



National Series 1255

**The Heavy-duty Lifting System for
Your Public Works Department**

**Maximum Vertical Reach: 102 Feet
Maximum Capacity at 10-Foot Radius: 35,000 Pounds**



**From America's Truck-Mounted
Hydraulic Crane Leader**



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40 FOOT JIB
RATED LOADS

LOAD RADIUS (FEET)	LOADED BOOM ANGLE (DEGREES)	OVER SIDE (lb)	OVER REAR (lb)
24	74°	4700	4700
31	70°	3800	3800
39	65°	3200	3200
46	60°	2750	2750
53	55°	2350	2350
60	50°	2100	2100
65	45°	1900	1900
71	40°	1750	1750
76	35°	1600	1600
81	30°	1500	1500

SHADED AREAS ARE STRUCTURALLY LIMITED CAPACITIES

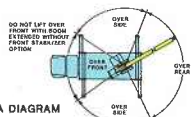
Capacities shown are with 400-pound block rigged on main boom. If 200-pound block is rigged on main boom, add 150 pounds to capacities shown. If no block is rigged on main boom, add 250 pounds to capacities shown.

SET UP

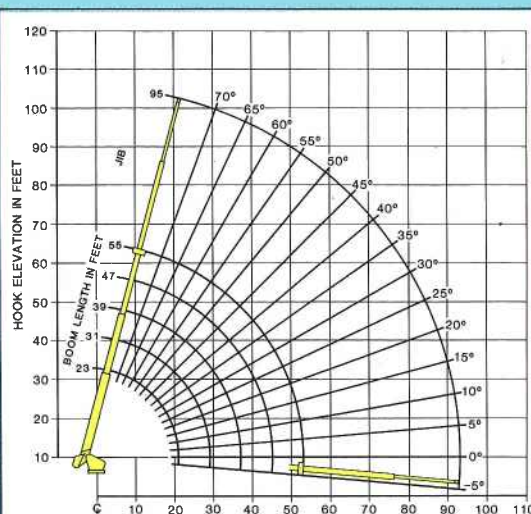
1. Fully extend outriggers and level crane.
2. Rig jib as shown in the operators manual.

OPERATION

1. Operate with jib by radius, when main boom is fully extended. If necessary increase boom angle to maintain loaded radius.
2. Operate with jib by boom angle when main boom is not fully extended. Do not exceed rated jib capacities at any reduced boom lengths.
3. All jib loads must be lifted with single part reeving.



WORK AREA DIAGRAM



OPERATING RADIUS FROM C ROTATION IN FEET WITH UNLOADED BOOM.

23 TO 40 FOOT JIB ERECTED LIFTING WITH MAIN BOOM				23 TO 55 FOOT BOOM RATED LOADS			
LOAD RADIUS	LOADED BOOM ANGLE	OVER SIDE	OVER REAR	LOADED BOOM ANGLE	OVER SIDE	OVER REAR	OVER REAR
23' BOOM LENGTH				31' BOOM LENGTH			
10'	59	33,000	33,000	67½	33,200	33,200	
15'	42	29,500	21,700	57½	23,700	22,200	
20'	33	12,900	12,500	44½	17,300	13,800	
25'				28½	12,400	9,400	
30'							
35'							
40'							
45'							
50'							
55' BOOM LENGTH				38' BOOM LENGTH			
10'				72½	32,600	32,600	
15'				64½	23,000	22,500	
20'				56	17,300	14,000	
25'				46	13,500	9,700	
30'				34½	9,400	7,000	
35'				18½	8,800	5,200	
40'							
45'							
50'							
47' BOOM LENGTH				55' BOOM LENGTH			
10'				72½	21,500	21,500	
15'				67	16,400	14,300	
20'				61	13,100	10,000	
25'				55	9,700	7,300	
30'				48	7,100	5,500	
35'				40½	5,400	4,200	
40'				31	4,100	3,200	
45'				18	3,100	2,400	
50'							

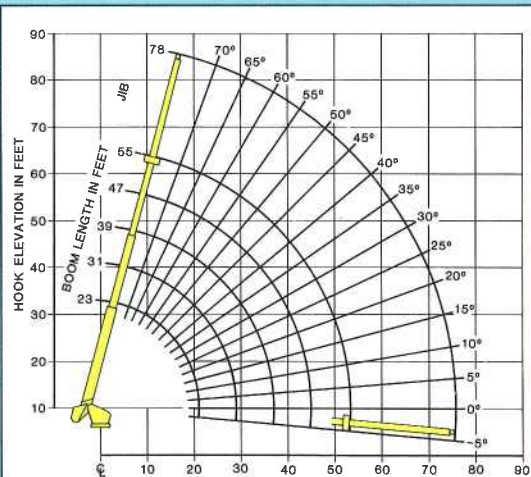
NOTE: 1. ALL CAPACITIES IN POUNDS, ANGLES IN DEGREES, RADIUS IN FEET.
2. LOADED BOOM ANGLES ARE GIVEN AS REFERENCE ONLY.
3. SHADED AREAS ARE STRUCTURALLY LIMITED CAPACITIES.

SET-UP:

1. Fully extend outriggers and level crane.
2. 23 to 40 foot jib pinned on boom tip (at 23 foot length) with 150 lb. downhaul weight freely suspended over jib tip.

OPERATION:

1. Capacities shown are maximum rated loads lifted at the boom tip with the main winch. The 23 foot jib is deployed with the 150 lb. downhaul weight rigged on the auxiliary winch line and freely suspended. DO NOT ATTEMPT ANY LIFT WITH BOTH BLOCKS.
2. When telescoping boom, lower both blocks to avoid two-blocking.
3. 23 foot boom length capacities are based on fully retracted boom.

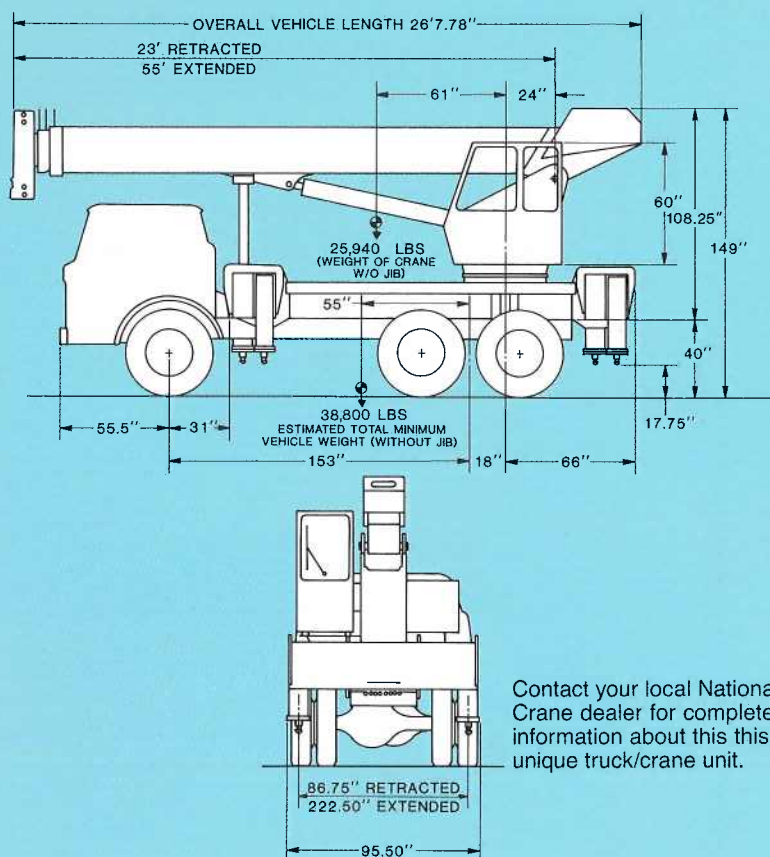


OPERATING RADIUS FROM C ROTATION IN FEET WITH UNLOADED BOOM.



National 1255 Truck/Crane Specifications

SERIES 1255 ON FORD CT8000



Contact your local National Crane dealer for complete information about this unique truck/crane unit.

TRUCK AND AXLE RATING REQUIREMENTS

Gross axle weight rating (GAWR) front 16,000 pounds*

Gross axle weight rating (GAWR) rear 34,000 pounds

Wheelbase 153 inches

Cab to axle/trunnion (CA/CT), free of obstructions, full width in crane mounting area 122 inches

Frame section modulus (SM) front axle to rear axle 30,000 PSI 34.89 inch³

Estimated bare chassis weight required for stability prior to installation of crane or accessories

Front 6,700 pounds

Rear 6,200 pounds

Estimated installed chassis weights for 85% crane stability factor (weight shown in pounds)

	Front axle*	Rear axle	Total chassis weight
With block	14,530	24,670	39,200
With jib and block	15,310	25,010	40,320

*If equipped with any options that significantly add to the front axle weight (i.e., a jib), an axle with an 18,000-pound rating is required.

NOTES:

- (1) Diesel engines require variable speed governor and electric engine shut-off for smooth crane operation.
- (2) Air dryer is required on cranes with continuous rotation.
- (3) GAWR means Gross Axle Weight Rating and is dependent on all components of the vehicle such as axles, tires, springs, frame, etc., meeting manufacturer's recommendation. **Always specify GAWR when purchasing trucks.**

Do not operate cranes or accessories within 10 feet (3m) of live power lines.

1. Load ratings shown on these charts are maximum allowable loads with the outriggers properly extended on a firm, level surface and the crane leveled and mounted on a factory-recommended truck.
2. Always level the crane with the level indicator located at the outrigger control station.
3. The operator must reduce loads to allow for factors

- such as wind, ground conditions, operating speeds and the effect of freely swinging loads.
4. Overloading this crane may cause structural collapse or instability.
 5. Weights of any accessories attached to the boom or loadline must be deducted from the load chart capacities.
 6. Do not exceed jib capacities at any reduced boom lengths.



NATIONAL CRANE

General Offices

11200 North 148th Street/Waverly, NE 68462

Phone: 402-786-2240; Telex: 438061; Fax: 402-786-3636

Your National Dealer:

National reserves the right to change designs, prices and specifications at any time without notice.