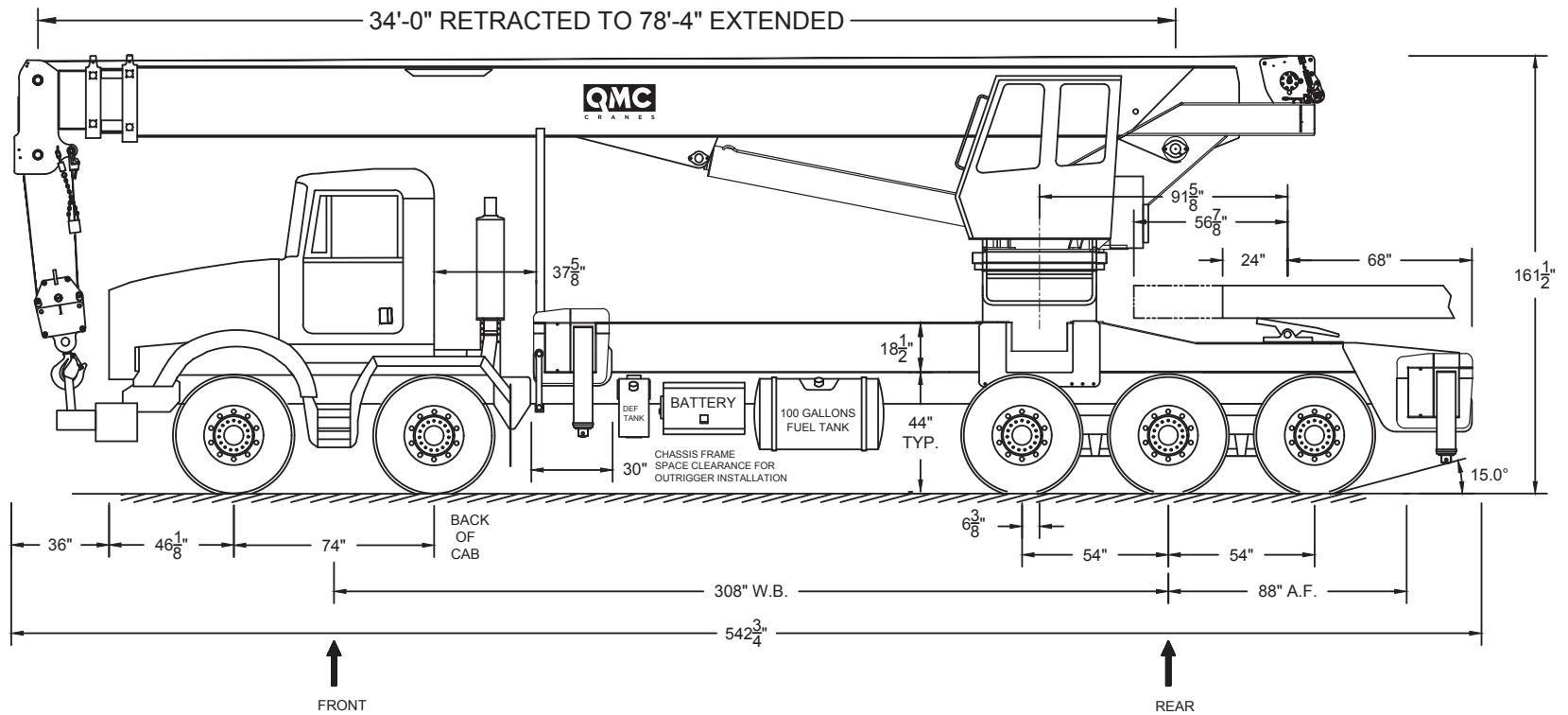


## TRACTOR MOUNT

ASME B30.5  
IMPERIAL 85%



BASIS OF DESIGN		
ITEM	DESCRIPTION	REMARKS
Tractor chassis		Per customer
Driver weight	250 pounds	Included in analysis
Fuel tank	100 gallons	Included in analysis
Hydraulic tank	100 gallons	Included in analysis, location may vary

MINIMUM FRAME REQUIREMENTS

Diagram illustrating minimum frame requirements for a 12" high frame:

- Top rail width:  $3\frac{1}{2}"$
- Side rail height:  $\frac{3}{4}"$
- Maximum frame width: 34.5"

Minimum section modulus per rail = 39.8 in.<sup>3</sup>  
Minimum yield strength = 110 KSI

WEIGHT DISTRIBUTION			
	FRONT	REAR	TOTAL
Tractor	15,550	13,460	29,010
Crane	14,180	25,700	39,880
Totals	29,730	39,160	68,890

Total axle limits shown are based on  
Federal D.O.T. regulations bridge formula.

Truck dimensions, weights, payload, and lifting performance representative of design baseline. Variations from information shown (truck weights, wheel base, front axle to back of cab, and more) may be accommodated and may result in adjustment of payload, payload size, and crane lifting capacity. Contact QMC Cranes with your requirements.

# Load Chart

Red lines indicate transition from structural to tipping limits. Loads above the line are based on structural limits. Loads below the line are based on 85% actual tipping condition per ASME B30.5.

[illegible]

56 FOOT BOOM				
WORKING RADIUS	BOOM ANGLE	RATED LOAD		
		REAR	SIDE	FRONT
8	79	68,800	68,800	68,800
10	77	68,800	68,800	68,800
12	75	70,200	70,200	70,200
15	72	64,300	60,800	64,300
18	68	56,500	49,100	52,000
20	66	50,400	43,300	45,900
25	60	39,300	32,400	35,000
30	54	31,800	22,900	27,900
35	47	26,400	17,100	20,600
40	39	22,300	13,300	15,400
45	30	19,100	10,500	11,900
50	16	15,700	8,400	9,300

78 FOOT BOOM				
WORKING RADIUS	BOOM ANGLE	RATED LOAD		
		REAR	SIDE	FRONT
12	81	53,200	53,200	53,200
15	78	46,500	46,500	46,500
18	76	40,600	40,600	40,600
20	74	37,500	37,500	37,500
25	70	31,100	31,100	31,100
30	66	26,500	23,000	26,500
35	62	23,000	17,300	20,800
40	58	20,100	13,400	15,600
45	53	17,800	10,700	12,100
50	48	15,900	8,600	9,600
55	43	14,300	7,000	7,700
60	37	12,800	5,700	6,200
65	30	11,300	4,700	5,000
70	21	10,000	3,800	4,000
74	0	1,900	1,900	1,900

Working radius is in feet. Loads are in pounds and boom angles are in degrees. Capacity limits will apply based on the load block selected.

WIRE ROPE CAPACITY									
Parts Line	1	2	3	4	5	6	7	8	9
Load Limit	11,280	22,560	33,840	45,120	56,400	67,680	78,960	90,240	101,520

Do not exceed parts of line ratings.

1. Load does not include blocks, slings, and all other equipment used to handle objects being lifted.
2. Load ratings are for zero degree list.
3. Loads must be freely suspended.
4. Rope: Rotation resistant, compacted strand, 9080 lb. capacity.
5. This chart is only a guide and should not be used to operate the crane. Individual crane's load chart, operating instructions, and other instructional plates must be read and understood prior to operating crane.