










## Specifications

### 900H winch data

### NOTICE

- 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 9/16 in diameter rotation resistant cable with 38,500 lb breaking strength on this machine
- Maximum capacity with high speed winch is 3000 lb

			1 part line	2 part line	3 part line	4 part line	5 part line	6 part line	7 part line
									
Maximum Boom Length at Maximum Elevation with Rigging Shown with Load Block at Ground Level			95 ft boom 145 ft Boom and jib	95 ft	82 ft	69 ft	56 ft	43 ft	29 ft
			105 ft boom 154 ft Boom and jib	105 ft	76 ft	61 ft	46 ft	46 ft	32 ft
Winch	Cable supplied	Average breaking strength	Lift and speed	Lift and speed	Lift and speed	Lift and speed	Lift and speed	Lift and speed	Lift and speed
Low speed winch	9/16 in diameter rotation resistant	38,500 lb	7700 lb 160 fpm	15,400 lb 80 fpm	23,100 lb 53 fpm	30,800 lb 40 fpm	38,500 lb 32 fpm	46,200 lb 27 fpm	54,000 lb 23 fpm
High speed winch	9/16 in diameter rotation resistant	38,500 lb	3000 lb 310+ fpm	6000 lb 155 fpm	9000 lb 103 fpm	12,000 lb 78 fpm	15,000 lb 62 fpm	18,000 lb 52 fpm	21,000 lb 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 ANSI 5 to 1 cable safety factor. These are shown below:

**Winch**  
Standard planetary

**4th layer drum pull**  
7700 lb (low speed)  
(3000 lb "burst of speed")

**Allowable cable pull**  
7700 lb

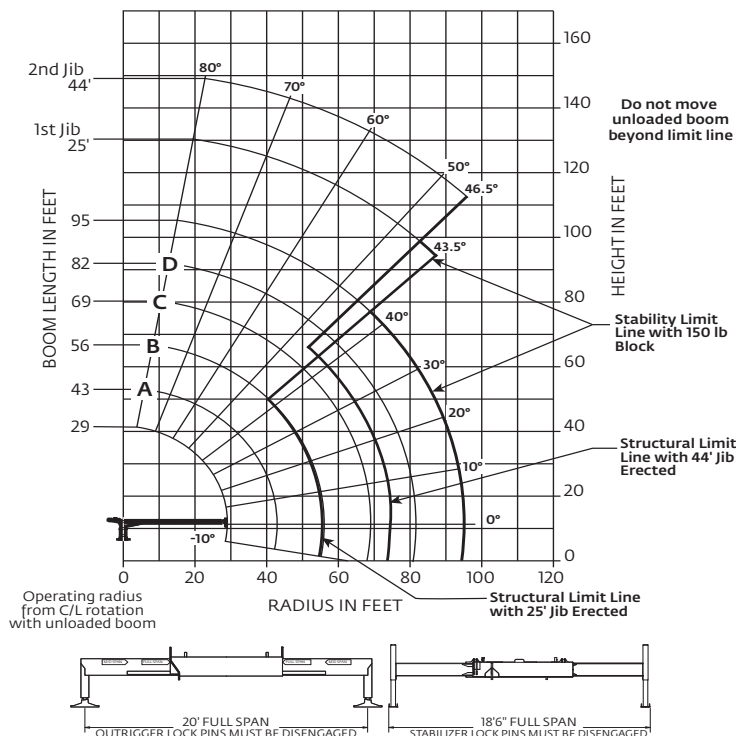
5 t	Downhaul weight	150 lb
12 t	1 sheave block	270 lb
19 t	2 sheave block	350 lb
30 t	3 sheave block	575 lb



## Capacities

**Series 995H: 95 ft boom with 25 ft – 44 ft jib, full span outrigger and stabilizer**

National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



### CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating 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.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capabilities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

### Load chart

**29 ft – 95 ft BOOM RATED LOADS WITHOUT JIB**

LOADED RADIUS (ft)	LOADED BOOM ANGLE (deg)	29 ft BOOM (lb)	LOADED BOOM ANGLE (deg)	A 43 ft BOOM (lb)	LOADED BOOM ANGLE (deg)	B 56 ft BOOM (lb)	LOADED BOOM ANGLE (deg)	C 69 ft BOOM (lb)	LOADED BOOM ANGLE (deg)	D 82 ft BOOM (lb)	LOADED BOOM ANGLE (deg)	95 ft BOOM (lb)
5	75.8	54,000										
8	69.5	42,000	76.7	29,000								
10	65.1	35,500	73.9	27,000								
12	60.6	31,750	71	25,000	75.9	28,000						
14	55.9	25,500	68.1	23,000	73.8	24,000	77.6	22,000				
16	50.8	23,000	65.2	21,000	71.6	22,000	75.8	18,000				
20	39.3	17,500	59	17,500	67.1	18,000	72.4	17,000	76.2	16,500		
25	17.4	13,000	50.7	13,250	61.3	13,500	67.9	13,000	72.5	13,250	75.9	12,000
30			41.1	10,500	55.2	10,500	63.2	10,250	68.6	10,500	72.7	10,500
35			29.1	8250	48.5	8500	58.2	8250	64.6	8250	69.3	8500
40					41.7	7000	53.5	6750	60.8	6750	66.2	7000
45					32.9	5750	47.9	5500	56.5	5500	62.6	5750
50					21.2	4750	41.9	4900	52.1	4700	58.9	4750
55							34.9	4000	47.3	4100	55.1	4000
60							26.2	3250	42.1	3400	51.2	3300
65							12.9	2700	36.2	2750	46.9	2750
70									29.4	2300	42.4	2350
75									20.4	1800	37.4	1900
80											31.7	1500
85											24.8	1200
90											14.8	900
	0	9000	0	5500	0	3650	0	2300	0	1300	0	600

**25 ft – 44 ft JIB RATED LOADS**

LOADED RADIUS (ft)	LOADED BOOM ANGLE (deg)	25 ft JIB (lb)	LOADED BOOM ANGLE (deg)	44 ft JIB (lb)
25	79	4900		
30	76.9	4750		
35	74.7	4500	77	2500
40	72.4	4000	75.2	2500
45	69.9	3500	73.4	2500
50	67.6	3500	71.5	2500
55	65	3000	69.7	2200
60	62.4	2750	67.5	2100
65	59.7	2500	65.4	2000
70	56.7	2000	63.2	1850
75	53.6	1600	61	1800
80	50.4	1200	58.4	1750
85	47	850	55.6	1400
90	43.5	600	52.7	1100
95			49.8	850
100			46.5	500

**RATED LOAD REDUCTIONS WITH STOWED JIB**

BOOM LENGTH (ft)	25 ft – 44 ft JIB STOWED
29	Reduce load 800 lb
43	Reduce load 600 lb
56	Reduce load 450 lb
69	Reduce load 350 lb
82	Reduce load 300 lb
95	Reduce load 250 lb

### Note:

1. All capacities are in pounds, angles in degrees and radii in feet.
2. Loaded boom angles are given as reference only.
3. Shaded areas are structurally limited capacities.
4. Handling of personnel is only permitted with full span extension of all outrigger and stabilizer beams.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

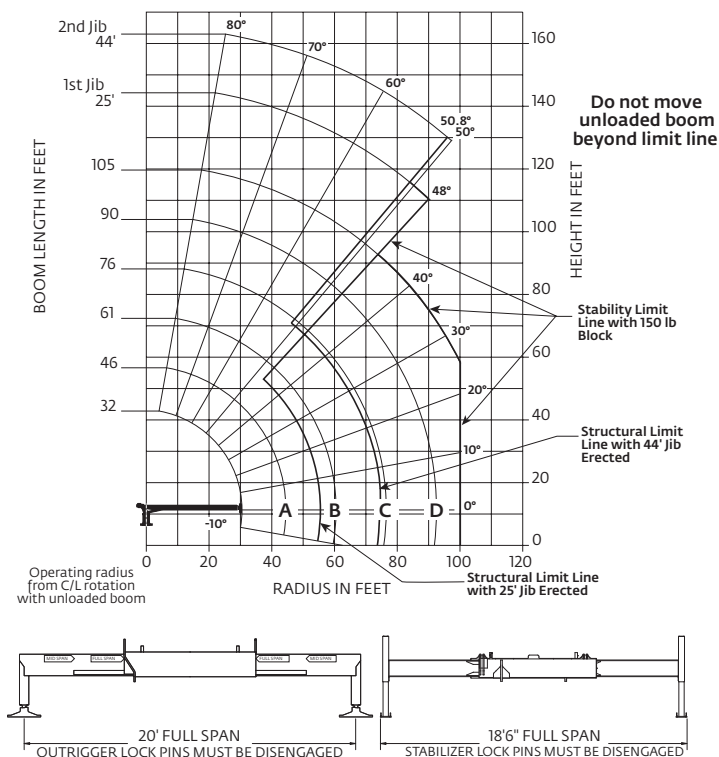
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



## Capacities

### Series 9105H: 105 ft boom with 25 ft – 44 ft jib, full span outrigger and stabilizer

National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



#### CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating 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.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capabilities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

#### Load chart

##### 32 ft – 105 ft BOOM RATED LOADS WITHOUT JIB

LOADED RADIUS (ft)	LOADED BOOM ANGLE (deg)	32 ft BOOM (lb)	46 ft BOOM (lb)	61 ft BOOM (lb)	76 ft BOOM (lb)	90 ft BOOM (lb)	105 ft BOOM (lb)
5	77.2	54,000					
8	71.5	40,000	29,000				
10	67.6	34,000	27,000				
12	63.5	30,000	24,950	77.4	24,000		
14	59.4	24,000	22,850	75.4	22,000	78.6	19,000
16	55	22,000	20,450	73.5	20,000	77.1	17,000
20	45.4	16,500	16,950	69.4	16,000	73.9	14,500
25	30.2	12,000	12,900	64.2	13,000	69.9	12,000
30		45.4	10,000	58.7	10,000	65.7	9,500
35		35.5	7,750	52.9	8,000	61.4	8,000
40		23.3	6,300	47.1	6,650	57.3	6,750
45				39.8	5,300	52.6	5,500
50				31.5	4,300	47.5	4,550
55				20.3	3,500	42	3,700
60						35.7	2,950
65						28.3	2,300
70						18.3	1,800
75							32.2
80							25
85							14.8
90							
	0	8000	0	4500	0	2500	0
							1300
							500

##### 25 ft – 44 ft JIB RATED LOADS

LOADED RADIUS (ft)	LOADED BOOM ANGLE (deg)	25 ft JIB (lb)	44 ft JIB (lb)
40	73.9	4400	
45	71.9	4400	74.7
50	69.6	4100	72.9
55	67.2	3600	71.1
60	64.5	2850	69.2
65	61.7	2250	67.1
70	58.9	1750	65.1
75	56	1300	62.8
80	53.1	900	60.2
85	50	550	57.5
90			54.8
95			52

#### RATED LOAD REDUCTIONS WITH STOWED JIB

BOOM LENGTH (ft)	25 ft – 44 ft JIB STOWED
32	Reduce load 800 lb
46	Reduce load 600 lb
61	Reduce load 450 lb
76	Reduce load 350 lb
90	Reduce load 300 lb
105	Reduce load 250 lb

#### Note:

1. All capacities are in pounds, angles in degrees and radii in feet.
2. Loaded boom angles are given as reference only.
3. Shaded areas are structurally limited capacities.
4. Handling of personnel is only permitted with full span extension of all outrigger and stabilizer beams.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.