TF45/60 (metric)

by

LIFT SYSTEMS, INC.

Global Leaders in Specialized

Lifting Equipment!

TF45/60

GENERAL SPECIFICATIONS

STANDARD EQUIPMENT

ENGINE:
GM 3.0L, 4 cylinder, 56 Kw (75 hp) propane engine

PUMP:
Sundstrand 40 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:
Rockwell planetary drive axle. Full hydrostatic system with spring applied brakes.

WHEELS:
Front: qty. (4)
Diameter: 711mm
Width: 305mm
Rear: qty. (2)
Diameter: 711mm
Width: 305mm
Replaceable polyurethane composition

OSCILLATING REAR STEERING BOX:
Keeps all steering wheels in contact with ground.

GRADABILITY:
Unloaded maximum grade is 26%
Loaded maximum grade is 15%
18,000 lbs of draw bar pull unloaded

TRAVEL SPEED UNLOADED:
High Gear: 4.42 km/h
Low Gear: 1.20 km/h

TELESCOPING COUNTERWEIGHT:
Standard counterweight section telescopes 1220mm using a hydraulic cylinder. Push button control.

HYDRAULIC RESERVOIR:
340 liters (90 gallons)

BOOM:
High strength two section telescoping boom. Replaceable wear pads on all sliding sections.

BOOM LIFT CYLINDER:
Single cylinder capable of lifting and lowering with a full load. Integral safety holding valve. Spherical bearing ensures constant alignment with the boom.

BOOM TELESCOPE CYLINDER:
Single cylinder capable of telescoping the boom in and out with a full load. Integral safety holding valve.

FORKS:
2,438mm self leveling forks. Tilt angle controlled from operating station.

WEIGHT:
14,530 kg base unit
Standard “A” counterweight included

COUNTERWEIGHTS:
“A” - non-removable counterweight installed in unit
Four (4) additional counterweights plates included with fork lift loops standard. Weight of each plate is 2,497 kg.
Total of additional counterweight is 9,988 kg.

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

RIGGERS BOOM:
Hydraulic riggers boom attaches to fork attachment with the forks removed.

MOBILIFT BOOM:
2,133mm boom pins on end of power section in place of fork attachment. Requires winch and block.

WINCH:
High performance hydraulic winch. Integral, full load brake. 76m of high capacity 15.875mm wire rope standard.

BLOCK:
27 tonne block standard. Low profile with swivel hook.

ANTI-TWO-BLOCK DEVICE:
Safety device installed to prevent hook block from contacting boom.

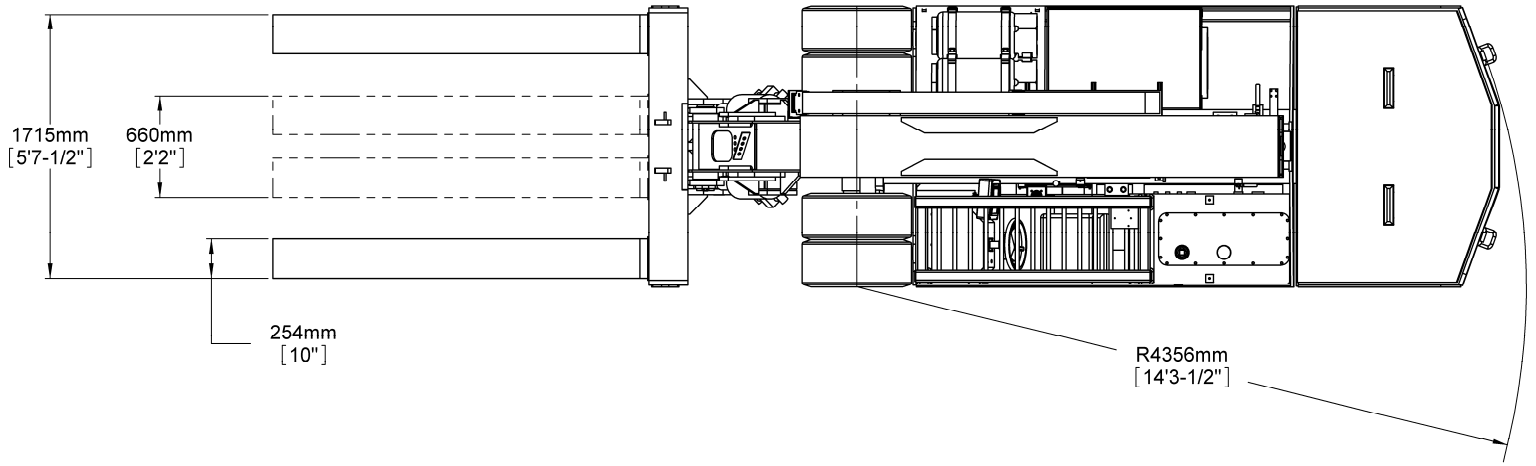
RADIO REMOTE CONTROL:
Radio remote control allows full machine functionality from a wireless radio remote. Allows operator optimal view of load. Emergency safety shutdown switch is standard.

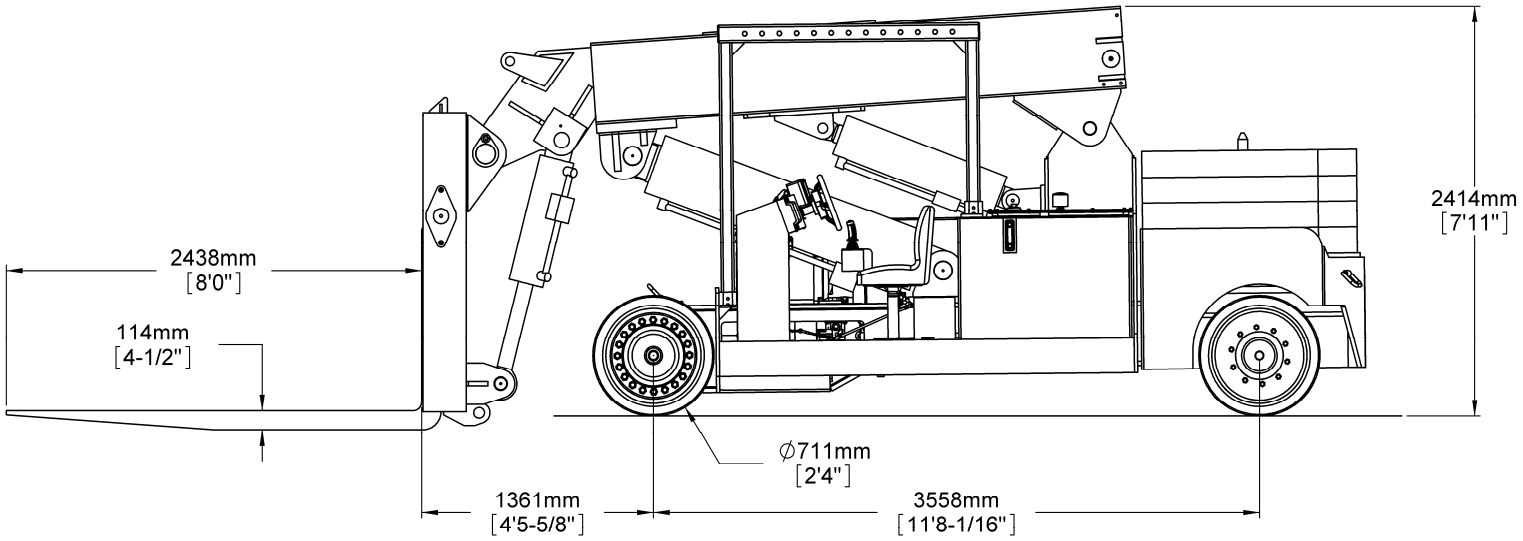
JIB EXTENSION:
Consult factory for available capacities

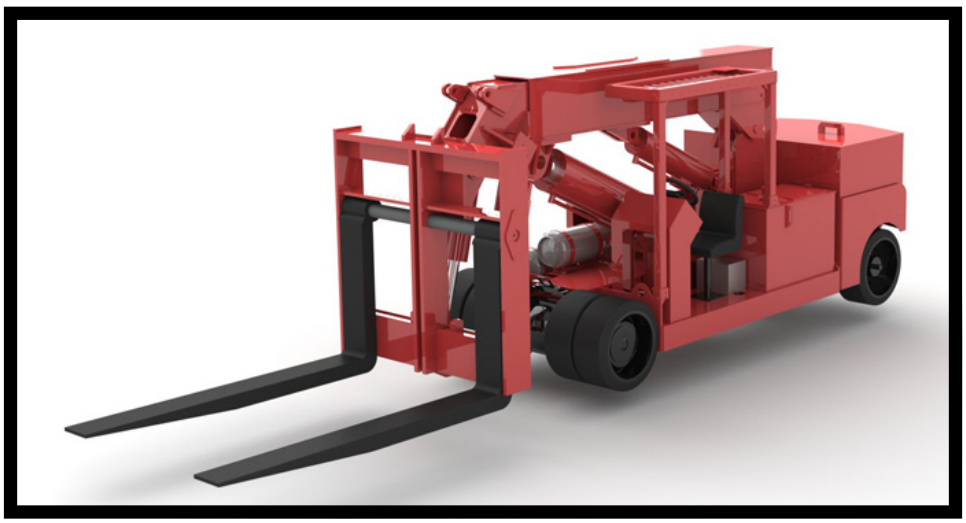
TF45/60

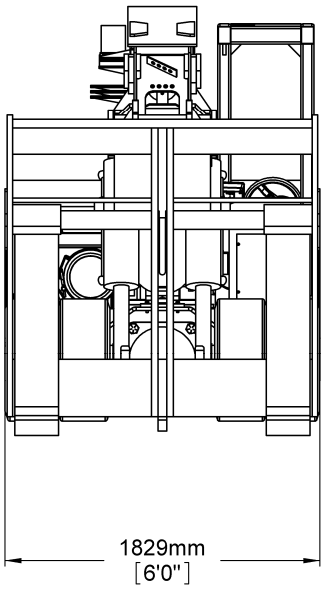
AS A FORKLIFT

DIMENSIONAL DATA





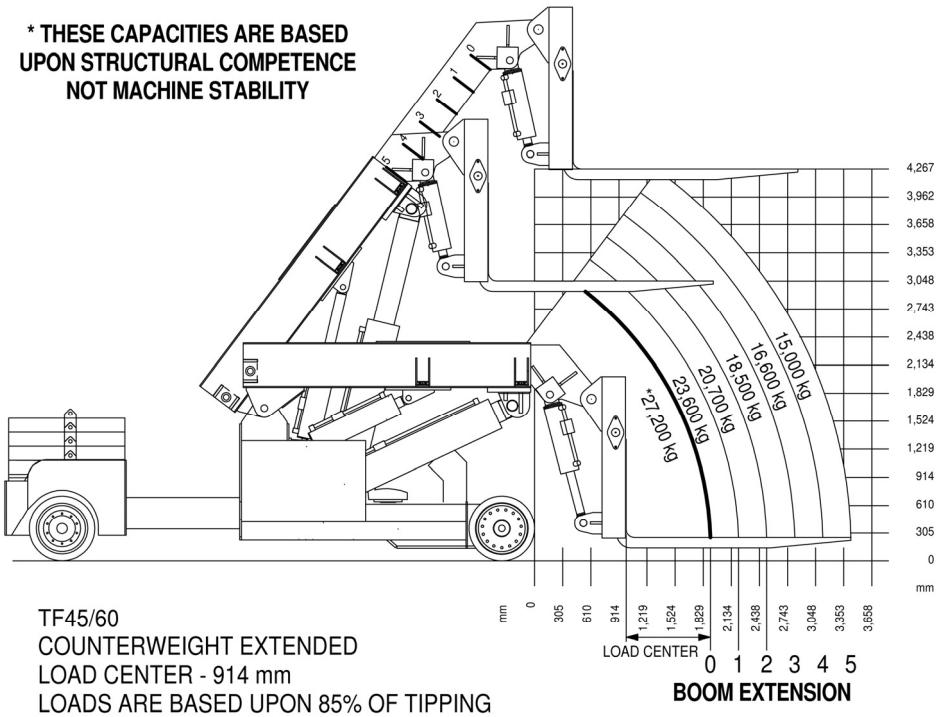




TF45/60

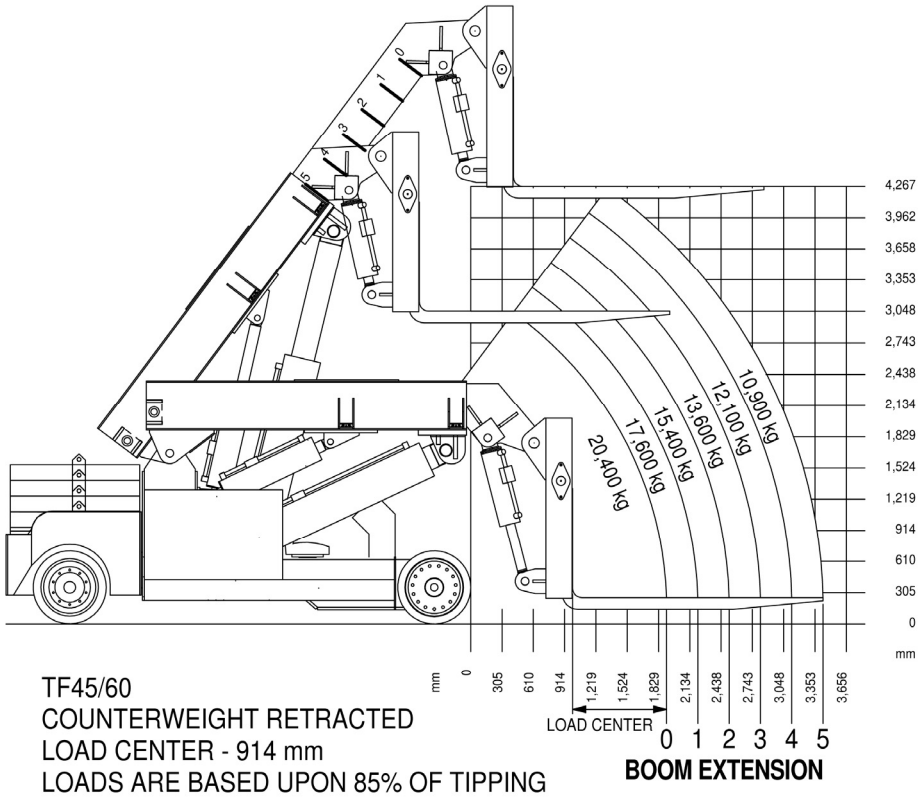
AS A FORKLIFT

LOAD CHARTS FOR FORKLIFT WITH COUNTERWEIGHT EXTENDED



TF45/60
COUNTERWEIGHT EXTENDED
LOAD CENTER - 914 mm
LOADS ARE BASED UPON 85% OF TIPPING

LOAD CHARTS FOR FORKLIFT WITH COUNTERWEIGHT RETRACTED

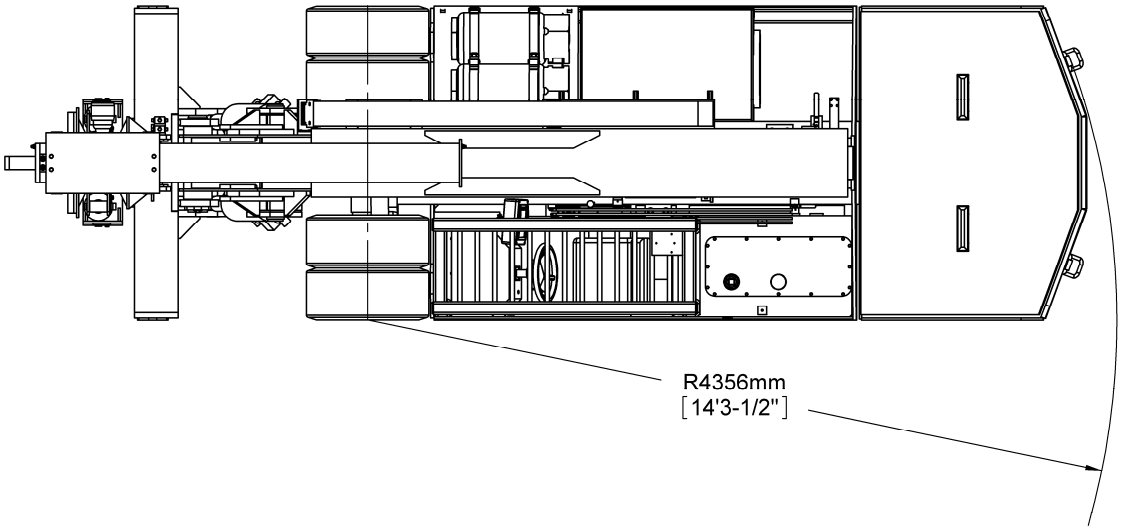


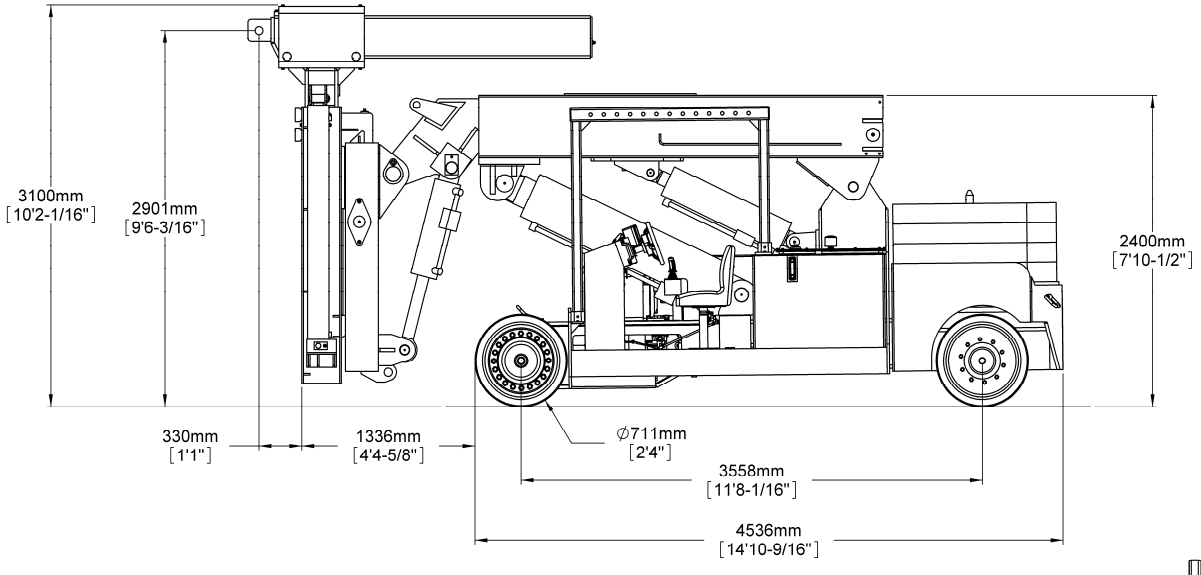
TF45/60
COUNTERWEIGHT RETRACTED
LOAD CENTER - 914 mm
LOADS ARE BASED UPON 85% OF TIPPING

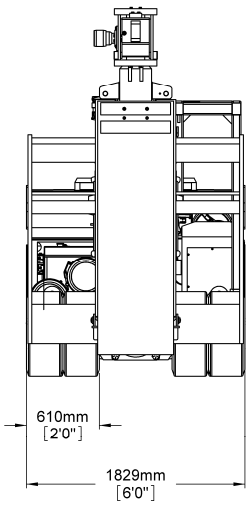
TF45/60

WITH RIGGERS BOOM OPTION

DIMENSIONAL DATA



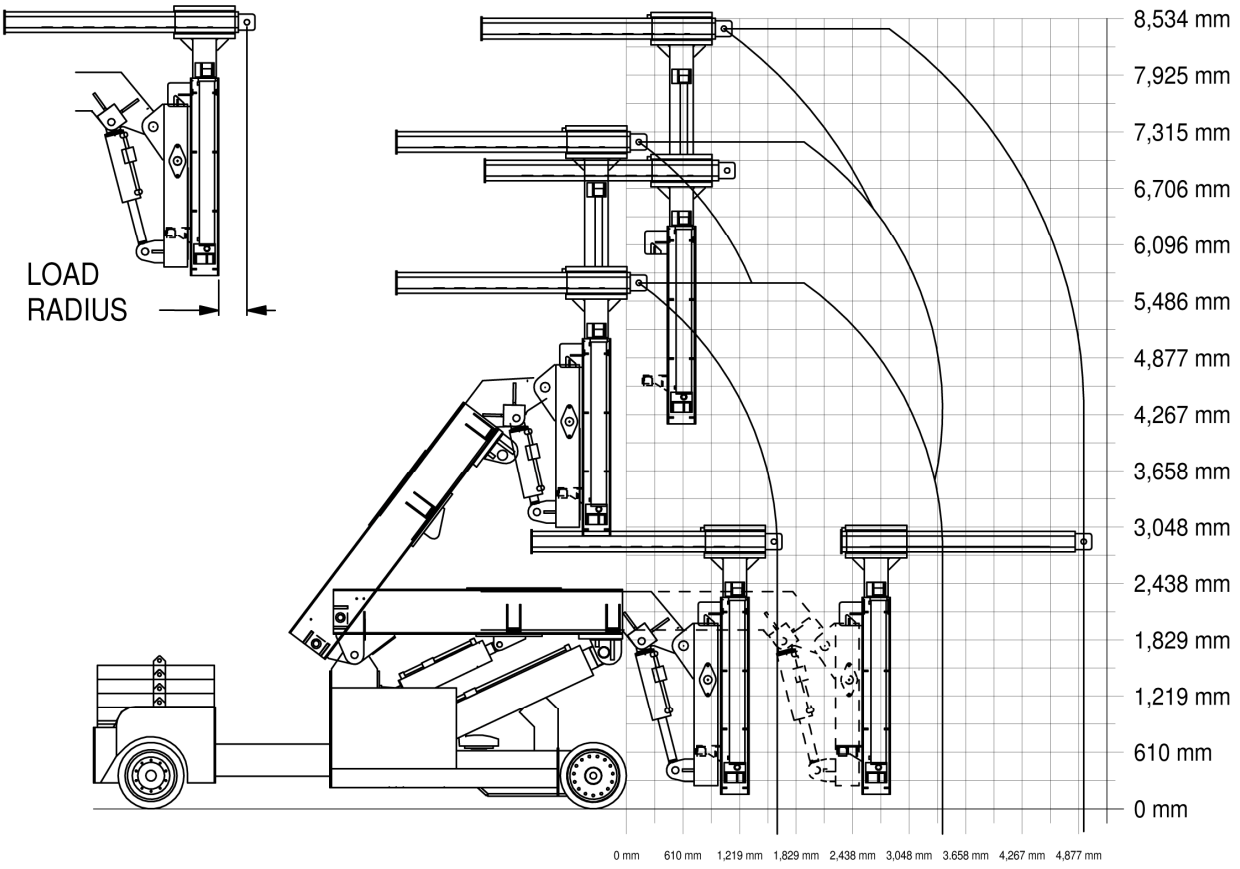




TF45/60

WITH RIGGERS BOOM OPTION

RANGE DIAGRAM / LOAD CHART WITH COUNTERWEIGHT EXTENDED



LOAD RADIUS IN METERS FROM BOOM FACE	TF45/60 LOAD CHART FOR USE WITH RIGGERS BOOM ONLY STANDARD COUNTERWEIGHT COUNTERWEIGHT FULLY RETRACTED					
	POWER BOOM EXTENSION (METERS)					
	0	0.30	0.61	0.91	1.22	1.52
0.30	27,200	26,600	23,100	20,300	18,000	16,100
0.61	27,000	23,400	20,600	18,300	16,400	14,800
0.91	23,100	20,900	18,500	16,600	15,000	13,600
1.22	19,400	18,800	16,900	15,200	13,900	12,700
1.52	16,600	16,600	15,500	14,100	12,900	11,800
1.83	14,600	14,600	14,300	13,100	12,000	11,100
2.08	13,100	13,100	13,100	12,300	11,300	10,500
	SEE NOTE "D" BELOW					

NOTES:

A) ALL RATINGS ABOVE THE BOLD LINE ARE STABILITY LIMITS. STABILITY IS BASED ON 85% OF TIPPING.

B) ALL RATINGS BELOW THE BOLD LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY (TIPPING CONDITIONS).

C) ALL CAPACITIES ARE IN KILOGRAMS.

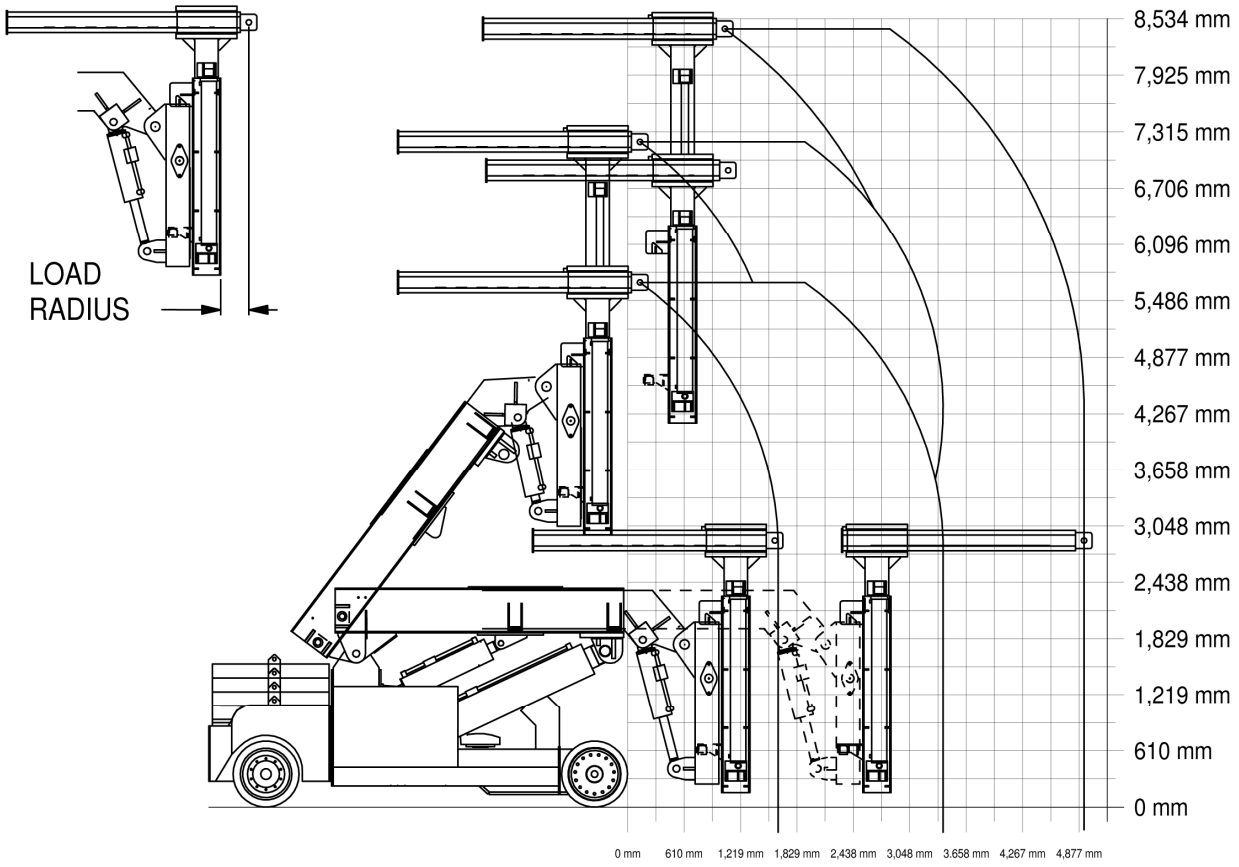
D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

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

TF45/60

WITH RIGGERS BOOM OPTION

RANGE DIAGRAM / LOAD CHART WITH COUNTERWEIGHT RETRACTED



LOAD RADIUS IN METERS FROM BOOM FACE	TF45/60 LOAD CHART FOR USE WITH RIGGERS BOOM ONLY STANDARD COUNTERWEIGHT COUNTERWEIGHT FULLY RETRACTED					
	POWER BOOM EXTENSION (METERS)					
	0	0.30	0.61	0.91	1.22	1.52
0.30	23,500	19,900	17,100	15,000	13,200	11,700
0.61	20,300	17,500	15,200	13,500	12,000	10,700
0.91	17,800	15,600	13,700	12,200	11,000	9,900
1.22	15,900	14,000	12,500	11,200	10,100	9,200
1.52	14,300	12,700	11,400	10,300	9,400	8,500
1.83	13,000	11,700	10,600	9,600	8,700	8,000
2.08	12,000	10,900	9,800	9,000	8,200	7,500
	SEE NOTE "D" BELOW					

NOTES:

A) ALL RATINGS ABOVE THE BOLD LINE ARE STABILITY LIMITS. STABILITY IS BASED ON 85% OF TIPPING.

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C) ALL CAPACITIES ARE IN KILOGRAMS.

D) TELESCOPE CYLINDER MUST BE FULLY RETRACTED AND AGAINST STOPS.

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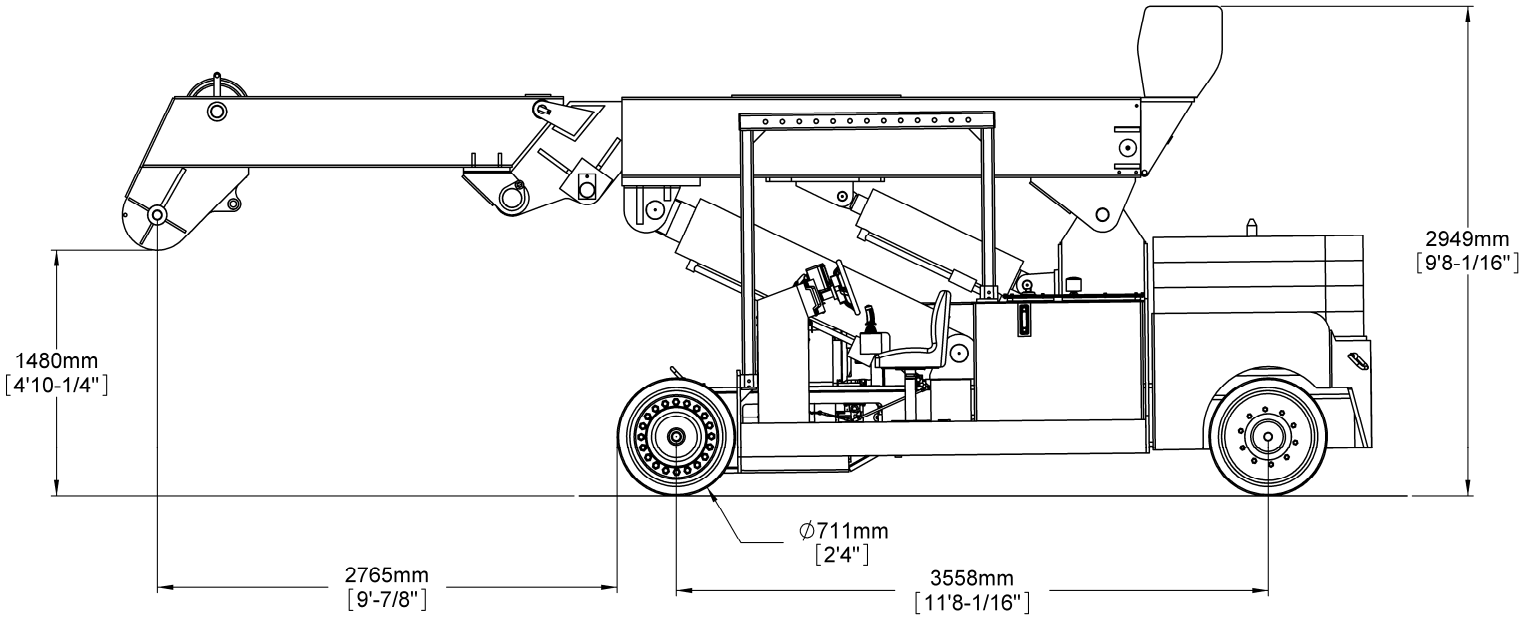
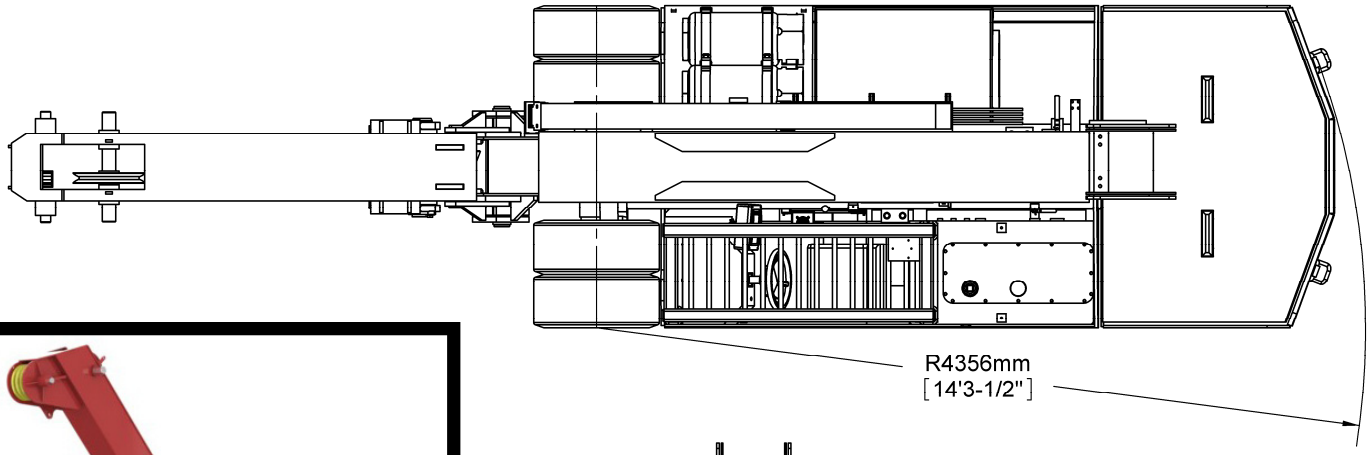
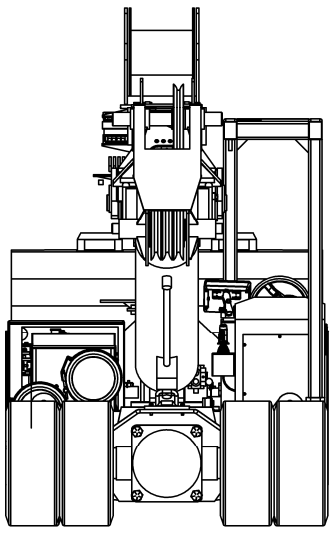
TF45/60

WITH MOBILIFT BOOM OPTION

DIMENSIONAL DATA



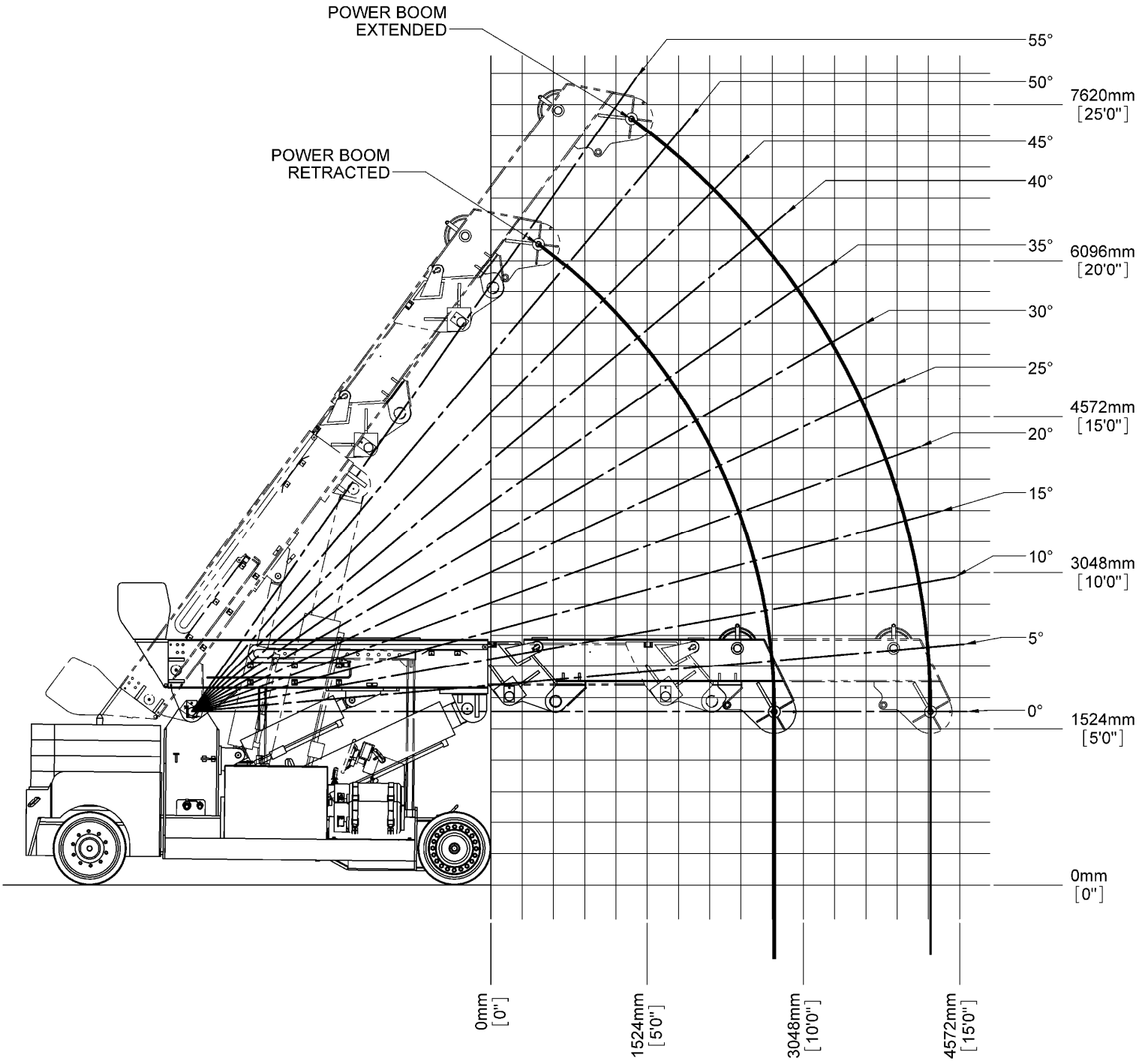




TF45/60

WITH MOBILIFT BOOM OPTION

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.**

TF45/60

WITH MOBILIFT BOOM OPTION

LOAD CHART WITH COUNTERWEIGHT EXTENDED

TF45/60 LOAD CHART

FOR USE WITH MOBILIFT BOOM AND HOOK BLOCK ONLY
STANDARD COUNTERWEIGHT
COUNTERWEIGHT FULLY EXTENDED

MLLC083M
03242001
REV.A

LOAD RADIUS IN METERS FROM FRONT OF TIRE	∠°	POWER BOOM EXTENSION (METERS)										
		0	LOADED BOOM ANGLE ∠°	0.30	LOADED BOOM ANGLE ∠°	0.61	LOADED BOOM ANGLE ∠°	0.91	LOADED BOOM ANGLE ∠°	1.22	LOADED BOOM ANGLE ∠°	1.52
0.61	52	27,200										
0.91	47	27,200	50	27,200	52	27,200						
1.22	43	27,200	46	27,200	49	27,200	51	27,200	53	26,800		
1.52	38	27,200	42	27,200	45	27,200	48	26,300	50	25,400	52	24,600
1.83	33	27,200	37	27,200	41	26,200	44	25,100	46	24,200	49	23,400
2.13	27	26,500	32	26,300	36	25,100	40	24,000	43	23,100	45	22,400
2.44	19	23,500	26	23,500	31	23,500	36	23,100	39	22,200	42	21,400
2.74	0	20,900	19	21,000	26	21,100	31	21,100	35	21,100	38	20,500
3.05	SEE NOTE "D" BELOW		0	18,900	18	19,000	25	19,100	30	19,100	34	19,100
3.35					0	17,300	18	17,400	24	17,400	29	17,400
3.66							0	15,900	17	16,000	24	16,000
3.96									0	14,600	17	14,700
4.27											0	13,600

NOTES:

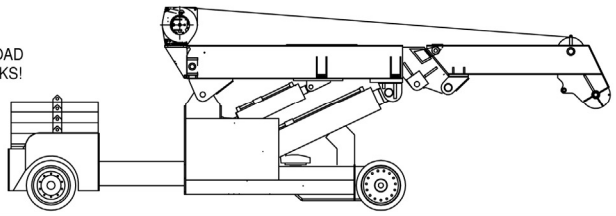
A) CAPACITIES ABOVE BOLD LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT STABILITY. (TIPPING CONDITIONS)

B) CAPACITIES BELOW BOLD LINE ARE BASED ON 85% STABLITY LIMITS.

C) ALL CAPACITES ARE IN KILOGRAMS.

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 CHART WITH COUNTERWEIGHT RETRACTED

TF45/60 LOAD CHART

FOR USE WITH MOBILIFT BOOM AND HOOK BLOCK ONLY
STANDARD COUNTERWEIGHT
COUNTERWEIGHT FULLY RETRACTED

MLLC082M
03242001
REV.A

LOAD RADIUS IN METERS FROM FRONT OF TIRE	∠°	POWER BOOM EXTENSION (METERS)										
		0	LOADED BOOM ANGLE ∠°	0.30	LOADED BOOM ANGLE ∠°	0.61	LOADED BOOM ANGLE ∠°	0.91	LOADED BOOM ANGLE ∠°	1.22	LOADED BOOM ANGLE ∠°	1.52
0.61	52	27,200										
0.91	47	27,200	50	27,200	52	27,200						
1.22	43	27,200	46	27,200	49	27,200	51	27,200	53	26,800		
1.52	38	27,200	42	27,200	45	27,200	48	26,300	50	25,400	52	24,600
1.83	33	23,400	37	23,400	41	23,400	44	23,400	46	23,300	49	23,300
2.13	27	20,400	32	20,400	36	20,400	40	20,400	43	20,300	45	20,300
2.44	19	18,000	26	18,000	31	18,000	36	18,000	39	18,000	42	18,000
2.74	0	15,900	19	16,100	26	16,100	31	16,100	35	16,100	38	16,100
3.05			0	14,400	18	14,500	25	14,600	30	14,600	34	14,600
3.35	SEE NOTE "D" BELOW				0	13,100	18	13,200	24	13,200	29	13,200
3.66							0	12,000	17	12,100	24	12,200
3.96									0	11,100	17	11,200
4.27											0	10,200

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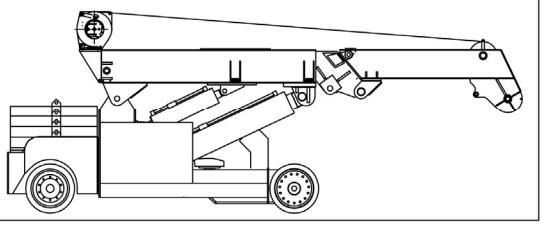

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