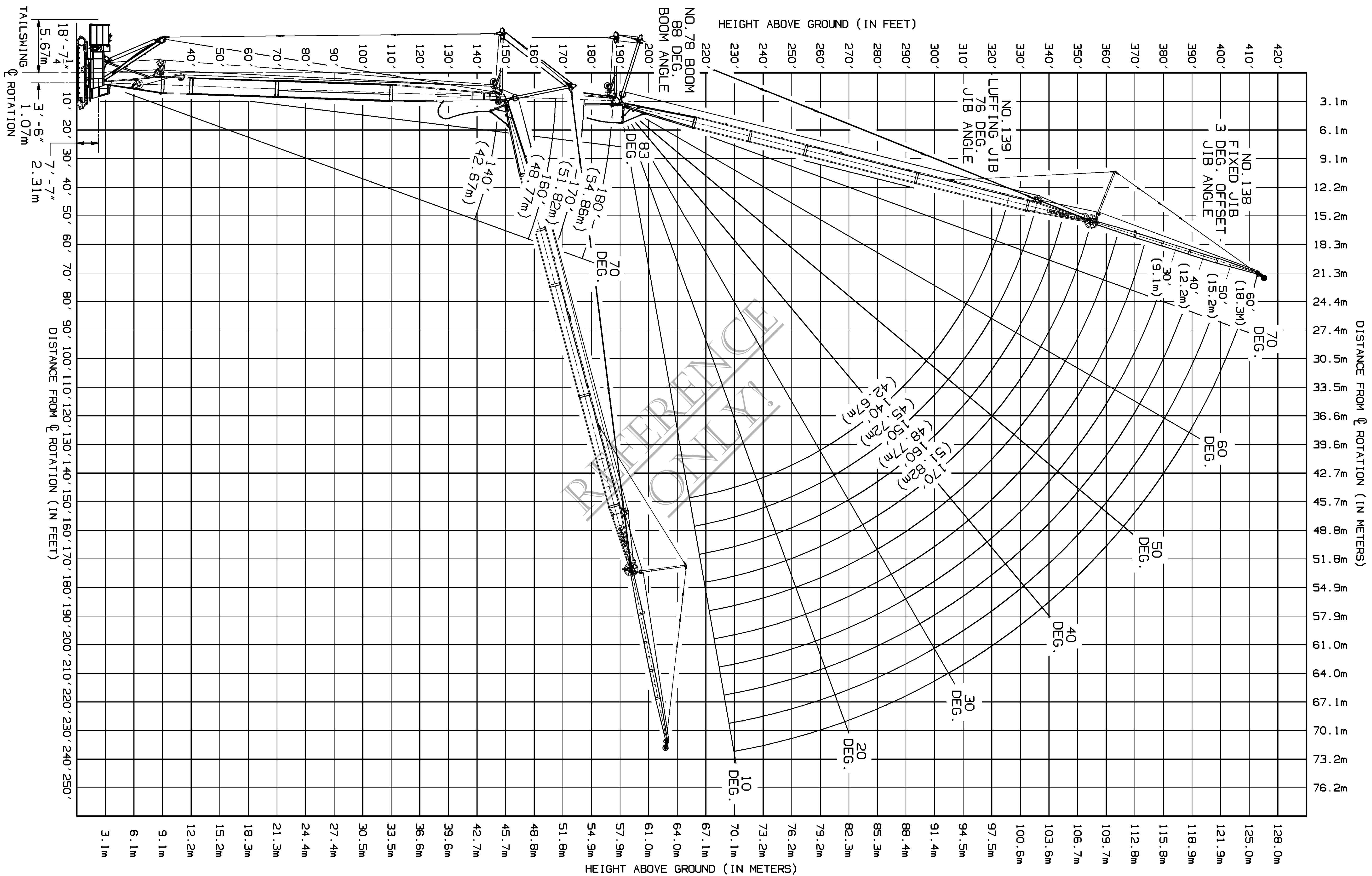
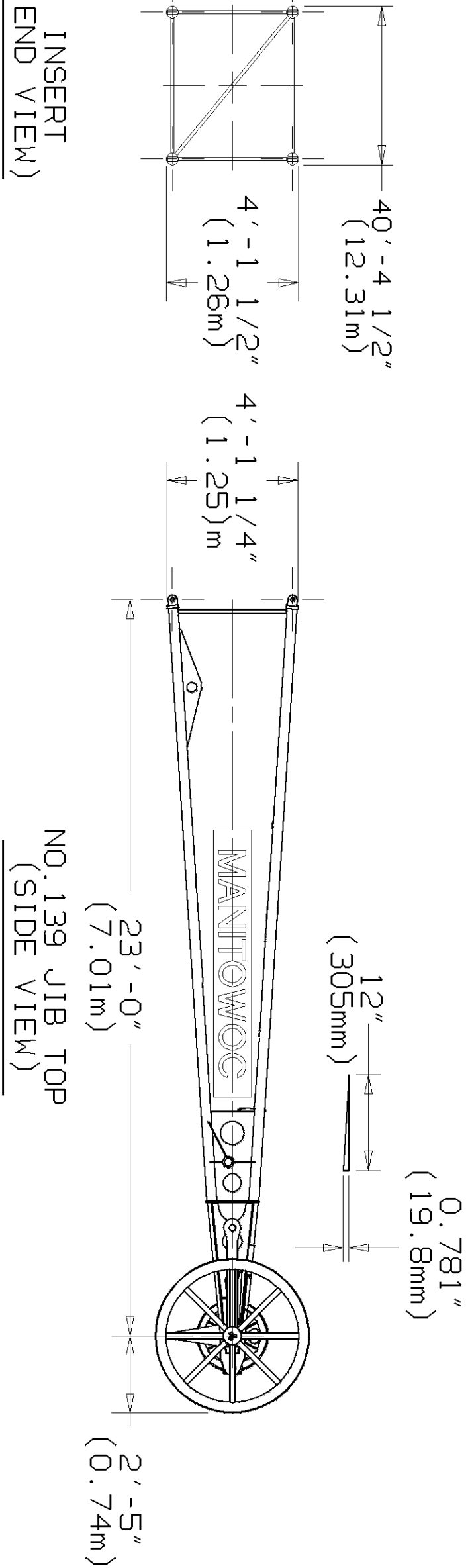
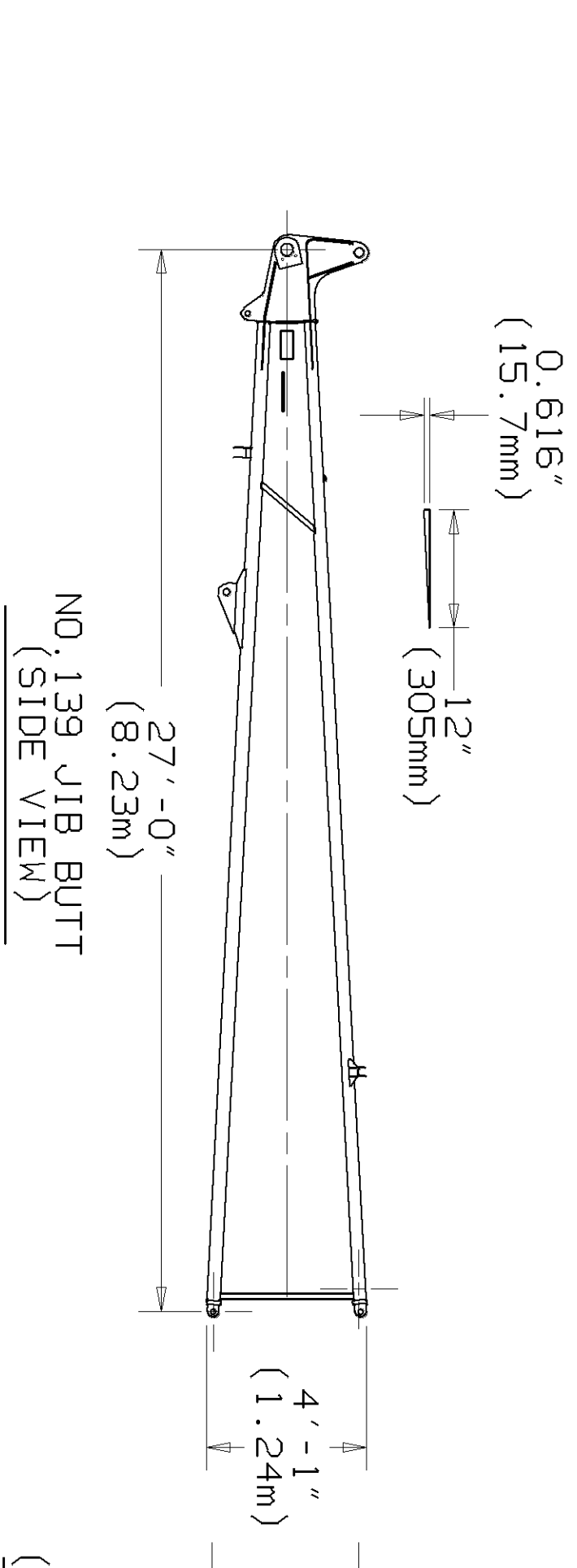
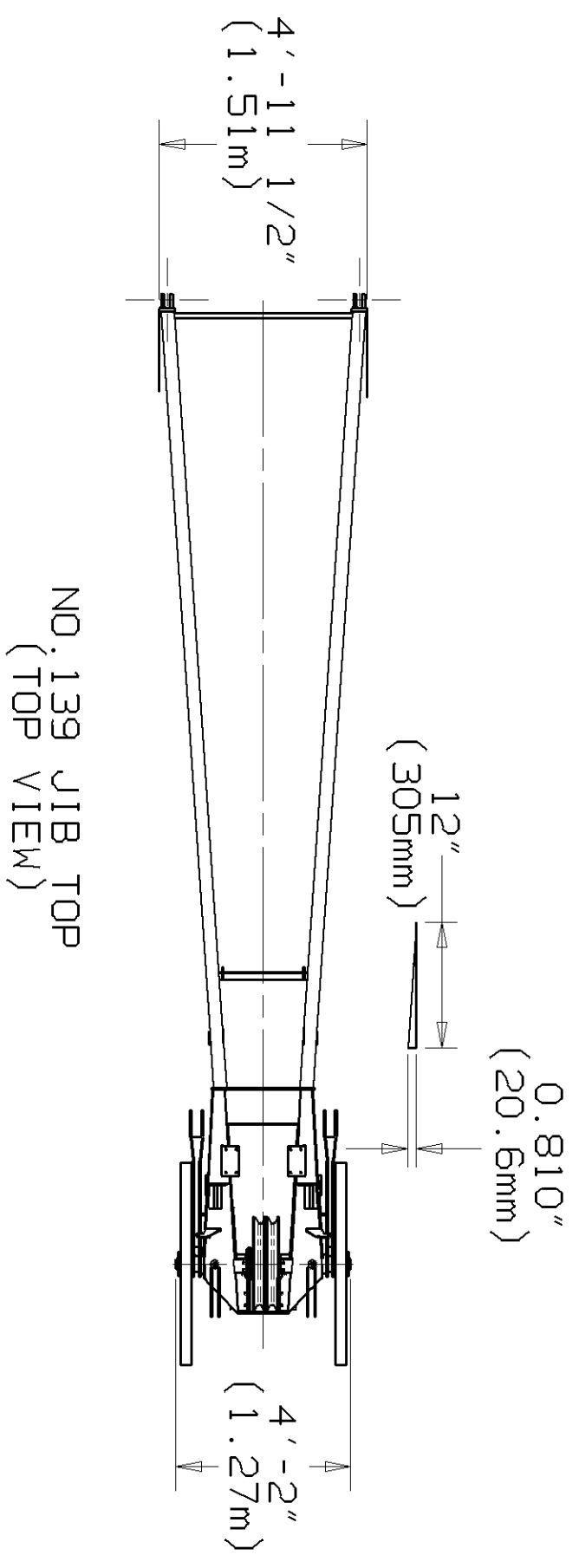
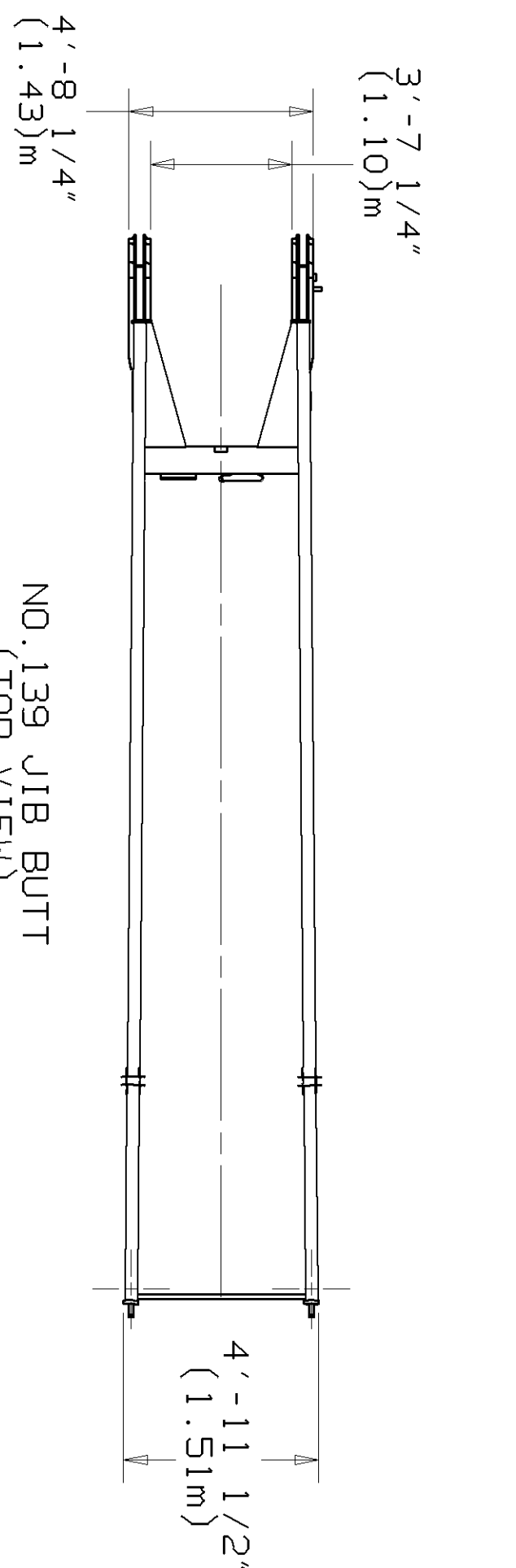




DATE	1/8"-1"	MANITOWOC CRANES, INC.	DIAGRAM - RANGE ASSEMBLY -	SECTION
10-12-00	BR/NS	MANITOWOC WISCONSIN	NO.78 BOOM	
DRAWING NO.	CC-TWB	MODEL 777	NO.139 LUFFING JIB	
192135	APP TSC		NO.138 FIXED JIB	



NOTE 1: THIS DRAWING IS INTENDED ONLY AS A GUIDE TO ASSIST IN JOB PLANNING.

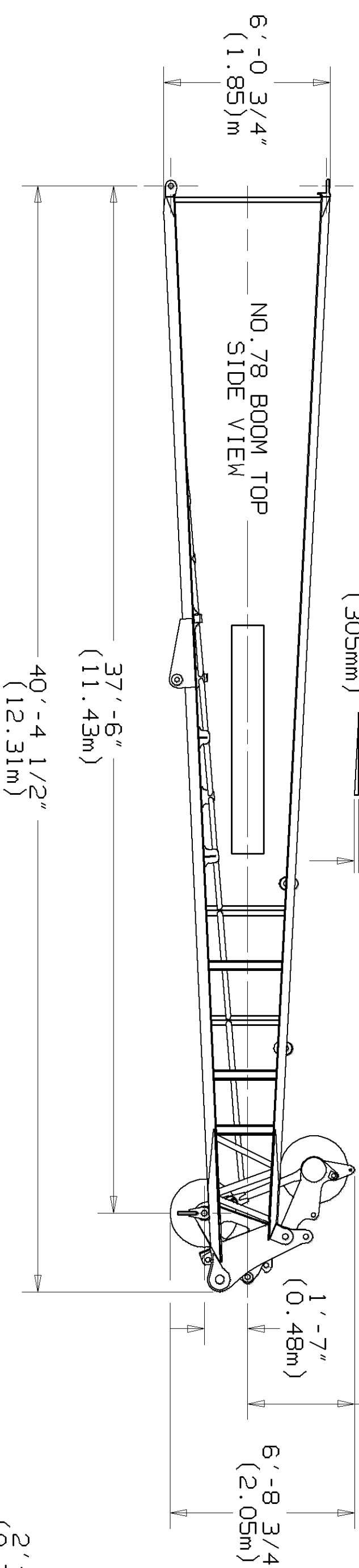
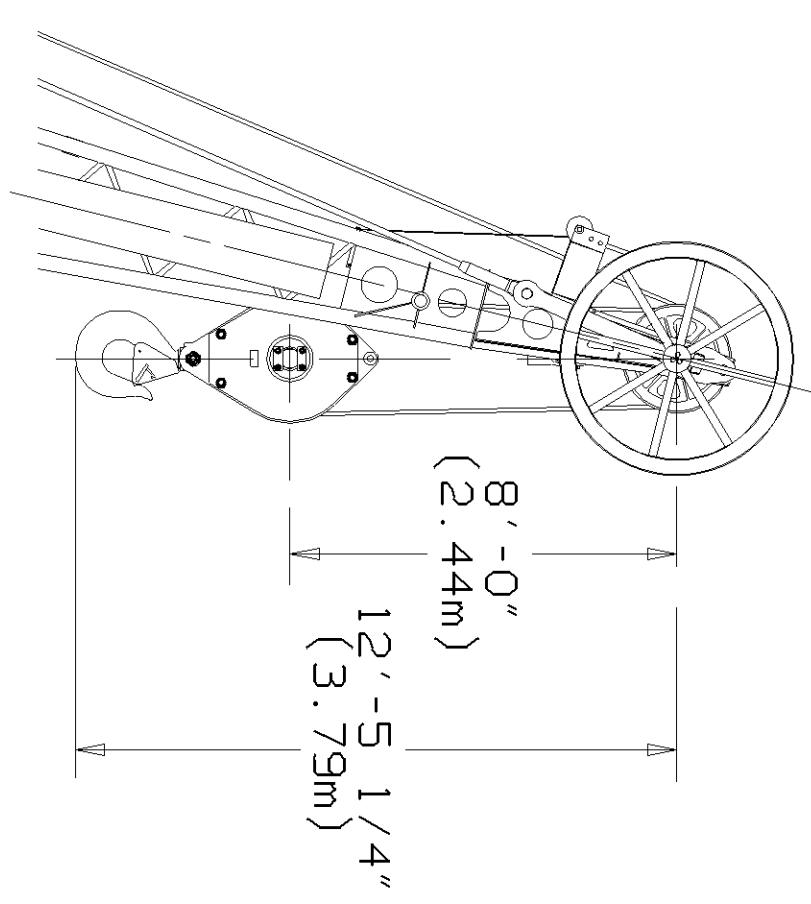
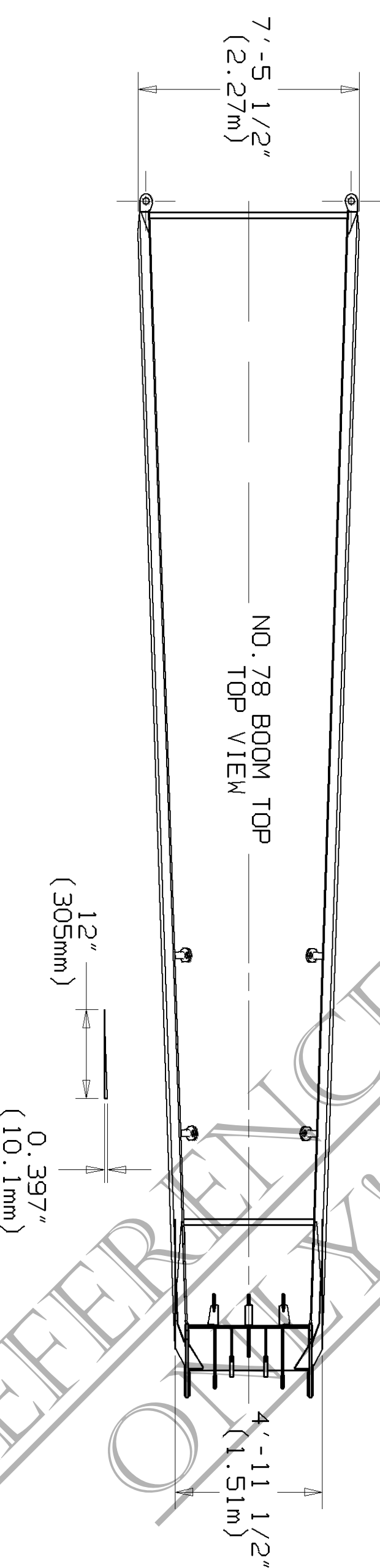
NOTE 2: FOR PLANNING A LIFT, THIS DRAWING IS TO BE USED IN CONJUNCTION WITH APPROPRIATE CAPACITY CHARTS, RANGE CHART, WIRE ROPE SPECIFICATIONS, RIGGING DRAWING, AND OUTLINE DIMENSIONS.

NOTE 3: FOR PLANNING LIFTS WHERE CLEARANCES ARE LIMITED AND ACCURACY IS DESIRED, A DETAILED LAYOUT SHOULD BE PREPARED.

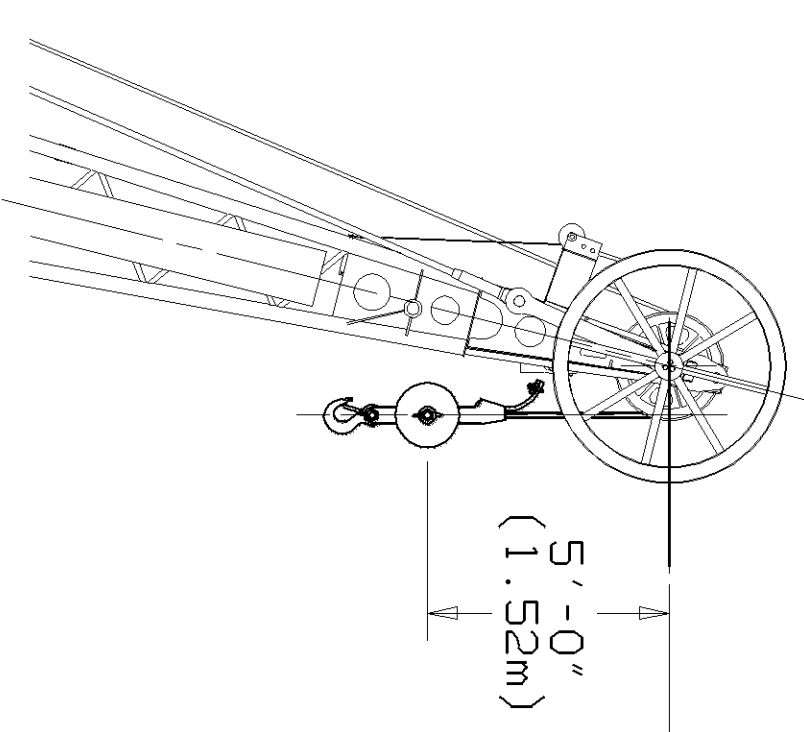
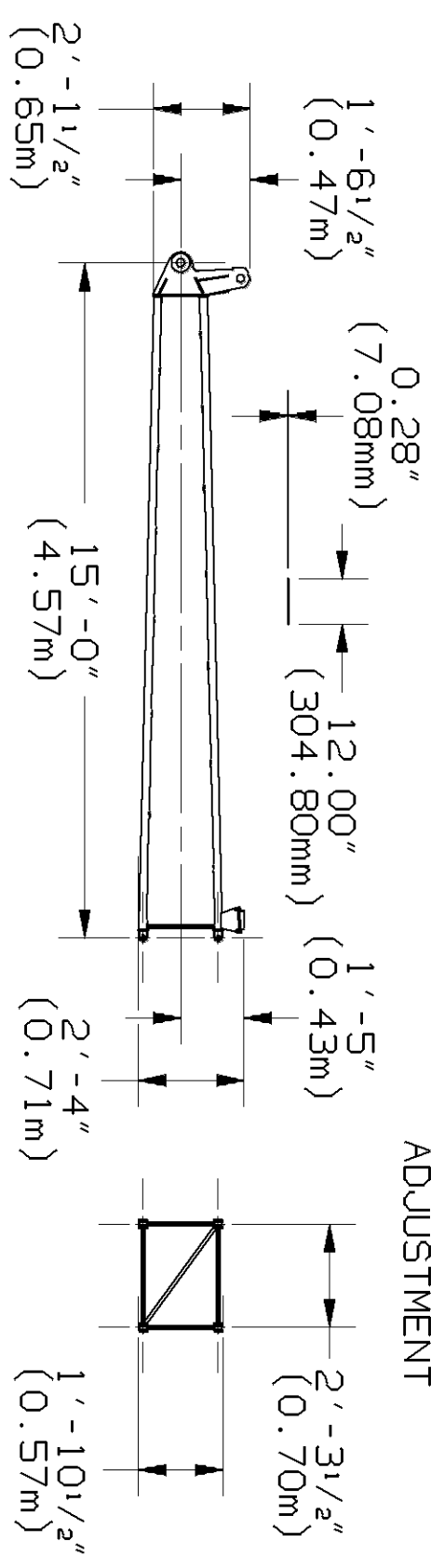
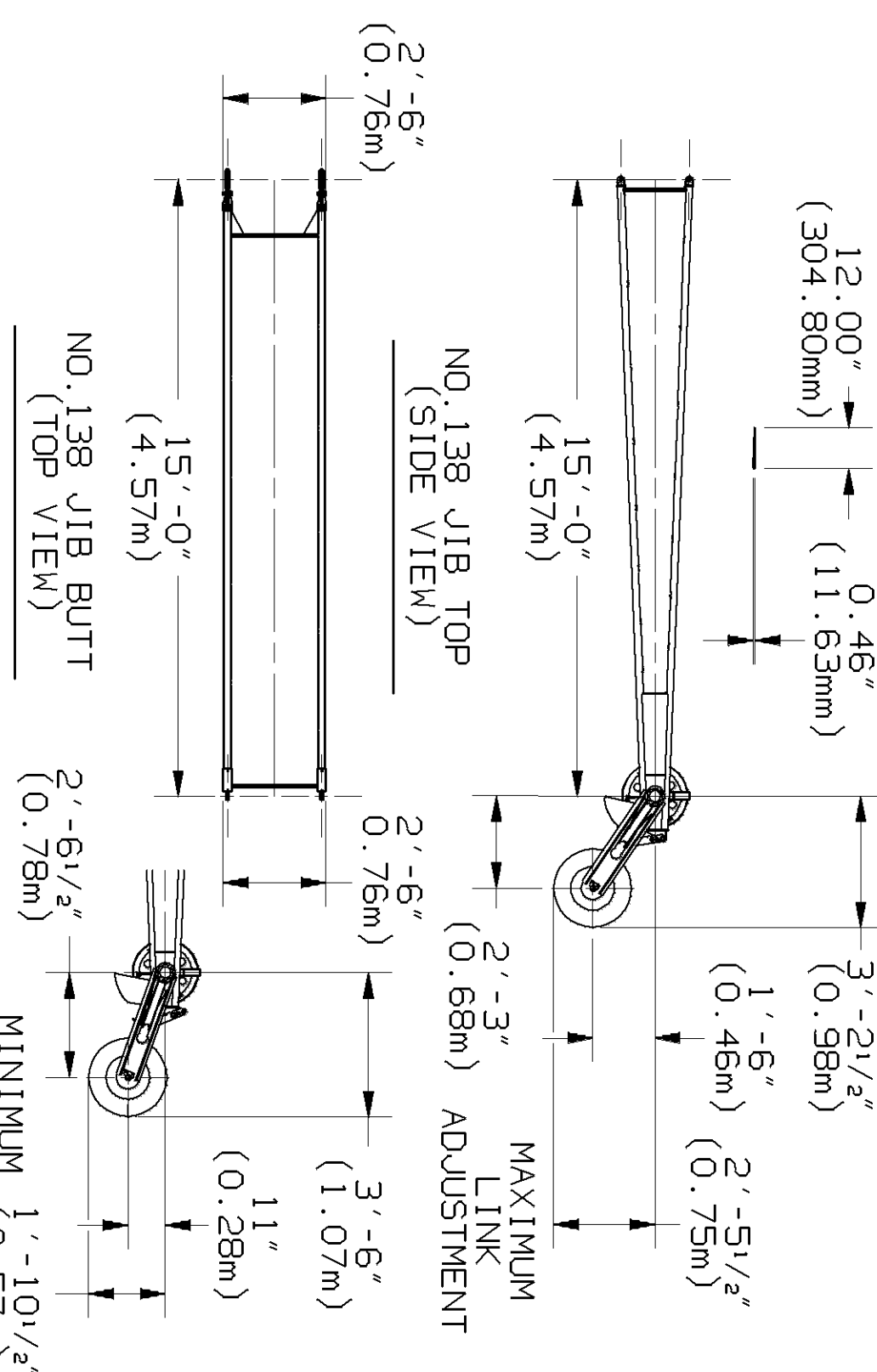
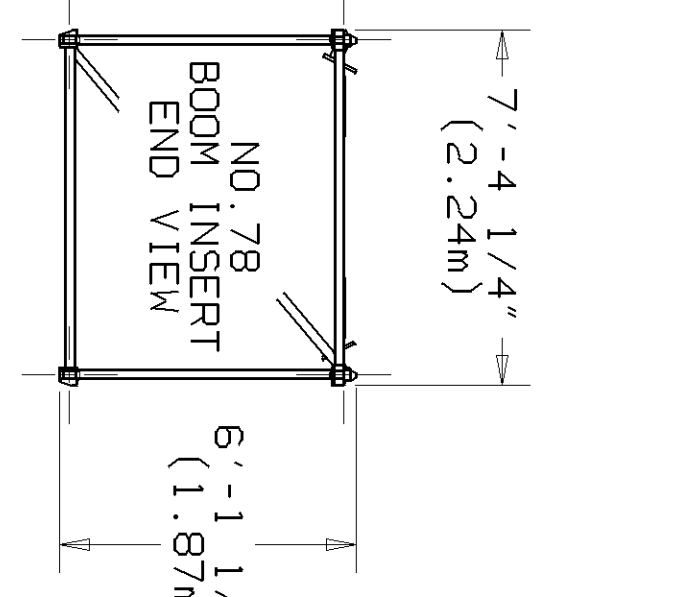
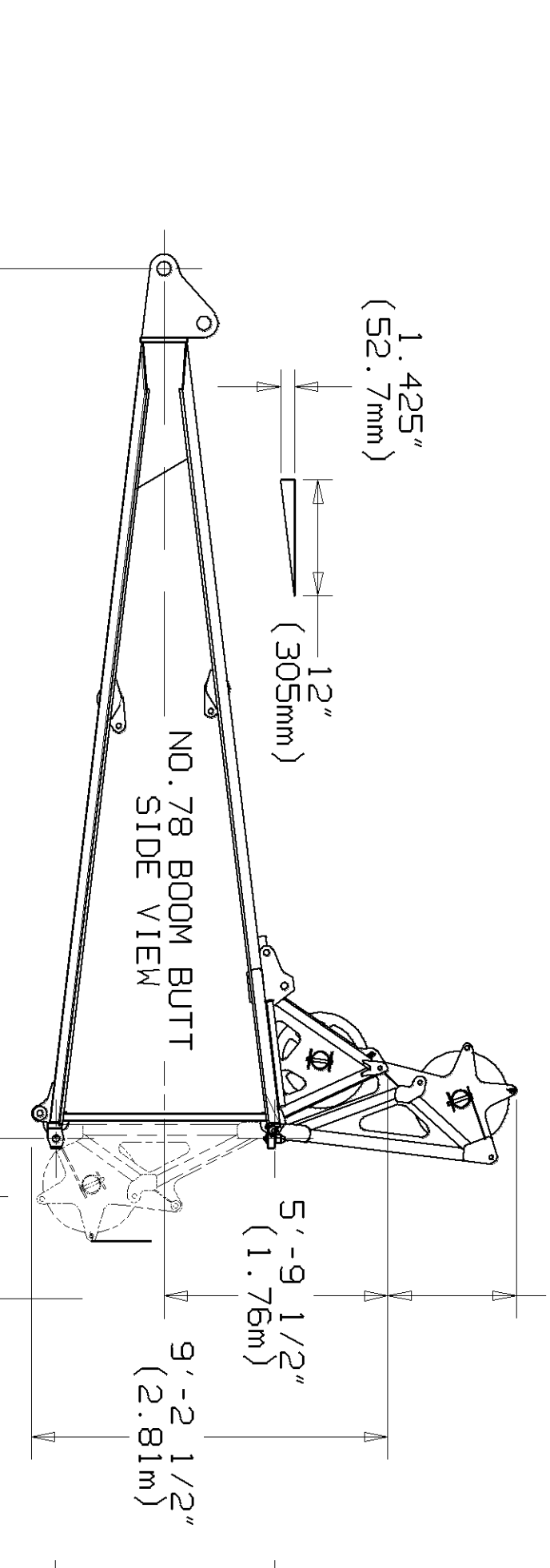
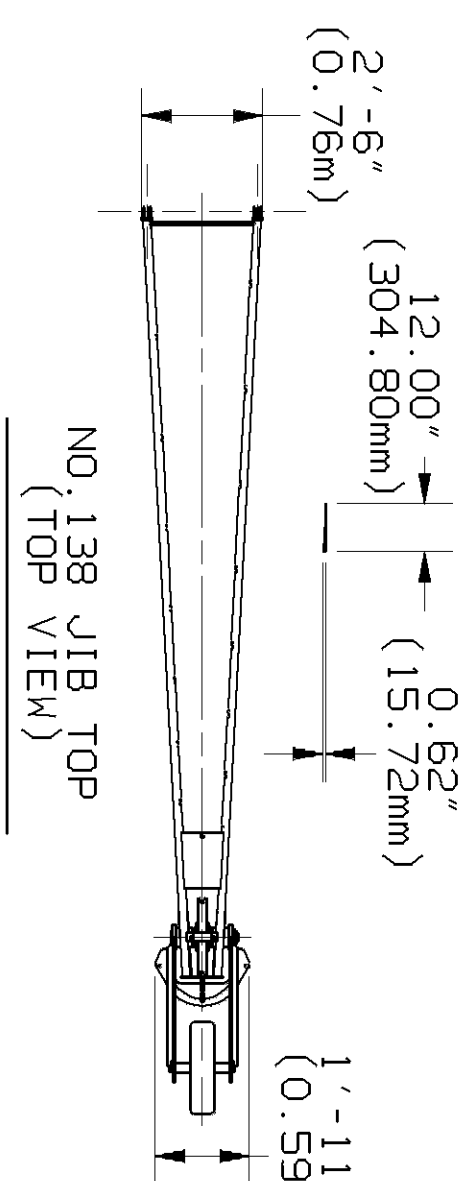
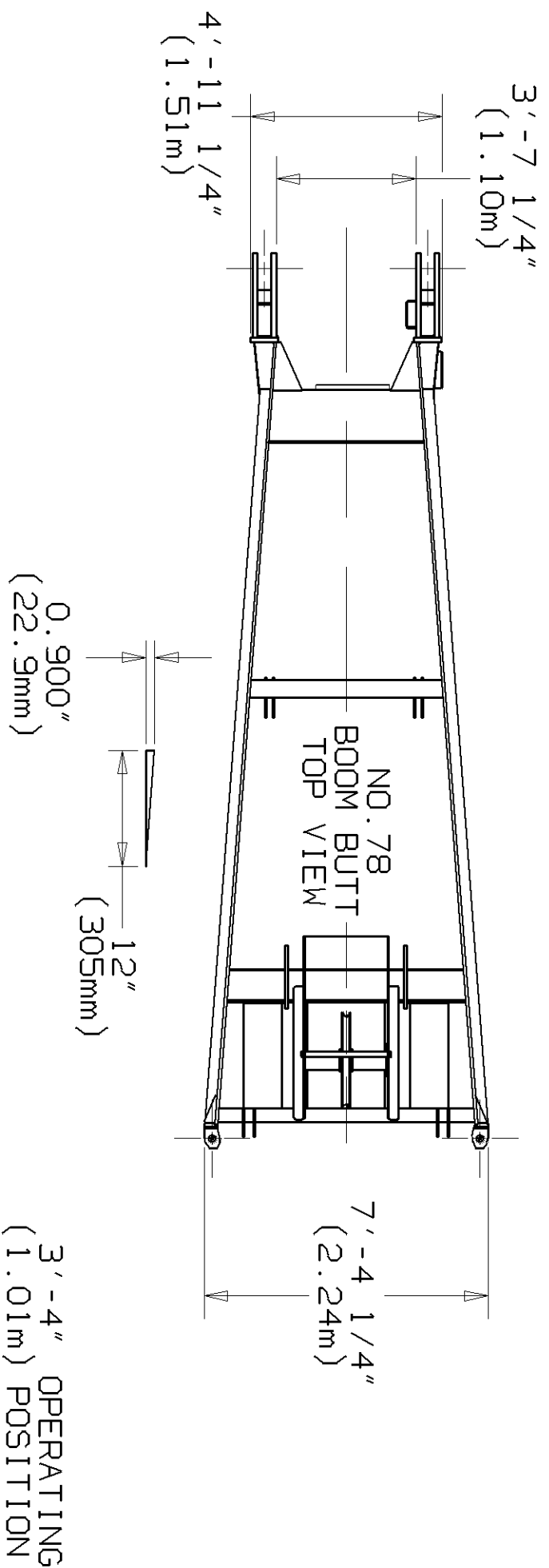
NOTE 4: WHEN EQUIPPED WITH BLOCK-UP LIMIT CONTROL, LOAD BLOCK TO BOOM POINT/JIB POINT MINIMUM DISTANCE MAY BE MORE THAN INDICATED. SEE OPERATOR'S MANUAL FOR "BLOCK-UP LIMIT CONTROL".

NOTE 5: MAXIMUM BOOM ANGLE 88 DEGREES FOR NO. 78 BOOM WITH NO. 139 LUFFING JIB. MAXIMUM JIB ANGLE 76 DEGREES FOR NO. 139 LUFFING JIB WITH BOOM AT 88 DEGREE BOOM ANGLE. SEE CAPACITY CHARTS FOR MAXIMUM LUFFING JIB ANGLES FOR OTHER BOOM CONFIGURATIONS.

NOTE 6: MAXIMUM BOOM AND BOOM AND JIB LENGTHS SHOWN ON SHEET 1 ARE FOR MACHINE EQUIPPED WITH SERIES 2 COUNTERWEIGHT. IN ALL CASES, REFER TO CRANE BOOM RIGGING OR CAPACITY CHART FOR MAXIMUM LENGTHS.



60 US TON (55 METRIC TON)
BLOCK TO JIB POINT
MINIMUM DISTANCE
NO. 139 JIB - 4 PARTS OF LINE
MINIMUM DISTANCE MEASUREMENTS FROM
MANITOWOC LOAD BLOCK TO JIB POINT
SHOWN ABOVE BASED ON 76 DEGREE JIB ANGLE
AND PHYSICAL LIMITATIONS.



15 US TON (14 METRIC TON)
SWIVEL HOOK & WEIGHT BALL
TO JIB POINT MINIMUM DISTANCE
NO. 139 JIB - SINGLE PART LINE

DATE	3/25/98	MANITOWOC CRANES, INC.	DIAGRAM - RANGE ASSEMBLY -	REVISION
DRAWING NO.	192135	MANITOWOC WISCONSIN	NO. 78 BOOM	10-12-00 NV/S
BY	MB	MANITOWOC WISCONSIN	NO. 139 LUFFING JIB	01-21-03 NV/S
CHK	TWB	MANITOWOC WISCONSIN	NO. 138 FIXED JIB	
APP	TSC	MANITOWOC WISCONSIN	NO. 138 FIXED JIB	