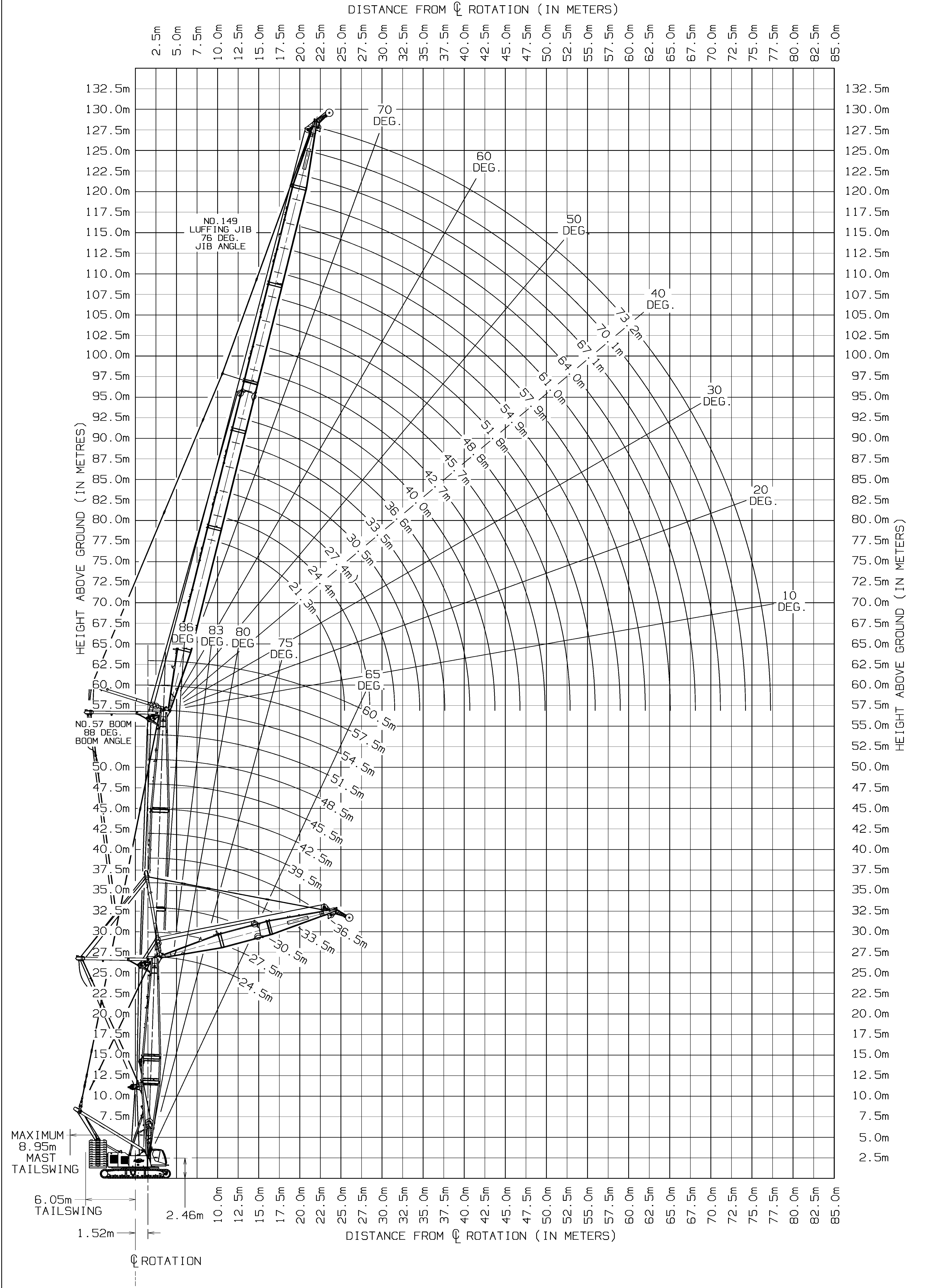
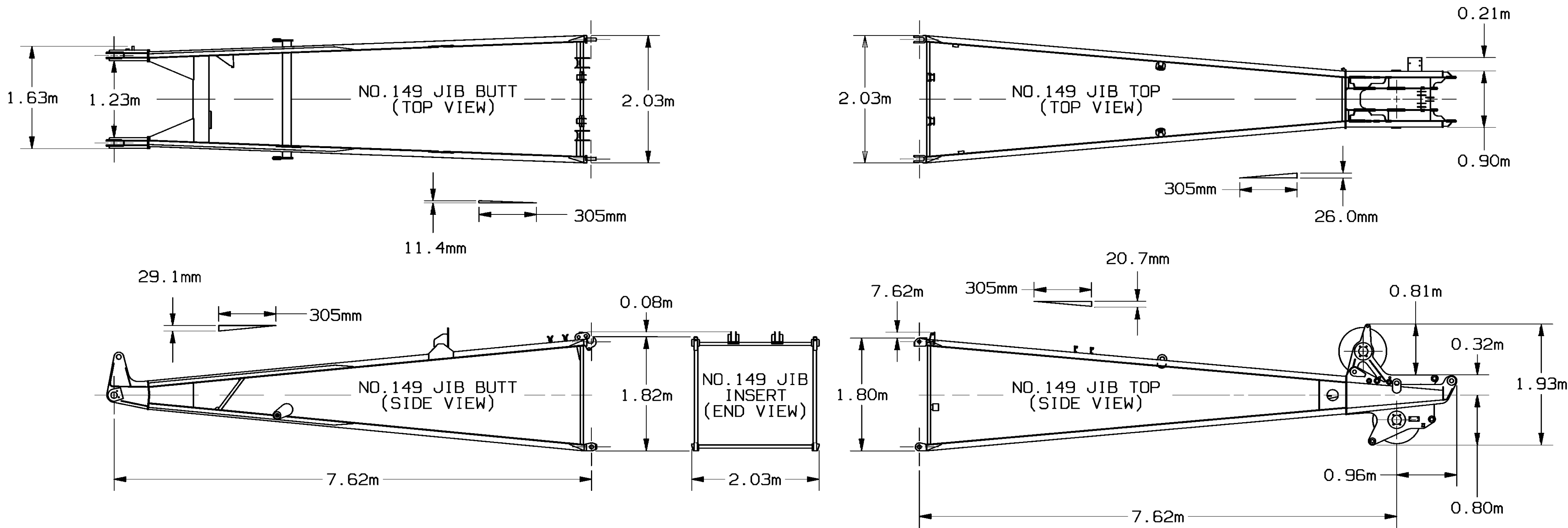




DATE	SCALE	Manitowoc Cranes, Inc. <i>Manitowoc, Wisconsin</i>	DIAGRAM - RANGE ASSEMBLY -	REVISION
03-19-04	1/16"=1'			
DRAWING NO.	CK-NVS	MODEL 15000	NO. 57 BOOM	
A09788	APP/JAS	SERIES 1,2,3,4	NO. 149 LUFFING JIB	



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

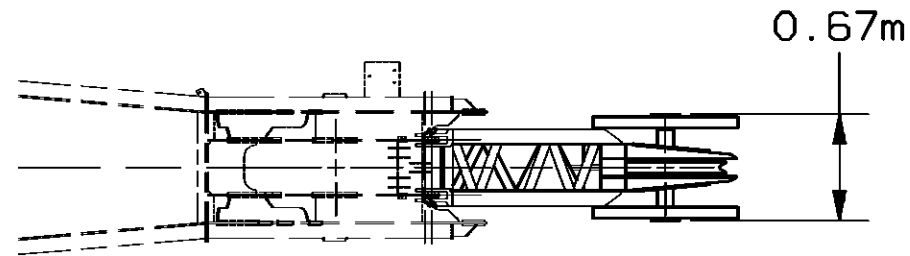
NOTE 2: FOR PLANNING A LIFT, THIS DRAWING IS TO BE USED IN CONJUNCTION WITH APPROPRIATE CAPACITY CHARTS, RANGE CHART, WIRE ROPE SPECIFICATIONS, RIGGING DRAWING, AND OUTLINE DIMENSIONS.

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

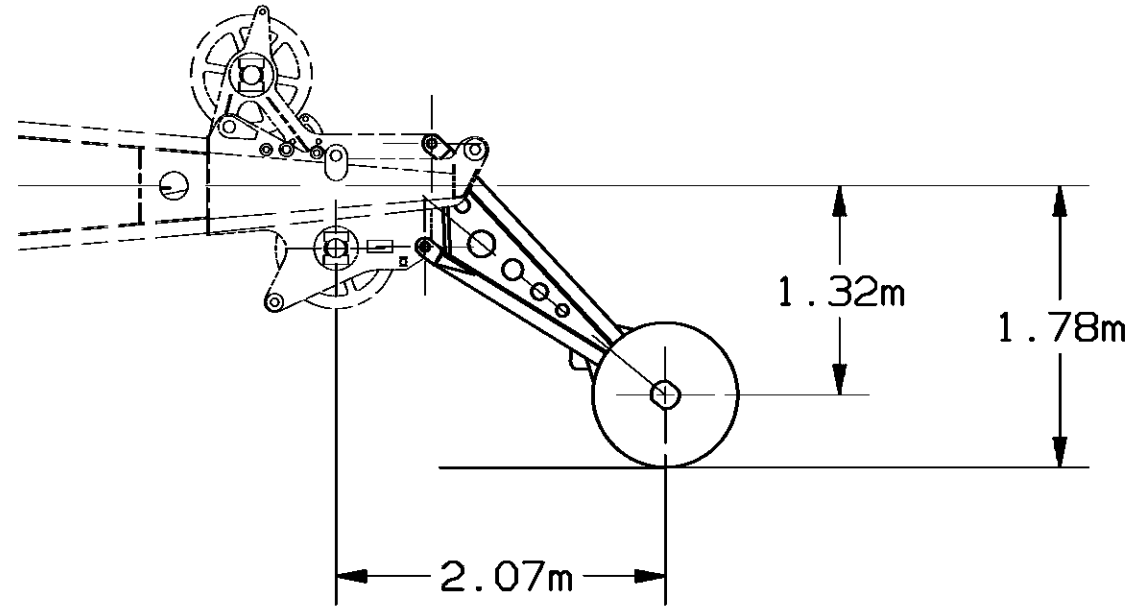
NOTE 4: WHEN EQUIPPED WITH BLOCK-UP LIMIT CONTROL, LOAD BLOCK TO BOOM POINT/JIB POINT MINIMUM DISTANCE MAY BE MORE THAN INDICATED. SEE OPERATOR'S MANUAL FOR "BLOCK-UP LIMIT CONTROL".

NOTE 5: MAXIMUM BOOM ANGLE 88 DEGREES FOR NO.57 BOOM WITH NO.149 LUFFING JIB. MAXIMUM JIB ANGLE 76 DEGREES FOR NO.149 LUFFING JIB.

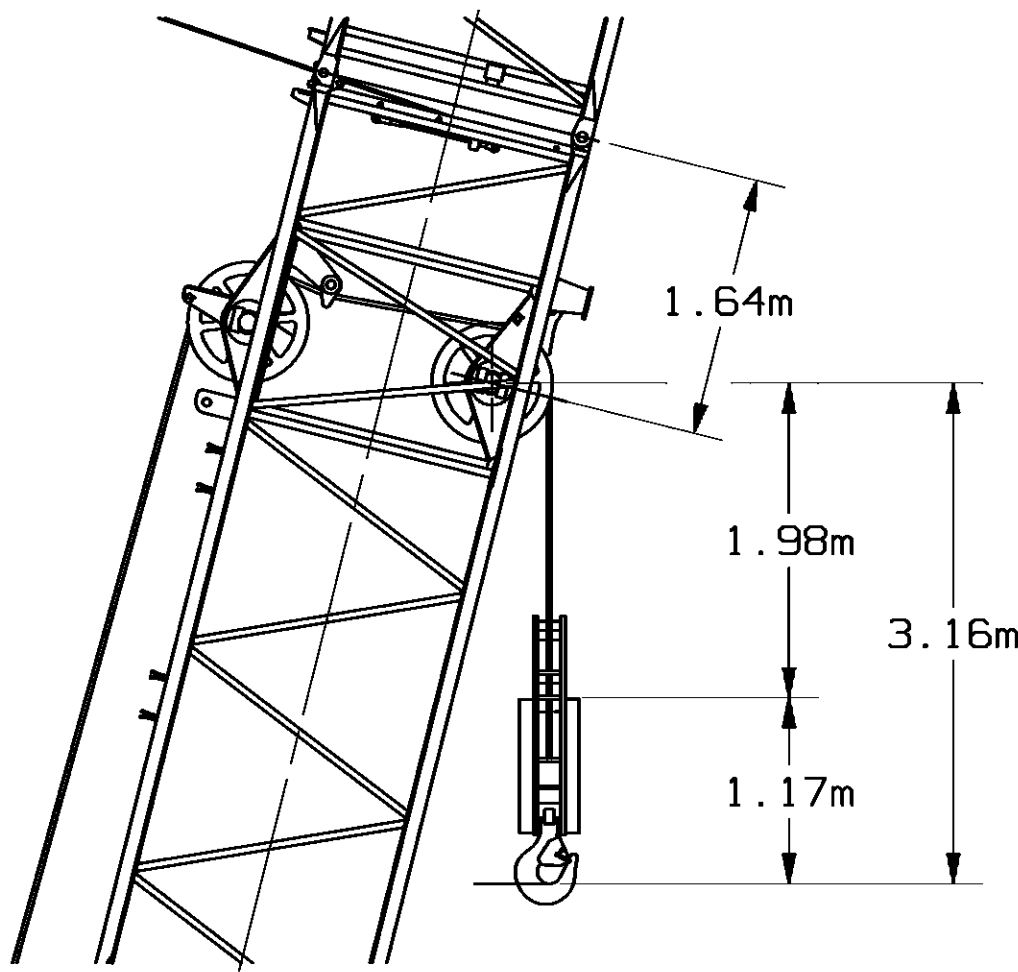
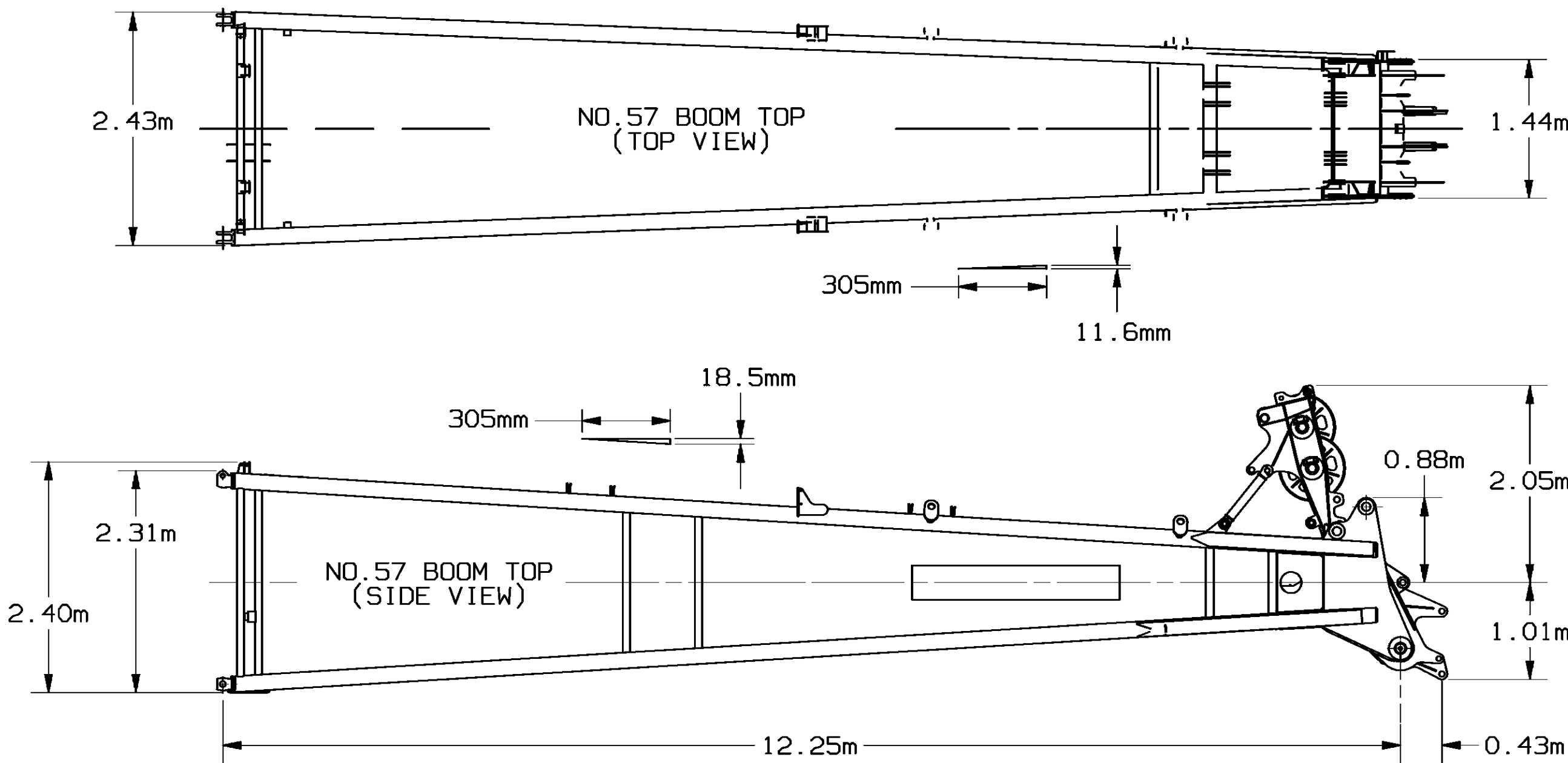
NOTE 6: MAXIMUM BOOM AND BOOM AND JIB LENGTHS SHOWN ON SHEET 1 ARE FOR MACHINES EQUIPPED WITH SERIES 3 COUNTERWEIGHTS. IN ALL CASES, REFER TO CRANE BOOM RIGGING OR CAPACITY CHARTS FOR MAXIMUM LENGTHS.



NO.149 JIB POINT ROLLER ASSEMBLY (TOP VIEW)

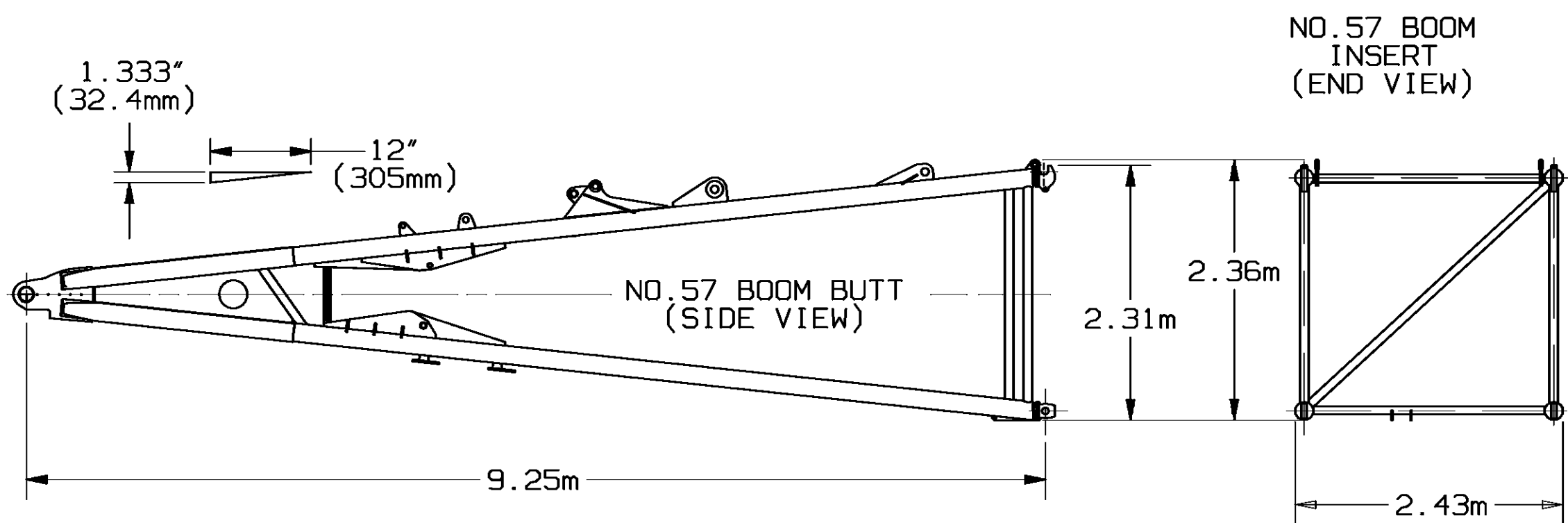
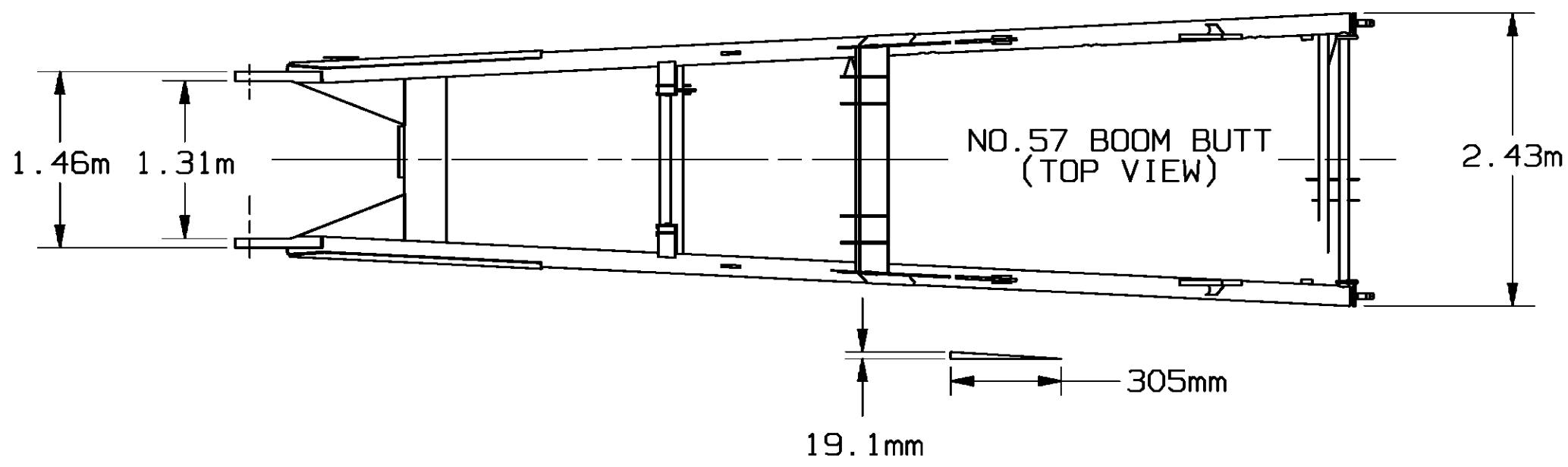


NO.149 JIB POINT ROLLER ASSEMBLY (SIDE VIEW)

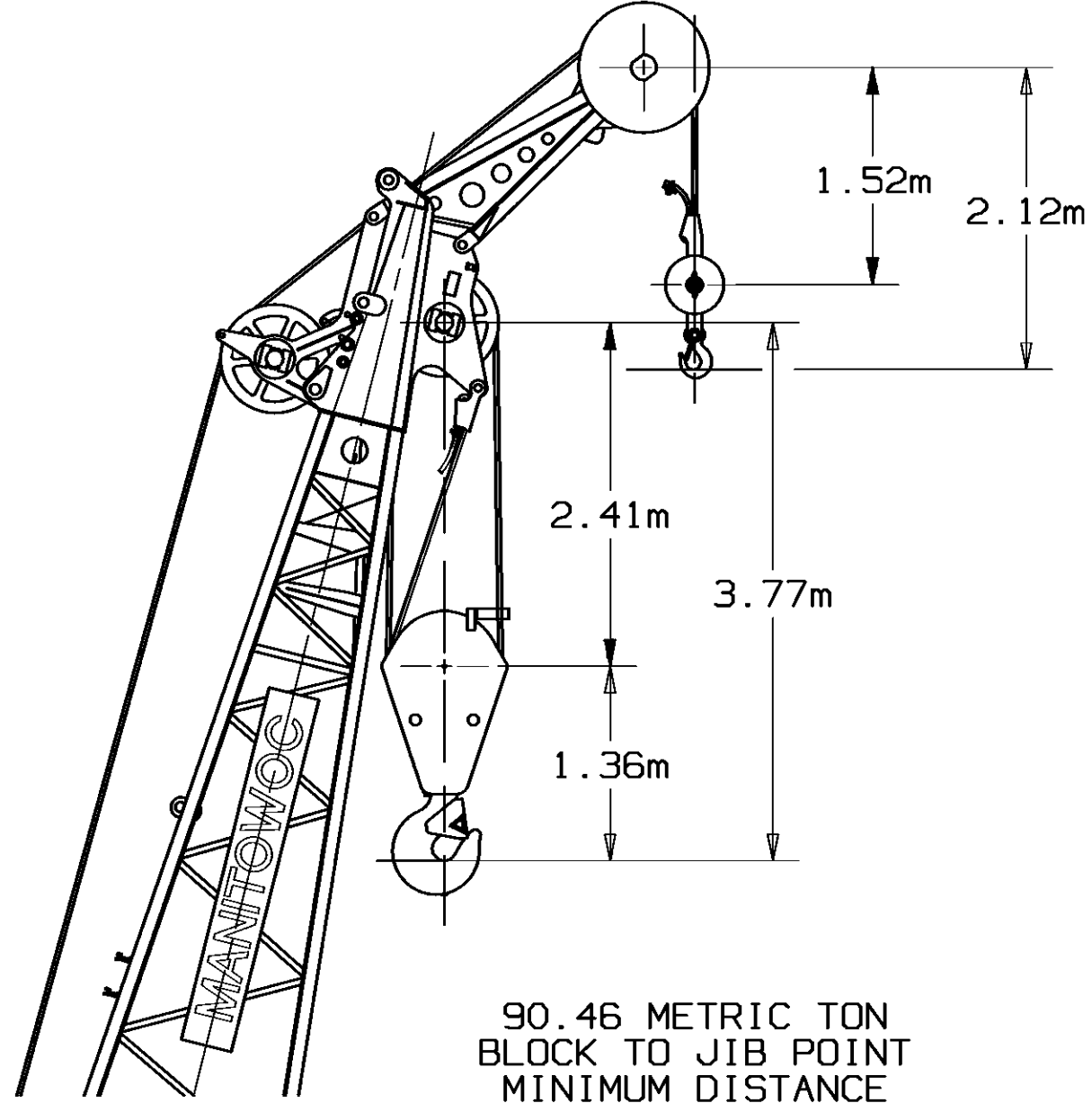


40.70 METRIC TON
BLOCK TO INTERMEDIATE FALL
MINIMUM DISTANCE
NO.149 JIB - 2 PARTS OF LINE

MINIMUM DISTANCE MEASUREMENTS FROM MANITOWOC LOAD BLOCK TO JIB POINT SHOWN ABOVE BASED ON 76 DEGREE JIB ANGLE AND PHYSICAL LIMITATIONS.



14 METRIC TON
SWIVEL HOOK & WEIGHT BALL
TO JIB POINT MINIMUM DISTANCE
NO.149 JIB - SINGLE PART LINE



90.46 METRIC TON
BLOCK TO JIB POINT
MINIMUM DISTANCE
NO.149 JIB - 6 PARTS OF LINE

MINIMUM DISTANCE MEASUREMENTS FROM MANITOWOC LOAD BLOCK TO JIB POINT SHOWN ABOVE BASED ON 76 DEGREE JIB ANGLE AND 2 1/2 DEGREE FLEET ANGLE.

DATE	SCALE	Manitowoc Cranes, Inc.	REVISION
03-19-04	1/16"=1'	Manitowoc, Wisconsin	DIAGRAM - RANGE ASSEMBLY -
DRAWING NO.	CK-NVS	MODEL 15000	NO.57 BOOM
A09788	APP/JAS	SERIES 1,2,3,4	NO.149 LUFFING JIB