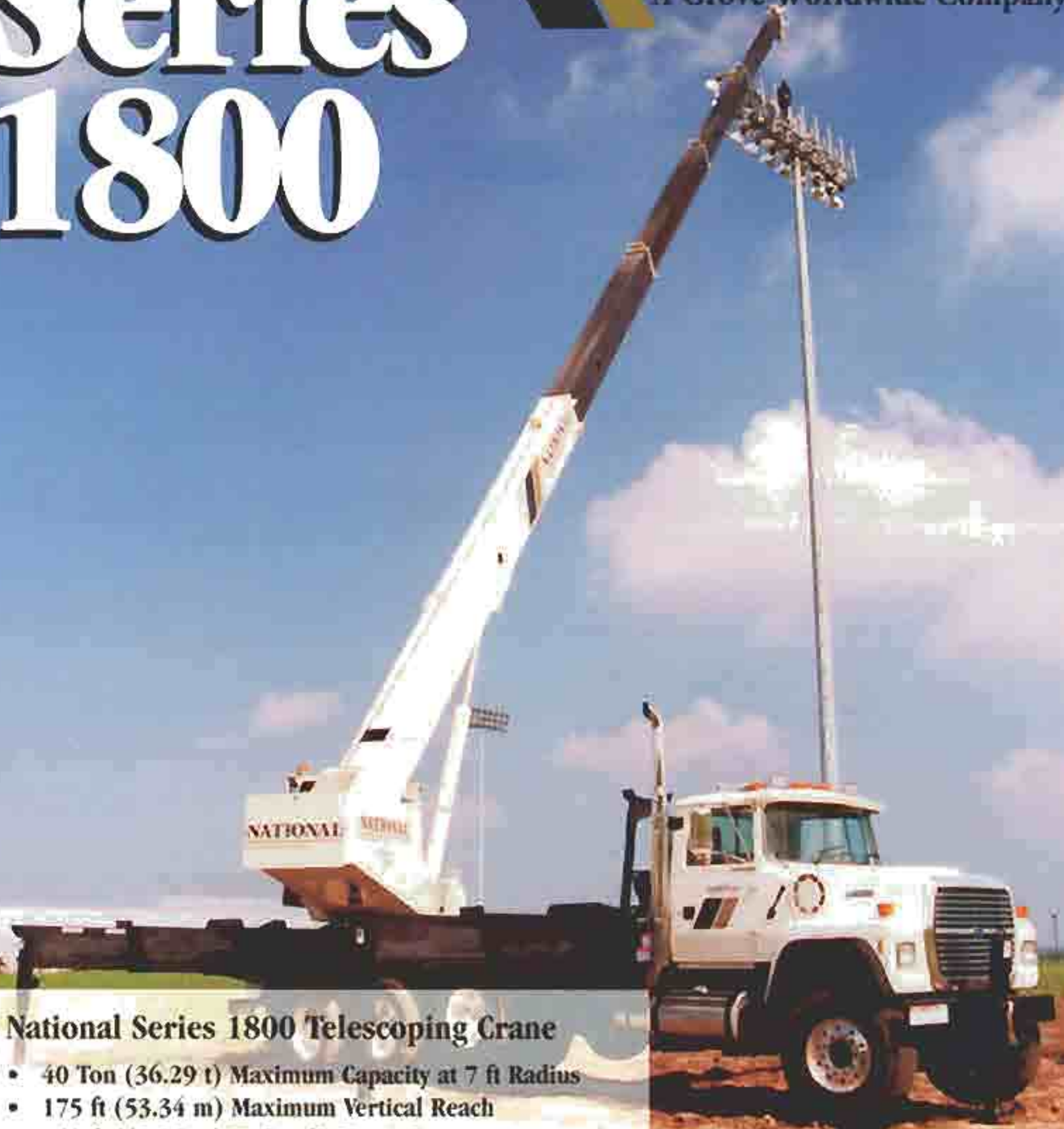


# Series 1800



**NATIONAL CRANE**  
A Grove Worldwide Company



## **National Series 1800 Telescoping Crane**

- 40 Ton (36.29 t) Maximum Capacity at 7 ft Radius
- 175 ft (53.34 m) Maximum Vertical Reach
- 142 ft (43.28 m) Hydraulic Extension
- Five-stage Proportional Telescoping Boom
- Operator's Cab
- Interactive Load Moment Indicator (LMI) System
- Mounts on Standard Commercial Carrier with Pusher or Tag Axle

# Series 1800

## Equipment

### 18142 Telescoping Hydraulic Crane S.N. 30713 • S.O. # 1065138

## Description

- Basic 18142 telescoping crane
- 34' - 142' five-section boom, provides vertical reach of 150'
- 26' swing-around jib, 175' high
- Two sets of 24' 8"-span hydraulic out & down outriggers equipped with 17'6" mid-span locks
- Mid-span capacity rating chart
- Single front outrigger for full 360° rating
- Large aluminum outrigger foot pads, retracted stow width of 102", removable to road unit at 96"
- Deluxe crane cab with single axis armrest controls
- Single variable displacement load-sensing piston pump
- Pressure compensated, load-sensing control valves
- Hydraulic oil cooler
- Load Moment Indicator system with touch pad setup
- Extra-high-pull winch and auxiliary winch with rooster sheave and extra-flexible, ultra-high-strength, no-spin 5/8"-diameter rope
- Downhaul weight and 2-3 part rigging
- Winch drum rotation indicator on both winches
- Continuous rotation
- Aluminum deck and fenders
- Aluminum tool box
- Adjustable speed glide swing with foot brake
- Boom rest
- Painted National Ivory

## Truck Data

1999 Peterbilt 357 truck chassis equipped as follows:

- 20,000-lb. GAWR FA
- 12,000-lb. tag axle
- 11R24.5 rear tires - Traction Tread
- CAT 3406C 350-hp diesel engine
- 37.7 S.M., 110,000 psi frame
- 258" WB, 168" CT, 130" AF
- Air brakes, air dryer
- Air ride driver's seat with fixed passenger seat
- Dual air horns
- 40,000-lb. GAWR rear tandem axle
- 425/65 R22.5 front tires
- Disc alloy wheels
- Fuller RTX 14609B 9-speed transmission
- One 90-gallon fuel tank
- Horizontal muffler w/vertical pipe
- Air conditioning
- AM/FM radio
- 100 amp alternator
- Cab painted Ivory

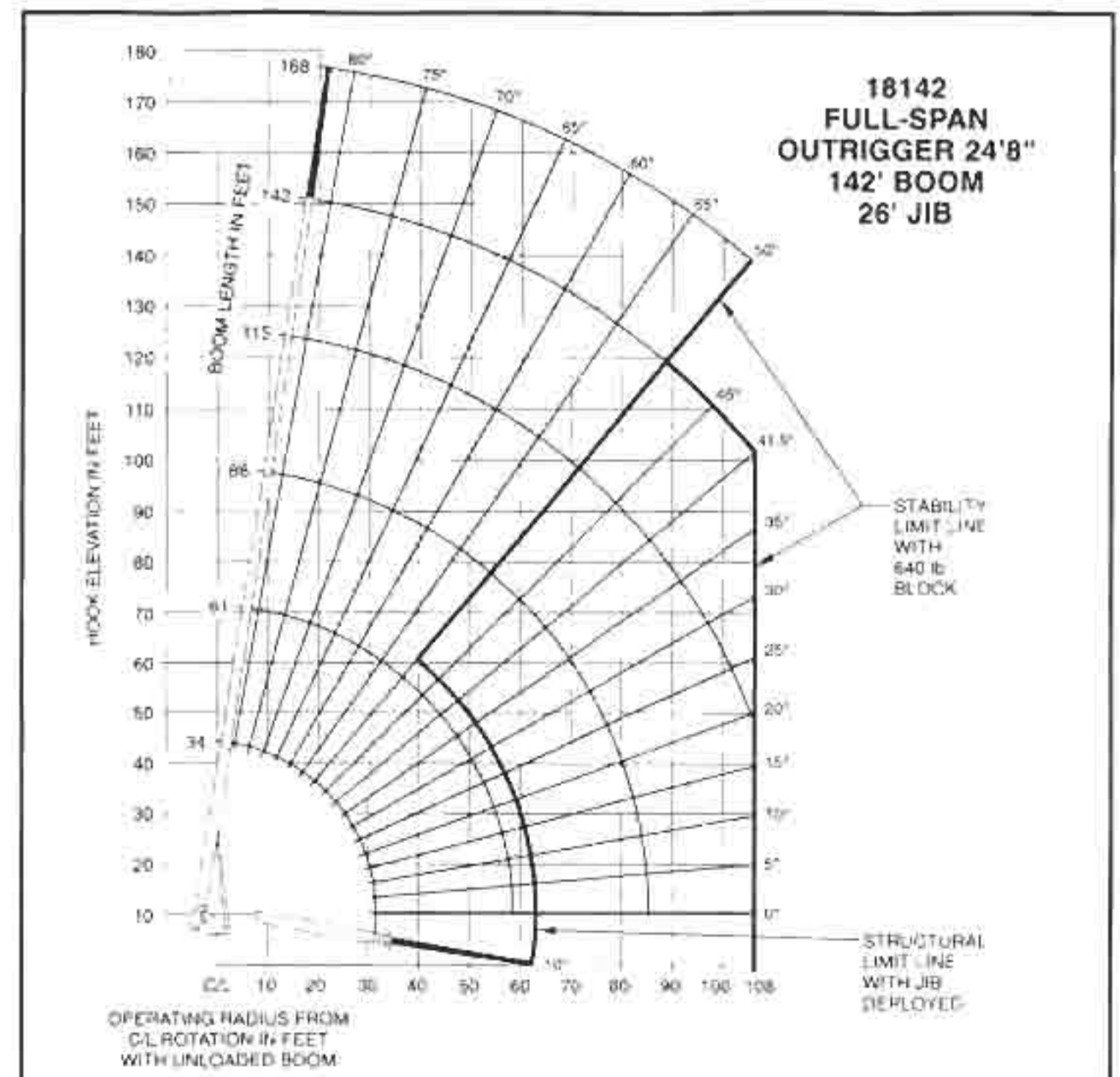
FULL-SPAN OUTRIGGER		18142 142' BOOM 26' JIB					
NOTE: 1. All capacities are in pounds unless otherwise noted. 2. L-shaped boom angles are given as elevation only. 3. Shaded areas are structurally limited capacities.							
34 TO 142 FOOT BOOM RATED LOADS WITHOUT JIB							
LOAD RADIUS (FEET)	BOOM ANGLE	BOOM LENGTH (FT)	BOOM ANGLE	BOOM LENGTH (FT)	BOOM ANGLE	BOOM LENGTH (FT)	BOOM ANGLE
1	76.3	30,000					
5	72.3	14,000					
10	68.3	8,000					
15	64.3	5,000					
20	60.3	3,000					
25	56.3	2,000					
30	52.3	1,500					
35	48.3	1,000					
40	44.3	700					
45	40.3	500					
50	36.3	350					
55	32.3	250					
60	28.3	180					
65	24.3	130					
70	20.3	100					
75	16.3	75					
80	12.3	55					
85	8.3	40					
90	4.3	30					
95		22					
100		16					
105		12					
110		9					
115		7					
120		5					
125		4					
130		3					
135		2					
140		1					
142		1					

26' JIB RATED LOADS		
RADIUS FULL EXTENDED	LOADING BOOM ANGLE	RATED LOAD ALL BOOM LENGTHS
35	85	4,000
50	75	3,500
65	70	3,200
80	65	2,800
95	60	2,500
110	55	2,200
125	50	1,900
140	45	1,600

RATED LOAD REDUCTIONS WITH JIB			
BOOM LENGTH	IN JIB STOWED	IN JIB EXTENDED	
34	Reduce load 525 lb	Reduce load 1,050 lb	
67	Reduce load 300 lb	Reduce load 600 lb	
100	Reduce load 200 lb	Reduce load 400 lb	
133	Reduce load 150 lb	Reduce load 300 lb	
166	Reduce load 125 lb	Reduce load 250 lb	



**Caution:** Do not operate crane booms, jib extensions, any accessories, or loads within 10 feet (3m) of live power lines or other conductors of electricity.