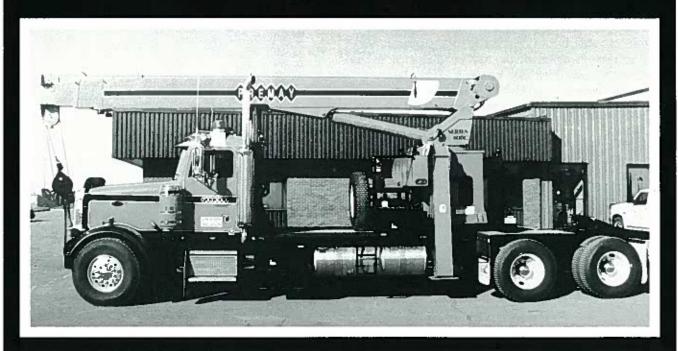
# National Model 857C

Largest crane on the market to tractor mount on a single front axle truck



## National Crane Model 857C

NOTE: Refer to the Series 800C product catalog for general information, detailed specifications, winch data, accessories, etc.

National Crane's Series 800C is a heavy-duty telescoping crane with a lot of muscle—a rated capacity of 38,500 pounds (19.05 MT). Model 857C, manufactured in Canada specifically for the Canadian market, is the largest crane in the industry that tractor mounts on a single front axle truck. With its three-section 57-foot hydraulic-powered proportional extension boom it reaches vertically to 67 feet (20.7 m) when mounted. Standard equipment includes reversed crane controls for tractor mount applications.

# Model 857C shares these basic Series 800C features—and more:

### • Optional Hydraulic Capacity Alert System

An optional Hydraulic Capacity Alert (HCA) system monitors lift cylinder pressure against the crane's constant pressure capacity chart. When the lift cylinder pressure reaches the maximum load moment, the system shuts down the crane functions. Only load-relieving functions may then be operated (boom up, winch down, telescope in).

### • High Performance Winch

A high performance planetary winch is standard. It offers high line pull and fast standard speed. This gear drive winch increases efficiency, requires less horsepower and generates less heat.

### • Proportional Boom Extension

The 857C has a three section proportional (cable crowd) boom. Each section extends and retracts proportionally while telescoping, providing more efficient boom weight distribution, fast set-up, and heavy-duty lifting power, particularly in normal working radii.



### • Solid, Reliable Stability

The 857C's standard 21-foot (6.4 m) A-frame out-and-down outriggers provide stable, efficient leveling, even on rough ground.

### • Heavy-duty Hydraulics

A high pressure, high speed, balanced vane triple pump provides three individual hydraulic circuits for the independent operation of the winch, swing and crane functions.

**Specifications:** (Truck specifications are minimum requirements.)

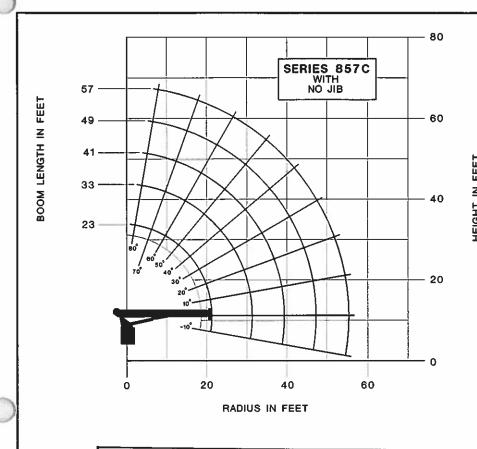
- This mount requires either ASH-TM or RSOD-TM rear stabilizers. Care must be taken in the specification of the truck. The truck must meet the minimum requirements shown and must have 110,000 PSI yield steel frame.
- A minimum clearance of 65 inches is recommended for trailer turning radius clearance.
- For tractor mounts where the boom will be carried over the rear only, a wheelbase of 246 inches may be used.

Minimum Truck Requirements: (For tractor mounts where boom will be carried over front.)

• GAWR (front)	18,000 lbs.
• GAWR (rear)	40,000 lbs.
Wheelbase	286 inches
Cab to axle	206 inches
• Frame strength	30 SM
Stability weight	
(front axle)	10,050 lbs.
Stability weight	•
(rear axle)	9,200 lbs.
•Estimated final weight	
<b>O</b>	(without rig-up)



# National 857C Load Rating Chart

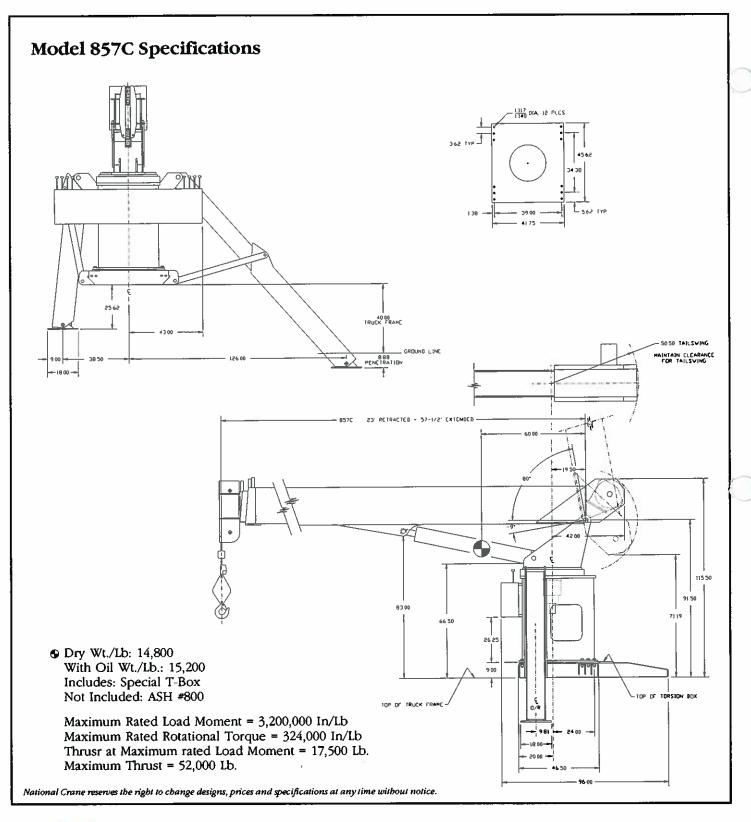


### Caution

Do not operate crane booms, jib extensions, any accessories, or loads within 10 feet (3 m) of live power lines or other conductors of electricity • Capacities shown are maximum for each section • Do not exceed capacities at reduced radii.

- 1. Load ratings shown 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 on the crane frame.
- 3. The operator must reduce loads to allow for factors such as wind, ground conditions, operating speeds and the effect of freely suspended 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.
- Do not exceed jib capacities at any reduced boom lengths.

	LOAD RATINGS										LOADLINE EQUIPMENT		
LOAD RADIUS (FEET)	LOADED BOOM ANGLE	23FT BOOM (LBS)	LOADED BOOM ANGLE	33FT BOOM (LBS)	LOADED BOOM ANGLE	41 FT BOOM (LBS)	BOOM ANGLE	49FT BOOM (LBS)	BOOM ANGLE	67FT BOOM (LB\$)		DEDUCT	
4	79	38,500			272.00				1		_		
6	74	31,500		Ĺ	8						1	DOWNHAUL WEIGHT = 90	
8	88.5	29,500								<del></del>	ı	ONE SHEAVE BLOCK . 200 TWO SHEAVE BLOCK . 355	
10	63	24,700	72	21,500	76	21,200	79	20,300				THE STATE BLOCK - GOD	
12	57	21,300	68	19,600	73	18,400	76	17,400	79	17,300			
14	50	18,700	64	18,800	70	16,200	73.5	15,400	77	15,200			
16	42.5	16,700	80	15,500	67	14,300	71	13,800	75	13,300			
20	21.5	12,400	51	12,300	80.5	11,700	66	11,300	70.5	10,800			
25			38	10,200	51.5	9,400	59	9,200	65	8,700			
_ 30			16.5	7,450	41.5	7,900	52	7,650	59	7,200	l		
35					28	5,600	43.5	6,600	53	6,260	l		
40				_			33.5	5,600	46	5,450	ŀ		
45					1		18.5	4,600	38	4,750	l		
50	ş/								28	4,050	l		
55									11	2,900	l		
							i.						
1 PAF	RT LINE	2	PART L	INE	3 PART	LINE	4 P	ART LI	NE 5	PART L	INE	NOTICE	
	MAX. PULL 7,700 LBS					MAX. PULL 23,100 LBS		M/ 30	MAX. PULL 30,800 LBS		MAX. PULL 38.500 LBS		DO NOT DEADHEAD LINE BLOCK AGAINST BOOM TIP WHEN EXTENDING BOOM. KEEP AT LEAST 3 WRAPS OF LOADLINE ON DRUM AT ALL TIMES. USE ONLY 9/18' DIAMETER ROTATION RESISTANT CABLE WITH 38.500 LBS BREAKING STRENGTH ON THIS MACHINE. MAXIMUM CAPACITY WITH "BURST OF SPEED" IS 3.000 LBS.





A Grove Worldwide Company

# Contractors Machinery & Equipment LTD.

1051 Heritage Road Burlington, Ontario Canada L7L 4Y1 Phone: (905) 335-3863 Fax: (905) 332-4933 Edmonton Branch 2820-84th Avenue Edmonton, Alberta Canada T6P 1P7 Phone: (403) 464-1909 Fax: (403): 467-0434 Montreal Brancb 8751 Crescent 5 Ville D'Anjou, Quebec Canada H1f 1A3 Phone: (514) 351-1160 Fax: (514) 354-6984

General Offices: 11200 No. 148th St. / Waverly, NE 68462