION
				PAF	rts list
REV. SIZE	ACAD FILE:				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DO NOT	SCALE	DRAWING		HOMAG
TOLERANCES DECIMALS ANGULAR	DRAWN J.	YOUNG	DATE	▕▕▋▖▋	MFG. COMPANY ormond beach, fl.
.XX ±.010 ±1/2° .XXX ±.005 FRACTIONS	CHECK			TITLE:	
$\begin{array}{c} .XXXX \pm .0005 \pm 1/64 \\ \hline MATERIAL \end{array}$	ENG HIE	LSCHER			WER FRAME ASSEMBLY
MATERIAL	PROD				3D PERSPECTIVE VIEW
TREATMENT	QC			DWG. NO.	
TREATMENT	MFG			A - WF	LF - FTN - 175 - 001
FINISH	TOOLING			SCALE: NT	S SHEET 1 OF 1

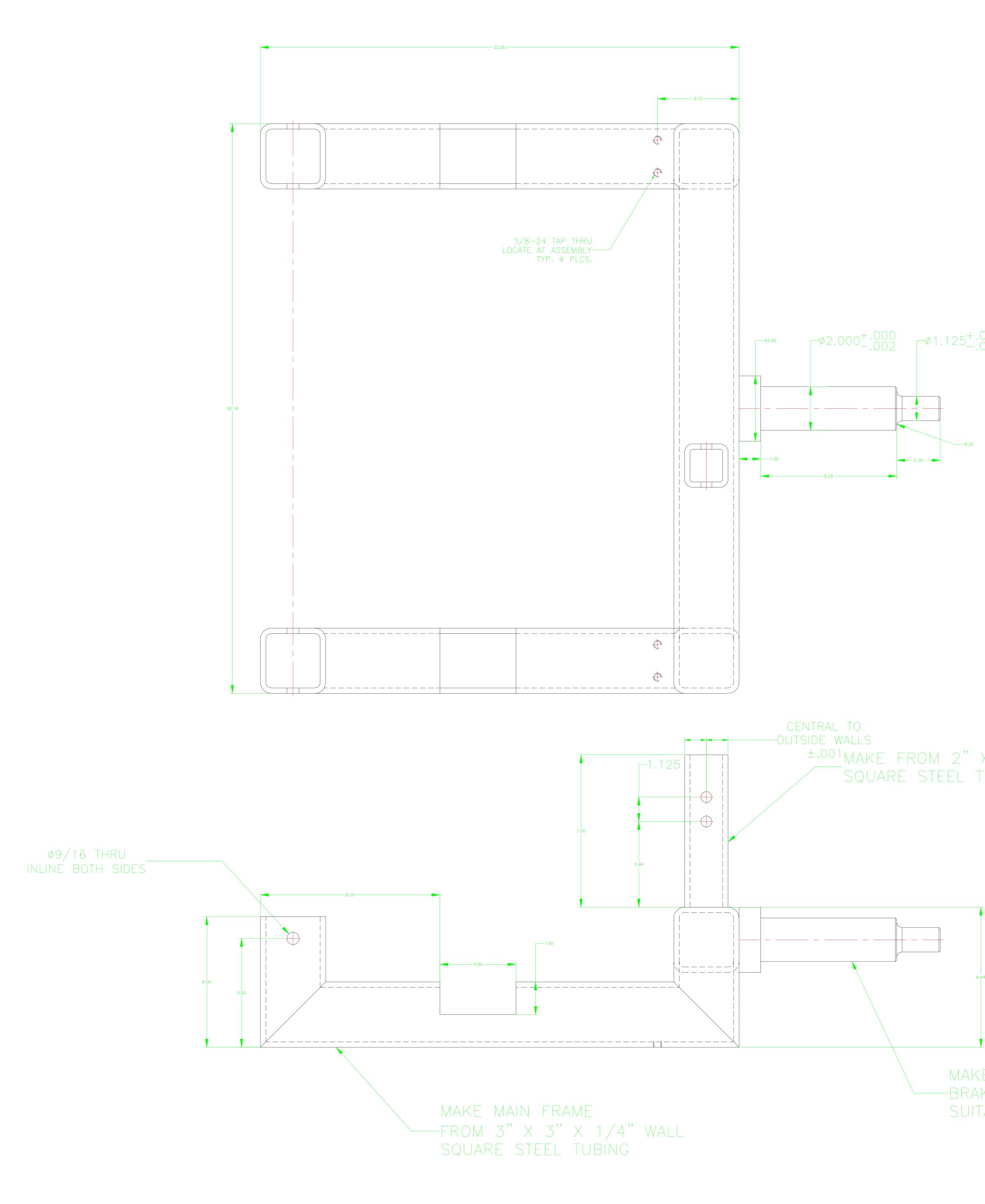
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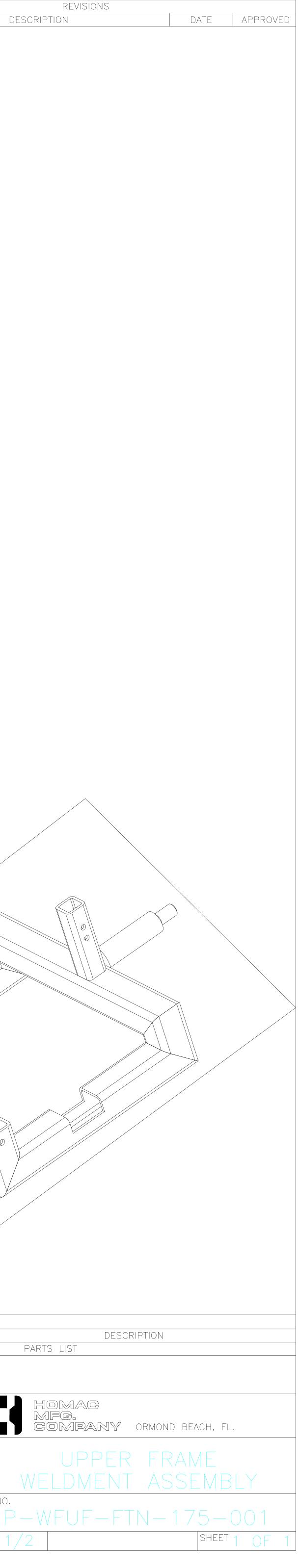
REV	REVISIC DESCRIPTION		DATE	APPROV
IN	ITIAL PROTOTYPE BUILD	BY	DATE	
	WELD ENTIRE PERIMETER			
	BOTH SIDES			
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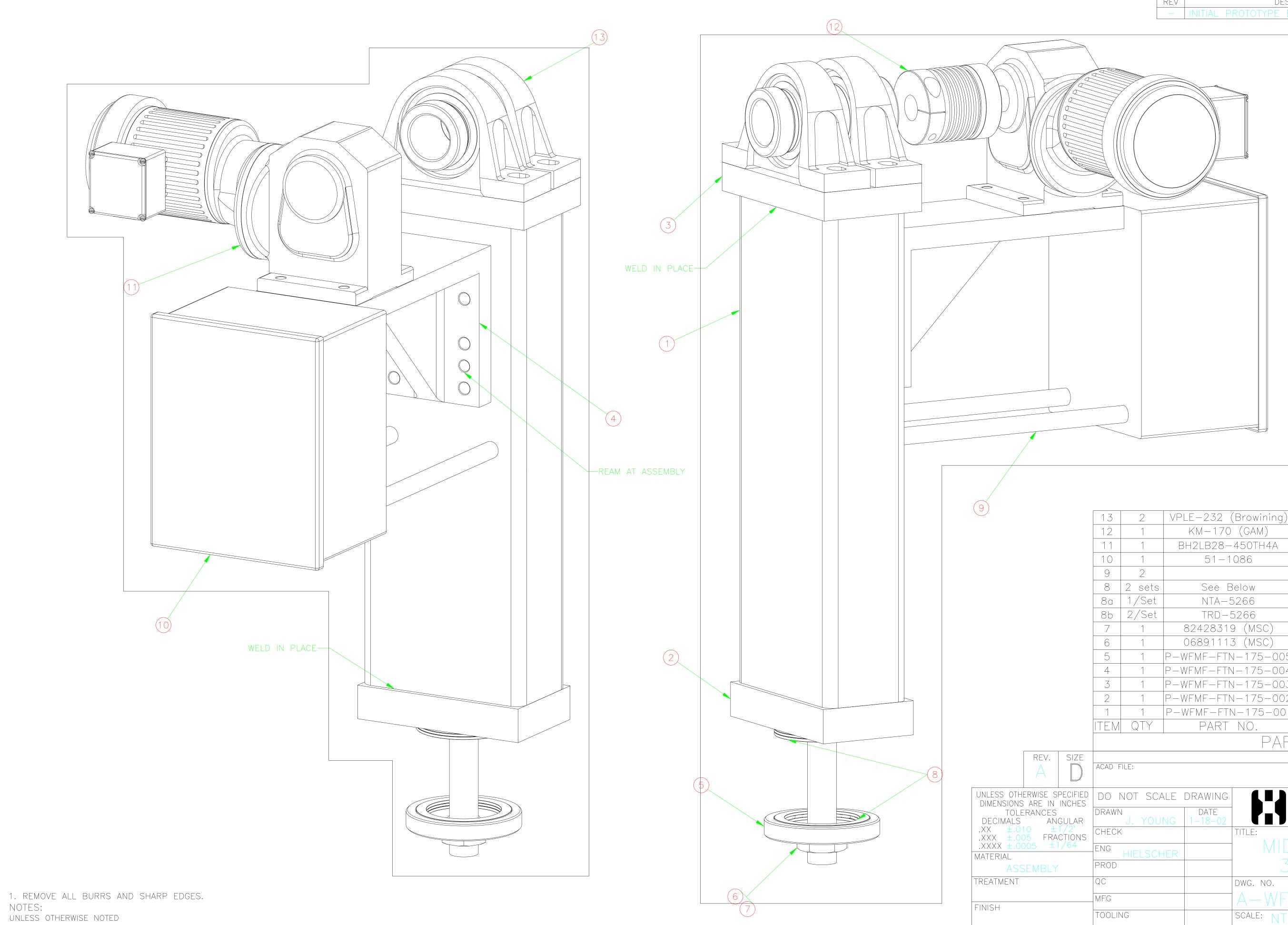
4	2	66028150 (MSC)	Medium duty truck caster, rigid plate		
3	2	66027848 (MSC)	Medium duty truck caster, Swivel with brake		
2	2	_	Legs 4"x4'x1/2" WALLx48" Long Square Tube		
1	1	_	Crossmember 4"x6"x30" Long C.R.S Bar stock		
ΞM	QTY	PART NO.	DESCRIPTION		
PARTS LIST					



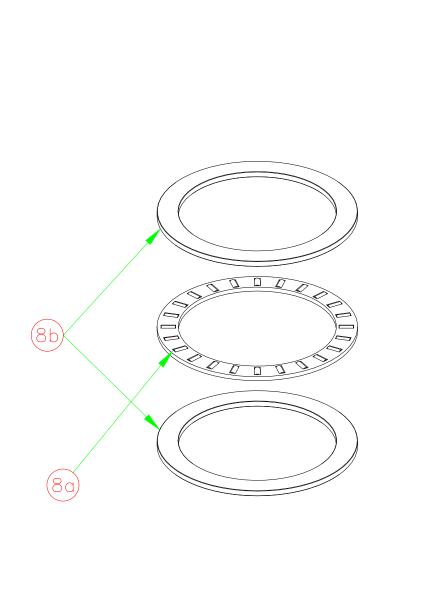


SHAFT FROM DE OR CTHER LLI-RE-LARD SILLL HARD AND AND AND AND AND AND AND AND AND AN	LOCATE & WELD AT ASSEMBLY			
SHAFT FROM DE OR OTHER LE PRE HARD STEEL UNESS OTHERWISE SPECIFIED DWENSIONS ARE IN INCHES DECMARS OTHERWISE SPECIFIED DWENSIONS ARE IN INCHES DECMARS OTHERWISE SPECIFIED DWENSIONS ARE IN INCHES DECMARS ANNU AR XX ± 0.05 ± 7.60 NATERIAL AS NOTED TRED TRED TREATMENT CC HINSH HINSH	2" X 1/4" WALL NING			
REV.     SIZE     ACAD FILE:       UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES     DO NOT SCALE DRAWING       DECIMALS     ANGULAR       .XX     ±.010       .XX     ±.005       .XXX     ±.005       FINISH     TOCHERANCE	DIE OR OTHER			
FINISH	LE PRE-HARD STEEL	REV.SIZE AACAD FILAEACAD FILUNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALSDONDECIMALSANGULAR ±1/2°DRAWN.XX±.010±1/2°.XXX±.005FRACTIONS.XXX±.0005±1/64MATERIAL ASPRODTREATMENTQC	E: OT SCALE DRAWING J. YOUNG 1-16-02 HIELSCHER	
		FINISH	SC SC	CALE:





	2	VPLE-232	(Browining)	Browning Ball Bearing Pillow Block
	1	KM-170	(GAM)	GAM Servo Coupling (ø1.125 ID Each End)
	1	BH2LB28-	450TH4A	Brother Brakemotor
	1	51-1	086	10"x8"x6" NEMA 12 Hinged Enclosure
	2			ø3/4"x11-5/8" Long Stabilizing bars
	2 sets	See E	Below	Torrington Thrust Bearing Set
	1/Set	NTA-5	5266	Torrington Needle Roller CAGE Assembly
	2/Set	TRD-	5266	Torrington Thrust Washer
	1	8242831	9 (MSC)	Flange Nut
	1	0689111.	3 (MSC)	Flat Washer
	1	P-WFMF-FTN	√−175−005	Lower Thrust bearing retaining CAP
	1	P-WFMF-FTN	√-175-004	Angle Plate for Gear Motor Mount
	1	P-WFMF-FTN	√−175−003	End Cap & Pillow Block Mounting Plate
	1	P-WFMF-FTN	√-175-002	End Cap & Pivot Assembly Tightning Screw
	1	P-WFMF-FTI	V-175-001	Main structure 4"x8"x1/2"Wallx21.5" Long rect tube
/ QTY PART NO. DESCR		DESCRIPTION		
			PAR	TS LIST
Г	ILE:			
	NOT SCA	LE DRAWING		HOMAC
		MFG.		
J. YOUNG 1-18-02 U U U COLMIPANY ORMOND BEACH, FL.		GUMPANY ORMOND BEACH, FL.		
CK TITL				
HIELSCHER			DLE FRAME ASSEMBLY	
)			3	D PERSPECTIVE VIEW
			DWG. NO.	
			A-WFN	MF - FTN - 175 - 001
_	NG		SCALE: NTS	SHEET 1 OF 1



	REVISIONS		
REV	DESCRIPTION	DATE	APPROVED
	INITIAL PROTOTYPE BUILD BY	DATE	

## AutoCAD Standard Lineweights

mm	inch	ISO
0.00		
0.05	.002	
0.09	.003	
0.13	.005	
0.15	.006	
0.18	.007 .008	X
0.20	.008	 ×
0.30	.012	
0.35	.014	 X
0.40	.016	
0.50	.020	 ×
0.00	.020	
0.53	.021	
0.60	.024	
0.70	.028	 X
	071	
0.80	.031	
0.90	.035	
1.00	.039	 X
1.00	.000	
1.06	.042	
1.20	.047	
		X
1.40	.056	
1.58	.062	
2.00	.078	 X
2.00	.070	
2.11	.083	

## AutoCAD Standard Lineweights

mm	inch	ISO
0.00		
0.05	.002	
0.09	.003	
0.13	.005	
0.15	.006	
0.18 0.20	.007 .008	X
0.20	.008	 X
0.30	.012	
0.35	.014	X
0.40	.016	
0.50	.020	 X
0.53	.021	
0.60	.024	
0.70	.028	 X
0.80	.031	
0.90	.035	
1.00	.039	X
1.00	.005	
1.06	.042	
1.20	.047	
1.40	.056	 X
1.58	.062	
		X
2.00	.078	
2.11	.083	