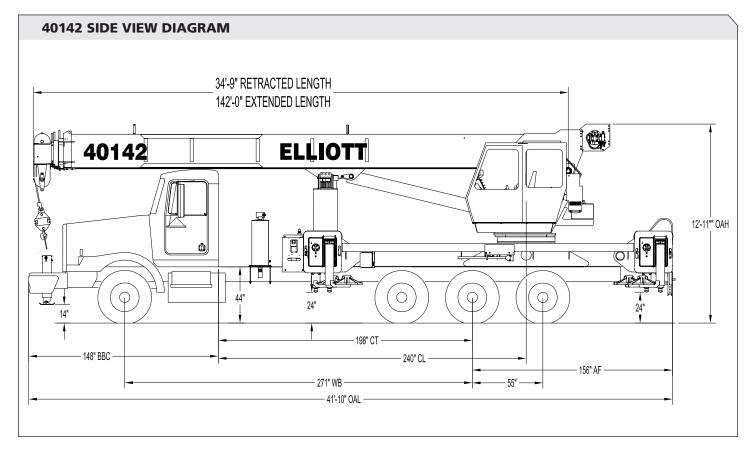
# BoomTruck 40142

### **TECHNICAL SPECIFICATIONS**









• Maximum Vertical Reach

201'/61.3 m

Working Area

360 Degrees

Lifting Capacity

Overall Height

12'11"/3.9 m

5

80,000 lbs/36,287 kg

• Operator Controls Rotating Cab with Control Seat

Boom Length

142'/43.3 m

Out-Down

• Crane Weight (Standard)

40,300 lbs/18,280 kg

26'2"/8 m

Jib Lengths

• Outrigger Type Front

Out-Down

• Winch Bare Drum Pull

26', 49'/ 8 m, 15 m

• Outrigger Type Rear

Outrigger Spread Front

26'2"/8 m

15,000 lbs/6,804 kg

Outrigger Spread Rear

Powered Boom Sections



Elliott Equipment Company 4427 South 76th Circle Omaha, NE 68127



### **TECHNICAL SPECIFICATIONS**

Crane Capacity: 80,000 lbs at nine feet load radius.

Maximum Tip Height: 142' height (201' with optional 49' jib)

Control Console: Rotating seated controls with operator cab and deluxe operators seat. Station equipped with four pilot operated control levers for the main crane controls. Operator station includes LMI display, diesel heater, bubble level gauge, engine start/stop switch, signal horn button, variable speed throttle switch, lifting capacity chart, range diagram chart, boom angle indicator, system pressure gauge, 12V DC power source, and cup holder. Independent ground level electric operated outrigger controls.

**Boom:** Five-section fully proportional, high strength steel plated rectangular tube sections. A maximum boom tip height of 152' mounted on a truck. The boom nose contains one floating upper sheave and three lower sheaves. Assembly includes heavy-duty cylinder fittings, pivot pins, and replaceable wear

Winch: Mounted at the base of the boom for a long fleet angle and flat level spooling of cable. Winch is driven by a planetary reducer and powered by a hydraulic motor. Burst-of-speed winch provides increased line speed. The winch brake is spring applied, pressure release design. Supplied with 430' of 5/8" diameter rotation resistant wire rope with a single line pull of 10,000 lbs., and a downhaul ball with swivel hook for single part line.

### **Load Moment Indicator System:**

System senses hoist cylinder pressures, boom length and boom angle with hydraulic function lockout. The display console is equipped with a bar graph showing crane utilization, boom angle or boom length, a mode select controls for main boom and jib operation, and an anti-two block with an audio/visual warning and shut-off functions to limit hook-boom point contact.

Outriggers: Two sets of out and down overframe outriggers with 26'2" span. Outriggers are configured for full span, mid span, or full retracted operation. Outriggers equipped with 22" diameter ball socket aluminum removable pads that stow on vertical outrigger legs. Front bumper stabilizer required.

Frame: Full length, all welded rigid 4-plate design sub-frame. Sub-frame allows for bolt-on addition of aluminum bed wings, with top plate of subbase serving as a portion of the bed deck, to form a three-piece bed.

Turret: Reverse offset turret is onepiece weldment. Turret rotates on large diameter ball bearing.

**Rotation:** Hydraulic motor drives turret through double reduction planetary swing drive for 360 degree continuous rotation. Glide-swing drive system has manual foot applied brake

**Lift:** One double-acting long stroke cylinder provides smooth and stable boom elevation. Holding valve prevents boom from falling in event of hose

**Boom Extension:** Incorporates a 2-stage hydraulic extension cylinder, attached to the largest boom section, with a proportional cable extension system driving the outermost sections.

**Hoses:** All high pressure hoses are wire braid reinforced with a minimum safety factor of 4 to 1.

Cylinders: All cylinders use microhoned cylinder tubing, chrome shafts, top grade packing and protective rod wipers. Cylinder-mounted holding valves provided on all load-holding cylinders.

**Hydraulic System:** Equipped with air-shift PTO, piston pump, SAE O-ring face seals on pressure lines, and a 10-micron return line filter. The control valve distributes all flow to hoist system, swing circuit, and other crane functions.

System is closed center type.

Oil Tank Capacity: 143 gallon mounted to top of frame.

**Cab Equipment:** Air shift PTO with indicator lights installed in truck cab. U/L approved 5:BC dry chemical fire extinguisher installed in truck cab.

**Operators Manual & Video: Two CD** copies and one hard copy of operation, maintenance, safety and parts manual provided with each unit. Operational and safety video provided at delivery.

**Installation:** Unit installed on chassis, painted, system and tank filled with oil, tested, inspected, and ready to operate.

**Standard Paint:** Paint turret and boom white, outriggers red, and bed and boxes black.

Bumper: Bureau of Motor Carrier Safety rear bumper.

Weight: Approximately 40,300 lbs. with 18' aluminum bed less truck.

Truck Chassis Required: Approx. 198" C.A., RBM 3,300,000 in-lb. per rail, 20,000 lb. front axle and 78,000 lb. GVWR required. Trucks must have front frame extension, 12V electrical system with high capacity alternator, cab clearance stop/tail/backup lights, and I.D. lamps. Recommended GVWR is minimum for BOOMTRUCK with flatbed only. Contact factory when additional equipment is to be added.

### **Options:**

Air Conditioning for Crane Cab. 49 ft. Jib for Work Platform. Gravity Leveled Work Basket. Swing Counterweight up to 1,600 lbs. Radio Remote Controls. Winch Drum Rotation Indicator. Much More...

Elliott Equipment Company reserves the right to change the specification of any unit at any time without prior notice. This brochure is only a statement of general specifications on the date of this publication. For more detailed info on specific Elliott trucks go to www.elliottequip.com





### **MAXIMUM LIFTING CAPABILITIES - FULL SPAN OUTRIGGERS**



MODEL 4000 142-ft BOOM

### MAIN BOOM LOAD RATINGS WITH FULLY EXTENDED OUTRIGGERS

### MAIN BOOM LOAD RATINGS

LOAD RATINGS IN Ibs WITH OUTRIGGERS AND STABILIZERS EXTENDED LOAD LOADED LOADED LOADED В LOADED С LOADED D LOADED LOADED Н Α Ł LOADED G LOADED BOOM BOOM BOOM BOOM BOOM RADUIS BOOM BOOM BOOM BOOM 34-ft 47-ft 61-ft 74-ft 88-ft 101**-**ft 115-ft 128-ft 142-ft N FEET ANGLE ANGLE ANGLE ANGLE ANGLE ANGLE 9 73.2 80,000 10 71.0 64,500 76.7 | 43,000 12 56,100 74.3 43,000 79.1 43,000 67.3 15 61.7 49,000 70.5 43.000 76.3 42,400 79.5 36,600 20 50.9 34,000 24,900 38,000 63.6 71.4 34.000 75.7 31,700 78.7 25 38.1 28,800 56.0 28.500 66.3 28,200 71.5 26,400 75.2 21,000 77.8 17,500 30 19.3 24,000 47.8 23,500 23,200 67.2 23,300 71.7 18,400 75.0 16,000 77.5 13,400 79.3 11,500 60.6 35 38.0 116.700 54.5 16,500 62.8 16,600 68.1 16,000 72.0 14,400 | 75.0 11,800 77.0 | 10.100 79.1 | 6,600 40 25.2 12,500 48.0 14,000 58.0 14,100 64.4 14,000 68.8 12,600 | 72.2 10,700 74.9 | 8,900 77.0 6,600 45 11,200 40.7 11,000 52.9 11,000 60.6 65.6 11.300 | 69.8 9.400 72.6 | 8.100 74.8 16.600 50 56.5 8,500 62.3 10.000 | 67.0 31.9 8.500 47.3 8.400 8.400 70.1 | 7.400 72.7 15.900 55 41.2 7,500 52.3 59.1 64.2 70.5 19.8 7,300 7,600 8.700 7,500 67.6 | 6,500 5,300 60 34.9 48.0 6,800 55.5 7,000 61.2 6,700 65.0 | 5,900 4,800 6,600 68.3 65 26.4 5.700 43.0 5,900 51.8 5.900 58.1 5,800 62.4 | 5,300 65.9 4,300 70 12.9 5,000 37.3 5,200 47.6 5,000 55.0 5.100 59.7 4,900 63.6 3,900 75 56.9 4.100 30.8 4,400 43.1 4.200 54.6 4.300 61.2 13.500 80 22.5 38.2 54.0 | 3,500 3.600 47.8 3.600 58.7 3.700 3.100 85 32.7 43.8 2.900 6.5 3,000 2.900 50.8 | 2,800 56.2 12.800 90 26.1 2,300 39.6 2,300 47.4 2,300 53.5 2.500 95 43.8 | 1,900 50.7 17.1 1,800 34.9 1.900 1.900 100 29.6 1,500 40.0 | 1,500 47.6 1,500 105 23.1 1.100 35.8 | 1.100 44.3 1.100 800 13.9 800 31.6 41.0 1800 110 17.000 0 10,600 0 6,600 4,500 0 2,500 0 1,300 DEDUCTIONS FOR STOWED EXTENDABL 550 400 350 300 700 450 250 950 200 DEDUCTIONS FOR STOWED EXTENDABLE JIB (lbs)

> 26' - 2" FULL SPAN OUTRIGGERS OUTRIGGER LOCK PINS DISENGAGED AND BEAMS AT FULL HORIZONTAL EXTENSION

ELLIOTT EQUIPMENT CO. SUPPLIED LOADLINE EQUIPMENT DEDUCTIONS: DOWNHAUL WEIGHT .....225 lbs ONE SHEAVE BLOCK..... .424 lbs TWO SHEAVE BLOCK. .592 lbs THREE SHEAVE BLOCK......639 lbs .....762 lbs FOUR SHEAVE BLOCK.. AUXILIARY SHEAVE...... .....100 lbs

CRANE MEETS ASME B30.5 REQUIREMENTS AT TIME OF MANUFACTURE

DO NOT PAINT OVER ANY LABELS

1141120 090808



JIB (lbs)

Elliott Equipment Company 4427 South 76th Circle Omaha, NE 68127



### **MAXIMUM LIFTING CAPABILITIES - MID SPAN OUTRIGGERS**



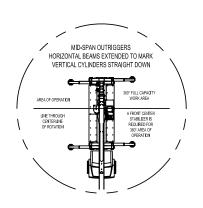
MODEL 4000 142-ft BOOM

## MAIN BOOM LOAD RATINGS WITH MIDSPAN OUTRIGGERS

			LOAD	RATINGS IN	lbs WITH C	UTRIGGERS	AND STAB	LIZERS EXTE	ENDED										
LOAD	LOADED		LOADED BOOM	Α	LOADED	В	LOADED	С	LOADED	D	LOADED	Е	LOADED	F	LOADED	G	LOADED	Н	
RADUIS IN FEET	BOOM ANGLE	34-ft	ANGLE	47-ft	BOOM ANGLE	61-ft	BOOM ANGLE	74-ft	BOOM ANGLE	88-ft	BOOM ANGLE	101-ft	BOOM ANGLE	115 <b>-</b> ft	BOOM ANGLE	128-ft	BOOM ANGLE	142-ft	
9	73.2	80,000																	
10	71.0	64,500	76.7	43,000															
12	67.3	56,100	74.3	43,000	79.1	43,000													
15	61.7	49,000		43,000	76.3	42,400	79.5	36,600											
20	50.9	38,000		34,000	71.4	34,000	75.7	31,700		24,900									
25	38.1	17,000		17,500	66.3	17,900		26,400		21,000	77.8	17,500							
30	19.3	11,800		12,300	60.6	12,700	67.2	13,000	71.7	13,100	75.0	16,000	_	11,500	79.3	11,500			
35		,	38.0	8,800	54.5	9,200	62.8	9,300	68.1	9,500	72.0	9,600		10,100	_	10,100	79.1	6,600	
40			25.2	6,500	48.0	6,600	58.0	6,800	64.4	6,900	68.8	7,100		8,900	_	8,900	77.0	6,600	
45					40.7	5,000	52.9	5,400	60.6	5,500	65.6	5,700	69.8	5,900		8,100	74.8	5,900	
50					31.9	3,800	47.3	4,200	56.5	4,400	62.3	4,600	_	4,700	70.1	7,400	72.7	4,700	
55					19.8	2,800	41.2	3,200	52.3	3,300	59.1	3,500	_	3,600	67.6	6,500	70.5	3,600	
60						,	34.9	2,400	48.0	2,500	55.5	2,600	61.2	2,700	65.0	5,900	68.3	2,700	
65							26.4	1,700	43.0	1,800	51.8	1,900	58.1	2,000	62.4	5,300	65.9	2,000	
70							12.9	1,100	37.3	1,200	47.6	1,300	55.0	1,400	59.7	4,900	63.6	1,400	
75								,	30.8	800	43.1	900	54.6	1,000	56.9	4,100	61.2	1,000	
80														,	54.0	3,500	58.7	700	
	0	10,000	0		0	4,800	0	2,000	0	600						,			
	DEDUCTIONS FOR			700				,		400		050				050		200	
STOWED EXTENDABLE JIB (lbs)		950	50 700		550		450			400		350		300		250		200	DEDUCTIONS FOR STOWER
STOW	IONS FOR ED FIXED H JIB (lbs)																		DEDUCTIONS FOR STOWED

### NOTE:

- 1. Operate jib by radius when main boom is fully extended. Increase boom angle if necessary to maintain load radius.
- 2. When boom is retracted, operate jib by boom angles. Do not exceed any rated jib capacities at reduced boom lengths.
- 3. Capacities do not exceed stability based on ISO 4305-1991.
- 4. Load ratings above bold line are structurally limited.
- 5. Personnel handling is allowed only with full span outriggers.
- 6. Boom load ratings are based on loaded boom radius. Loaded boom angles are given as reference only.





ELLIOTT EQUIPMENT CO. SUPPLIED LOADLINE EQUIPMENT DEDUCTIONS: DOWNHAUL WEIGHT .....225 lbs ONE SHEAVE BLOCK......424 lbs TWO SHEAVE BLOCK.....592 lbs THREE SHEAVE BLOCK.....639 lbs FOUR SHEAVE BLOCK.....762 lbs AUXILIARY SHEAVE......100 lbs

CRANE MEETS ASME B30.5 REQUIREMENTS AT TIME OF MANUFACTURE

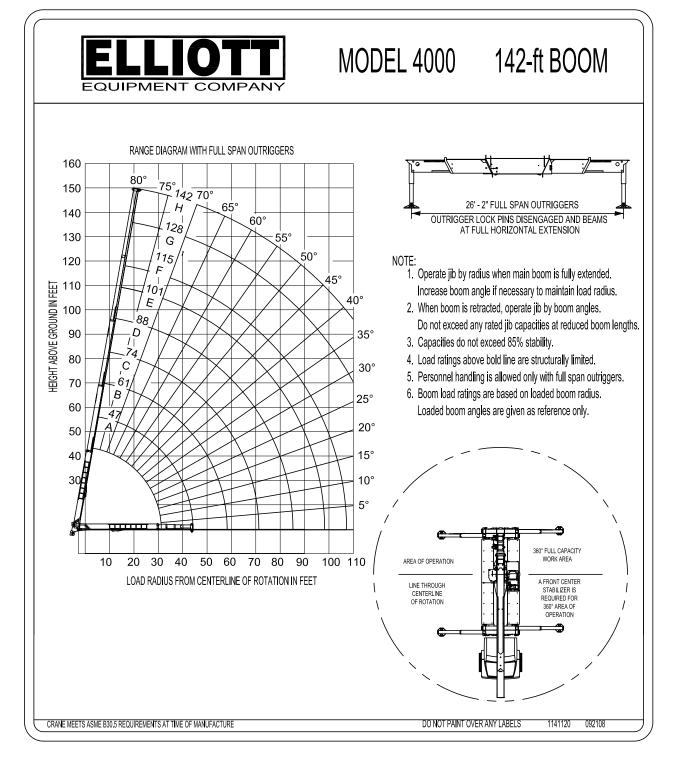
DO NOT PAINT OVER ANY LABELS

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1141120

### **MAXIMUM RANGE CAPABILITIES - FULL SPAN OUTRIGGERS**



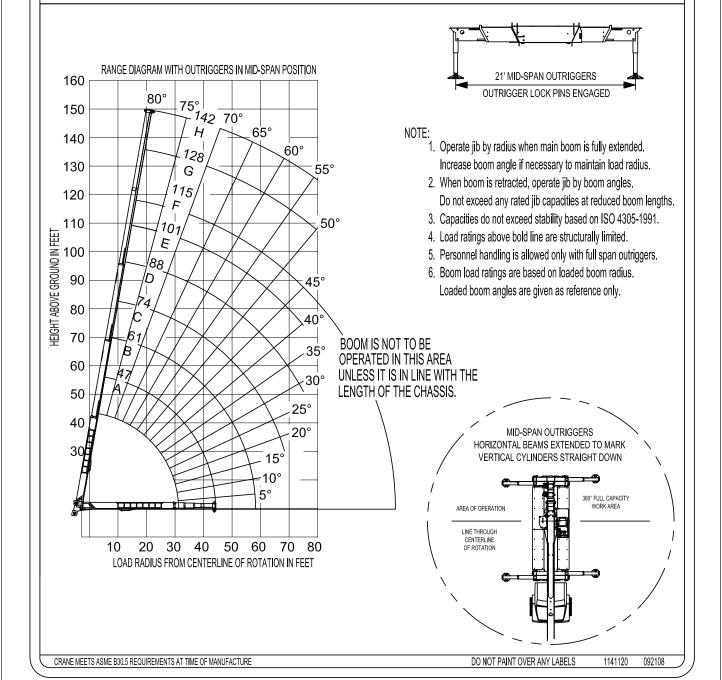




### **MAXIMUM RANGE CAPABILITIES - MID SPAN OUTRIGGERS**



MODEL 4000 142-ft BOOM





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### **MAXIMUM JIB RANGE CAPABILITIES**



MODEL 4000 142-ft BOOM

JIB RANGE DIAGRAM WITH PLATFORM ATTACHED

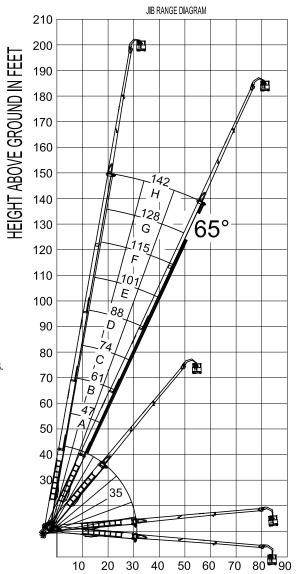
# PERSONELL 600LBS MAX

# **USE OUTRIGGERS** AT ALL TIMES

# PLATFORM JIB IS NOT RATED TO PICK LOADS

NOTE: 1. Operate jib by radius when main boom is fully extended. Increase boom angle if necessary to maintain load radius.

- 2. When boom is retracted, operate jib by boom angles. Do not exceed any rated jib capacities at reduced boom lengths.
- 3. Capacities do not exceed stability based on ISO 4305-1991.
- 4. Load ratings above bold line are structurally limited.
- 5. Personnel handling is allowed only with full span outriggers.
- 6. Boom load ratings are based on loaded boom radius. Loaded boom angles are given as reference only.



LOAD RADIUS FROM CENTERLINE OF ROTATION IN FEET

CRANE MEETS ASME B30.5 REQUIREMENTS AT TIME OF MANUFACTURE

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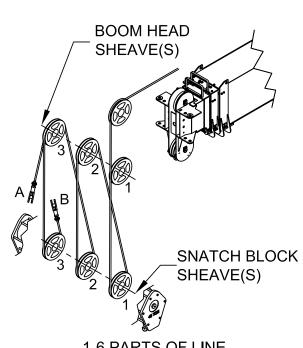


### **MAIN BOOM WINCH DATA**

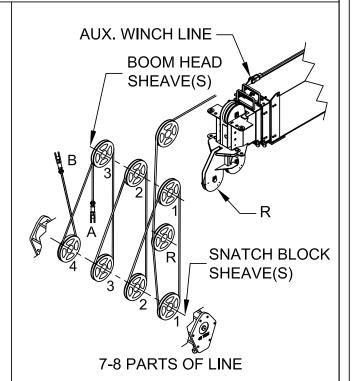


MODEL 4000 142-ft BOOM

# PARTS OF LINE







### NOTICE:

- DO NOT DEADHEAD LINE BLOCK AGAINST BOOM TIP WHEN EXTENDING BOOM.
- KEEP AT LEAST 5 WRAPS OF LOADLINE ON THE WINCH DRUM AT ALL TIMES.
- USE ONLY 5/8" DIAMETER WIRE ROPE, AS SPECIFIED. WITH THE PROPER BREAKING STRENGTH LISTED.
- ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE **OPERATING CRANE. SEE OPERATION &** SAFETY MANUAL.

PARTS OF LINE	SHEAVE(S) ON BOOM HEAD	SHEAVE(S) ON SNATCH BLOCK	5/8" - SPIN RESISTANT (5:1 S.F.) 50,000-lbs. BREAKING STRENGTH
1	1	А	10,000 lbs
2	1 B	1	20,000 lbs
3	12	1 A	30,000 lbs
4	12B	12	40,000 lbs
5	123	12A	50,000 lbs
6	123B	123	60,000 lbs
7	R123	123A	70,000 lbs
8	R123B	1234	80,000 lbs

A-DEAD END FOR ODD PARTS OF LINE B-DEAD END FOR EVEN PARTS OF LINE R-ROOSTER SHEAVE REQUIRED WHEN USING 7 AND 8 PARTS OF LINE

CRANE MEETS ASME B30.5 REQUIREMENTS AT TIME OF MANUFACTURE

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1141120 092108



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### TRUCK CHASSIS SPECIFICATIONS

	40142 BoomTruck
Wheelbase (WB)	288" / 731 cm
Cab to Axle (CA)	198" / 503 cm
Cab to End of Frame (EOF)	345" / 876 cm
Frame Section Modulus	30.0 in3-110,000 psi / 758,428 kPa
Front Axle Gross Weight Rating	20,000 lb / 9,072 kg
Rear Axle Gross Weight Rating	58,000 lb / 26,308 kg
Integral Front Frame Rails	Required

Chassis data is minimum general requirements-not for engineering.

### **OPTIONS**



### **Radio Remote Control**

Interference protected radio remotes let you get closer to your work and have full control over your machine.



### **Pin-On Jib Attachments**

One piece & two piece telescoping or fixed jibs that stow on the side of the boom for easy placement while on the worksite.



### **Air Conditioning in Crane Cab**

Work all day in comfort with an high efficiency air conditioning system mounted on the rear of the crane control cab.



### **Auxiliary Winch System**

Take advantage of the auxiliary winch to quickly deploy Elliott's telescopic jib without having to remove the multi-part line hook block on the primary winch.



### **Tool Boxes**

Optional tool boxes and bed storage can accommodate any storage need for tools, work materials and more.



### **Hook Block for Multi-Part Line**

Elliott can include a hook block device for up to 8 parts of line to improve lifting capabilities and allow you to maximize your use of the crane.



### **Gravity Leveled Basket**

Elliott's pin-on work platform pins onto the boom for easy installation and removal. Gravity leveling and mechanical rotation makes it a great accessory for any worksite.



### **Body Mounted Hose Reels and Circuits**

Let us work with you to customize your tool compatability by adding hose reels or hydraulic circuits to the crane bed.



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Actual dimensions and truck data will depend on truck selection and axle configuration. \*Minimum chassis weight is required to meet 85% stbility requirements.