



110 TON MOBILIFT by LIFT SYSTEMS, INC.



***Global Leaders in Specialized
Lifting Equipment!***



110 TON

STANDARD EQUIPMENT

ENGINE:

Cummins Diesel Engine: QSB4.5P
160 hp (116 Kw) intermittent @ 2500 rpm
U.S. EPA Tier 3
CARB Tier 3
EU Stage III
Torque @ 1500 rpm, 466 ft-lbs (632 N-m)

PUMP:

Sundstrand 90 series drive pump

CONTROL SYSTEM:

CARL (Computer Assisted Remote Lifting) Control System.
Monitors Boom Angle, Boom Extension, Pressure,
Counterweight Load Pin. Automatic Shutdown for overload
conditions. Large easy to read display screen with push
button navigation and dial adjustment.

CONTROLS:

Separate controls for each function.
Combination of foot pedal, joystick, and push
button controls allows for multiple functions to be
performed at the same time.

DRIVE:

Poclain MK35 drive motors (qty. 3)
(2) in front, (1) in rear steering box.

WHEELS:

Front: qty. (4)
Diameter: 28"
Width: (2) @ 24" and (2) @ 16"
Rear: qty. (2)
Diameter: 28"
Width: 16"

Replaceable polyurethane composition

STEERING:

90 degree steering of rear wheels.

OSCILLATING REAR STEERING BOX:

Keeps all steering wheels in contact with ground.

GRADABILITY:

Unloaded maximum grade is 20%
Loaded maximum grade is 8%

GROUND BEARING PRESSURE:

Loaded Front Tires: 634 psi maximum
Unloaded Rear Tires: 502 psi maximum

TRAVEL SPEED UNLOADED:

Travel Mode - High Gear = 0.0 to 1.70 mph
Travel Mode - Low Gear = 0.0 to 0.86 mph
Work Mode - Low Gear = 0.0 to 0.42 mph

TELESCOPING COUNTERWEIGHT:

Standard counterweight section telescopes 5'
using (2) hydraulic cylinders. Push button control.

HYDRAULIC RESERVOIR:**BOOM:**

High strength three section telescoping boom with powered
first section and manually extended second section.
Replaceable wear pads on all sliding sections.

BOOM LIFT CYLINDERS:

Twin cylinders capable of lifting and lowering with a full
load. Safety holding valves installed on both cylinders.
Spherical bearings ensure constant alignment with the
boom.

BOOM TELESCOPE CYLINDER:

Single cylinder capable of telescoping the boom in and out
with a full load. Safety holding valve is installed on the
cylinder.

LIFTING EYES:

Qty. one (1) centrally located on main boom and one (1)
located on power boom both with 110 ton capacity.

WINCH:

Two speed high performance hydraulic winch. Integral, full
capacity load brake. Wide, low profile drum. 500' - 1" wire
rope capacity.

WEIGHT:

58,200 lbs.
Standard "A" counterweight included

COUNTERWEIGHTS:

"A" - non-removable counterweight installed in unit
"B" - qty. (2) - 8,270 lbs each. - 16,540 lbs total
"C" - qty. (1) - 9,200 lbs
"D" - qty. (1) - 9,200 lbs
"E" - qty. (1) - 9,200 lbs

TIE DOWN / LIFTING EYES:

Tie down / lifting eyes installed for securing unit during
transport and for lifting of the unit.

DRIVER PROTECTION GUARD:

Structural overhead guard for operator protection.

OTHER STANDARD FEATURES:

Back up alarm, horn, strobe light, operator seat
complete with safety belt and electric switch.

OPTIONAL EQUIPMENT

RADIO REMOTE CONTROL:

Radio remote control allows full machine functionality from
a wireless radio remote. Allows operator optimal view of
load. Emergency safety shutdown switch is standard.

110 TON SPINNER:

Allows for 360 degree rotation of load from picking eye.

EXHAUST PURIFIER:

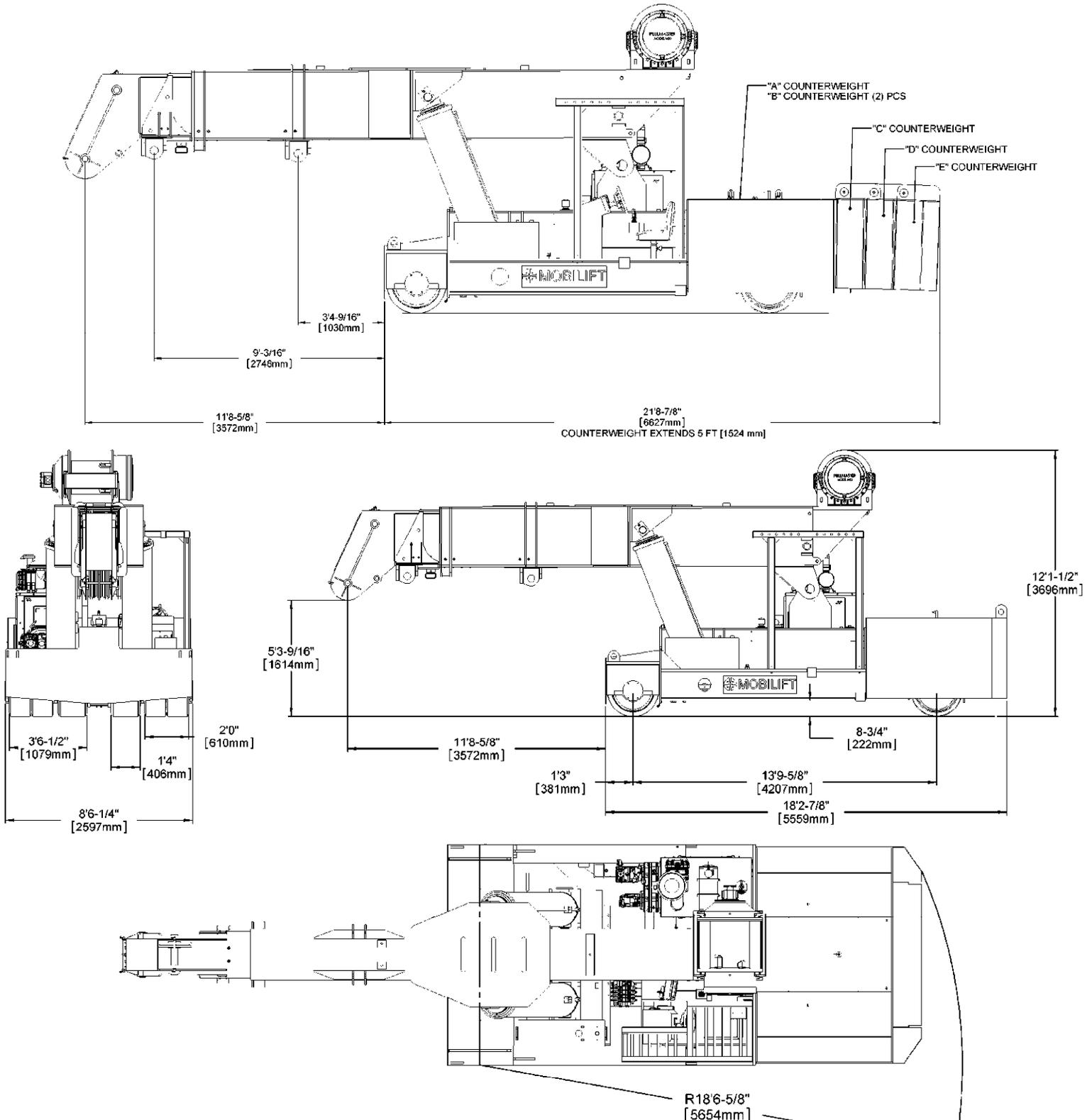
Reduces diesel particulate matter.

JIB EXTENSION:



110 TON

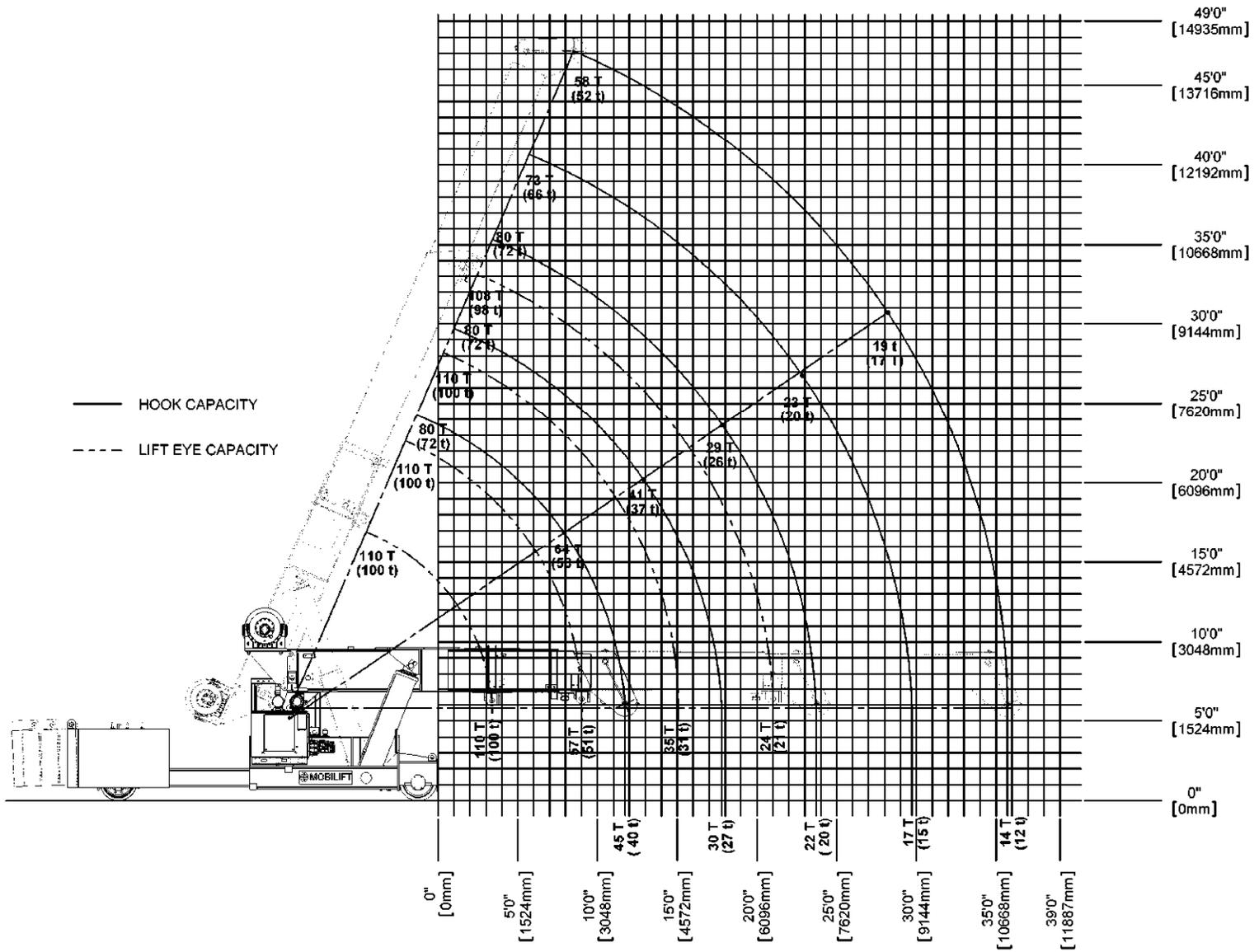
DIMENSIONAL DATA





110 TON

REFERENCE CAPACITY / RANGE DIAGRAM



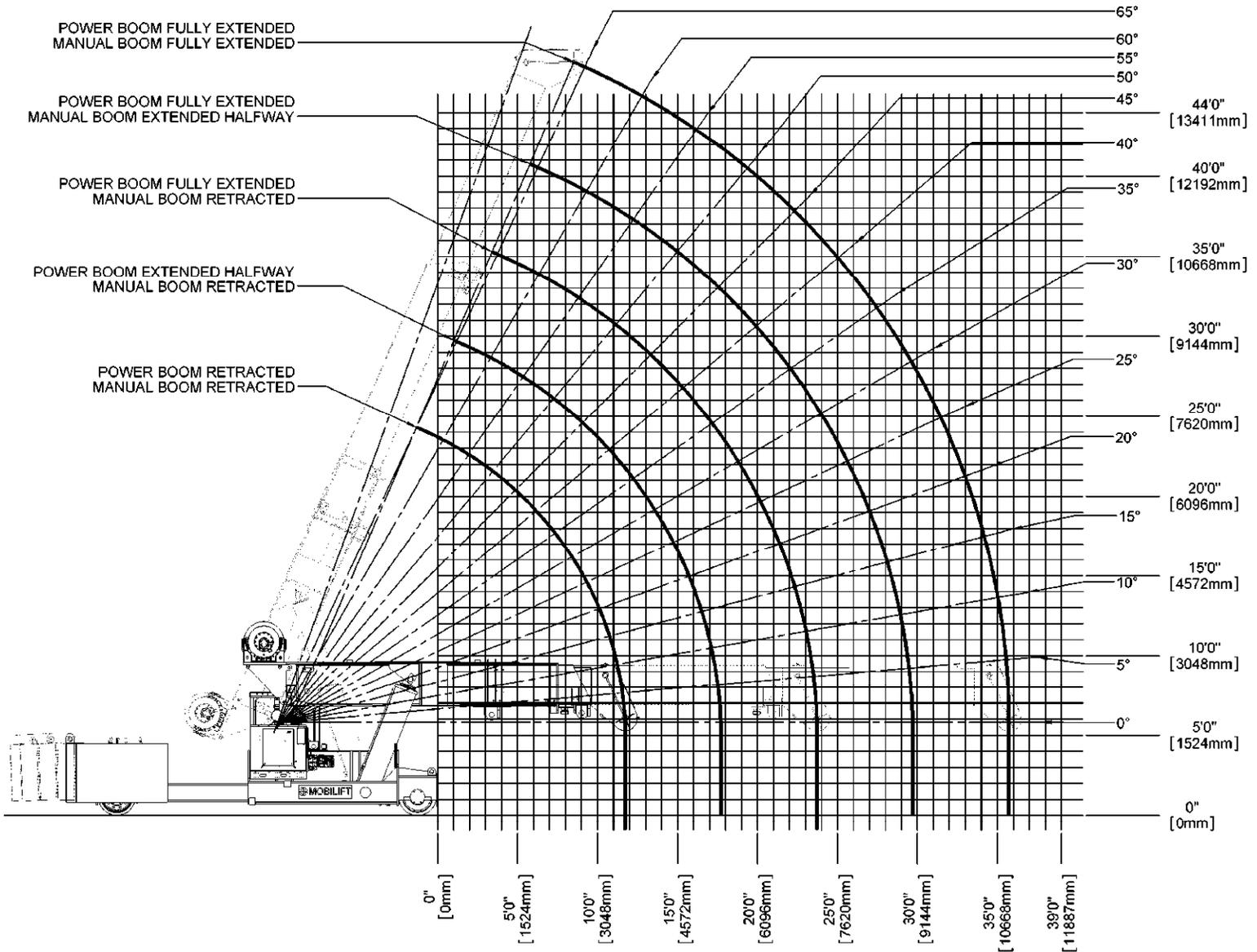
NOTE

1. The above chart is for reference purposes only.
2. Never use the above chart for lift planning calculations
3. Lift plan calculations are to be determined solely by the load charts and range diagrams that are issued for the specific serial numbered machine that is to be used for the specific planned lift



110 TON

RANGE DIAGRAM



NOTE

1. The above chart is for reference purposes only.
2. Never use the above chart for lift planning calculations
3. Lift plan calculations are to be determined solely by the load charts and range diagrams that are issued for the specific serial numbered machine that is to be used for the specific planned lift

This information is for reference only. Operators manual should be consulted and adhered to. Please contact HWP Rigging at 314-436-9019 for further information. All material is the property of it's respective owner.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART FOR USE WITH HOOK BLOCK ONLY STANDARD NON-REMOVABLE "A" COUNTERWEIGHT																MLLC220 11/21/2016 REV B	
	FULLY EXTENDED								FULLY RETRACTED									
	BOOM LENGTH (FEET)								BOOM LENGTH (FEET)									
	21	27	33	39	45	21	27	33	39	45	21	27	33	39	45			
0	63	160,000									63	160,000						
1	60	160,000									60	157,100						
2	57	131,600	65	131,000							57	107,200	65	106,700				
3	54	99,400	62	98,500							54	80,800	62	80,300				
4	50	79,500	60	79,100							50	64,400	60	64,000				
5	46	66,000	57	65,600							46	53,300	57	52,900				
6	42	56,200	55	55,800							42	45,300	55	44,900				
7	38	48,700	52	48,400							38	39,200	52	38,800				
8	33	42,900	50	42,600							33	34,400	50	34,100				
9	28	38,200	47	37,900							28	30,500	47	30,200				
10	23	34,400	44	34,100							21	27,400	44	27,100				
11	0	29,200	41	30,900	52	30,700	58	31,500	63	32,000	10	23,100	41	24,400	52	24,300		
12	SEE NOTE (E)		37	28,200	49	28,000	56	28,700	62	29,300	SEE NOTE (E)		37	22,200	49	22,000		
13			34	25,800	47	25,600	55	26,400	60	26,900			34	20,300	47	20,100		
14			30	23,800	45	23,600	53	24,300	59	24,800			30	18,600	45	18,400		
15			25	22,000	42	21,800	51	22,500	57	23,000			25	17,100	42	17,000		
16			20	20,400	39	20,300	49	20,900	56	21,400			20	15,800	39	15,700		
17			0	18,100	36	18,900	47	19,500	54	20,000			0	13,900	36	14,500		
18					33	17,600	45	18,200	52	18,700					33	13,500		
19					30	16,500	43	17,100	51	17,600					30	12,600		
20					26	15,400	41	16,100	49	16,500					26	11,700		
21					22	14,500	39	15,100	47	15,600					22	11,000		
22					16	13,700	36	14,300	46	14,700					16	10,300		
23					0	12,400	34	13,500	44	13,900				0	9,200	34	10,200	
24							31	12,700	42	13,200						31	9,600	
25							28	12,100	40	12,500						28	9,100	
26							25	11,400	38	11,900						25	8,500	
27							21	10,900	36	11,300						21	8,100	
28							16	10,300	33	10,700						16	7,600	
29							0	9,500	31	10,200						0	6,900	
30									28	9,800							28	7,200
31									26	9,300							26	6,900
32									22	8,900							22	6,500
33									19	8,500							19	6,200
34									14	8,100							14	5,900
35									0	7,600							0	5,400

NOTES:
 A) FLY SECTION CAPACITIES ARE LIMITED BY ANGLE. DO NOT USE LOAD RADIUS WHEN USING FLY SECTION.
 B) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 C) RATINGS BELOW THE BOLD LINE ARE BASED ON 88% OF TIPPING.
 D) ALL CAPACITIES ARE IN POUNDS.
 E) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING
 FOR BOOM LENGTHS LESS THAN 45' WITH FLY SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY, IN THE COLUMN HEADED BY 45' BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF THE NEXT LOWER BOOM ANGLE.

CAUTION
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110TON MOBILIFT LOAD CHART										MLLC221 11/21/2016 REV B			
	FOR USE WITH HOOK BLOCK ONLY STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B" COUNTERWEIGHT ADDED													
	FULLY EXTENDED BOOM LENGTH (FEET)					FULLY RETRACTED BOOM LENGTH (FEET)								
	21	27	33	39	45		21	27	33	39	45			
0	63	160,000				63	160,000							
1	60	160,000				60	160,000							
2	57	160,000	65	160,000		57	160,000	65	160,000					
3	54	159,600	62	159,100		54	124,500	62	124,000					
4	50	128,200	60	127,800	66	127,600	50	99,800	60	99,400	66	99,100		
5	46	106,900	57	106,500	64	106,300	46	83,000	57	82,600	64	82,400		
6	42	91,400	55	91,100	62	90,900	42	70,900	55	70,500	62	70,300		
7	38	79,700	52	79,400	60	79,200	38	61,700	52	61,300	60	61,100	65	62,000
8	33	70,600	50	70,300	58	70,100	33	54,400	50	54,100	58	53,900	63	54,800
9	28	63,200	47	62,900	56	62,700	28	48,600	47	48,300	56	48,100	62	49,000
10	21	57,100	44	56,800	54	56,700	21	43,900	44	43,400	54	43,400	60	44,200
11	0	48,900	41	51,800	52	51,600	0	37,400	41	39,500	52	39,400	58	40,200
12	SEE NOTE (E)		37	47,500	49	47,300	37	36,100	49	36,000	56	36,000	56	36,800
13			34	43,800	47	43,600	34	33,200	47	33,100	55	33,800	60	34,400
14			30	40,600	45	40,400	30	30,700	45	30,600	53	31,300	59	31,800
15			25	37,700	42	37,600	25	26,600	42	28,400	51	29,100	57	29,600
16			20	35,300	39	35,100	20	24,900	39	26,400	49	27,100	56	27,600
17			0	31,600	36	32,900	0	23,700	36	24,700	47	25,300	54	25,800
18					33	30,900			33	23,100	45	23,800	52	24,200
19					30	29,100			30	21,700	43	22,400	51	22,800
20					26	27,500			26	20,500	41	21,100	49	21,500
21					22	26,000			22	19,300	39	19,900	47	20,400
22					16	24,700			16	18,200	36	18,800	46	19,300
23					0	22,600			0	16,600	34	17,900	44	18,300
24											31	17,000	42	17,400
25											28	16,100	40	16,600
26											25	15,400	38	15,800
27											21	14,600	36	15,100
28											16	14,000	33	14,400
29											0	12,900	31	13,800
30													28	13,200
31													26	12,600
32													22	12,100
33													19	11,600
34													14	11,200
35													0	10,400

NOTES:
 A) FLY SECTION CAPACITIES ARE LIMITED BY ANGLE. DO NOT USE LOAD RADIUS WHEN USING FLY SECTION.
 B) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 C) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 D) ALL CAPACITIES ARE IN POUNDS.
 E) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING
 FOR BOOM LENGTHS LESS THAN 44' WITH FLY SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY, IN THE COLUMN HEADED BY 45' BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF THE NEXT LOWER BOOM ANGLE.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART																MLLC222			
	FOR USE WITH HOOK BLOCK ONLY																11/21/2016			
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B", "C" COUNTERWEIGHT ADDED																REV B			
	FULLY EXTENDED								FULLY RETRACTED											
	BOOM LENGTH (FEET)								BOOM LENGTH (FEET)											
	21	27		33		39		45		21	27		33		39		45			
	63	160,000			LOADED BOOM ANGLE		MANUAL FLY SECTION SEE NOTES		MANUAL FLY SECTION SEE NOTES		63	160,000			LOADED BOOM ANGLE		MANUAL FLY SECTION SEE NOTES		MANUAL FLY SECTION SEE NOTES	
0	63	160,000			66		151,500		SEE NOTES		63	160,000			66		124,800		SEE NOTES	
1	60	160,000			64		133,900		SEE NOTES		60	160,000			64		103,900		SEE NOTES	
2	57	160,000	65	160,000	62		114,700		SEE NOTES		57	160,000	65	160,000	62		88,900		SEE NOTES	
3	54	160,000	62	160,000	60		100,200		SEE NOTES		54	156,200	62	155,700	60		77,400		SEE NOTES	
4	50	160,000	60	160,000	58		88,800		SEE NOTES		50	125,400	60	125,000	58		68,700		SEE NOTES	
5	46	134,600	57	134,200	56		79,800		SEE NOTES		46	104,600	57	104,200	56		61,300		SEE NOTES	
6	42	115,300	55	114,900	54		72,000		SEE NOTES		42	89,400	55	89,100	54		55,400		SEE NOTES	
7	38	100,700	52	100,400	52		65,700		SEE NOTES		38	78,000	52	77,600	52		50,400		SEE NOTES	
8	33	89,300	50	89,000	50		58,400		SEE NOTES		33	69,000	50	68,700	50		47,800		SEE NOTES	
9	28	80,100	47	79,800	49		51,100		SEE NOTES		28	61,800	47	61,500	49		46,200		SEE NOTES	
10	21	72,500	44	72,200	47		55,700		SEE NOTES		21	55,800	44	55,500	47		42,800		SEE NOTES	
11	0	62,300	41	65,900	45		51,700		SEE NOTES		0	47,800	41	50,600	45		39,400		SEE NOTES	
12	SEE NOTE (E)		37	60,500	55		58,400		SEE NOTES		SEE NOTE (E)		37	46,400	55		43,300		SEE NOTES	
13			34	55,900	53		52,400		SEE NOTES				34	42,700	53		40,100		SEE NOTES	
14			30	51,900	51		48,900		SEE NOTES				30	39,600	51		37,400		SEE NOTES	
15			25	48,400	49		45,800		SEE NOTES				25	36,800	49		34,900		SEE NOTES	
16			20	45,300	47		43,000		SEE NOTES				20	34,400	47		32,700		SEE NOTES	
17			0	40,700	45		41,000		SEE NOTES				0	30,800	45		30,800		SEE NOTES	
18					43		38,300		SEE NOTES						43		29,000		SEE NOTES	
19					41		36,200		SEE NOTES						41		27,400		SEE NOTES	
20					39		34,400		SEE NOTES						39		26,000		SEE NOTES	
21					36		32,700		SEE NOTES						36		24,600		SEE NOTES	
22					34		31,100		SEE NOTES						34		23,400		SEE NOTES	
23					31		29,700		SEE NOTES						31		22,300		SEE NOTES	
24					28		28,400		SEE NOTES						28		21,300		SEE NOTES	
25					25		27,200		SEE NOTES						25		20,300		SEE NOTES	
26					21		26,000		SEE NOTES						21		19,400		SEE NOTES	
27					16		25,000		SEE NOTES						16		18,600		SEE NOTES	
28					0		23,300		SEE NOTES						0		17,300		SEE NOTES	
29									SEE NOTES										SEE NOTES	
30									SEE NOTES										SEE NOTES	
31									SEE NOTES										SEE NOTES	
32									SEE NOTES										SEE NOTES	
33									SEE NOTES										SEE NOTES	
34									SEE NOTES										SEE NOTES	
35									SEE NOTES										SEE NOTES	

NOTES:
 A) FLY SECTION CAPACITIES ARE LIMITED BY ANGLE. DO NOT USE LOAD RADIUS WHEN USING FLY SECTION.
 B) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINES HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 C) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 D) ALL CAPACITIES ARE IN POUNDS.
 E) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING
 FOR BOOM LENGTHS LESS THAN 45' WITH FLY SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY, IN THE COLUMN HEADED BY 45' BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF THE NEXT LOWER BOOM ANGLE.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART																MLLC223				
	FOR USE WITH HOOK BLOCK ONLY																11/21/2016				
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B", "C", "D" COUNTERWEIGHT ADDED																REV B				
	FULLY EXTENDED BOOM LENGTH (FEET)								FULLY RETRACTED BOOM LENGTH (FEET)												
	21	27		33	39		45		21	27		33	39		45						
	63	160,000			LOADED BOOM ANGLE	MANUAL FLY SECTION SEE NOTES		MANUAL FLY SECTION	63	160,000			LOADED BOOM ANGLE	MANUAL FLY SECTION SEE NOTES		MANUAL FLY SECTION					
			65	160,000		BOOM ANGLE	LOADED BOOM ANGLE				65	160,000		BOOM ANGLE	LOADED BOOM ANGLE						
0	63	160,000			66	151,500			63	160,000			66	151,500							
1	60	160,000			64	143,300			60	160,000			64	128,900							
2	57	160,000	65	160,000	62	135,900			57	160,000	65	160,000	62	108,600							
3	54	160,000	62	160,000	60	122,400	65	117,300	54	160,000	62	160,000	60	108,600	65	95,700					
4	50	160,000	60	160,000	58	108,400	63	109,300	50	160,000	60	160,000	58	84,000	63	84,800					
5	46	160,000	57	160,000	56	97,300	62	98,100	46	160,000	57	160,000	56	75,300	62	76,100	66	76,700			
6	42	140,300	55	140,000	54	88,200	60	89,000	42	109,200	55	108,900	54	68,300	60	69,500					
7	38	122,700	52	122,400	52	80,500	58	81,300	38	95,400	52	95,000	52	62,300	58	62,900	63	63,400			
8	33	108,900	50	108,600	49	74,100	56	74,800	33	84,500	50	84,200	49	57,000	56	57,700	62	58,300			
9	28	97,800	47	97,500	47	68,500	55	69,200	28	75,800	47	75,500	47	52,800	55	53,300	60	53,900			
10	21	88,700	44	88,400	45	63,600	53	64,300	21	68,500	44	68,300	45	49,500	53	49,500	59	50,000			
11	0	76,300	41	80,700	42	59,400	51	60,100	0	58,900	41	62,300	42	45,500	51	46,200	57	48,700			
12	SEE NOTE (E)		37	74,200	41	55,800	49	58,300	12	SEE NOTE (E)		37	57,200	41	43,200	49	43,200	56	43,700		
13			34	68,600	40	52,300	47	52,900	13			34	49,000	40	40,600	47	40,600	54	41,100		
14			30	63,800	39	49,900	45	49,900	14			30	45,500	39	38,200	45	38,200	52	38,700		
15			25	59,600	38	47,200	43	47,200	15			25	42,700	38	36,100	43	36,100	51	36,500		
16			20	55,800	37	44,200	41	44,800	16			20	40,600	37	33,500	41	34,200	49	34,600		
17			0	50,300	36	41,900	39	42,500	17			0	39,900	36	32,400	39	32,400	47	32,900		
18					36	39,900	36	40,500	18				36	30,200	36	30,800	46	31,200			
19					34	38,600	34	38,600	19				34	29,300	34	29,300	44	29,800			
20					31	36,900	31	36,900	20				31	28,000	31	28,000	42	28,400			
21					28	35,300	28	35,300	21				28	26,700	28	26,700	40	27,100			
22					25	33,800	25	33,800	22				25	25,600	25	25,600	38	26,000			
23					21	32,500	21	32,500	23				21	24,500	21	24,500	36	24,900			
24					16	31,200	16	31,200	24				16	23,500	16	23,500	33	23,900			
25					0	29,200	0	29,200	25				0	21,900	0	21,900	31	23,000			
26									26									28	22,100		
27									27									26	21,500		
28									28									22	20,500		
29									29									19	19,700		
30									30									14	19,100		
31									31									0	18,000		
32									32												
33									33												
34									34												
35									35												

NOTES:
 A) FLY SECTION CAPACITIES ARE LIMITED BY ANGLE. DO NOT USE LOAD RADIUS WHEN USING FLY SECTION.
 B) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 C) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 D) ALL CAPACITIES ARE IN POUNDS.
 E) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING
 FOR BOOM LENGTHS LESS THAN 44' WITH FLY SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY, IN THE COLUMN HEADED BY 45' BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF THE NEXT LOWER BOOM ANGLE.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART																MLLC224
	FOR USE WITH HOOK BLOCK ONLY																11/21/2016
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B", "C", "D", "E" COUNTERWEIGHT ADDED																REV B
	FULLY EXTENDED								FULLY RETRACTED								
	BOOM LENGTH (FEET)				BOOM LENGTH (FEET)				BOOM LENGTH (FEET)				BOOM LENGTH (FEET)				
	21	27		33	39		45		21	27		33	39		45		
	63	65		66	68		69	LOADED BOOM ANGLE	63	65		66	68		69	LOADED BOOM ANGLE	
0	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
1	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
2	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
3	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
4	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
5	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
6	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	160,000	160,000		160,000	151,500		143,300	MANUAL FLY SECTION SEE NOTES	
7	145,800	145,500		129,200	117,300		111,600	MANUAL FLY SECTION SEE NOTES	113,800	113,500		113,300	114,200		101,300	MANUAL FLY SECTION SEE NOTES	
8	129,500	129,200		123,100	111,600		106,500	MANUAL FLY SECTION SEE NOTES	101,000	100,600		100,400	101,300		91,500	MANUAL FLY SECTION SEE NOTES	
9	116,400	116,100		115,900	106,500		101,700	MANUAL FLY SECTION SEE NOTES	90,800	90,300		90,100	90,900		83,000	MANUAL FLY SECTION SEE NOTES	
10	105,600	105,300		105,100	101,700		97,400	MANUAL FLY SECTION SEE NOTES	82,100	81,800		81,600	81,400		75,800	MANUAL FLY SECTION SEE NOTES	
11	90,900	96,300		96,100	97,400		93,000	MANUAL FLY SECTION SEE NOTES	70,800	74,700		74,500	75,300		69,800	MANUAL FLY SECTION SEE NOTES	
12	SEE NOTE (E)	88,600		88,400	89,200		87,000	MANUAL FLY SECTION SEE NOTES	68,700	68,500		68,500	69,200		66,800	MANUAL FLY SECTION SEE NOTES	
13	SEE NOTE (E)	82,000		81,800	82,800		83,500	MANUAL FLY SECTION SEE NOTES	63,500	63,300		63,300	64,000		64,500	MANUAL FLY SECTION SEE NOTES	
14	SEE NOTE (E)	76,300		76,100	76,800		77,300	MANUAL FLY SECTION SEE NOTES	59,000	58,800		58,800	59,500		60,000	MANUAL FLY SECTION SEE NOTES	
15	SEE NOTE (E)	71,300		71,100	71,800		72,300	MANUAL FLY SECTION SEE NOTES	55,000	54,900		54,900	55,500		56,000	MANUAL FLY SECTION SEE NOTES	
16	SEE NOTE (E)	66,800		66,700	67,300		67,800	MANUAL FLY SECTION SEE NOTES	51,500	51,400		51,400	52,000		52,500	MANUAL FLY SECTION SEE NOTES	
17	SEE NOTE (E)	60,300		62,700	63,400		63,900	MANUAL FLY SECTION SEE NOTES	46,400	48,300		48,300	49,000		49,400	MANUAL FLY SECTION SEE NOTES	
18	SEE NOTE (E)	59,200		59,800	59,800		60,300	MANUAL FLY SECTION SEE NOTES	45,500	46,100		46,100	46,600		47,100	MANUAL FLY SECTION SEE NOTES	
19	SEE NOTE (E)	56,000		56,600	56,600		57,100	MANUAL FLY SECTION SEE NOTES	43,000	43,800		43,800	44,100		44,600	MANUAL FLY SECTION SEE NOTES	
20	SEE NOTE (E)	53,100		53,700	53,700		54,200	MANUAL FLY SECTION SEE NOTES	40,700	41,300		41,300	41,800		42,300	MANUAL FLY SECTION SEE NOTES	
21	SEE NOTE (E)	50,500		51,100	51,100		51,600	MANUAL FLY SECTION SEE NOTES	38,600	39,200		39,200	39,700		40,200	MANUAL FLY SECTION SEE NOTES	
22	SEE NOTE (E)	48,100		48,700	48,700		49,100	MANUAL FLY SECTION SEE NOTES	36,700	37,300		37,300	37,800		38,300	MANUAL FLY SECTION SEE NOTES	
23	SEE NOTE (E)	44,400		46,500	46,500		46,900	MANUAL FLY SECTION SEE NOTES	33,900	35,600		35,600	36,000		36,400	MANUAL FLY SECTION SEE NOTES	
24	SEE NOTE (E)	44,400		44,400	44,400		44,900	MANUAL FLY SECTION SEE NOTES	34,000	34,000		34,000	34,400		34,800	MANUAL FLY SECTION SEE NOTES	
25	SEE NOTE (E)	42,600		42,600	42,600		43,000	MANUAL FLY SECTION SEE NOTES	32,500	32,500		32,500	32,900		33,300	MANUAL FLY SECTION SEE NOTES	
26	SEE NOTE (E)	40,800		40,800	40,800		41,300	MANUAL FLY SECTION SEE NOTES	31,100	31,100		31,100	31,600		32,100	MANUAL FLY SECTION SEE NOTES	
27	SEE NOTE (E)	39,200		39,200	39,200		39,600	MANUAL FLY SECTION SEE NOTES	29,900	29,900		29,900	30,300		30,700	MANUAL FLY SECTION SEE NOTES	
28	SEE NOTE (E)	37,700		37,700	37,700		38,100	MANUAL FLY SECTION SEE NOTES	28,700	28,700		28,700	29,100		29,500	MANUAL FLY SECTION SEE NOTES	
29	SEE NOTE (E)	35,400		35,400	35,400		36,700	MANUAL FLY SECTION SEE NOTES	26,800	26,800		26,800	27,000		27,200	MANUAL FLY SECTION SEE NOTES	
30	SEE NOTE (E)	35,400		35,400	35,400		36,700	MANUAL FLY SECTION SEE NOTES	26,800	26,800		26,800	27,000		27,200	MANUAL FLY SECTION SEE NOTES	
31	SEE NOTE (E)	34,100		34,100	34,100		34,100	MANUAL FLY SECTION SEE NOTES	26,000	26,000		26,000	26,000		26,000	MANUAL FLY SECTION SEE NOTES	
32	SEE NOTE (E)	33,000		33,000	33,000		33,000	MANUAL FLY SECTION SEE NOTES	25,000	25,000		25,000	25,000		25,000	MANUAL FLY SECTION SEE NOTES	
33	SEE NOTE (E)	31,900		31,900	31,900		31,900	MANUAL FLY SECTION SEE NOTES	24,200	24,200		24,200	24,200		24,200	MANUAL FLY SECTION SEE NOTES	
34	SEE NOTE (E)	30,900		30,900	30,900		30,900	MANUAL FLY SECTION SEE NOTES	23,400	23,400		23,400	23,400		23,400	MANUAL FLY SECTION SEE NOTES	
35	SEE NOTE (E)	29,200		29,200	29,200		29,200	MANUAL FLY SECTION SEE NOTES	22,100	22,100		22,100	22,100		22,100	MANUAL FLY SECTION SEE NOTES	

NOTES:
 A) FLY SECTION CAPACITIES ARE LIMITED BY ANGLE. DO NOT USE LOAD RADIUS WHEN USING FLY SECTION.
 B) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 C) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 D) ALL CAPACITIES ARE IN POUNDS.
 E) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING
 FOR BOOM LENGTHS LESS THAN 44' WITH FLY SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY. IN THE COLUMN HEADED BY 45' BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF THE NEXT LOWER BOOM ANGLE.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART											MLLC234
	FOR USE WITH POWER BOOM LIFT EYE ONLY											11/21/2016
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B","C","D", "E" COUNTERWEIGHT ADDED											REV A
	FULLY EXTENDED					FULLY RETRACTED						
	BOOM LENGTH (FEET)					BOOM LENGTH (FEET)						
	21	27	33			21	27	33				
		LOADED BOOM ANGLE	LOADED BOOM ANGLE			LOADED BOOM ANGLE	LOADED BOOM ANGLE			LOADED BOOM ANGLE	LOADED BOOM ANGLE	
0	58	220,463				58	220,463					
1	54	220,463	64	220,463		54	220,463	64	220,463			
2	50	220,463	61	220,463		50	220,463	61	220,463			
3	46	220,200	58	220,200	65	171,800	46	212,400	58	212,400	65	171,800
4	42	213,000	55	210,400	63	161,900	42	179,600	55	179,500	63	161,900
5	37	192,200	53	192,100	61	153,000	37	149,900	53	149,900	61	149,900
6	32	164,900	50	164,800	59	145,100	32	128,500	50	128,400	59	128,400
7	25	144,200	47	144,100	56	138,100	25	112,200	47	112,200	56	112,100
8	17	128,100	43	127,900	54	127,900	17	99,500	43	99,400	54	99,400
9	0	114,900	40	114,900	52	114,900	0	89,200	40	89,100	52	89,100
10	SEE NOTE (D)		36	104,200	49	104,100	SEE NOTE (D)		36	80,700	49	80,700
11			32	95,200	47	95,200			32	73,700	47	73,600
12			28	87,600	44	87,600			28	67,700	44	67,600
13			22	81,100	42	81,000			22	62,500	42	62,500
14			15	75,400	39	75,300			15	58,100	39	58,000
15			0	70,400	36	70,300			0	54,100	36	54,100
16					32	65,900					32	50,600
17					29	62,000					29	47,500
18					25	58,500					25	44,800
19					20	55,300					20	42,300
20					14	52,500					14	40,000
21					0	49,800					0	38,000

NOTES:

- A) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
- B) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
- C) ALL CAPACITIES ARE IN POUNDS.
- D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

CAUTION!

DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART											MLLC233
	FOR USE WITH POWER BOOM LIFT EYE ONLY											11/21/2016
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B","C","D" COUNTERWEIGHT ADDED											REV A
	FULLY EXTENDED					FULLY RETRACTED						
	BOOM LENGTH (FEET)					BOOM LENGTH (FEET)						
	21	27	33			21	27	33				
			LOADED BOOM ANGLE		LOADED BOOM ANGLE			LOADED BOOM ANGLE		LOADED BOOM ANGLE		
0	58	220,463				58	220,463					
1	54	220,463	64	220,463		54	220,463	64	220,463			
2	50	220,463	61	220,463		50	220,463	61	220,463			
3	46	220,463	58	220,200	65	171,800	46	187,400	58	187,300	65	171,800
4	42	193,600	55	193,600	63	161,900	42	150,600	55	150,600	63	150,500
5	37	161,700	53	161,700	61	153,000	37	125,600	53	125,500	61	125,500
6	32	138,600	50	138,600	59	138,500	32	107,500	50	107,400	59	107,400
7	25	121,200	47	121,100	56	121,000	25	93,800	47	93,700	56	93,700
8	17	107,500	43	107,400	54	107,300	17	83,100	43	83,000	54	82,900
9	0	96,400	40	96,300	52	96,300	0	74,400	40	74,300	52	74,300
10	SEE NOTE (D)		36	87,300	49	87,200	SEE NOTE (D)		36	67,200	49	67,200
11			32	79,700	47	79,600			32	61,200	47	61,200
12			28	73,200	44	73,200			28	56,200	44	56,200
13			22	67,700	42	67,600			22	51,900	42	51,800
14			15	62,900	39	62,800			15	48,100	39	48,000
15			0	58,700	36	58,600			0	44,800	36	44,700
16					32	54,900					32	41,800
17					29	51,600					29	39,200
18					25	48,600					25	36,900
19					20	45,900					20	34,800
20					14	43,500					14	32,900
21					0	41,300					0	31,100

NOTES:
 A) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 B) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 C) ALL CAPACITIES ARE IN POUNDS.
 D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART												MLLC232
	FOR USE WITH POWER BOOM LIFT EYE ONLY												11/21/2016
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B", "C" COUNTERWEIGHT ADDED												REV A
	FULLY EXTENDED BOOM LENGTH (FEET)						FULLY RETRACTED BOOM LENGTH (FEET)						
	21	27	33				21	27	33				
		LOADED BOOM ANGLE	LOADED BOOM ANGLE					LOADED BOOM ANGLE	LOADED BOOM ANGLE				
0	58	220,463					58	220,463					
1	54	220,463	64	220,463			54	220,463	64	220,463			
2	50	220,463	61	220,463			50	202,700	61	202,700			
3	46	197,800	58	197,700	65	171,800	46	153,700	58	153,600	65	153,600	
4	42	159,000	55	159,000	63	158,900	42	123,500	55	123,200	63	123,200	
5	37	132,700	53	132,600	61	132,600	37	102,700	53	102,600	61	102,600	
6	32	113,600	50	113,500	59	113,500	32	87,700	50	87,700	59	87,600	
7	25	99,100	47	99,100	56	99,000	25	76,400	47	76,300	56	76,300	
8	17	87,800	43	87,700	54	87,700	17	67,600	43	67,500	54	67,400	
9	0	78,700	40	78,600	52	78,600	0	60,400	40	60,300	52	60,300	
10	SEE NOTE (D)		36	71,100	49	71,100	SEE NOTE (D)		36	54,400	49	54,400	
11			32	64,800	47	64,800			32	49,500	47	49,500	
12			28	59,500	44	59,500			28	45,400	44	45,300	
13			22	55,000	42	54,900			22	41,800	42	41,700	
14			15	51,000	39	50,900			15	38,700	39	38,600	
15			0	47,500	36	47,400			0	36,000	36	35,900	
16					32	44,400					32	33,500	
17					29	41,600					29	31,300	
18					25	39,200					25	29,400	
19					20	36,900					20	27,700	
20					14	35,000					14	26,100	
21					0	33,100					0	24,700	

NOTES:
 A) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 B) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 C) ALL CAPACITIES ARE IN POUNDS.
 D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART											MLLC231
	FOR USE WITH POWER BOOM LIFT EYE ONLY											11/21/2016
	STANDARD NON-REMOVABLE "A" COUNTERWEIGHT WITH "B" COUNTERWEIGHT ADDED											REV A
	FULLY EXTENDED						FULLY RETRACTED					
	BOOM LENGTH (FEET)					BOOM LENGTH (FEET)						
	21	27	33			21	27	33				
		LOADED BOOM ANGLE		LOADED BOOM ANGLE			LOADED BOOM ANGLE		LOADED BOOM ANGLE			
0	58	220,463				58	220,463					
1	54	220,463	64	220,463		54	220,463	64	220,463			
2	50	207,200	61	207,100		50	161,300	61	161,200			
3	46	157,100	58	157,000	65	157,000	46	122,000	58	121,900	65	121,900
4	42	126,100	55	126,000	63	126,000	42	97,000	55	97,600	63	97,600
5	37	105,000	53	104,900	61	104,900	37	81,100	53	81,100	61	81,000
6	32	89,700	50	89,700	59	89,600	32	69,200	50	69,100	59	69,100
7	25	78,200	47	78,100	56	78,100	25	60,100	47	60,000	56	60,000
8	17	69,100	43	69,000	54	69,000	17	53,000	43	52,900	54	52,900
9	0	61,800	40	61,700	52	61,700	0	47,300	40	47,200	52	47,200
10	SEE NOTE (D)		36	55,700	49	55,700	SEE NOTE (D)		36	42,500	49	42,400
11	SEE NOTE (D)		32	50,700	47	50,700	SEE NOTE (D)		32	38,500	47	38,500
12	SEE NOTE (D)		28	46,500	44	46,400	SEE NOTE (D)		28	35,200	44	35,200
13	SEE NOTE (D)		22	42,800	42	42,800	SEE NOTE (D)		22	32,300	42	32,300
14	SEE NOTE (D)		15	39,700	39	39,600	SEE NOTE (D)		15	29,900	39	29,800
15	SEE NOTE (D)		0	36,900	36	36,800	SEE NOTE (D)		0	27,700	36	27,600
16	SEE NOTE (D)				32	34,300	SEE NOTE (D)				32	25,700
17	SEE NOTE (D)				29	32,100	SEE NOTE (D)				29	24,000
18	SEE NOTE (D)				25	30,200	SEE NOTE (D)				25	22,400
19	SEE NOTE (D)				20	28,400	SEE NOTE (D)				20	21,000
20	SEE NOTE (D)				14	26,800	SEE NOTE (D)				14	19,800
21	SEE NOTE (D)				0	25,400	SEE NOTE (D)				0	18,700

NOTES:

- A) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
- B) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
- C) ALL CAPACITIES ARE IN POUNDS.
- D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

CAUTION!

DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.

LOAD RADIUS (FEET FROM FRONT)	110 TON MOBILIFT LOAD CHART											MLLC230	
	FOR USE WITH POWER BOOM LIFT EYE ONLY STANDARD NON-REMOVABLE "A" COUNTERWEIGHT											11/21/2016	
	FULLY EXTENDED						FULLY RETRACTED						REV A
		BOOM LENGTH (FEET)						BOOM LENGTH (FEET)					
	21	27	33				21	27	33				
		LOADED BOOM ANGLE 	LOADED BOOM ANGLE 					LOADED BOOM ANGLE 	LOADED BOOM ANGLE 				
0	58	220,463					58	220,463					
1	54	188,100	64	188,100			54	153,000	64	152,900			
2	50	128,500	61	128,400			50	104,100	61	104,100			
3	46	96,900	58	96,800	65	96,800	46	78,300	58	78,200	65	78,200	
4	42	77,400	55	77,300	63	77,300	42	62,300	55	62,200	63	62,200	
5	37	64,100	53	64,000	61	64,000	37	51,400	53	51,300	61	51,300	
6	32	54,500	50	54,400	59	54,400	32	43,500	50	43,500	59	43,400	
7	25	47,200	47	47,100	56	47,100	25	37,600	47	37,500	56	37,500	
8	17	41,500	43	41,400	54	41,400	17	32,900	43	32,800	54	32,800	
9	0	37,000	40	36,800	52	36,800	0	29,200	40	29,100	52	29,000	
10	SEE NOTE (D)		36	33,000	49	33,000	SEE NOTE (D)		36	26,000	49	25,900	
11			32	29,800	47	29,800			32	23,400	47	23,400	
12			28	27,200	44	27,100			28	21,200	44	21,200	
13			22	24,900	42	24,800			22	19,300	42	19,300	
14			15	22,900	39	22,800			15	17,700	39	17,600	
15			0	21,100	36	21,100			0	16,300	36	16,200	
16					32	19,500					32	14,900	
17					29	18,100					29	13,800	
18					25	16,900					25	12,800	
19					20	15,800					20	11,900	
20					14	14,800					14	11,100	
21					0	13,900					0	10,300	

NOTES:
 A) RATINGS ABOVE THE BOLD LINE ARE BASED ON THE MACHINE'S HYDRAULIC OR STRUCTURAL STRENGTH AND NOT STABILITY.
 B) RATINGS BELOW THE BOLD LINE ARE BASED ON 85% OF TIPPING.
 C) ALL CAPACITIES ARE IN POUNDS.
 D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

CAUTION!
 DO NOT EXTEND OR RETRACT COUNTERWEIGHT WITH ANY LOAD SUSPENDED ON HOOK OR FORKS.