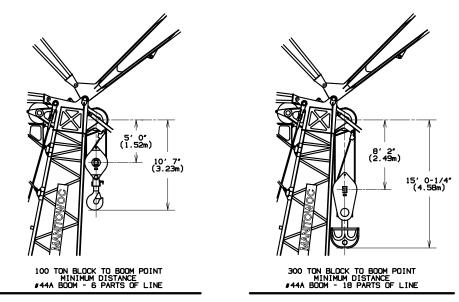
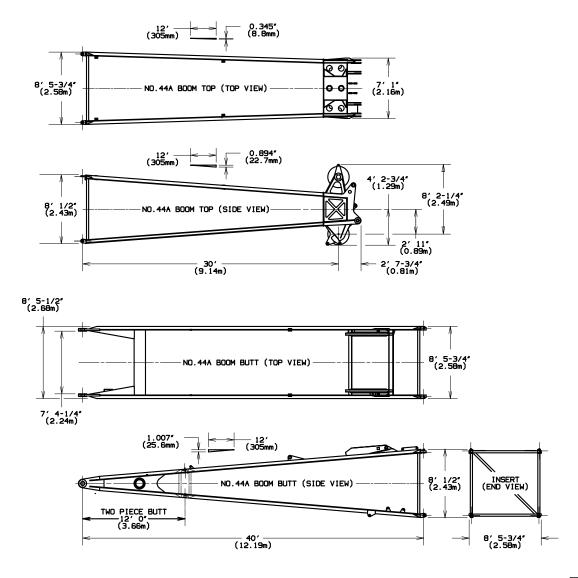
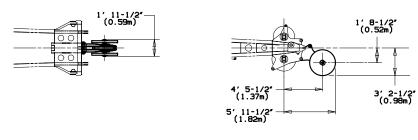
11-12-97

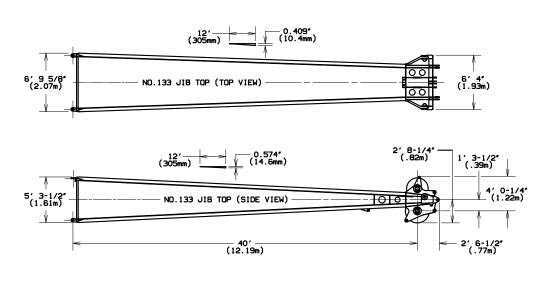


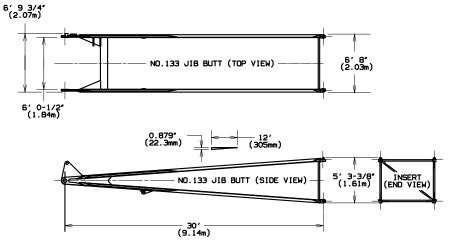
MINIMUM DISTANCE MEASUREMENTS BASED ON 83° BOOM ANGLE. BOOM ANGLES ABOVE 83° ARE NOT ALLOWED WITH A LOAD BLOCK HANGING FROM THE LOWER BOOM POINT.



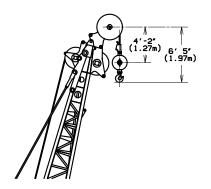


UPPER JIB POINT

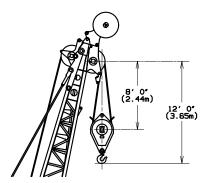




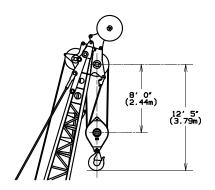
NOTE: JIB NO.133 (SHOWN) IS IDENTICAL TO JIB NO.133A EXCEPT FOR THE JIB CONNECTORS. JIB NO.133 HAS FACT CONNECTORS, JIB NO.133A HAS STANDARD CONNECTORS.



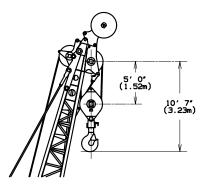
15 TON SWIVEL HOOK & WEIGHT BALL TO UPPER JIB POINT MINIMUM DISTANCE #133 JIB - 1 PART OF LINE



30 TON BLOCK TO JIB POINT MINIMUM DISTANCE #133 JIB - 2 PARTS OF LINE



60 TON BLOCK TO JIB POINT MINIMUM DISTANCE #133 JIB - 4 PARTS OF LINE



100 TON BLOCK TO JIB POINT MINIMUM DISTANCE #133 JIB - 6 PARTS OF LINE

MINIMUM DISTANCE MEASUREMENTS BASED ON 76° JIB ANGLE.

- 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 CAPACTLY CHARTS, RANGE CHART, LOAD LINE 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: DISTANCE OF MANITOWOC LOAD BLOCK TO BOOM POINT BASED ON 2 1/2 DEGREE FLEET ANGLE OR PHYSICAL LIMITATIONS.
- NOTE 5. WHEN EQUIPPED WITH HOIST LIMIT CONTROL, LOAD BLOCK TO BOOM POINT MINIMUM DISTANCE MAY BE MORE THAN INDICATED. SEE OPERATOR' MANUAL FOR "HOIST LIMIT CONTROL".
- NOTE 6: MAXIMUM BOOM ANGLE 88 DEGREES FOR NO.44A BOOM WITH NO.133/133A LUFFING JIB.
 MAXIMUM JIB ANGLE 76 DEGREES FOR NO.133/133A LUFFING JIB WITH NO.44A BOOM AT AN 88 DEGREE BOOM ANGLE.
- NOTE 7 JIB NO.133 (SHOWN) IS IDENTICAL TO JIB NO.133A EXCEPT FOR THE JIB CONNECTORS. JIB NO.133 HAS FACT CONNECTORS, JIB NO.133A HAS STANDARD CONNECTORS.