

**Manitex**



**TC400**

**40-ton (36,3 mt) TELESCOPIC CRANE**  
**TC400 SERIES PRODUCT GUIDE**



















# CONTENTS

















|   |       |
|---|-------|
| Crane Features .....                        | 4     |
| TC400 Chassis Data - S Models .....         | 5     |
| TC400 Chassis Data - SHL Models .....       | 6     |
| Outrigger Extension.....                    | 7     |
| Sub Frame .....                             | 7     |
| Electrical System .....                     | 7     |
| 4077S Load Chart: Main Boom .....           | 8     |
| 4077S Boom Diagram .....                    | 9     |
| 4077SHL Load Chart: Main Boom.....          | 10    |
| 4077SHL Boom Diagram .....                  | 11    |
| 40100S Load Chart: Main Boom and Jib .....  | 12    |
| 40100S Boom Diagram .....                   | 13    |
| 40100SHL Load Chart: Main Boom and Jib..... | 14    |
| 40100 SHL Boom Diagram .....                | 15    |
| 40124S Load Chart: Main Boom and Jib .....  | 16    |
| 40124S Boom Diagram .....                   | 17    |
| 40124SHL Load Chart: Main Boom and Jib..... | 18    |
| 40124SHL Boom Diagram .....                 | 19    |
| Area of Operation .....                     | 20    |
| Reeving Diagram.....                        | 20    |
| LMI Codes .....                             | 21    |
| Warning, Information & Definitions .....    | 21    |
| Technical Descriptions .....                | 22-23 |
| Options .....                               | 23    |

Effective Date: September 1, 2013  
 This document is non-contractual. This document is supplied for reference use only. We are constantly making improvements to our products and reserve the right that specification, equipment, and prices are all subject to change without notice or obligation.  
 The photographs, and /or images in this document are for illustrative purposes only and may include optional equipment and accessories and may not include all standard equipment.  
 Refer to the appropriate Operator's Manual and Load Charts for instructions on the proper use of this equipment to determine allowable crane lifting capacities, assembly and operating procedures.  
 Failure to follow the appropriate operator's manual or load chart(s) when using our equipment or to otherwise act irresponsibly may result in serious injury or death.  
 The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale. Manitex makes no other warranty, expressed or implied.  
 Products and services listed may be trademarks, service marks or trade-names of Manitex International and /or its subsidiaries in the USA and other countries.  
 All rights are reserved. Manitex® is a registered trademark of Manitex International, Inc. in the USA and many other countries.  
 Copyright 2013 Manitex Inc. Manitex Inc, Georgetown Texas, 78626



# KEY

|   |   |
|---|---|
|    | Operator aids   |
|    | Cab   |
|    | Heating / Air conditioning                                  |
|    | Controls  |
|    | Hoist speed   |
|    | 1 - Main hoist<br>2 - Auxiliary winch<br>3 - Recovery winch |
|    | Rope length   |
|    | Rope - standard/optional                                    |
|  | Rope diameter   |
|  | Permissible line pull                                       |
|  | Maximum line pull   |
|  | Slewing / Allowable slewing range                           |
|  | Slewing gears   |
|  | Slewing brake   |
|  | Outriggers / Lifting on outriggers                          |
|  | 2-Person man basket   |
|  | Counterweight   |
|  | Radio remote control  |

|   |                                       |
|---|---------------------------------------|
|    | Hook block                            |
|    | Distance from hook to head sheave pin |
|    | Hook and ball                         |
|    | Hydraulics                            |
|    | Boom elevation angle                  |
|    | Max. boom length with extension       |
|    | Boom with extension retracted         |
|    | Boom angle                            |
|  | Telescoping mode                      |
|  | Working radius                        |
|  | Boom length                           |
|  | Hydraulic actuated boom               |
|  | Full power mechanical synchronized    |
|  | Boom head / Hook block dimension      |
|  | Main boom with auxiliary head         |
|  | Tip height                            |



## THE TC400 SERIES TELESCOPIC CRANES

### Versatile. Affordable. User friendly.

The TC400 series telescopic cranes are built to meet the wide-ranging needs of owner operators who may use it for residential construction one day and bridge work the next. No matter what the task, the 40-ton line of telescopic crane is designed to get you to the job and on the job quickly.

With it, you can:

- Travel to and between job sites at highway speed on a commercial chassis
- Set up quickly with radio outrigger controls
- Operate comfortably and confidently in its tiltable cab

### Other features include:

- 40-ton capacity @ 5 ft. radius
- 3, 4 & 5-section proportional boom
- Optional telescopic jib
- 187 ft. maximum tip height (with optional telescopic jib)
- Tiltable cab
- Out-and-down outriggers
- Remote outrigger controls

### RADIO OUTRIGGER CONTROLS

Operate the outriggers remotely, with a clear view of the machine, using radio outrigger controls we call ROC Solid.

### TWO-SPEED PLANETARY HOIST

Increase productivity and minimize downtime. The two-speed planetary hoist lets you change line speed on the fly and minimize rope stacking.

### REMOTE WINCH CONTROL

Lower and raise the hook block quickly. With remote winch control on the TC400 series, the winch can be operated from any location. (OPTIONAL)



Operator cab tilts from 0° to 20° for a comfortable, clear view of the load.

### INCREASE PROFITABILITY

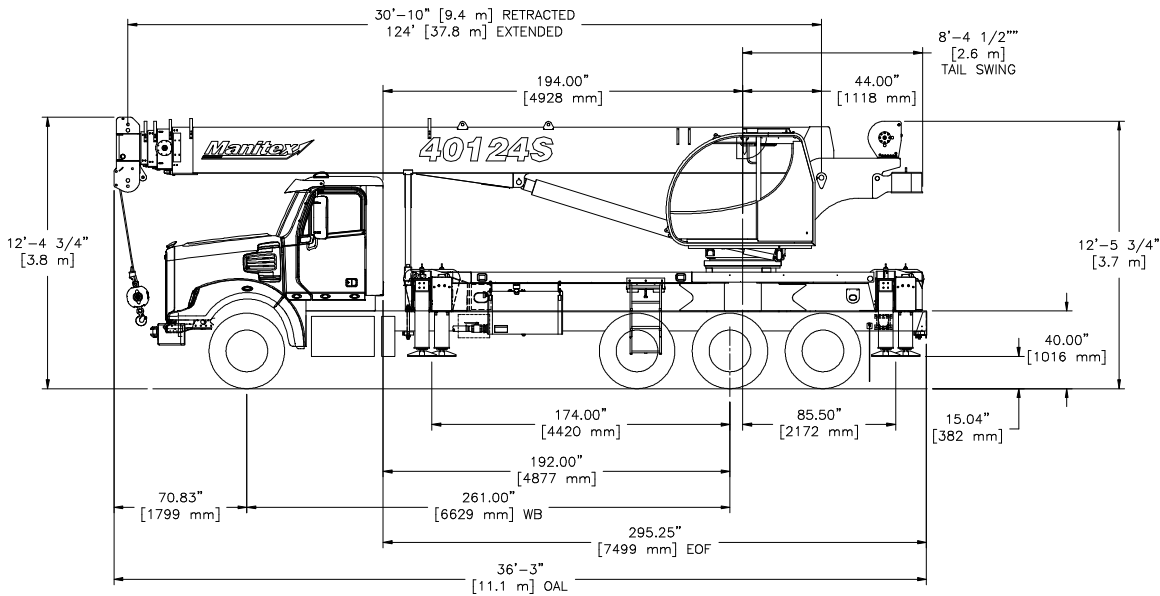
The versatile TC400 series is designed to help both owners and operators make the most of their investment.

- Travel to and between jobs at highway speed.
- Minimize maintenance costs with replaceable, self-lubricating boom slider pads and sealed, multi-disc wet brakes on the hoist and swing system.
- Minimize repair costs with its front stabilizer and first-up auto retract feature that prevents drive-away damage.

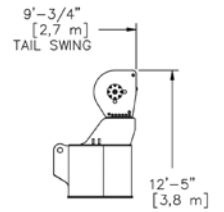


# TC400 SERIES CHASSIS DATA: S MODELS

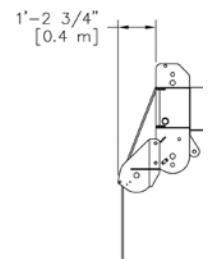
## TC400 Series S Dimensions



## Auxiliary Winch



## Auxiliary Sheave Head



## CHASSIS DATA

| S Models   |   |
|--|---|
| Wheel Base (WB)                                      | 261 in. (6,639 mm)                              |
| Cab to Tandem (CT)                                   | 192 in. (4,877 mm)                              |
| Cab to End of Frame (EOF)                            | 295 in. (7,493 mm)                              |
| Nominal frame W                                      | 34 in. (864 mm)                                 |
| Frame section modulus at 180/360° area of operation* | 25.0 in <sup>3</sup> , 110,000 psi, 758,422 kPa |

\* Frame selection modulus at 360° area of operation requires front bumper stabilizer.

## TRUCK AXLE WEIGHTS

| Model                       | 4077S                   | 40100S                  | 40124S                  |
|-----------------------------|-------------------------|-------------------------|-------------------------|
| Front axle (GW)             | 18,000 lbs. (8,165 kg)  | 18,000 lbs. (8,165 kg)  | 20,000 lbs. (9,072 kg)  |
| Rear axle                   | 40,000 lbs. (18,144 kg) | 40,000 lbs. (18,144 kg) | 40,000 lbs. (18,144 kg) |
| Min. truck axle W - Front** | 8,000 lbs. (3,629 kg)   | 8,000 lbs. (3,629 kg)   | 9,200 lbs. (4,173 kg)   |
| Min. truck axle W - Rear**  | 8,300 lbs. (3,765 kg)   | 8,300 lbs. (3,765 kg)   | 8,300 lbs. (3,765 kg)   |

\*\* Minimum chassis weight is required to meet 85% stability requirements. Chassis data is general - not for engineering. Some dimensions depend on truck selection.

## CRANE WEIGHTS

| Model          | 4077S                   | 40100S                  | 40124S                  |
|----------------|-------------------------|-------------------------|-------------------------|
| Crane          | 28,895 lbs. (13,107 kg) | 30,965 lbs. (14,045 kg) | 32,385 lbs. (14,690 kg) |
| Jib fixed      | 830 lbs. (376 kg)       | 830 lbs. (376 kg)       | 830 lbs. (376 kg)       |
| Jib telescopic | 1,720 lbs. (780 kg)     | 1,720 lbs. (780 kg)     | 1,720 lbs. (780 kg)     |
| Flatbed 8 ft.  | 825 lbs. (374 kg)       | 825 lbs. (374 kg)       | 825 lbs. (374 kg)       |
| Flatbed 10 ft. | 1,000 lbs. (454 kg)     | 1,000 lbs. (454 kg)     | 1,000 lbs. (454 kg)     |

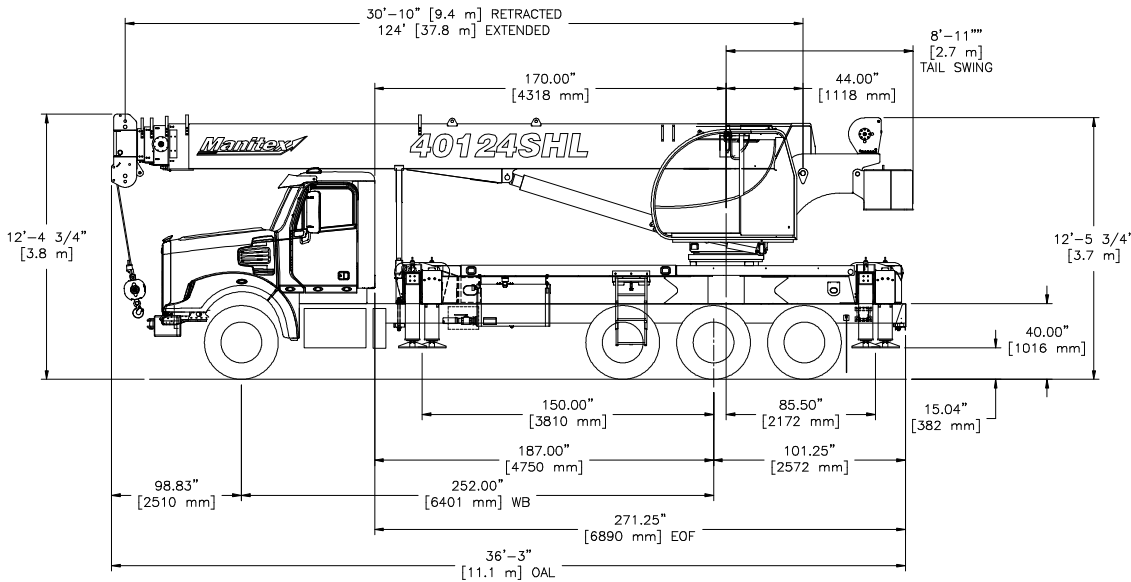
Notes: Additional axles required for federal bridge legal configuration - consult Manitex. Manitex highly recommends the addition of a front stabilizer and it may be required on some installations - consult Manitex.

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

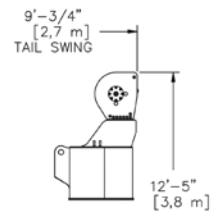


# TC400 SERIES CHASSIS DATA: SHL MODELS

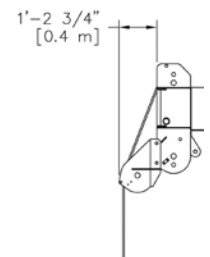
## TC400 Series SHL Dimensions



## Auxiliary Winch



## Auxiliary Sheave Head



## CHASSIS DATA

| SHL Models   |   |
|--|---|
| Wheel Base (WB)                                      | 252 in. (6,401 mm)                                |
| Cab to Tandem (CT)                                   | 187 in. (4,750 mm)                                |
| Cab to End of Frame (EOF)                            | 271 in. (6,883 mm)                                |
| Nominal frame length                                 | 34 in. (864 mm)                                   |
| Frame section modulus at 180/360° area of operation* | 25.0 in <sup>3</sup> , 110,000 psi<br>758,422 kPa |

\* Frame selection modulus at 360° area of operation requires front bumper stabilizer.

## TRUCK AXLE WEIGHT

| Model                            | 4077SHL                 | 40100SHL                | 40124SHL                |
|----------------------------------|-------------------------|-------------------------|-------------------------|
| Front axle (GW)                  | 20,000 lbs. (9,072 kg)  | 20,000 lbs. (9,072 kg)  | 20,000 lbs. (9,072 kg)  |
| Rear axle                        | 44,000 lbs. (19,958 kg) | 44,000 lbs. (19,958 kg) | 44,000 lbs. (19,958 kg) |
| Min. truck axle weight - Front** | 9,800 lbs. (4,445 kg)   | 9,800 lbs. (4,445 kg)   | 9,800 lbs. (4,445 kg)   |
| Min. truck axle weight - Rear**  | 8,000 lbs. (3,629 kg)   | 8,000 lbs. (3,629 kg)   | 8,000 lbs. (3,629 kg)   |

\*\* Minimum chassis weight is required to meet 85% stability requirements. Chassis data is general - not for engineering. Some dimensions depend on truck selection.

## CRANE WEIGHTS

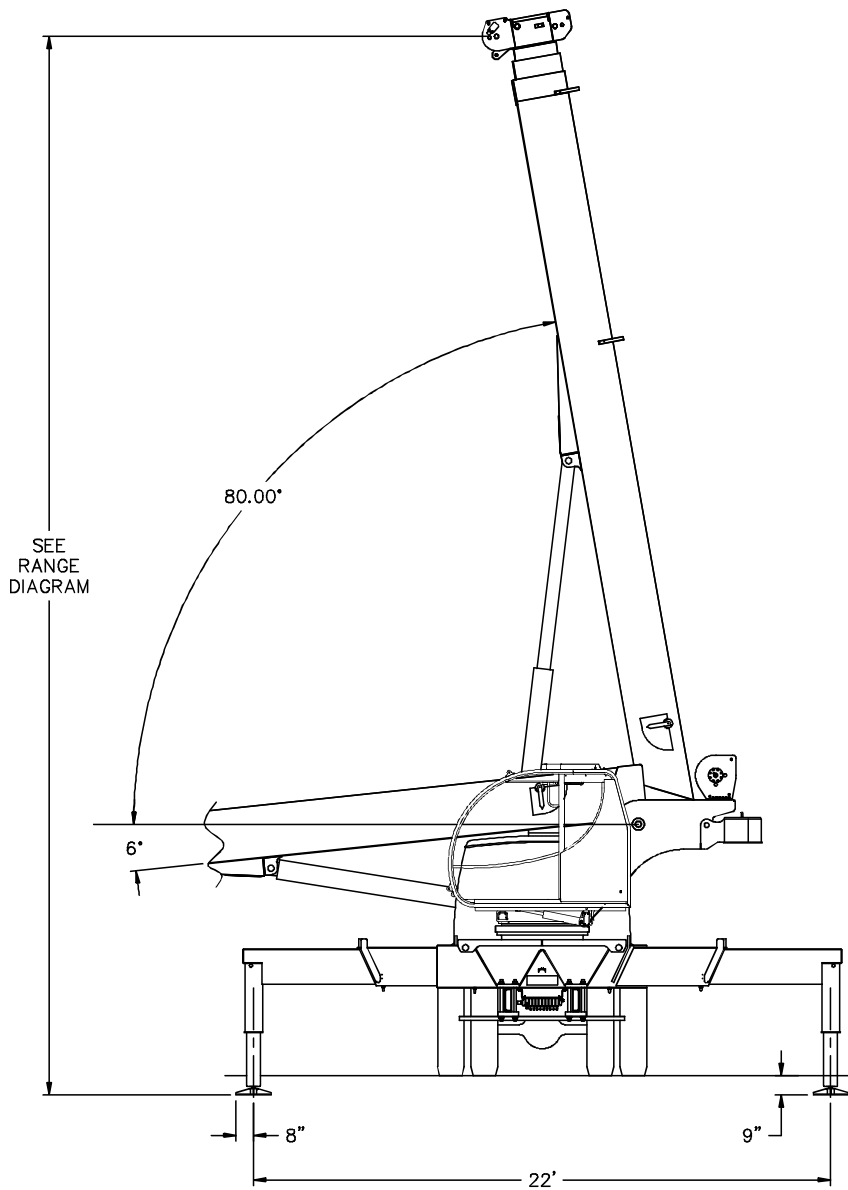
| Model          | 4077SHL                 | 40100SHL                | 40124SHL                |
|----------------|-------------------------|-------------------------|-------------------------|
| Crane          | 34,995 lbs. (15,873 kg) | 37,065 lbs. (16,812 kg) | 38,485 lbs. (17,457 kg) |
| Jib fixed      | 830 lbs. (376 kg)       | 830 lbs. (376 kg)       | 830 lbs. (376 kg)       |
| Jib telescopic | 1,720 lbs. (780 kg)     | 1,720 lbs. (780 kg)     | 1,720 lbs. (780 kg)     |
| Flatbed 8 ft.  | 825 lbs. (374 kg)       | 825 lbs. (374 kg)       | 825 lbs. (374 kg)       |
| Flatbed 10 ft. | 1,000 lbs. (454 kg)     | 1,000 lbs. (454 kg)     | 1,000 lbs. (454 kg)     |

Notes: Additional axles required for federal bridge legal configuration - consult Manitex. Manitex highly recommends the addition of a front stabilizer and it may be required on some installations - consult Manitex.

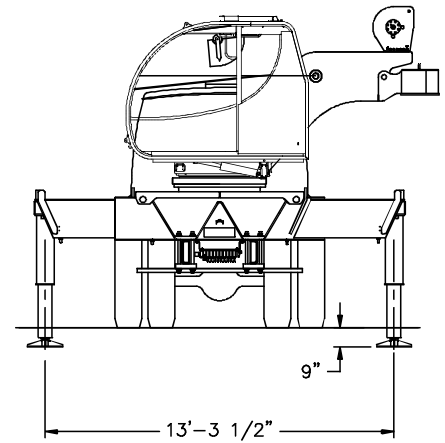
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# OUTRIGGER EXTENSION

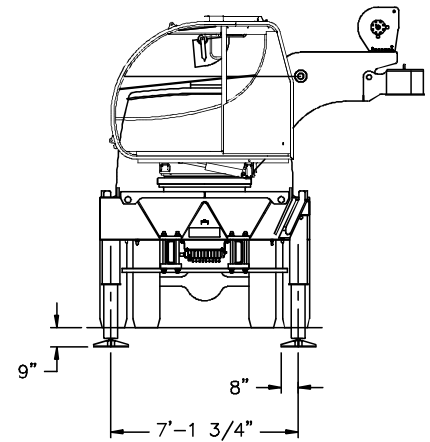
## Full Extension



## Middle Extension



## Full Retraction



## SUB FRAME

- Pedestal sub-frame and stabilizers are mounted to chassis by threaded rods and clamp plates
- Sub-frame: Torsion resistant, rigid 4-plate design mounted under crane full length of truck frame
- Rear under-ride protection: Standard on factory mounted cranes

## ELECTRICAL SYSTEM

- State-of-the-art, weather-resistant components throughout
- Hermetically sealed enclosure includes power in relays and circuit status LEDs


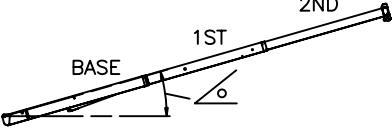





Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

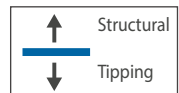
# 4077S LOAD CHART: Main Boom

Lifting Capacities 3-section Boom 30.5 ft. - 76.8 ft.  
Full Outrigger Extension

 22 ft. (100%)

 360° Continuous

| MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS PLACED AS SHOWN AND THE CRANE LEVEL         |   |                               |  |        |   |        |   |        |   |          |
|--|---|-------------------------------|--|--------|---|--------|---|--------|---|----------|
| LMI CODE #1  |   |                               |  |        |   |        |   |        |   |          |
| <br>(ft.) | Loaded Boom Angle (deg)   | Boom Length and Marker (lbs.) |  |        |   |        |   |        |   |          |
|  |   |                               | A  |        | B   |        | C   |        | D   |          |
|  |  | 30.5 ft.                      |   | 40 ft. |  | 52 ft. |  | 64 ft. |  | 76.8 ft. |
| 5  | 75  | 80,000                        |  |        |   |        |   |        |   |          |
| 8  | 69  | 61,760                        | 74   | 55,500 | 79  | 47,500 |   |        |   |          |
| 10   | 65  | 53,930                        | 71   | 50,920 | 76  | 47,500 | 80  | 38,000 |   |          |
| 12   | 61  | 48,090                        | 68   | 45,240 | 74  | 42,760 | 78  | 35,050 | 80  | 28,410   |
| 15   | 54  | 41,110                        | 64   | 38,890 | 71  | 36,570 | 75  | 30,890 | 78  | 25,500   |
| 20   | 41  | 31,330                        | 55   | 31,330 | 65  | 29,590 | 70  | 25,850 | 74  | 21,670   |
| 25   | 21  | 22,670                        | 46   | 23,080 | 58  | 23,320 | 65  | 21,930 | 70  | 18,870   |
| 30   |   |                               | 34   | 17,220 | 51  | 17,460 | 60  | 17,580 | 66  | 16,470   |
| 35   |   |                               | 16   | 13,420 | 44  | 13,690 | 55  | 13,810 | 62  | 13,890   |
| 40   |   |                               |  |        | 34  | 10,950 | 49  | 11,100 | 58  | 11,190   |
| 45   |   |                               |  |        | 22  | 8,790  | 42  | 8,960  | 53  | 9,050    |
| 50   |   |                               |  |        |   |        | 35  | 7,360  | 48  | 7,450    |
| 55   |   |                               |  |        |   |        | 25  | 6,110  | 43  | 6,210    |
| 60   |   |                               |  |        |   |        | 7   | 5,090  | 36  | 5,230    |
| 65   |   |                               |  |        |   |        |   |        | 29  | 4,420    |
| 70   |   |                               |  |        |   |        |   |        | 19  | 3,740    |



**NOTES:**

- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

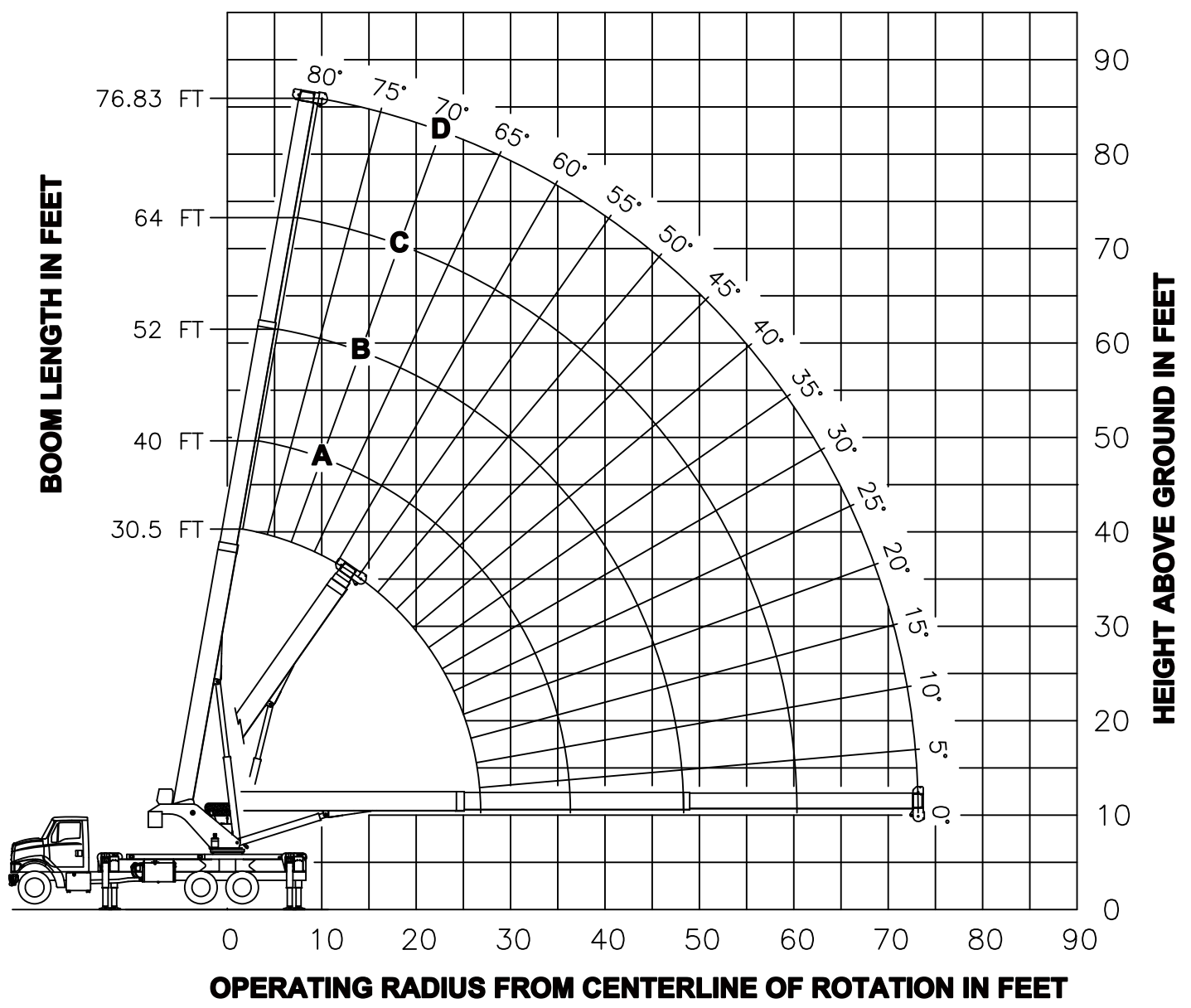
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.





# 4077S BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -



Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 4077SHL LOAD CHART: Main Boom

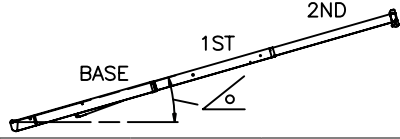
Lifting Capacities 3-section Boom 30.5 ft. - 76.8 ft.  
Full Outrigger Extension

 22 ft. (100%)



 360° Continuous

**MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS PLACED AS SHOWN AND THE CRANE LEVEL**

LMI CODE #4



| Loaded Boom Angle (deg) | Boom Length and Marker (lbs.) | A        |        | B      |        | C        |       | D      |       |
|-------------------------|-------------------------------|----------|--------|--------|--------|----------|-------|--------|-------|
|                         |                               | (ft.)    | (ft.)  | (ft.)  | (ft.)  | (ft.)    | (ft.) | (ft.)  | (ft.) |
| 75                      | 80,000                        | 30.5 ft. | 40 ft. | 52 ft. | 64 ft. | 76.8 ft. |       |        |       |
| 5                       | 75                            | 80,000   |        |        |        |          |       |        |       |
| 8                       | 69                            | 61,760   | 74     | 55,500 | 79     | 47,500   |       |        |       |
| 10                      | 65                            | 53,930   | 71     | 50,920 | 76     | 47,500   | 80    | 38,000 |       |
| 12                      | 61                            | 48,090   | 68     | 45,240 | 74     | 42,760   | 78    | 35,050 | 80    |
| 15                      | 54                            | 41,110   | 64     | 38,890 | 71     | 36,570   | 75    | 30,890 | 78    |
| 20                      | 41                            | 33,020   | 55     | 31,330 | 65     | 29,590   | 70    | 25,850 | 74    |
| 25                      | 21                            | 25,700   | 46     | 26,330 | 58     | 24,750   | 65    | 21,930 | 70    |
| 30                      |                               |          | 34     | 20,490 | 51     | 20,730   | 60    | 19,000 | 66    |
| 35                      |                               |          | 16     | 16,100 | 44     | 16,380   | 55    | 16,500 | 62    |
| 40                      |                               |          |        |        | 34     | 13,340   | 49    | 13,470 | 58    |
| 45                      |                               |          |        |        | 22     | 11,090   | 42    | 11,230 | 53    |
| 50                      |                               |          |        |        |        |          | 35    | 9,510  | 48    |
| 55                      |                               |          |        |        |        |          | 25    | 8,140  | 43    |
| 60                      |                               |          |        |        |        |          | 7     | 7,000  | 36    |
| 65                      |                               |          |        |        |        |          |       |        | 29    |
| 70                      |                               |          |        |        |        |          |       |        | 19    |

 Structural  
 Tipping

**NOTES:**

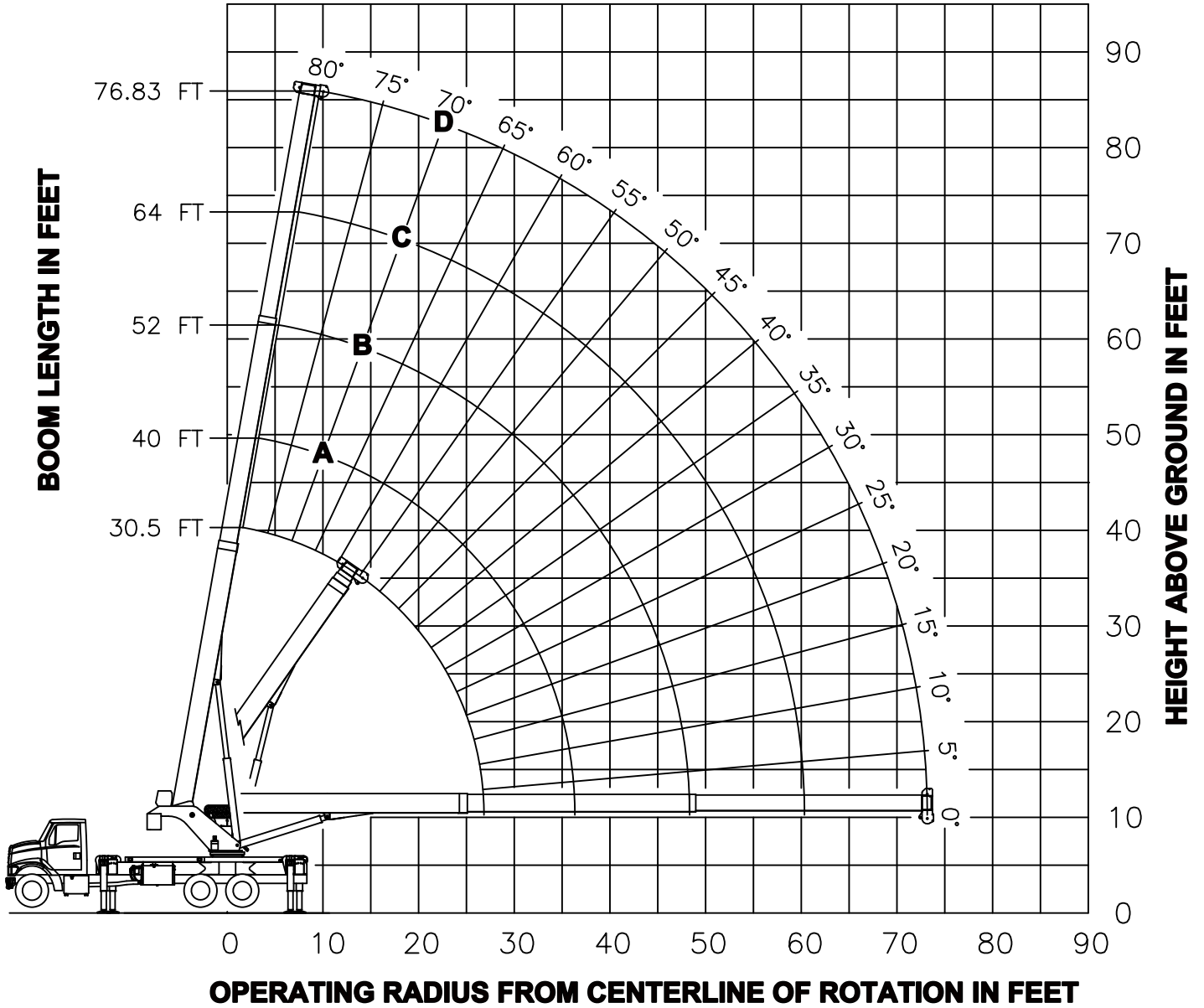
- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.



# 4077SHL BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -



Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 40100S LOAD CHART: Main Boom and Jib

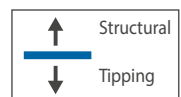
Lifting Capacities 4-section Boom 30.5 ft. - 100 ft.  
1 or 2-section Jib 31 ft. - 55 ft. - Full Outrigger Extension



| Load Ratings in (lbs.) with Outriggers and Stabilizers Extended |                      |          |          |          |          |          |    |          |    | Jib Load Ratings in (lbs.) with Outriggers and Stabilizers Extended |                                 |                                 |                                 |                                 |                |             |       |              |  |
|---|----------------------|----------|----------|----------|----------|----------|----|----------|----|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------|-------------|-------|--------------|--|
| LMI Code #1   |                      |          |          |          |          |          |    |          |    | LMI Code #32  |                                 |                                 |                                 |                                 |                | LMI Code #7 |       | LMI Code #13 |  |
| Loaded Boom Angle (ft.)   | Boom length & Marker |          |          |          |          |          |    |          |    | Loaded Boom Angle (ft.)   | Fixed Jib                       |                                 | Telescopic Jib                  |                                 | Telescopic Jib |             |       |              |  |
|   |                      | A (lbs.) |          | B (lbs.) |          | C (lbs.) |    | D (lbs.) |    |   | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths |                |             |       |              |  |
| 5   | 74                   | 80,000   |          |          |          |          |    |          |    |   |                                 |                                 |                                 |                                 |                |             |       |              |  |
| 8   | 68                   | 61,000   |          |          |          |          |    |          |    |   |                                 |                                 |                                 |                                 |                |             |       |              |  |
| 10  | 64                   | 52,860   | 76       | 31,500   |          |          |    |          |    | 10  |                                 |                                 |                                 |                                 |                |             |       |              |  |
| 12  | 60                   | 47,000   | 73       | 31,500   | 78       | 31,500   |    |          |    | 12  |                                 |                                 |                                 |                                 |                |             |       |              |  |
| 15  | 53                   | 40,280   | 70       | 31,500   | 76       | 31,500   | 79 | 23,700   |    | 15  |                                 |                                 |                                 |                                 |                |             |       |              |  |
| 20  | 40                   | 30,660   | 64       | 28,680   | 71       | 26,820   | 76 | 20,600   | 79 | 14,000  | 20                              |                                 |                                 |                                 |                |             |       |              |  |
| 25  | 20                   | 22,380   | 58       | 23,230   | 67       | 22,160   | 72 | 18,300   | 76 | 13,500  | 25                              |                                 |                                 |                                 |                |             |       |              |  |
| 30  |                      |          | 51       | 17,230   | 62       | 17,450   | 69 | 15,870   | 73 | 12,820  | 30                              | 77                              | 7,300                           | 77                              | 7,000          |             |       |              |  |
| 35  |                      |          | 43       | 13,370   | 57       | 13,590   | 65 | 13,720   | 70 | 11,380  | 35                              | 75                              | 7,100                           | 75                              | 6,800          | 78          | 4,000 |              |  |
| 40  |                      |          | 34       | 10,660   | 52       | 10,910   | 61 | 11,030   | 67 | 10,160  | 40                              | 73                              | 6,620                           | 73                              | 6,240          | 76          | 3,850 |              |  |
| 45  |                      |          | 22       | 8,440    | 46       | 8,710    | 57 | 8,850    | 64 | 8,940   | 45                              | 71                              | 6,060                           | 71                              | 5,670          | 74          | 3,700 |              |  |
| 50  |                      |          |          |          | 39       | 7,060    | 52 | 7,200    | 60 | 7,290   | 50                              | 69                              | 5,550                           | 69                              | 5,150          | 73          | 3,550 |              |  |
| 55  |                      |          |          |          | 32       | 5,790    | 48 | 5,930    | 57 | 6,010   | 55                              | 66                              | 5,100                           | 66                              | 4,690          | 71          | 3,310 |              |  |
| 60  |                      |          |          |          | 22       | 4,760    | 43 | 4,910    | 53 | 4,990   | 60                              | 64                              | 4,680                           | 64                              | 4,210          | 69          | 3,090 |              |  |
| 65  |                      |          |          |          |          |          | 37 | 4,080    | 49 | 4,160   | 65                              | 61                              | 4,210                           | 61                              | 3,740          | 67          | 2,900 |              |  |
| 70  |                      |          |          |          |          |          | 31 | 3,390    | 45 | 3,470   | 70                              | 59                              | 3,800                           | 59                              | 3,330          | 65          | 2,710 |              |  |
| 75  |                      |          |          |          |          |          | 22 | 2,800    | 40 | 2,890   | 75                              | 56                              | 3,200                           | 56                              | 2,800          | 63          | 2,550 |              |  |
| 80  |                      |          |          |          |          |          | 7  | 2,280    | 35 | 2,390   | 80                              | 53                              | 2,690                           | 53                              | 2,290          | 61          | 2,400 |              |  |
| 85  |                      |          |          |          |          |          |    |          | 30 | 1,960   | 85                              | 50                              | 2,250                           | 50                              | 1,850          | 59          | 2,270 |              |  |
| 90  |                      |          |          |          |          |          |    |          | 22 | 1,580   | 90                              | 47                              | 1,870                           | 47                              | 1,460          | 56          | 2,080 |              |  |
| 95  |                      |          |          |          |          |          |    |          | 11 | 1,230   | 95                              | 43                              | 1,530                           | 43                              | 1,120          | 54          | 1,820 |              |  |
| 100   |                      |          |          |          |          |          |    |          |    |   | 100                             | 40                              | 1,230                           | 40                              | 820            | 52          | 1,510 |              |  |
| 105   |                      |          |          |          |          |          |    |          |    |   | 105                             | 36                              | 960                             | 36                              | 550            | 49          | 1,240 |              |  |
| 110   |                      |          |          |          |          |          |    |          |    |   | 110                             |                                 |                                 |                                 |                | 46          | 990   |              |  |
| 115   |                      |          |          |          |          |          |    |          |    |   | 115                             |                                 |                                 |                                 |                | 43          | 770   |              |  |
| 120   |                      |          |          |          |          |          |    |          |    |   | 120                             |                                 |                                 |                                 |                | 40          | 560   |              |  |
|   |                      | 590 lbs. | 350 lbs. | 270 lbs. | 220 lbs. | 180 lbs. |    |          |    |   | Fixed Jib                       |                                 | Deductions for Stowed Jib       |                                 |                |             |       |              |  |
|   |                      | 890 lbs. | 530 lbs. | 400 lbs. | 330 lbs. | 280 lbs. |    |          |    |   | Telescopic Jib                  |                                 |                                 |                                 |                |             |       |              |  |

**NOTES:**

- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

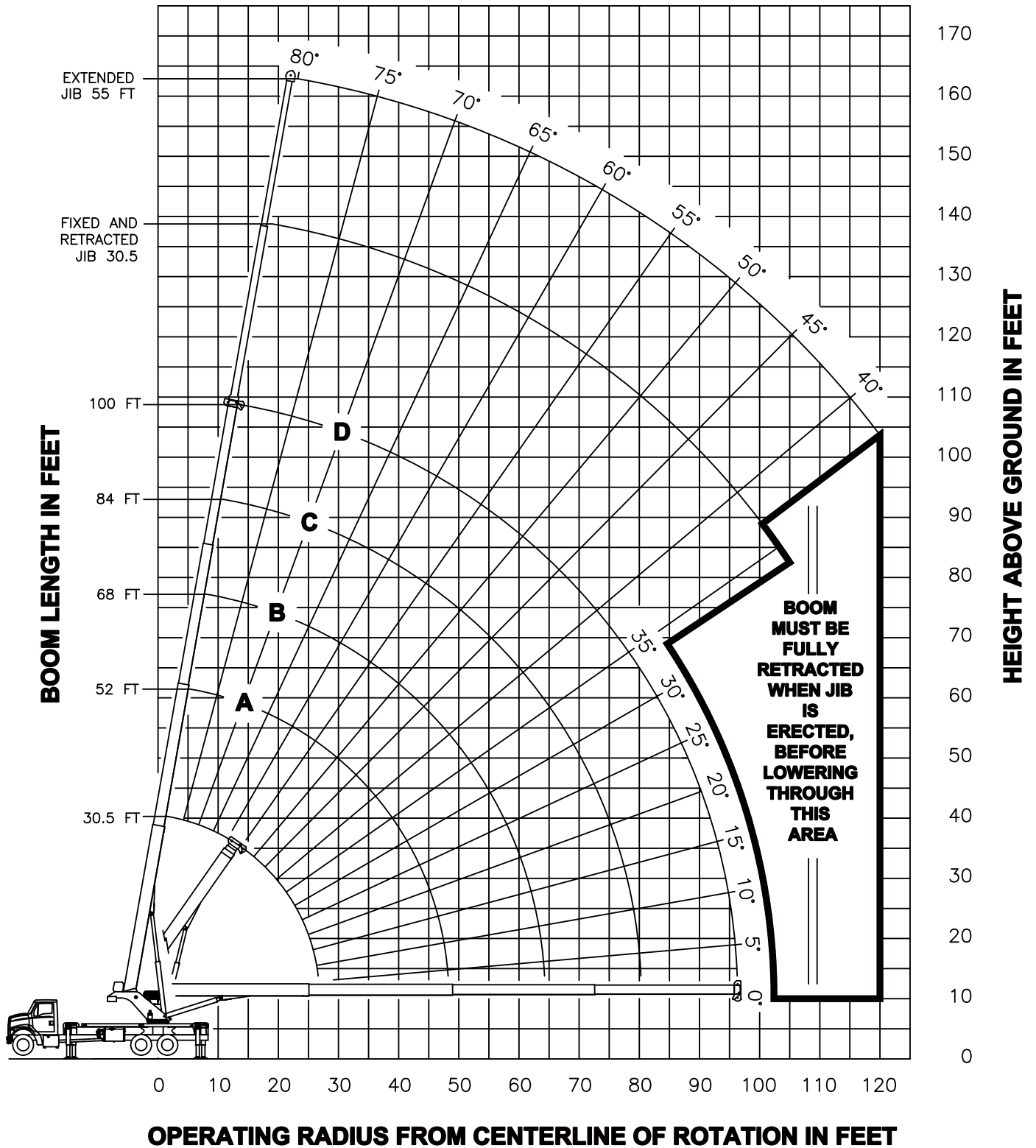


Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.



# 40100S BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -



Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 40100SHL LOAD CHART: Main Boom and Jib

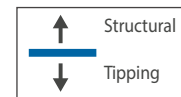
Lifting Capacities 4-section Boom 30.5 ft. - 100 ft.  
1 or 2-section Jib 31 ft. - 55 ft. - Full Outrigger Extension



| Load Ratings in (lbs.) with Outriggers and Stabilizers Extended |                      |          |          |          |          |          |    |          |    | Jib Load Ratings in (lbs.) with Outriggers and Stabilizers Extended |                                 |                                 |                                 |                                 |  |  |
|---|----------------------|----------|----------|----------|----------|----------|----|----------|----|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--|--|
| LMI Code #1   |                      |          |          |          |          |          |    |          |    | LMI Code #32  |                                 |                                 |                                 |                                 |  |  |
| Loaded Boom Angle (ft.)   | Boom length & Marker |          |          |          |          |          |    |          |    | Loaded Boom Angle (ft.)   | Fixed Jib                       |                                 | Telescopic Jib                  |                                 |  |  |
|   |                      | A (lbs.) |          | B (lbs.) |          | C (lbs.) |    | D (lbs.) |    |   | LMI Code #7                     | LMI Code #13                    |                                 |                                 |  |  |
|   | 30.5 ft.             | 52 ft.   | 68 ft.   | 84 ft.   | 100 ft.  |          |    |          |    |   | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths | Jib Length for All Boom Lengths |  |  |
| 5   | 74                   | 80,000   |          |          |          |          |    |          |    |   | See Warning Note: 4             | See Warning Note: 4             | See Warning Note: 4             | See Warning Note: 4             |  |  |
| 8   | 68                   | 61,000   |          |          |          |          |    |          |    |   | 30.5 ft.                        | 30.5 ft.                        | 55 ft.                          |                                 |  |  |
| 10  | 64                   | 52,860   | 76       | 31,500   |          |          |    |          |    | 10  |                                 |                                 |                                 |                                 |  |  |
| 12  | 60                   | 47,000   | 73       | 31,500   | 78       | 31,500   |    |          |    | 12  |                                 |                                 |                                 |                                 |  |  |
| 15  | 53                   | 40,280   | 70       | 31,500   | 76       | 31,500   | 79 | 23,700   |    | 15  |                                 |                                 |                                 |                                 |  |  |
| 20  | 40                   | 31,870   | 64       | 28,680   | 71       | 26,820   | 76 | 20,600   | 79 | 14,000  |                                 |                                 |                                 |                                 |  |  |
| 25  | 20                   | 24,430   | 58       | 23,830   | 67       | 22,160   | 72 | 18,300   | 76 | 13,500  |                                 |                                 |                                 |                                 |  |  |
| 30  |                      |          | 51       | 20,400   | 62       | 19,080   | 69 | 15,870   | 73 | 12,820  | 77                              | 7,300                           | 77                              | 7,000                           |  |  |
| 35  |                      |          | 43       | 15,980   | 57       | 16,200   | 65 | 13,950   | 70 | 11,380  | 75                              | 7,100                           | 75                              | 6,800                           |  |  |
| 40  |                      |          | 34       | 12,890   | 52       | 13,110   | 61 | 12,350   | 67 | 10,160  | 73                              | 6,620                           | 73                              | 6,240                           |  |  |
| 45  |                      |          | 22       | 10,610   | 46       | 10,840   | 57 | 10,960   | 64 | 9,370   | 71                              | 6,060                           | 71                              | 5,670                           |  |  |
| 50  |                      |          |          |          | 39       | 9,090    | 52 | 9,220    | 60 | 8,430   | 69                              | 5,550                           | 69                              | 5,150                           |  |  |
| 55  |                      |          |          |          | 32       | 7,710    | 48 | 7,830    | 57 | 7,620   | 66                              | 5,100                           | 66                              | 4,690                           |  |  |
| 60  |                      |          |          |          | 22       | 6,580    | 43 | 6,710    | 53 | 6,790   | 64                              | 4,680                           | 64                              | 4,210                           |  |  |
| 65  |                      |          |          |          |          |          | 37 | 5,780    | 49 | 5,860   | 65                              | 4,210                           | 61                              | 3,740                           |  |  |
| 70  |                      |          |          |          |          |          | 31 | 5,000    | 45 | 5,070   | 70                              | 3,800                           | 59                              | 3,330                           |  |  |
| 75  |                      |          |          |          |          |          | 22 | 4,320    | 40 | 4,410   | 75                              | 3,440                           | 56                              | 2,970                           |  |  |
| 80  |                      |          |          |          |          |          | 7  | 3,730    | 35 | 3,830   | 80                              | 3,120                           | 53                              | 2,660                           |  |  |
| 85  |                      |          |          |          |          |          |    |          | 30 | 3,320   | 85                              | 2,840                           | 50                              | 2,370                           |  |  |
| 90  |                      |          |          |          |          |          |    |          | 22 | 2,880   | 90                              | 2,590                           | 47                              | 2,120                           |  |  |
| 95  |                      |          |          |          |          |          |    |          | 11 | 2,470   | 95                              | 2,350                           | 43                              | 1,890                           |  |  |
| 100   |                      |          |          |          |          |          |    |          |    |   | 100                             | 2,150                           | 40                              | 1,690                           |  |  |
| 105   |                      |          |          |          |          |          |    |          |    |   | 105                             | 1,960                           | 36                              | 1,500                           |  |  |
| 110   |                      |          |          |          |          |          |    |          |    |   | 110                             | 1,760                           | 32                              | 1,300                           |  |  |
| 115   |                      |          |          |          |          |          |    |          |    |   | 115                             | 1,500                           | 27                              | 1,090                           |  |  |
| 120   |                      |          |          |          |          |          |    |          |    |   | 120                             | 1,270                           | 21                              | 850                             |  |  |
| 125   |                      |          |          |          |          |          |    |          |    |   | 125                             | 1,040                           | 13                              | 630                             |  |  |
|   |                      | 590 lbs. | 350 lbs. | 270 lbs. | 220 lbs. | 180 lbs. |    |          |    |   | Fixed Jib                       |                                 | Deductions for Stowed Jib       |                                 |  |  |
|   |                      | 890 lbs. | 530 lbs. | 400 lbs. | 330 lbs. | 280 lbs. |    |          |    |   | Telescopic Jib                  |                                 |                                 |                                 |  |  |

**NOTES:**

- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating



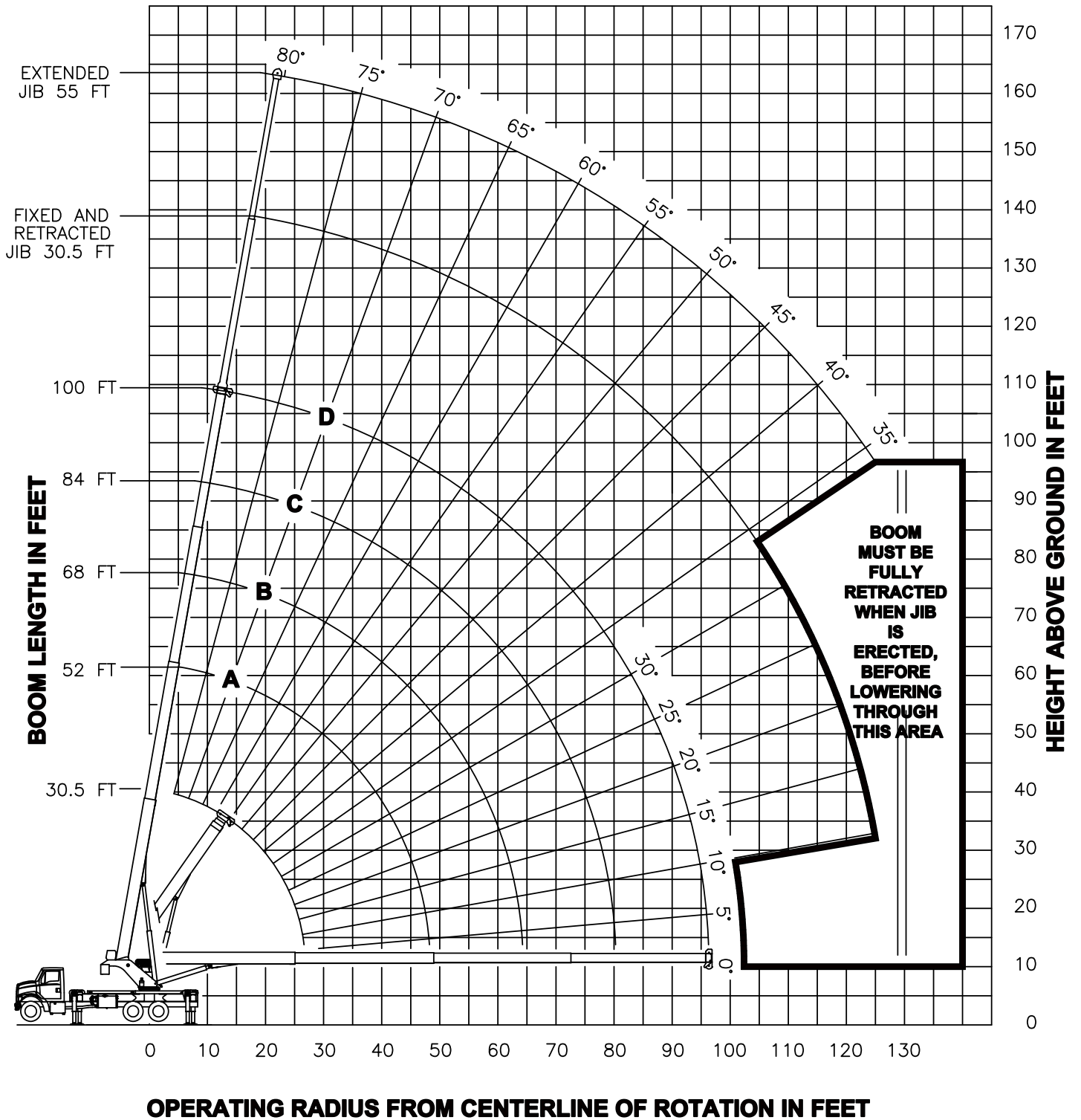
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.





# 40100SHL BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -












Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 40124S LOAD CHART: Main Boom and Jib

Lifting Capacities 5-section Boom 30.8 ft. - 123.5 ft.  
1 or 2-section Jib 31 ft. - 55 ft. - Full Outrigger Extension

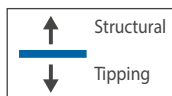
 22 ft. (100%)

 360° Continuous

| MAIN BOOM LMI CODE 1 |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| Jib (ft.)            | 30.833 ft.  |                      | 47 ft. (A)  |                      | 58 ft. (B)  |                      | 69 ft. (C)  |                      | 80 ft. (D)  |                      | 91 ft. (E)  |                      | 102 ft. (F)   |                      | 113 ft. (G)   |                      | 123.5 ft. (H)   |                      |
|                      |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 5                    | 75  | 80,000               |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
| 8                    | 69  | 60,500               |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
| 10                   | 64  | 52,500               | 74  | 25,000               |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
| 12                   | 60  | 46,600               | 72  | 25,000               | 76  | 25,000               | 79  | 25,000               |   |                      |   |                      |   |                      |   |                      |   |                      |
| 15                   | 53  | 39,600               | 68  | 25,000               | 73  | 25,000               | 76  | 25,000               | 79  | 21,500               |   |                      |   |                      |   |                      |   |                      |
| 20                   | 40  | 30,300               | 61  | 25,000               | 67  | 25,000               | 72  | 23,900               | 75  | 19,700               | 78  | 17,100               | 79  | 14,500               |   |                      |   |                      |
| 25                   | 22  | 23,070               | 53  | 23,760               | 62  | 22,840               | 67  | 21,650               | 71  | 18,200               | 74  | 15,850               | 77  | 13,500               | 78  | 10,910               | 80  | 8,450                |
| 30                   |   |                      | 45  | 18,430               | 56  | 18,670               | 63  | 18,720               | 67  | 16,250               | 71  | 14,530               | 74  | 12,820               | 76  | 10,430               | 78  | 8,150                |
| 35                   |   |                      | 36  | 14,200               | 49  | 14,450               | 58  | 14,600               | 63  | 14,540               | 68  | 12,960               | 71  | 11,380               | 73  | 9,540                | 75  | 7,800                |
| 40                   |   |                      | 22  | 10,880               | 42  | 11,190               | 52  | 11,370               | 59  | 11,490               | 64  | 11,570               | 68  | 10,160               | 71  | 8,680                | 73  | 7,280                |
| 45                   |   |                      |   |                      | 34  | 8,820                | 47  | 9,000                | 55  | 9,110                | 60  | 9,190                | 65  | 9,250                | 68  | 8,040                | 71  | 6,780                |
| 50                   |   |                      |   |                      | 23  | 7,030                | 40  | 7,230                | 50  | 7,340                | 56  | 7,420                | 61  | 7,480                | 65  | 7,260                | 68  | 6,160                |
| 55                   |   |                      |   |                      |   |                      | 34  | 5,850                | 45  | 5,970                | 52  | 6,050                | 58  | 6,110                | 62  | 6,150                | 65  | 5,540                |
| 60                   |   |                      |   |                      |   |                      | 24  | 4,750                | 39  | 4,880                | 48  | 4,960                | 54  | 5,020                | 59  | 5,060                | 62  | 5,000                |
| 65                   |   |                      |   |                      |   |                      | 6   | 3,810                | 33  | 3,980                | 43  | 4,070                | 51  | 4,130                | 56  | 4,170                | 59  | 4,200                |
| 70                   |   |                      |   |                      |   |                      |   |                      | 25  | 3,230                | 38  | 3,330                | 47  | 3,390                | 53  | 3,430                | 57  | 3,460                |
| 75                   |   |                      |   |                      |   |                      |   |                      | 12  | 2,580                | 32  | 2,700                | 42  | 2,760                | 49  | 2,800                | 54  | 2,830                |
| 80                   |   |                      |   |                      |   |                      |   |                      |   |                      | 25  | 2,150                | 37  | 2,220                | 45  | 2,270                | 51  | 2,300                |
| 85                   |   |                      |   |                      |   |                      |   |                      |   |                      | 15  | 1,670                | 32  | 1,750                | 41  | 1,800                | 47  | 1,840                |
| 90                   |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      | 26  | 1,340                | 37  | 1,400                | 44  | 1,430                |
| 95                   |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      | 17  | 970                  | 32  | 1,030                | 40  | 1,070                |
| 100                  |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      | 26  | 710                  | 36  | 750                  |
| 105                  |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
| 110                  |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |
| 115                  |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |   |                      |




| DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SFJ = Stowed Fixed Jib, STJ = Stowed Telescopic Jib |          |          |          |          |          |          |          |          |          |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>SFJ</b>   | 450 lbs. | 300 lbs  | 240 lbs. | 200 lbs. | 180 lbs. | 160 lbs. | 140 lbs. | 130 lbs  | 120 lbs. |
| <b>STJ</b>   | 840 lbs  | 560 lbs. | 450 lbs. | 380 lbs. | 330 lbs. | 290 lbs. | 260 lbs. | 230 lbs. | 210 lbs. |






**NOTES:**

- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

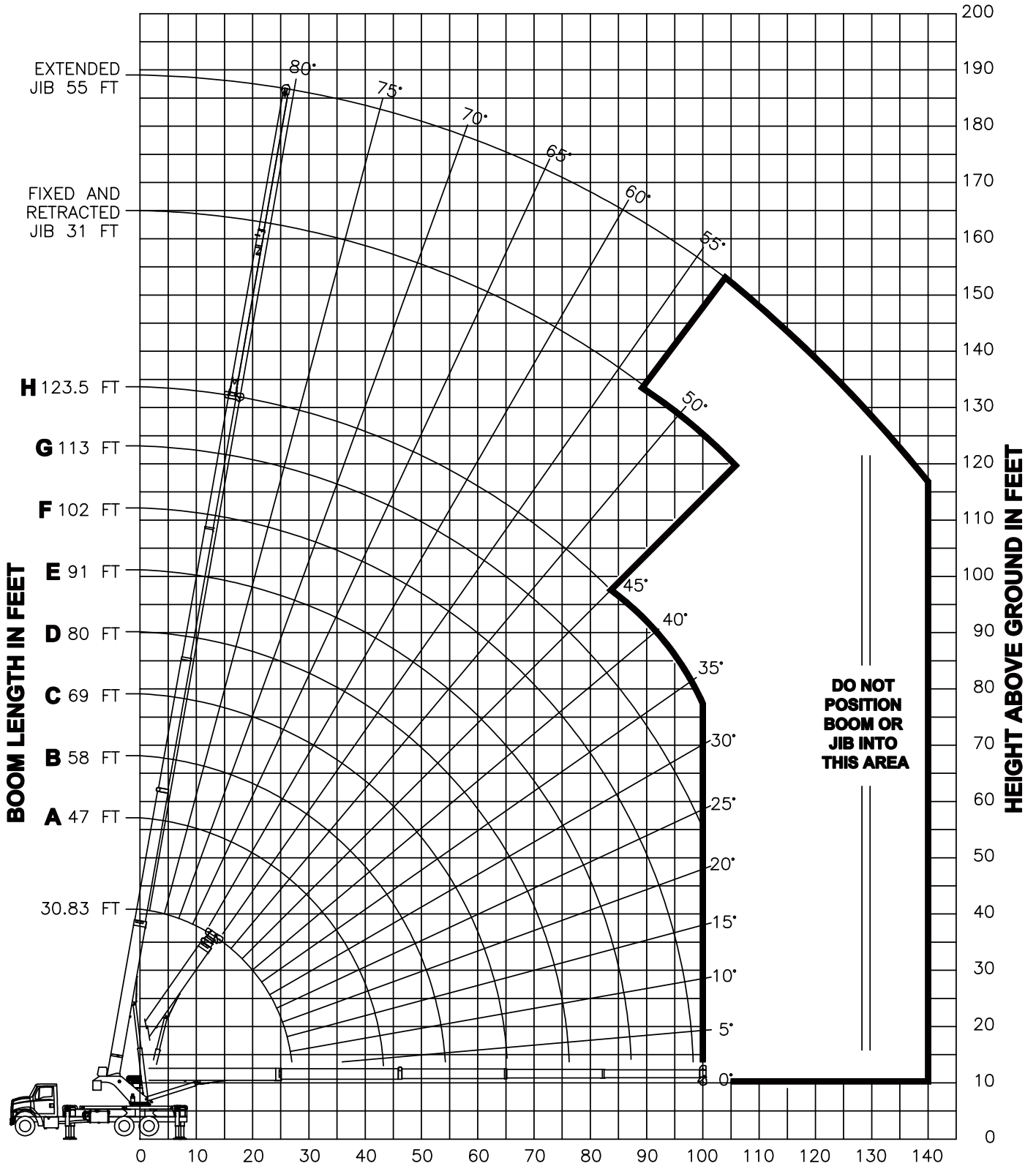
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

| JIB LOAD CAPACITIES |   |                      |   |                      |   |                      |
|---------------------|---|----------------------|---|----------------------|---|----------------------|
| Jib (ft.)           | 31 ft. Fixed Jib LMI code #32   |                      | 30.5 ft. Tele. Jib LMI Code #7  |                      | 55 ft. Tele. Jib LMI code #13   |                      |
|                     |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 30                  | 80  | 4,000                | 79.5  | 3,300                |   |                      |
| 35                  | 78  | 3,850                | 77.5  | 3,300                | 79.5  | 2,450                |
| 40                  | 76  | 3,700                | 76  | 3,300                | 78  | 2,450                |
| 45                  | 74  | 3,550                | 74  | 3,300                | 76.5  | 2,450                |
| 50                  | 72  | 3,400                | 72  | 3,300                | 75  | 2,450                |
| 55                  | 70  | 3,250                | 70.5  | 3,300                | 73  | 2,450                |
| 60                  | 68  | 3,080                | 68.5  | 3,300                | 71.5  | 2,450                |
| 65                  | 66  | 2,910                | 66.5  | 3,070                | 70  | 2,420                |
| 70                  | 64  | 2,750                | 64.5  | 2,750                | 68  | 2,260                |
| 75                  | 62  | 2,600                | 62  | 2,380                | 66  | 2,110                |

| JIB LOAD CAPACITIES |  |                      |   |                      |   |                      |
|---------------------|--|----------------------|---|----------------------|---|----------------------|
| Jib (ft.)           | 31 ft. Fixed Jib LMI code #32  |                      | 30.5 ft. Tele. Jib LMI Code #7  |                      | 55 ft. Tele. Jib LMI code #13   |                      |
|                     |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 80                  | 60   | 2,460                | 60  | 2,050                | 64.5  | 1,940                |
| 85                  | 58   | 2,260                | 58  | 1,660                | 63  | 1,750                |
| 90                  | 55   | 1,850                | 55.5  | 1,250                | 61  | 1,580                |
| 95                  | 53   | 1,490                | 53  | 890                  | 59  | 1,440                |
| 100                 | 51   | 1,170                | 50.5  | 570                  | 57  | 1,260                |
| 105                 | 48   | 880                  |   |                      | 55  | 970                  |
| 110                 | 45   | 620                  |   |                      | 53  | 710                  |
| 115                 |  |                      |   |                      |   |                      |
| 120                 |  |                      |   |                      |   |                      |
| 125                 |  |                      |   |                      |   |                      |

# 40124S BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -



Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.











# 40124SHL LOAD CHART: Main Boom and Jib

Lifting Capacities 5-section Boom 30.8 ft. - 123.5 ft.

 22 ft. (100%)

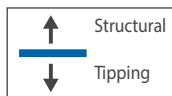
 360° Continuous

1 or 2-section Jib 31 ft. - 55 ft. - Full Outrigger Extension

| MAIN BOOM LMI CODE 1   |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      |   |                      |
|--|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|--|----------------------|---|----------------------|---|----------------------|---|----------------------|
| <br>(ft.) | 30.8 ft.  |                      | 47 ft. (A)  |                      | 58 ft. (B)  |                      | 69 ft. (C)  |                      | 80 ft. (D)  |                      | 91 ft. (E)   |                      | 102 ft. (F)   |                      | 113 ft. (G)   |                      | 123.5 ft. (H)   |                      |
|  |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 5  | 75  | 80,000               |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      |   |                      |
| 8  | 69  | 60,500               |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      |   |                      |
| 10   | 64  | 52,500               | 74  | 25,000               |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      |   |                      |
| 12   | 60  | 46,600               | 72  | 25,000               | 76  | 25,000               | 79  | 25,000               |   |                      |  |                      |   |                      |   |                      |   |                      |
| 15   | 53  | 39,600               | 68  | 25,000               | 73  | 25,000               | 76  | 25,000               | 79  | 21,500               |  |                      |   |                      |   |                      |   |                      |
| 20   | 40  | 31,330               | 61  | 25,000               | 67  | 25,000               | 72  | 23,900               | 75  | 19,700               | 78   | 17,100               | 79  | 14,500               |   |                      |   |                      |
| 25   | 22  | 24,100               | 53  | 24,010               | 62  | 22,840               | 67  | 21,650               | 71  | 18,200               | 74   | 15,850               | 77  | 13,500               | 78  | 10,910               | 80  | 8,450                |
| 30   |   |                      | 45  | 20,260               | 56  | 19,550               | 63  | 18,720               | 67  | 16,250               | 71   | 14,530               | 74  | 12,820               | 76  | 10,430               | 78  | 8,150                |
| 35   |   |                      | 36  | 15,850               | 49  | 16,100               | 58  | 16,130               | 63  | 14,540               | 68   | 12,960               | 71  | 11,380               | 73  | 9,540                | 75  | 7,800                |
| 40   |   |                      | 22  | 12,630               | 42  | 12,900               | 52  | 13,060               | 59  | 13,070               | 64   | 11,610               | 68  | 10,160               | 71  | 8,680                | 73  | 7,280                |
| 45   |   |                      |   |                      | 34  | 10,540               | 47  | 10,700               | 55  | 10,800               | 60   | 10,600               | 65  | 9,370                | 68  | 8,040                | 71  | 6,780                |
| 50   |   |                      |   |                      | 23  | 8,720                | 40  | 8,890                | 50  | 9,000                | 56   | 9,070                | 61  | 8,430                | 65  | 7,260                | 68  | 6,160                |
| 55   |   |                      |   |                      |   |                      | 34  | 7,460                | 45  | 7,570                | 52   | 7,640                | 58  | 7,620                | 62  | 6,550                | 65  | 5,540                |
| 60   |   |                      |   |                      |   |                      | 24  | 6,280                | 39  | 6,400                | 48   | 6,480                | 54  | 6,530                | 59  | 5,930                | 62  | 5,000                |
| 65   |   |                      |   |                      |   |                      | 6   | 5,270                | 33  | 5,430                | 43   | 5,510                | 51  | 5,570                | 56  | 5,380                | 59  | 4,520                |
| 70   |   |                      |   |                      |   |                      |   |                      | 25  | 4,610                | 38   | 4,700                | 47  | 4,760                | 53  | 4,790                | 57  | 4,090                |
| 75   |   |                      |   |                      |   |                      |   |                      | 12  | 3,900                | 32   | 4,010                | 42  | 4,060                | 49  | 4,100                | 54  | 3,700                |
| 80   |   |                      |   |                      |   |                      |   |                      |   |                      | 25   | 3,400                | 37  | 3,470                | 45  | 3,510                | 51  | 3,350                |
| 85   |   |                      |   |                      |   |                      |   |                      |   |                      | 15   | 2,860                | 32  | 2,940                | 41  | 2,990                | 47  | 3,020                |
| 90   |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      | 26  | 2,480                | 37  | 2,530                | 44  | 2,560                |
| 95   |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      | 17  | 2,060                | 32  | 2,120                | 40  | 2,150                |
| 100  |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      | 26  | 1,750                | 36  | 1,790                |
| 105  |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      | 18  | 1,410                | 31  | 1,460                |
| 110  |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      | 26  | 1,160                |
| 115  |   |                      |   |                      |   |                      |   |                      |   |                      |  |                      |   |                      |   |                      | 19  | 880                  |

DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SFJ = Stowed Fixed Jib, STJ = Stowed Telescopic Jib





|            |          |          |          |          |          |          |          |          |          |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>SFJ</b> | 450 lbs. | 300 lbs  | 240 lbs. | 200 lbs. | 180 lbs. | 160 lbs. | 140 lbs. | 130 lbs  | 120 lbs. |
| <b>STJ</b> | 840 lbs  | 560 lbs. | 450 lbs. | 380 lbs. | 330 lbs. | 290 lbs. | 260 lbs. | 230 lbs. | 210 lbs. |







**NOTES:**

- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

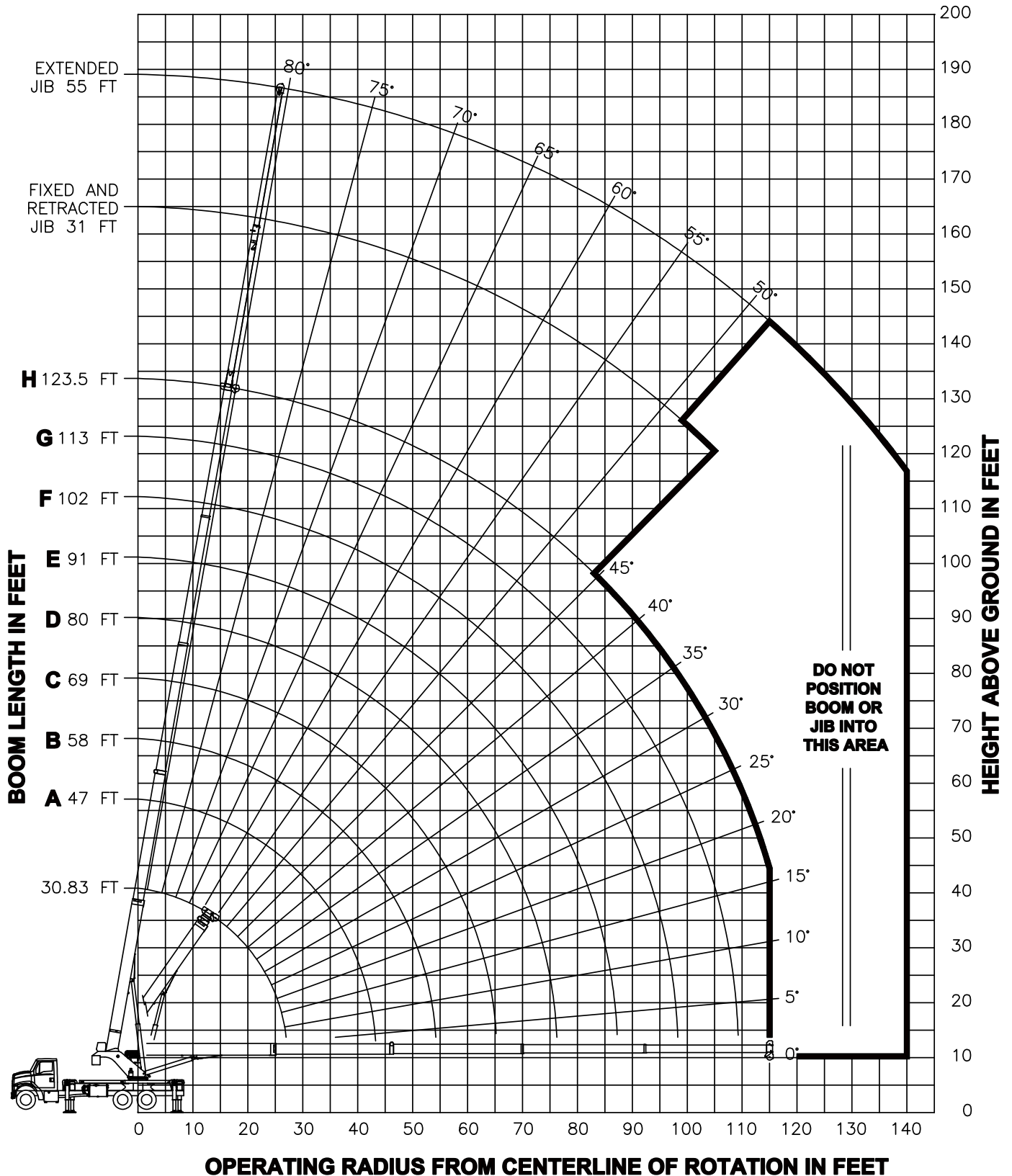
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

| JIB LOAD CAPACITIES  |   |                      |   |                      |   |                      |
|--|---|----------------------|---|----------------------|---|----------------------|
| <br>(ft.) | 31 ft. Fixed Jib LMI code #32   |                      | 30.5 ft. Tele. Jib LMI Code #7  |                      | 55 ft. Tele. Jib LMI code #13   |                      |
|  |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 30   | 80  | 4,000                | 79.5  | 3,300                |   |                      |
| 35   | 78  | 3,850                | 77.5  | 3,300                | 79.5  | 2,450                |
| 40   | 76  | 3,700                | 76  | 3,300                | 78  | 2,450                |
| 45   | 74  | 3,550                | 74  | 3,300                | 76.5  | 2,450                |
| 50   | 72  | 3,400                | 72  | 3,300                | 75  | 2,450                |
| 55   | 70  | 3,250                | 70.5  | 3,300                | 73  | 2,450                |
| 60   | 68  | 3,080                | 68.5  | 3,300                | 71.5  | 2,450                |
| 65   | 66  | 2,910                | 66.5  | 3,070                | 70  | 2,420                |
| 70   | 64  | 2,750                | 64.5  | 2,750                | 68  | 2,260                |
| 75   | 62  | 2,600                | 62  | 2,380                | 66  | 2,110                |

| JIB LOAD CAPACITIES   |   |                      |   |                      |   |                      |
|---|---|----------------------|---|----------------------|---|----------------------|
| <br>(ft.) | 31 ft. Fixed Jib LMI code #32   |                      | 30.5 ft. Tele. Jib LMI Code #7  |                      | 55 ft. Tele. Jib LMI code #13   |                      |
|   |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |  | Load Capacity (lbs.) |
| 80  | 60  | 2,460                | 60  | 2,050                | 64.5  | 1,940                |
| 85  | 58  | 2,320                | 58  | 1,760                | 63  | 1,750                |
| 90  | 55  | 2,170                | 55.5  | 1,500                | 61  | 1,580                |
| 95  | 53  | 1,930                | 53  | 1,260                | 59  | 1,440                |
| 100   | 51  | 1,720                | 50.5  | 1,050                | 57  | 1,280                |
| 105   | 48  | 1,530                | 48  | 850                  | 55  | 1,100                |
| 110   | 45  | 1,350                |   |                      | 53  | 930                  |
| 115   | 43  | 1,200                |   |                      | 51  | 770                  |
| 120   | 40  | 1,020                |   |                      |   |                      |
| 125   | 36  | 800                  |   |                      |   |                      |

# 40124SHL BOOM DIAGRAM

## - FULLY EXTENDED OUTRIGGER CONFIGURATION -

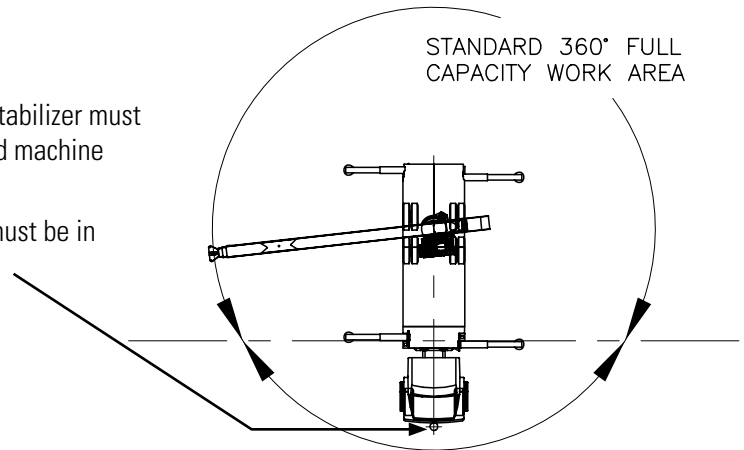


Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# AREA OF OPERATION

In order to take advantage of full 360° rotation, the front bumper stabilizer must be set in accordance to the manual before working in this area and machine must be level.

If a front bumper stabilizer was not supplied, then the front tires must be in contact with the ground before working in this area.



## Deductions from rated loads for load handling devices supplied by Manitex

|                           |                                  |
|---------------------------|----------------------------------|
| Auxiliary block           | 50 lbs. (22.7 kg)                |
| Overhaul ball             | See overhaul ball mfr. nameplate |
| Load blocks               | See load block mfr. nameplate    |
| Hose reel                 | 260 lbs. (117.9 kg)              |
| Swing around jib (stowed) | See load chart                   |

**WARNING:** Lifting off the main boom point while the jib is erected is not intended nor approved.

# REEVING DIAGRAM

| ALLOWABLE LINE PULL |             |             |             |             |             |             |             | <b>WARNING</b>   |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| 1 PART LINE         | 2 PART LINE | 3 PART LINE | 4 PART LINE | 5 PART LINE | 6 PART LINE | 7 PART LINE | 8 PART LINE |  |
|                     |             |             |             |             |             |             |             | <p>ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.</p> <p>REFER TO THE OWNER'S MANUAL.</p> <p>KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.</p> |
| 9500 LBS            | 19000 LBS   | 28500 LBS   | 38000 LBS   | 47500 LBS   | 57000 LBS   | 66500 LBS   | 76000 LBS   |  |
| 10000 LBS           | 20000 LBS   | 30000 LBS   | 40000 LBS   | 50000 LBS   | 60000 LBS   | 70000 LBS   | 80000 LBS   | 5/8" 6 X 25 IWRC (3.5:1 SF) – 35000 LBS MIN BREAKING STRENGTH  |

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.



# LMI OPERATING CODES

| Code | Crane Configuration                                 | Outrigger Configuration | Area of Operation |
|------|---|-------------------------|-------------------|
| #1   | Main Boom   | Fully Extended          | Full 360°         |
| #32  | Fixed Jib   | Fully Extended          | Full 360°         |
| #7   | Telescopic Jib - Retracted                          | Fully Extended          | Full 360°         |
| #13  | Telescopic Jib - Extended                           | Fully Extended          | Full 360°         |
| #25  | Personnel lifting platform on main boom             | Fully Extended          | Full 360°         |
| #33  | Personnel lifting platform on fixed jib             | Fully Extended          | Full 360°         |
| #26  | Personnel lifting platform on tele. jib - retracted | Fully Extended          | Full 360°         |
| #29  | Personnel lifting platform on tele. jib - extended  | Fully Extended          | Full 360°         |
| #4   | Main Boom   | Mid Extension           | Full 360°         |
| #34  | Fixed Jib   | Mid Extension           | Full 360°         |
| #19  | Telescopic Jib - retracted                          | Mid Extension           | Full 360°         |
| #22  | Telescopic Jib - extended                           | Mid Extension           | Full 360°         |
| #5   | Main Boom   | Fully Retracted         | Full 360°         |


## Warning

1. The operator must read and understand the owner’s manual before operating the crane.
2. Positioning or operation of crane beyond areas shown on these charts is not intended or approved except where specified in owner’s manual.
3. Loaded boom angles at specified boom lengths give only an approximation of the operating radius. The boom angle before loading should be greater to account for deflections. Do not exceed the operating radius for rated loads.
4. The operating radius shown in the jib rating chart is for fully extended boom only. When boom is not fully extended, use only loaded boom angle to determine load rating of jib.
5. For boom angles not shown on jib load rating chart, use rating of next lower boom angle.
6. For boom lengths not shown, use rating of next shorter or longer boom length, whichever is less. For radii not shown, use rating of next longer radius.
7. Crane load ratings on outriggers are based on freely suspended loads with the machine leveled and standing on a firm uniform supporting surface. No attempt shall be made to move a load horizontally on the ground in any direction.
8. Practical working loads depend on supporting surface, wind, and other factors affecting stability such as hazardous surroundings, experience of personnel, and proper handling, all of which must be taken into account by the operator.
9. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, and boom lubrication. It is safe to attempt to telescope any load within the limits of the load rating chart. Boom must be fully retracted against boom stops at all times when lifting minimum boom length capacity loads.
10. Lifting off the main boom point while the swing around jib is erected is not intended or approved.

## Information

1. Deductions must be made from rated loads for stowed jib, optional attachments, hooks, and load blocks (See deduction chart on page 8). Weights of slings and all other load handling devices shall be considered a part of the load.
2. Load ratings above the blue line are structurally limited capacities. Load ratings below the blue line are stability limited capacities and do not exceed 85% of tipping.

## Definitions

1. Operating radius is the horizontal distance from the axis of rotation to the center of the vertical hoist line or tackle with load applied.
2. Loaded boom angle as shown in the column head by  is the included angle between the horizontal and longitudinal axes of the boom base after lifting rated load at rated radius.

# TECHNICAL DESCRIPTIONS

## Boom



Boom lengths: Proportional boom

- 3-section 77 ft. (23,5 m)
- 4-section 100 ft. (30,1 m)
- 5-section 124 ft. (37,8 m)

5-sheave quick reeve boom point

Self lubricating slider pads



Max. tip height 4077S/SHL: 86 ft. (26,2 m)

Max. tip height 40100S/SHL: 108.7 ft. (33,1)

Max. tip height 40124S/SHL: 131.8 ft. (40,2)



Boom angle (min/max): -6° / 80°

## Rotation



Ball-bearing swing circle with external gear

Double-reduction planetary gearbox driven by hydraulic motor



Slewing brake: Spring-applied pressure released automatic brake



Slewing speed: 1.5 - 2 rpm. (nominal)

Boom rotation: 360° continuous

## Outriggers



Outriggers: Out-and-down style

FBS - Front Bumper Stabilizer (optional)

Outrigger monitoring system (for verification only)

Outrigger motion alarm

Full extension

- Front and rear: 22 ft. (6,7 m)

Middle extension

- Front and rear: 14.3 ft. (4,4 m)

Full retraction

- Front and rear: 7.1 ft. (2,2 m)



ROC Solid - Radio operated handheld controller for outrigger and FBS setup

## Operator aids



- Wired LMI with crane function cut-offs for overload protection
- Wired anti-two block system

## Hoist, Rope and Hook



Maximum theoretical line speed:

453 fpm (138 mpm)



Maximum theoretical bottom-layer line pull:

13,050 lbs. (5,919 kg)



Main winch cable diameter: 5/8 in. (15,9 mm) rotation resistant



Line length: 380 ft. (115,8 m)



Main winch: Bent axis 2-speed hydraulic motor (activated electrically)



Load block: 5T (4.5 mt) capacity hook with heavy-duty swivel and weight is provided for single line operation.

## Hydraulics



8-bolt direct mounted PTO and SAE C output (factory mounted units only)

3-section vane pump, SAE C input

Hydraulic reservoir capacity:

115 gal. (435 L)

Pump sections @ 2000 rpm with 100 psi

- Shaft end pump: 41.67 gpm (158 lpm)
- Center pump: 28.3 gpm (107 lpm)
- Cover end pump: 11.7 gpm (44 lpm)

## Tiltable Cab/Cab Controls



Standard features:

Curved glass, 0° to 20° cab tilt, Automotive door, heated cloth seat, 8 seat adjustments, lumbar support and adjustable head rest, sliding windows, rear pop out window, top hinged hatch, standard diesel fired heater, retractable sun screen, 12 volt DC outlet, E-coated cab (10 year rust warranty)



Controls:

PLC crane controller, CANBUS communication, J1939 truck engine communication capability, electronic hand and foot throttle, Hirschmann/PAT iScout D3 LMI system

# OPTIONS

## Boom

### Max. Tip Height



- 4077S and 4077SHL
- Max. tip height: 86 ft. (26,2 m)
- 40100S & 40100SHL
- Max tip height: 108.7 ft. (33,1m)
- 40124S & 40124SHL
- Max. tip height: 131.8 ft. (40,2 m)

### Jibs

- 40100S, 40100SHL, 40124S & 40124SHL
- 1-section fixed jib: 30.5 ft. (9,3 m)
  - 2-sections telescopic jib: 30.5 ft (9,3 m) - 55 ft. (16,8 m)

### Max. Tip Height with Extension

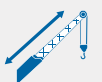


- 40100S & 40100SHL
- Max tip height with extension: 163.5 ft. (49,8 m)
  - Max tip height with extension retracted: 139.3 ft. (42,4 m)
- 40124S & 40124SHL
- Max. tip height with extension: 186.7 ft. (56,9 m)
  - Max. tip height with extension retracted: 163 ft. (49,7 m)

### Max. Boom Length



- 4077S
- Max. boom length 76.8 ft. (23,4 m)



- 40100S
- Max. boom length with extension: 155 ft. (47,2 m)
- 40124S & 40124SHL
- Max boom length with extension: 178.5 ft. (54,4 m)



- 40100S
- Max. boom length with extension retracted: 130.5 ft. (39,8 m)
- 40124S & 40124SHL
- Max boom length with extension retracted: 154 ft. (46,9 m)

### Bulkhead

24 in. (607 mm) bulkhead

## Hoist and Hook



- Auxiliary winch same as main winch, includes rooster sheave
- Wireline options available
- 2nd overhaul ball available
- 3rd wrap limiter main and auxiliary winch



- Auxiliary lower sheave block for 2-8 part lines
- Load blocks 1-3, 1-6, 2-6 part lines

## Hydraulics



- Hose reel – boom mounted.
- Front Bumper Stabilizer (FBS)

## Cab



- Air conditioner
- Engine monitoring system
- Video camera (1 or 2)
- Cab weather band radio system
- Wireless wind speed indicator

## Operator Aids



- 4-function radio remote crane control system either with paddles or joy sticks
- 900 Mhz
  - 433 Mhz
- Remote Winch Control System for main and auxiliary winches

## 2-person Basket



- Consult Manitex for specific application and rating
- 2-person gravity level basket
  - 2-person rotating steel basket
  - 2-person quick attach rotating basket

## Tool Boxes & Flatbed

- 24 in. L x 18 in. W x 18 in. H  
(610 mm L x 457 mm W x 457 mm H)
- 48 in. L x 24 in. W x 24 in. H  
(1,219 mm L x 610 mm W x 610 mm H)
- 8 ft. (2,4 m) flatbed - wood or steel
- 10 ft. (3 m) flatbed - wood or steel



# TC400

40-ton (36,3 mt) TELESCOPIC CRANE  
TC400 SERIES PRODUCT GUIDE



UPTime is the Manitest commitment to complete support of thousands of units working every day.

---

**MANITEX**  
3000 South Austin Avenue  
Georgetown, Texas 78626  
1-877-314-3390 | [www.Manitest.com](http://www.Manitest.com)