
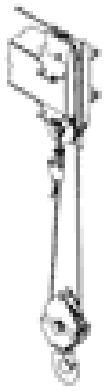
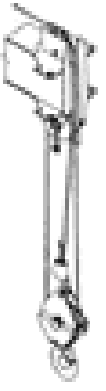
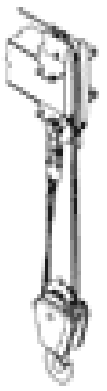
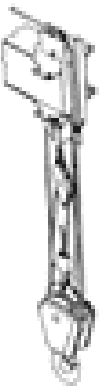



National Series 800C Winch Data			1 Part Line	2 Part Line	3 Part Line	4 Part Line	5 Part Line	6 Part Line
Caution								
<ul style="list-style-type: none"> • Do not deadhead lineblock against boom tip when extending boom. • Keep at least three wraps of loadline on drum at all times. • Use only 9/16" diameter rotation resistant cable with 38,500 pounds breaking strength on this machine. • Maximum capacity with "Burst-of-Speed" is 3,000 pounds on single part line. 								
Winch	Cable Supplied	Average Breaking Strength	Lift and Speed	Lift and Speed	Lift and Speed	Lift and Speed	Lift and Speed	Lift and Speed
Standard Planetary Winch	9/16" diameter rotation resistant 18 x 19 IWRC	38,500 lbs.	7,700 lbs. 164 fpm	15,400 lbs. 82 fpm	23,100 lbs. 55 fpm	30,800 lbs. 41 fpm	38,500 lbs. 33 fpm	42,000 lbs. 27 fpm
	optional 9/16" diameter 6 x 25 IWRC cable	29,750 lbs.	7,700 lbs. 164 fpm	15,400 lbs. 82 fpm	23,100 lbs. 55 fpm	30,800 lbs. 41 fpm	38,500 lbs. 33 fpm	42,000 lbs. 27 fpm
with "Burst-of-Speed" feature	Same as corresponding cable data shown above		3,000 lbs. 265 fpm	6,000 lbs. 133 fpm	9,000 lbs. 88 fpm	12,000 lbs. 66 fpm	15,000 lbs. 53 fpm	18,000 lbs. 44 fpm

All winch pulls and speeds are shown on the fourth layer. Winch line pulls would increase on the first, second and third layers. Winch line speed would decrease on the first, second, and third layers. Winch line pulls may be limited by the winch capacity or the cable safety factor. These are shown below:

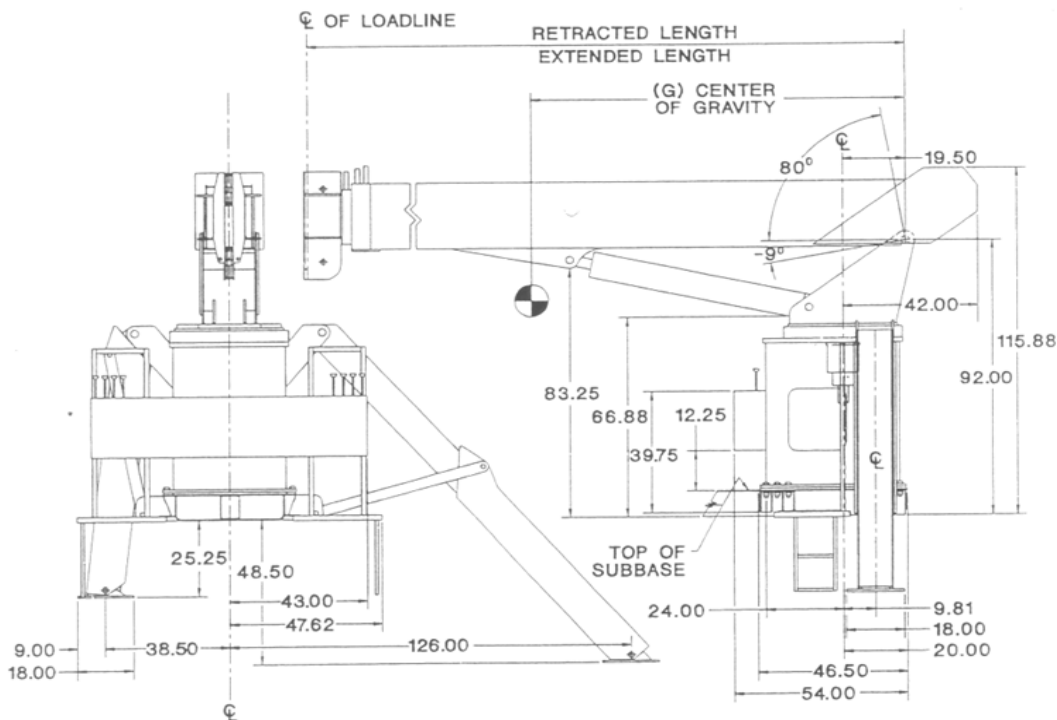
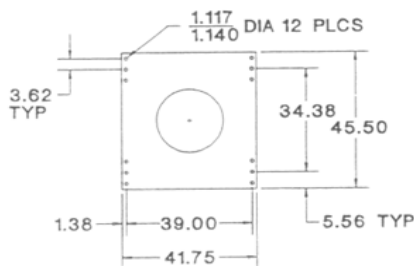
Winch	Bare Drum Pull	Allowable Cable Pull
With standard rotation resistant rope.....	10,000 pounds.....	7,700 pounds
With optional 6 x 25 IWRC rope.....	10,000 pounds.....	8,400 pounds

National Boom Rests

Dimensional Specification

Series	Retracted Length	Extended Length	G	Dry* Wt/Lb	With Oil* Wt/Lb
880C	24.5 ft.	80 ft.	87 in.	17,750*	18,500*
869C	27 ft.	69 ft.	90 in.	18,150*	

* Weight includes all items except ASH (600#).



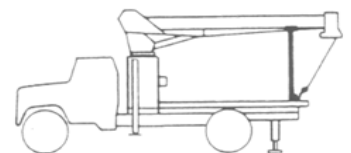
Cranes are tough when they are in use, but they can be severely damaged during travel from job to job. The only way a crane can be protected from this type of wear and damage is a strong, solid boom rest.

Boom Rests

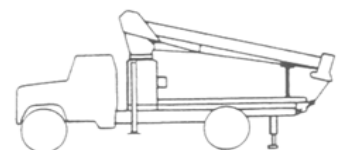
- Add years to the life of your crane
- Reduce stress on the crane frame
- Protect rotation gear from transit damage
- Remove stress from truck frame
- Spread crane load more evenly
- Reduce maintenance and downtime

In addition, boom rests are required to provide a positive way to immobilize your crane for transit.

National Crane supplies two heavy-duty boom rests for strong, sure protection of your crane. There is a quality National boom rest to fit your mounting configuration. All National cranes must be fitted with a boom rest. All factory mounted cranes will be supplied with a boom rest.



Horizontal rear bed mount for greater load space



Low-profile rear bed mount for lower center of gravity

Mounting Configurations	Configuration 1 with Torsion Box	Configuration 2 with Torsion Box
<p>The versatility of the Series 800C can be enhanced by the mounting configurations described at the right. The configurations are based on a Series 800C with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary.</p>	<p>This configuration is the least expensive method for the Series 800C. This mount, with the crane mounted behind the truck cab, requires the least weight of all mounts for stability; thus, you can haul larger payloads on your truck. It requires standard subbase and rear (ASH) stabilizers.</p>	<p>This mount requires front stabilizers to give the machine full capacity 360 degrees around the truck. Care must be taken in the selection of the truck. It must meet the minimum requirements below. The front stabilizer gives the machine a solid base, helping the operator control the loads precisely. Requires front SFO and rear ASH stabilizers and a subbase. The truck frame must be made from 110,000 PSI steel. Contact the factory for truck frame and mounting bolt requirements for front stabilizer.</p>
Stable	180 degrees	360 degrees
Gross Axle Weight Rating (GAWR), front	12,000 lbs.	12,000 lbs.
Gross Axle Weight Rating (GAWR), rear	34,000 lbs.	34,000 lbs.
Wheelbase (WB)	222 inches	222 inches
Cab to axle/trunnion (CA/CT)	144 inches	144 inches
Frame Section Modulus (SM) under crane: 50,000 PSI	35.0 cu. inch	Not applicable; see note above.
or 110,000 PSI	15.9 cu. inch	20.0 cu. inch
Frame Section Modulus (SM) over rear stabilizers: 50,000 PSI	17.0 cu. inch	Not applicable; see note above.
or 110,000 PSI	13.0 cu. inch	13.0 cu. inch

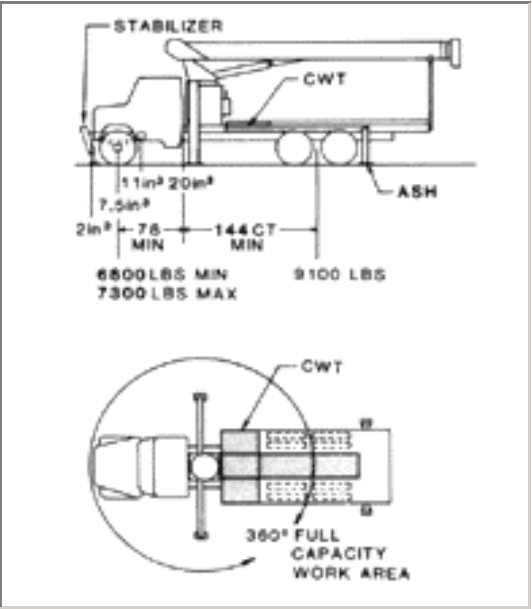
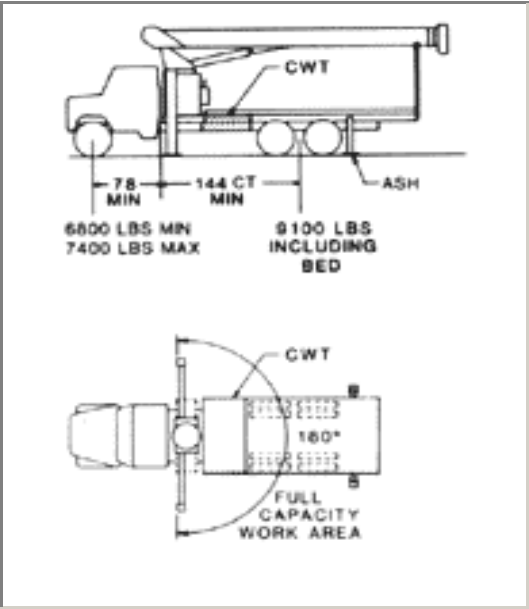
Stability Weight, Front	6,800 lbs. minimum 7,400 lbs. maximum*	6,800 lbs. minimum 7,300 lbs. maximum
Stability Weight, Rear	9,100 lbs. minimum*	9,100 lbs. minimum*
Estimated Average Final Weight (562C)	35,000 lbs.	35,300 lbs.

NOTES:

(1) 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 recommendations. Always specify GAWR when purchasing trucks.

(2) Minimum axle requirements may increase with use of longer wheelbase, service bodies, diesel engines or front stabilizers.

(3) Diesel engines require variable speed governor and energize-to-run fuel solenoid for smooth crane operation.



***Estimated axle scale rates prior to installation of crane, stabilizers, and subbase for 85% stability.**

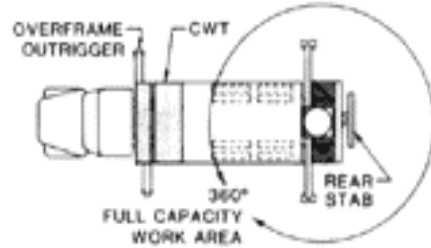
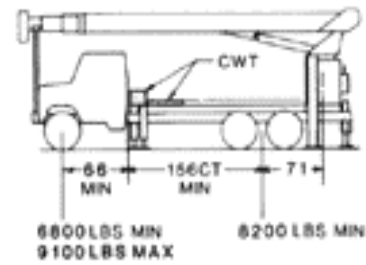
Mounting Configurations The versatility of the Series 800C can be enhanced by the mounting configurations described at the right. The configurations are based on a Series 800C with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary.	Configuration 3 with Torsion Box This configuration is the least expensive method for the Series 800C. This mount, with the crane mounted behind the truck cab, requires the least weight of all mounts for stability; thus, you can haul larger payloads on your truck. It requires standard subbase and rear (ASH) stabilizers.
Stable	360 degrees
Gross Axle Weight Rating (GAWR), front	16,000 lbs.
Gross Axle Weight Rating (GAWR), rear	34,000 lbs.
Wheelbase (WB)	246 inches
Cab to axle/trunnion (CA/CT)	168 inches
Frame Section Modulus (SM) under crane: 50,000 PSI	35.0 cu. inch
or 110,000 PSI	15.9 cu. inch
Frame Section Modulus (SM) over rear stabilizers: 50,000 PSI	35.0 cu. inch
or 110,000 PSI	15.9 cu. inch
Stability Weight, Front	9,250 lbs. minimum
Stability Weight, Rear	8,550 lbs. minimum; 10,250 lbs. maximum*
Estimated Average Final Weight (562C)	35,000 lbs.

NOTES:

(1) 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 recommendations. Always specify GAWR when purchasing trucks.

(2) Minimum axle requirements may increase with use of longer wheelbase, service bodies, diesel engines or front stabilizers.

(3) Diesel engines require variable speed governor and energize-to-run fuel solenoid for smooth crane operation.



***Estimated axle scale rates prior to installation of crane, stabilizers, and subbase for 85% stability.**

Series 880C with 43-ft jib

LOAD RADIUS (FEET)	LOADED BOOM ANGLE	24½FT BOOM (LBS)	LOADED BOOM ANGLE	36FT BOOM (LBS)	LOADED BOOM ANGLE	47FT BOOM (LBS)	LOADED BOOM ANGLE	58FT BOOM (LBS)	LOADED BOOM ANGLE	69FT BOOM (LBS)	LOADED BOOM ANGLE	80FT BOOM (LBS)
5	77.5°	42,000										
8	70°	29,200										
10	64.5°	24,200	73.5°	22,200	78°	20,600						
12	58.5°	20,900	70°	19,000	75.5°	17,500	78.5°	16,200				
14	52.5°	18,200	66.5°	16,600	73°	15,300	76.5°	14,100	79.5°	13,200		
16	46°	15,900	63°	14,700	70°	13,500	74.5°	12,500	77.5°	11,700	79.5°	11,300
20	29°	12,200	55°	11,900	64.5°	11,000	70°	10,100	74°	9,600	76.5°	9,100
25			44°	9,500	57.5°	8,900	65°	8,200	69.5°	7,600	72.5°	7,200
30			31°	7,400	50°	7,300	59°	6,700	65°	6,300	68.5°	5,950
35					41°	6,100	53°	5,700	60°	5,400	64.5°	5,000
40					30°	4,900	46.5°	4,800	55°	4,600	60.5°	4,300
45							38.5°	4,100	49.5°	4,000	56.5°	3,750
50							29°	3,300	43.5°	3,400	52°	3,250
55							13°	2,200	37°	2,900	47°	2,800
60									29°	2,400	41.5°	2,400
65									17°	1,700	35.5°	2,000
70											28°	1,600
75											18°	1,100

LOAD RADIUS (FEET)	LOADED BOOM ANGLE	24½FT JIB (LBS)	LOADED BOOM ANGLE	43FT JIB (LBS)
20	79.5°	5,600		
25	77°	4,900	79°	3,350
30	74°	4,300	77°	3,000
35	71°	3,650	75°	2,650
40	68°	3,100	72.5°	2,400
45	65°	2,600	70°	2,200
50	62°	2,200	67.5°	2,000
55	59°	1,900	65°	1,800
60	55.5°	1,800	62.5°	1,600
65	52°	1,350	60°	1,400
70	48.5°	1,100	57°	1,200
75	45°	850	54°	1,000