





SHL Heavy Fixed Jib (Type B2)

SHL Luffing Jib

SHL	Heavy Fixed Jib (Type B2)	Luffing Jib
 		
Max. Lifting Capacity:	246,600 lbs x 65.7 ft	440,900 lbs x 47.2 ft
Max. Boom Length:	—	—
Max. Combination:	256 ft + 59 ft	276 ft + 276 ft

## CONTENTS

Configuration .....	1
Specifications .....	5
General Dimensions .....	7

## STANDARD

Boom and Jib Arrangements .....	9
Working Ranges .....	12
Crane Boom Supplemental Data .....	19
Heavy Fixed Jib Supplemental Data .....	21
Luffing Jib Supplemental Data .....	23
Heavy Duty Crane Boom Lifting Capacities .....	25
Heavy Fixed Jib Lifting Capacities .....	27
Long Boom Lifting Capacities .....	28
Luffing Boom Lifting Capacities .....	29
Luffing Jib Lifting Capacities .....	31

## HEAVY LIFT

Boom and Jib Arrangements .....	37
Working Ranges .....	40
Heavy Duty Crane Boom Lifting Capacities .....	47
Long Boom Lifting Capacities .....	49
Heavy Fixed Jib Lifting Capacities .....	50
Luffing Boom Lifting Capacities .....	51
Luffing Jib Lifting Capacities .....	53

## SUPER HEAVY LIFT

Boom and Jib Arrangements .....	59
Working Ranges .....	62
Heavy Duty Crane Boom Lifting Capacities .....	69
Long Boom Lifting Capacities .....	71
Heavy Fixed Jib Lifting Capacities .....	73
Luffing Boom Lifting Capacities .....	74
Luffing Jib Lifting Capacities .....	77

Transportation Plan .....	95
Parts and Attachments .....	97

# SPECIFICATIONS



## Power Plant

**Model:** Hino diesel engine E13C-VV

**Type:** Water-cooled, direct fuel injection, with turbocharger  
Complies with US EPA Interim Tier 4 / NRMM (Europe) Stage III B.

**Displacement:** 788 cu in (12,913 liters)

**Rated Power:** 448 PS/1,800 rpm

**Max. torque:** 1,930 N·m/1,300 min<sup>-1</sup>

**Cooling system:** Liquid, recirculating bypass

**Starter:** 24 V/6 kW

**Radiator:** Corrugated type core, thermostatically controlled

**Air cleaner:** Dry type with replaceable paper element

**Throttle:** Twist grip type hand throttle, electrically actuated

**Fuel filter:** Replaceable paper element with water separator.

**Batteries:** Two 12V x 136Ah/5HR capacity batteries, parallel connected.

**Fuel tank capacity:** 158 US gal



## Hydraulic System

Seven variable displacement piston pumps are driven by heavy-duty pump drive. Two variable displacement pumps are used in H1 (main hook hoist) and right hand side propel circuit. Two variable displacement pumps are used in H2 (auxiliary hook hoist) and left hand side propel circuit. One of the other two pumps is used in W1 (boom), W2 (jib) or W3 (SHL mast) hoist circuit, and the other is used in the swing circuit.

One displacement piston pump is used for W1 or W3 hoist speed up.

**Control:** Full-flow hydraulic control system for infinitely variable pressure to all winches, propel and swing.

Controls respond instantly to the touch, delivering smooth function operation.

**Cooling:** Oil-to-air heat exchanger (plate-fin type)

**Filtration:** Full-flow and bypass type with replaceable element

**Max. relief valve pressure:** 32.0 MPa {326 kgf/cm<sup>2</sup>}

**Hydraulic Tank capacity:** 188 US gal



## Boom Hoisting System

Powered by a hydraulic motor through a planetary reducer.

**Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the boom hoist motor and operated through a counter-balance valve.

**Drum lock:** External ratchet for locking drum.

**Drum:** Double drum, grooved for 28 mm dia. wire rope.

**Line speed:** Single line on first drum layer

**Hoisting/Lowering:** 91~6 ft/min

**Boom hoist reeving:** 30 parts of 28 mm/min dia. high strength wire rope

**Boom backstops:** Required for all boom lengths



## Load Hoist System

H1 and H2 drums for load hoist powered by a hydraulic variable plunger motors, driven through planetary reducers.

**Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the hoist motor and operated through a counter-balance valve.

**Drum lock:** External ratchet for locking drum.

**Drums:**

**H1 and H2:**

25'2" (640 mm) P.C.D. x 53'8" (1,367 mm) Lg. wide drum, grooved for 28 mm wire rope. Rope capacity is 2,723 ft storage length.

Note: Rope lengths listed above denote drum capacity and may differ from actual rope lengths supplied when machinery is shipped.

**Line speed:** 360 to 10 ft/min

Single line on the first layer

**Rated line pull:** 30,864 lbs



## Swing System

Swing unit is powered by hydraulic motor driving spur gears through planetary reducers (4 sets), the swing system provides 360° rotation.

**Swing parking brakes:** A spring-set, hydraulically released multiple-disc brake is mounted on swing motor.

**Swing circle:** Triple-row roller bearing with an integral internally cut swing gear.

**Swing speed:** 0.9 rpm {0.9 min<sup>-1</sup>}



## Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine with low noise level.



## Cab & Control

Totally enclosed, full vision cab with safety glass, fully adjustable, can be tilted up to 15 degree, high backed seat with a head-rest and armrests, and intermittent wiper and window washer (sky light and front window.)

**Cab fittings:**

Air conditioner, convenient compartment (for tool), cup holder, ashtray, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, foot-rest, shoe tray

**Controls:**

Five adjustable levers for all winches and swing controls



## Lower Structure

Steel-welded carbody with axles. Crawler assemblies are designed with quick disconnect feature for individual removal as a unit from axles. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

**Crawler drive:** Two independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor propelling a driving tumbler through a planetary gear box. Hydraulic motor and gear box are built into the crawler side frame within the shoe width.

**Crawler brakes:** Spring-set, hydraulically released parking brakes are built into each propel drive.

**Steering mechanism:** A hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite directions).

**Track rollers:** Sealed track rollers.

**Shoes (flat):** 59" wide each crawler

**Max. travel speed:** 0.62/0.4 mph

**Max. gradeability:** 20%



## Weight

Including base machine, counterweights = 440,900 lbs, carbody weights = 110,200 lbs, 79 ft standard heavy duty boom and 992,000 lbs hook block. Not include quick connection device and upper translifter.

**Weight:** 979,000 lbs

**Ground pressure:** 147 kPa {1.5 kgf/cm<sup>2</sup>}



## Attachment

### Boom and Jib:

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections.

### Boom and Jib Length

	Min. Length (Min. Combination)	Max. Length (Max. Combination)
<b>STANDARD</b>		
Heavy Duty Boom	79 ft	276 ft
Luffing Boom	98 ft	276 ft
Long Boom	295 ft	354 ft
Heavy Fixed Jib	217 ft + 59 ft	256 ft + 59 ft
Luffing Jib	98 ft + 79 ft	197 ft + 236 ft
<b>HEAVY LIFT</b>		
Heavy Duty Boom	118 ft	276 ft
Luffing Boom	118 ft	276 ft
Long Boom	295 ft	354 ft
Heavy Fixed Jib	217 ft + 59 ft	256 ft + 59 ft
Luffing Jib	118 ft + 79 ft	217 ft + 236 ft
<b>SUPER HEAVY LIFT</b>		
Heavy Duty Boom	118 ft	276 ft
Luffing Boom	118 ft	276 ft
Long Boom	295 ft	413 ft
Heavy Fixed Jib	217 ft + 59 ft	256 ft + 59 ft
Luffing Jib	118 ft + 79 ft	276 ft + 276 ft

## Main Specifications (Model: SL6000G)

Lift Enhancer	STD	HL	SHL
HL Mast	-	98 ft	98 ft
Additional Weight	-	-	~551,000 lbs
<b>Heavy Duty Crane Boom</b>			
Max. Lifting Capacity	992,000 lbs 21.9 ft	815,600 lbs 27.2 ft	1,212,500 lbs 27.2 ft
Length	79 ~ 276 ft	118 ~ 276 ft	118 ~ 276 ft
<b>Luffing Boom</b>			
Max. Lifting Capacity	661,300 lbs 32 ft	661,300 lbs 28 ft	661,300 lbs 65 ft
Length	98 ~ 276 ft	118 ~ 276 ft	118 ~ 276 ft
<b>Long Boom</b>			
Max. Lifting Capacity	216,000 lbs 55 ft	216,000 lbs 65 ft	216,000 lbs 95 ft
Length	295 ~ 354 ft	295 ~ 354 ft	295 ~ 413 ft
<b>Heavy Fixed Jib</b>			
	Type A	Type B	Type B2
Max. Lifting Capacity	231,500 lbs 65 ft	264,600 lbs 65 ft	264,600 lbs 65.7 ft
Max. Combination (Boom)	256 ft	256 ft	256 ft
(Jib)	59 ft	59 ft	59 ft
<b>Luffing Jib</b>			
Max. Lifting Capacity	395,200 lbs 50 ft	440,900 lbs 47.2 ft	440,900 lbs 47.2 ft
Max. Combination (Boom)	98 ~ 197 ft	118 ~ 217 ft	118 ~ 276 ft
(Jib)	79 ~ 236 ft	79 ~ 236 ft	79 ~ 276 ft
Luffing Angle	66° ~ 86°		

### Power Plant

Model	Hino E13C-VV
Engine Output	448 PS/1,800 rpm
Fuel Tank Capacity	158 US gal

### Hoist Winch (H1, H2)

Max. Line Speed	360 to 10 ft (1st layer)
Rated Line Pull (Single line)	30,864 lbs
Wire Rope Diameter	28 mm (inch)
Wire Rope Length	2,723 ft

### Working Speed

Swing	0.9 rpm {min <sup>-1</sup> }
Travel	0.62/0.4 miles

### Hydraulic System

Pumps	7 variable displacement
Max. Pressure	4,620 psi
Hydraulic Tank Capacity	188 US gal

### Weight

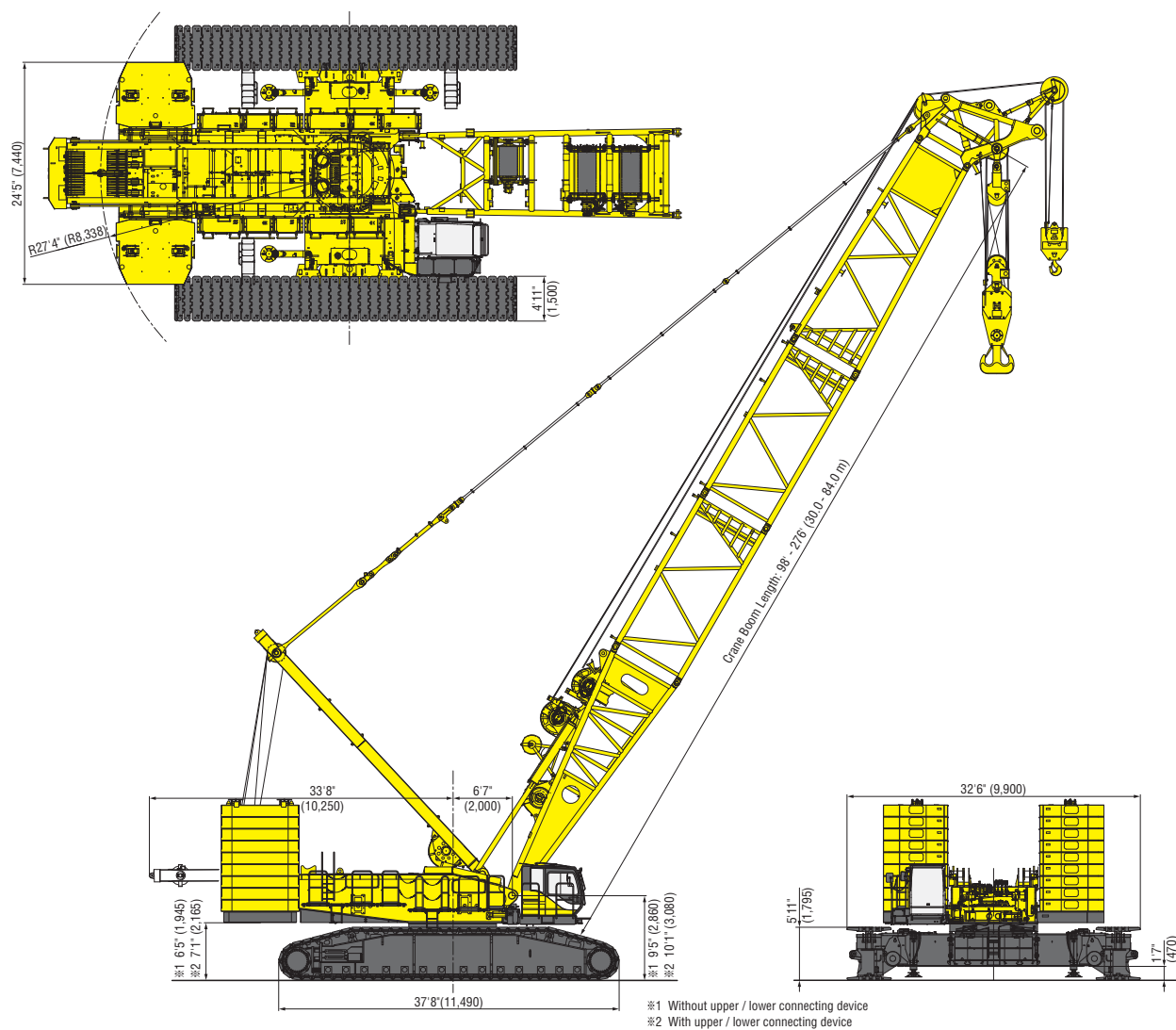
Working Weight*1	Approx. 979,000 lbs*1
Ground Pressure*1	20.7 psi*1
Counterweight	Upper: 441,000 lbs Carbody Weight: 110,000 lbs

\*1 Including base machine, counterweights = 440,900 lbs, carbody weights = 111,200 lbs, 79 ft boom with heavy boom tip and 992,000 lbs hook block. Not include quick connection device and upper translifter.

# GENERAL DIMENSIONS

## Crane Boom

Unit: ft-in (mm)



## Lift Enhancer

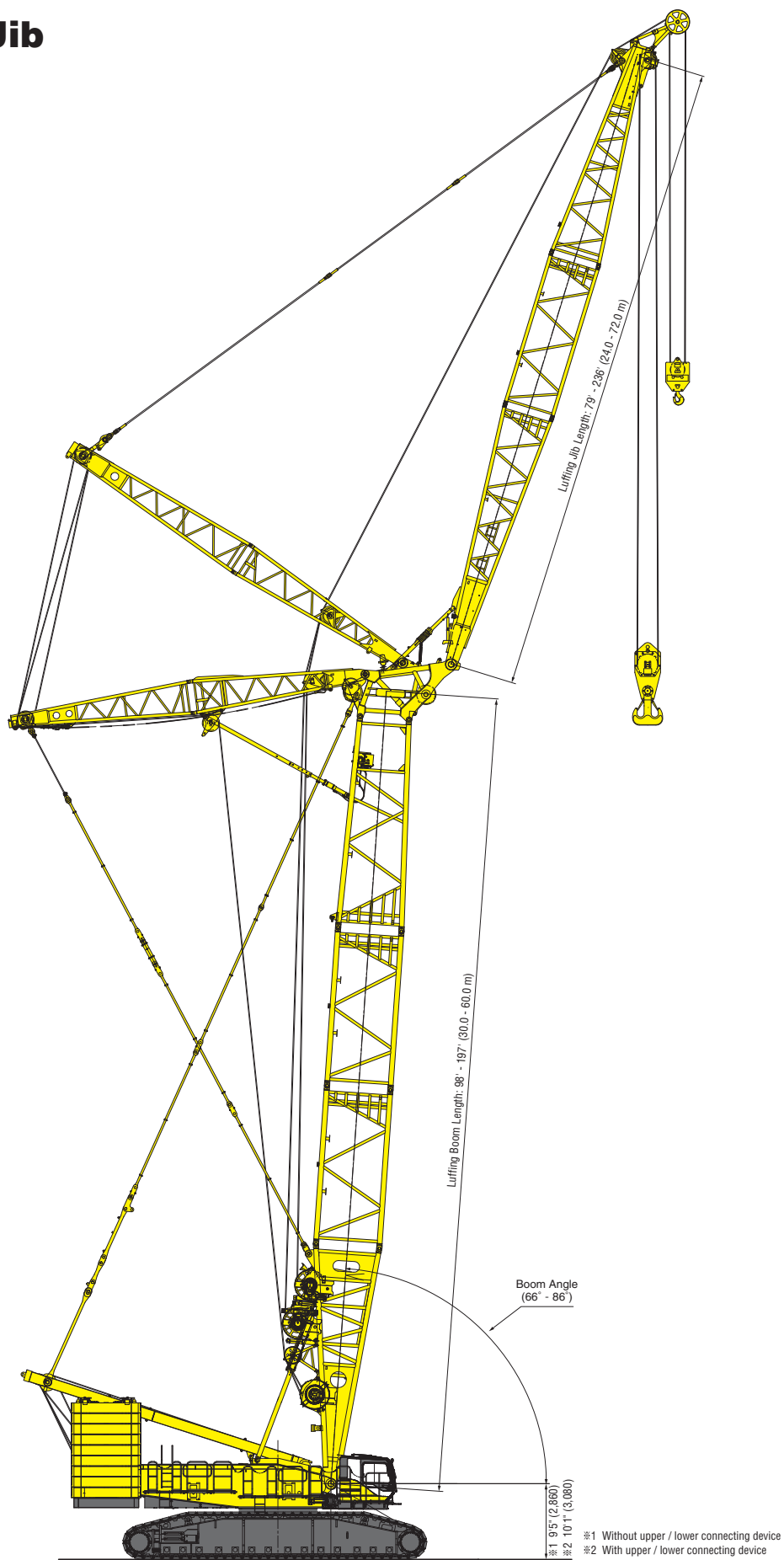


SHL CRANE

SHL LUFFING

## Luffing Jib

Unit: ft-in (mm)



## BOOM AND JIB ARRANGEMENTS

### Heavy Duty Crane Boom Arrangements

Boom length ft (m)	Boom arrangement
79 (24)	
98 (30)	※ 
117 (36)	※
138 (42)	※ 
157 (48)	※
177 (54)	※ 
197 (60)	※
217 (66)	※ 
236 (72)	※
256 (78)	※ 
276 (84)	※

Symbol	Boom Length	Remarks
	29.5 ft (9.0 m)	Boom Base
	26.2 ft (8.0 m)	Tapered Boom
	19.7 ft (6.0 m)	Insert Boom
	39.4 ft (12.0 m)	Insert Boom
	3.3 ft (1.0 m)	Boom Top

※ indicates the most flexible combination of insert heavy duty booms, which can be modified to form all shorter heavy duty boom arrangements.

※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.



## Luffing Boom Arrangements for Crane

Boom length ft (m)	Boom arrangement
98 (30)	※
118 (36)	※
138 (42)	※
157 (48)	※
177 (54)	※
197 (60)	※
217 (66)	※
236 (72)	※
256 (78)	※
276 (84)	※

Symbol	Boom Length	Remarks
	29.5 ft (9.0 m)	Boom Base
	26.2 ft (8.0 m)	Tapered Boom
	19.7 ft (6.0 m)	Insert Boom
	39.4 ft (12.0 m)	Insert Boom
	3.3 ft (1.0 m)	Boom Top

※ indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.

※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.

## Long Boom Arrangements

Boom length ft (m)	Boom arrangement
295 (90)	
315 (96)	※
335 (102)	※
354 (108)	※

Symbol	Boom Length	Remarks
	29.5 ft (9.0 m)	Boom Base
	26.2 ft (8.0 m)	Tapered Boom
	19.7 ft (6.0 m)	Insert Boom
	39.4 ft (12.0 m)	Insert Boom
	16.4 ft (5.0 m)	Luffing Insert Jib
	19.7 ft (6.0 m)	Luffing Insert Jib
	39.4 ft (12.0 m)	Luffing Insert Jib
	26.2 ft (8.0 m)	Jib Top

※ indicates the most flexible combination of insert long booms, which can be modified to form all shorter long boom arrangements.

※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.

## BOOM AND JIB ARRANGEMENTS

### Heavy Fixed Jib Boom Arrangements

Boom length ft (m)	Boom arrangement
217 (66)	※
236 (72)	※
256 (78)	※

Symbol	Boom Length	Remarks
	29.5 ft (9.0 m)	Boom Base
	26.2 ft (8.0 m)	Tapered Boom
	19.7 ft (6.0 m)	Insert Boom
	39.4 ft (12.0 m)	Insert Boom
	3.3 ft (1.0 m)	Boom Top

※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.

↗ mark shows the guy line installing position when the fixed jib is used.  
※ indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.

### Luffing Boom Arrangements for Luffing

Boom length ft (m)	Boom arrangement
98 (30)	※
118 (36)	※
138 (42)	※
157 (48)	※
177 (54)	※
197 (60)	※

Symbol	Boom Length	Remarks
	29.5 ft (9.0 m)	Boom Base
	26.2 ft (8.0 m)	Tapered Boom
	19.7 ft (6.0 m)	Insert Boom
	39.4 ft (12.0 m)	Insert Boom
	3.3 ft (1.0 m)	Boom Top

※ indicates the most flexible combination of insert luffing booms, which can be modified to form all shorter luffing boom arrangements.  
※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.

### Heavy Fixed Jib Arrangements

Jib length ft (m)	Jib arrangement
59 (18)	

Symbol	Jib Length	Remarks
	32.8 ft (10.0 m)	Jib Base
	26.2 ft (8.0 m)	Jib Top

### Luffing Jib Arrangements

Jib length ft (m)	Jib arrangement
79 (24)	
98 (30)	※
118 (36)	※
138 (42)	※
157 (48)	※
177 (54)	※
197 (60)	※
217 (66)	※
236 (72)	※

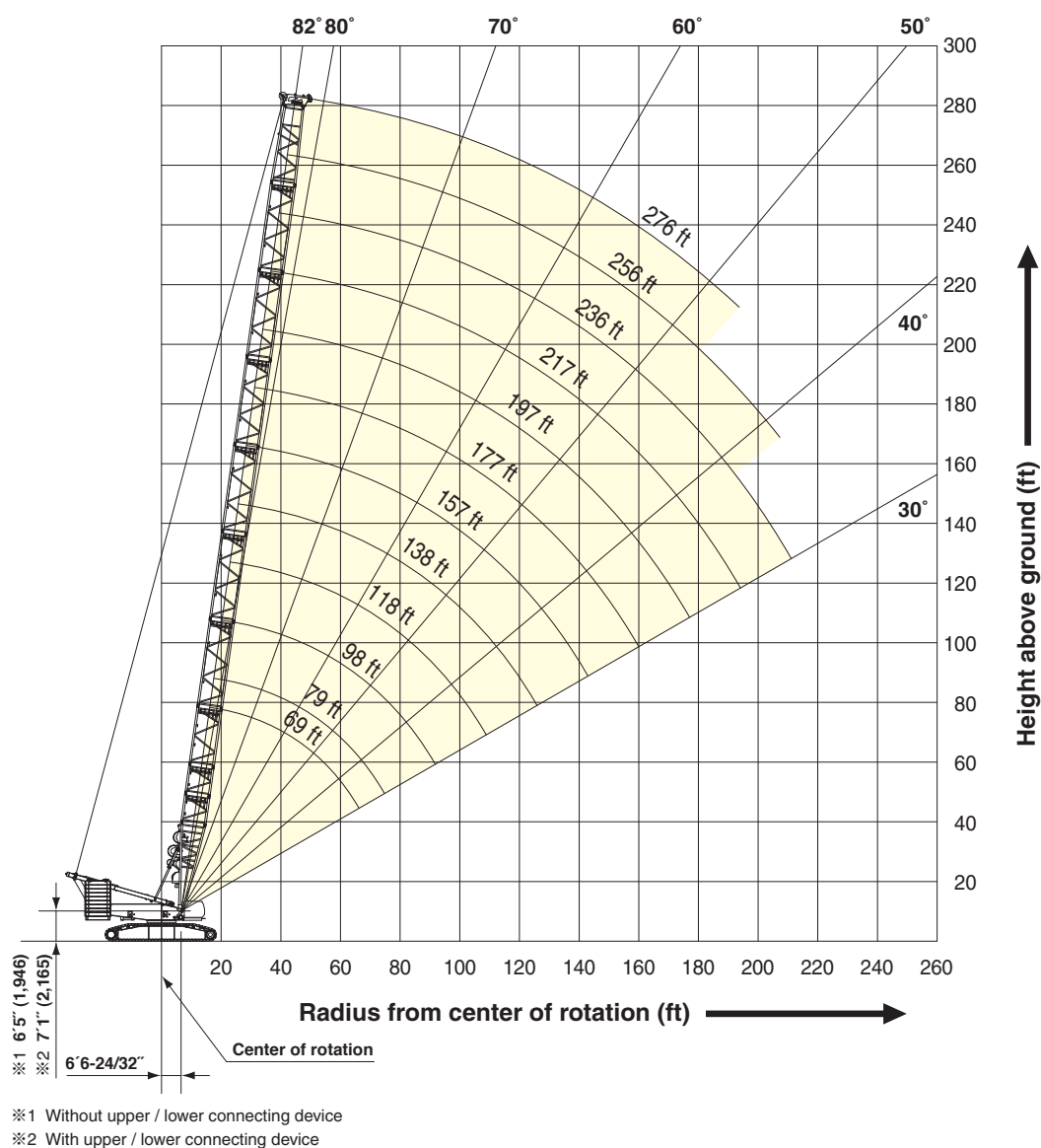
Symbol	Jib Length	Remarks
	32.8 ft (10.0 m)	Jib Base
	19.7 ft (6.0 m)	Luffing Insert Jib
	39.4 ft (12.0 m)	Luffing Insert Jib
	26.2 ft (8.0 m)	Jib Top

※ indicates the most flexible combination of insert luffing jibs, which can be modified to form all shorter luffing jib arrangements.  
※ Actual lengths of boom sections are metric such as 3m, 6m and 12m. The value shown above or in the arrangements are approximate conversions to feet.



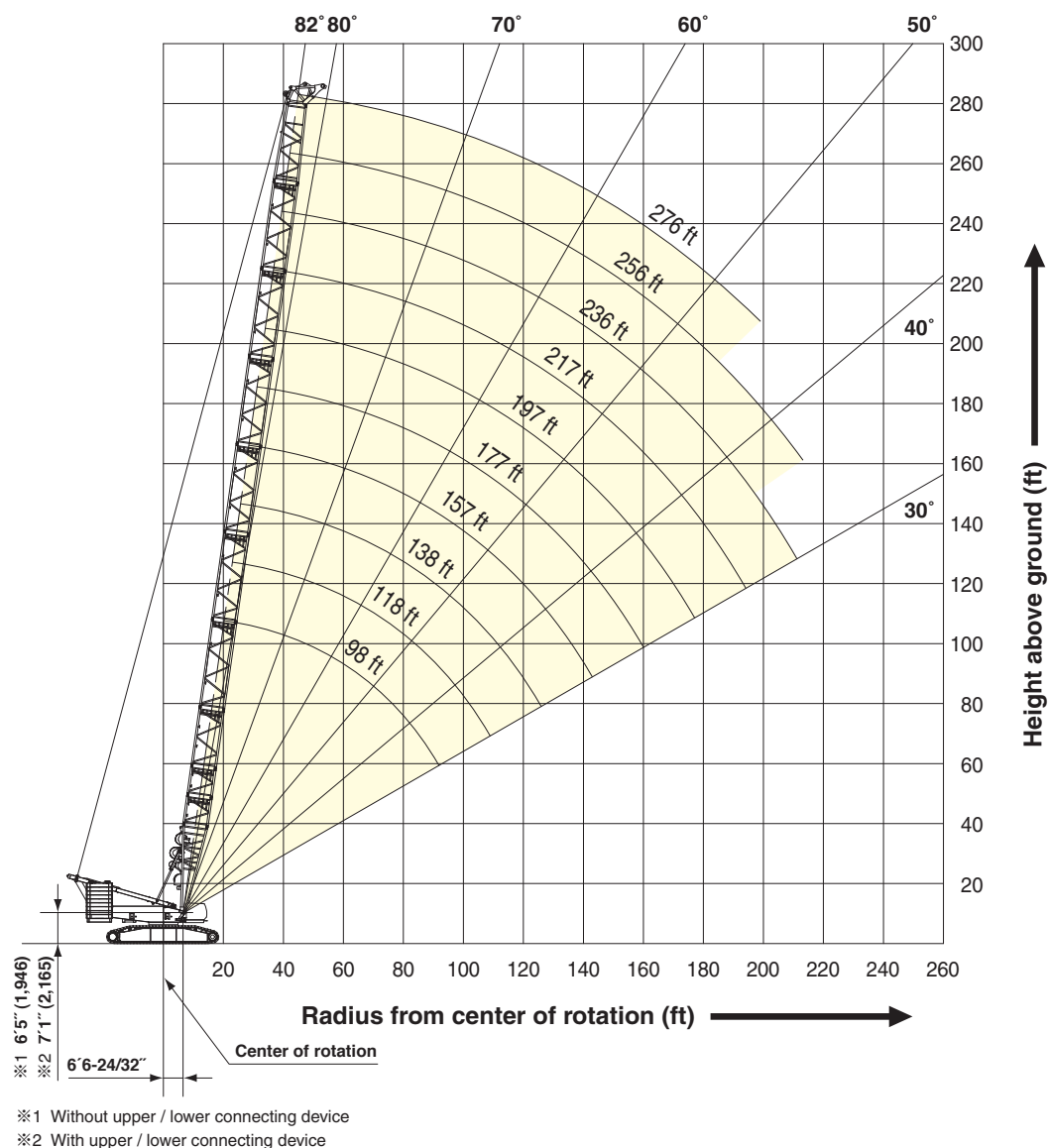
## WORKING RANGES

### Heavy Duty Crane Boom

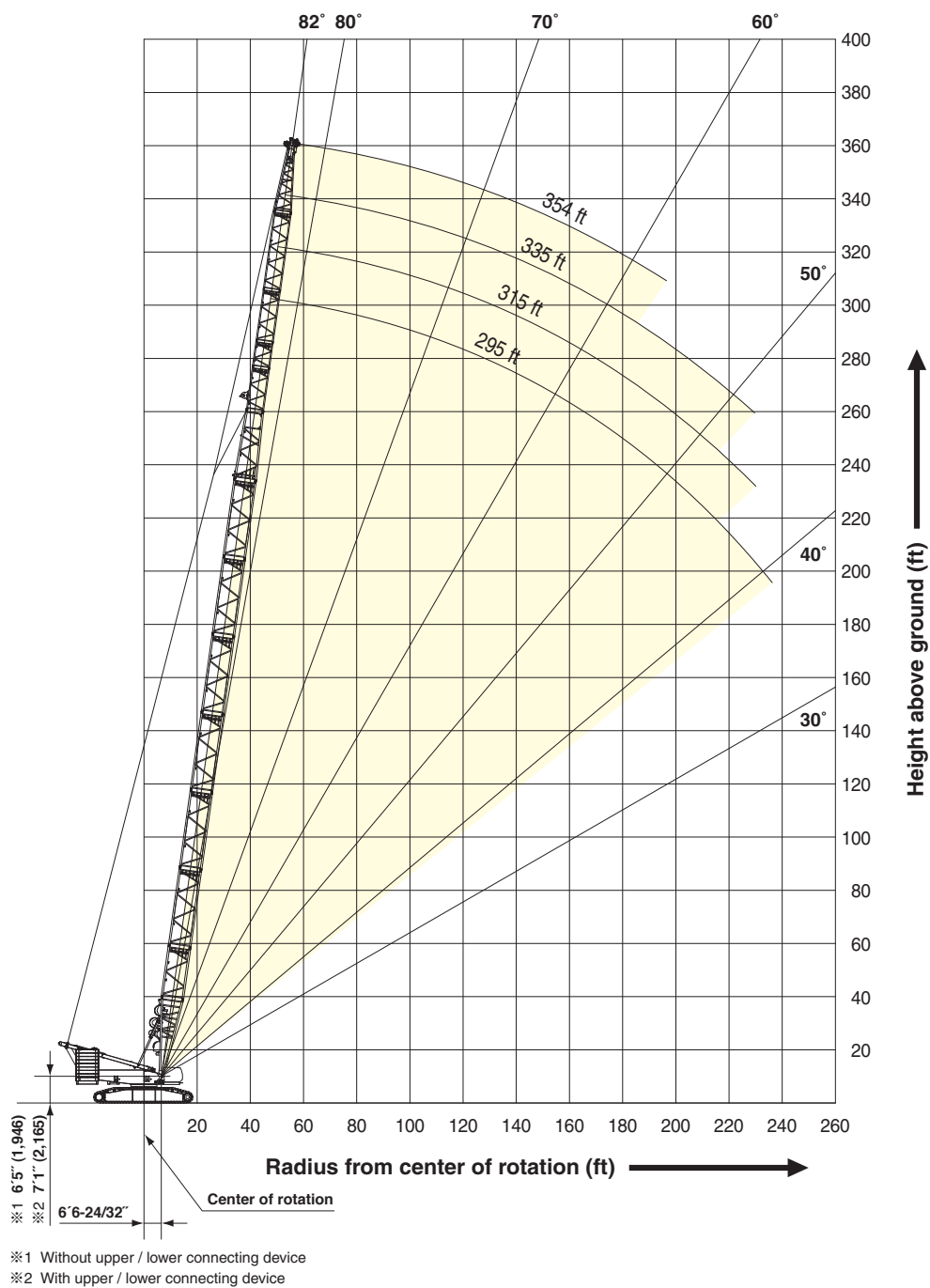


## WORKING RANGES

### Luffing Boom

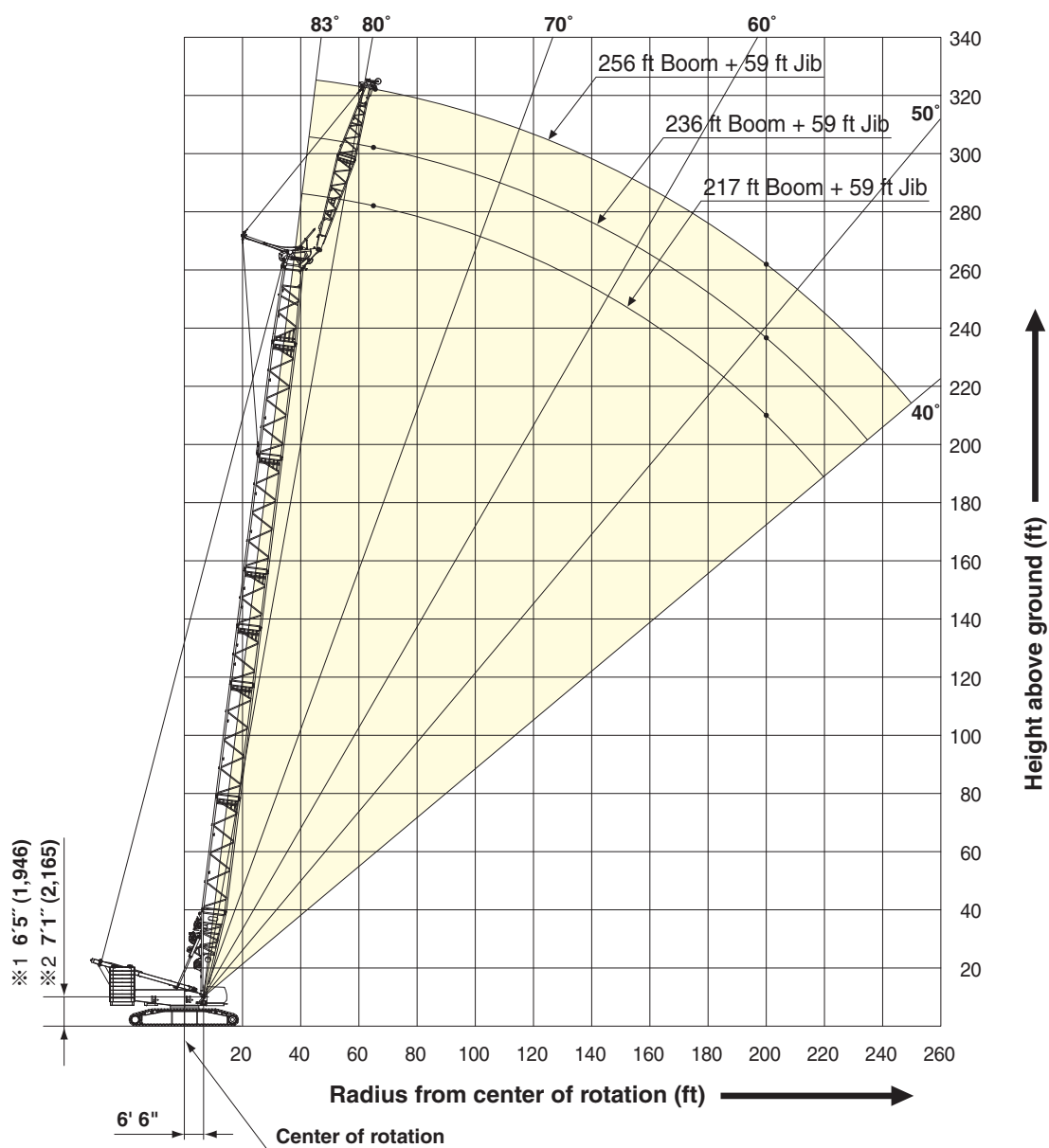


## Long Boom



## WORKING RANGES

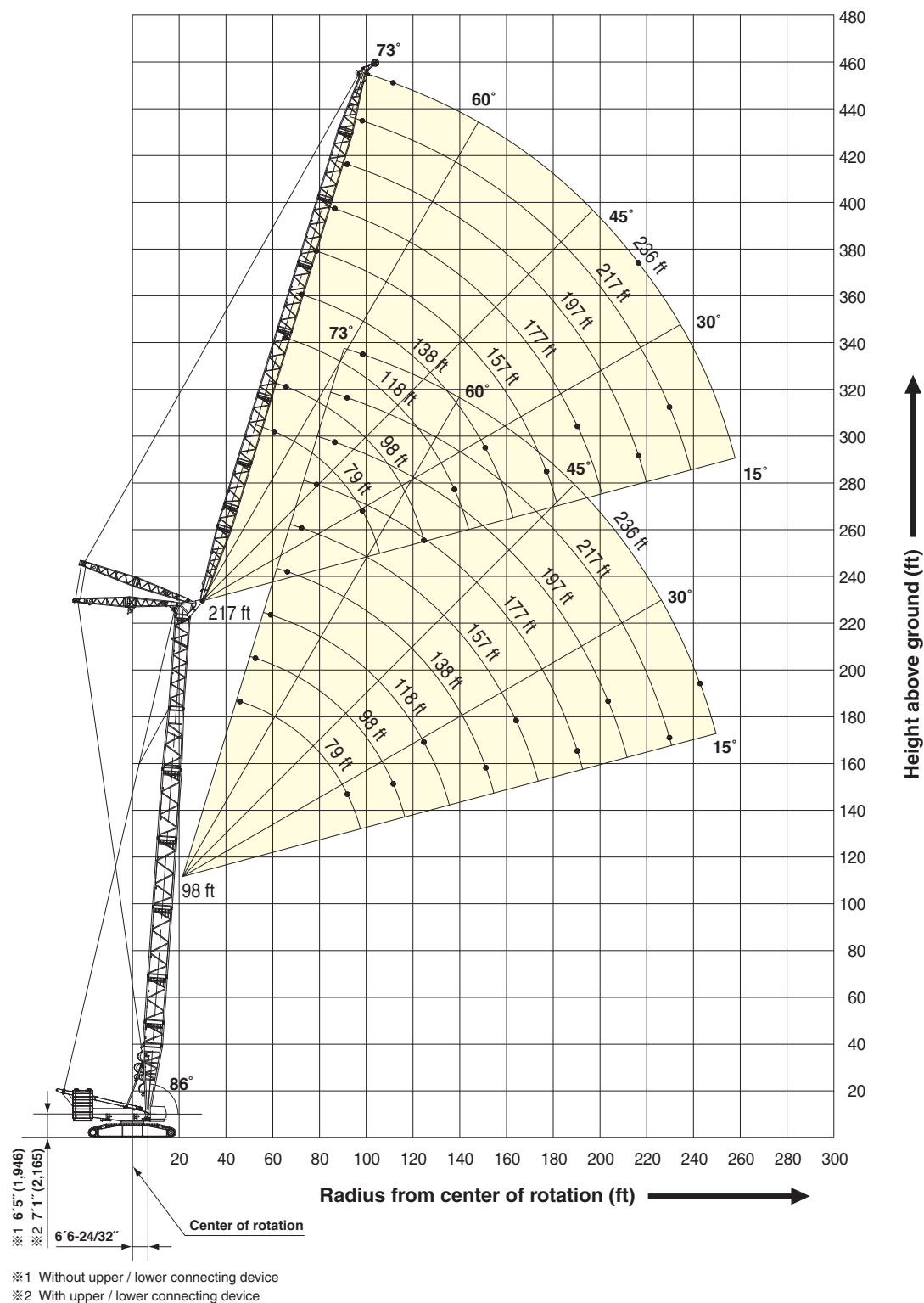
### Heavy Fixed Jib (Type A)



- ※1 Without upper / lower connecting device
- ※2 With upper / lower connecting device

## Luffing Jib

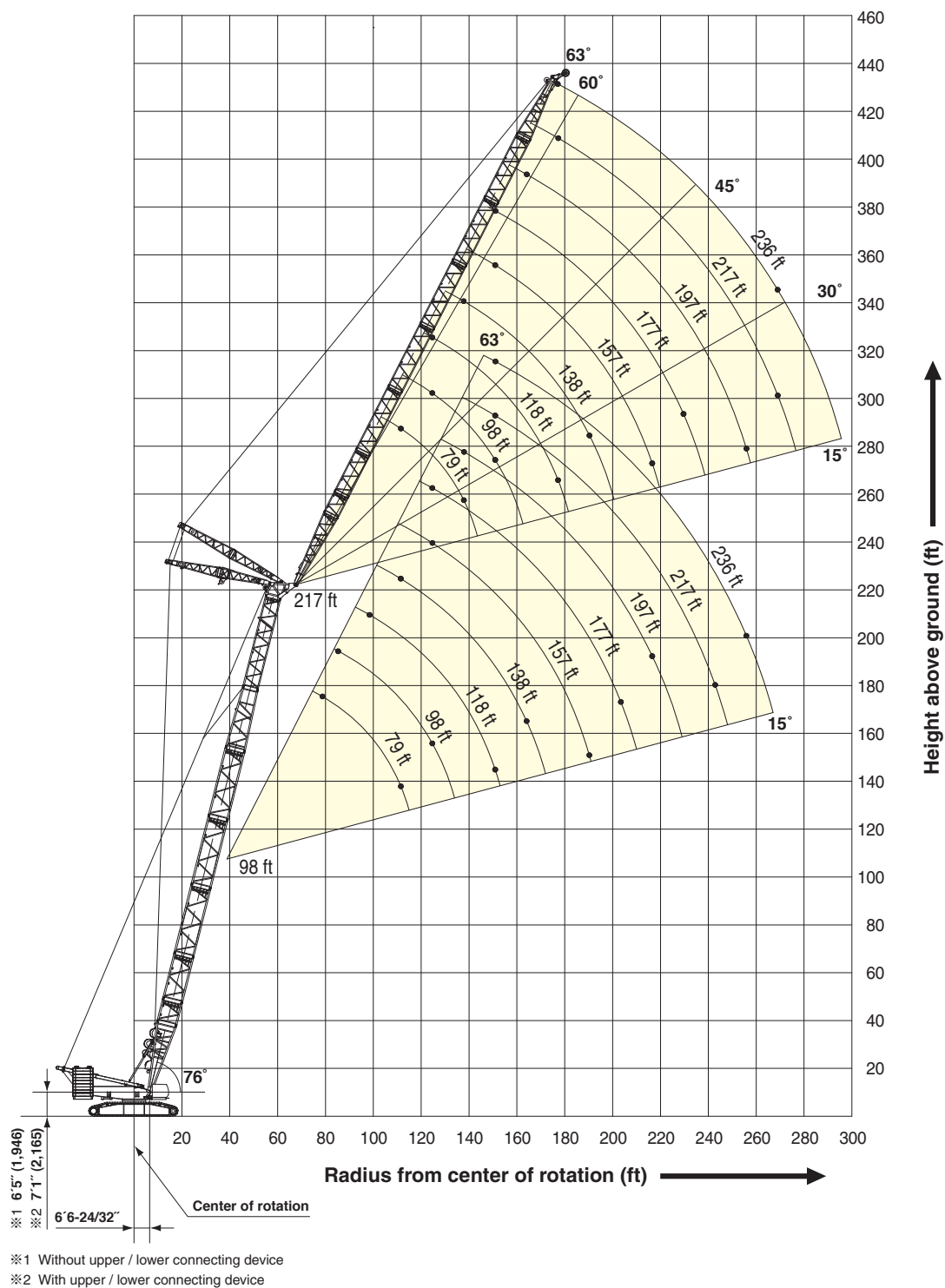
Boom Angle: 86°



## WORKING RANGES

### Luffing Jib

Boom Angle: 76°



## Luffing Jib

Boom Angle: 66°

