

TRI LIFTER 150,000 LBS

TRI LIFTER TL150BW

REACH UP:
35.5 FT

REACH OUT:
20 FT

ATTACHMENTS:
FORKS, JIB, BOOM,
SPINNER



NOTES:

TL150BW STANDARD EQUIPMENT

ENGINE:

GM 4.3L, V6
105 hp (78 Kw)

HYDRAULIC RESERVOIR:

290 gallons (1098 liters)

CONTROL SYSTEM:

CARL (Computer Assisted Remote Lifting) Control System. Lift Height, 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. 2).

Electronic Control of travel speed.

Posi Drive Feature for increased traction.

WHEELS:

Front: qty. (6)

Diameter: 28" (711 mm)

Width: (2) @ 16" (406 mm) and (4) @ 10" (256 mm)

Rear: qty. (4)

Diameter: 22" (559 mm)

Width: 8" (203 mm)

Replaceable polyurethane composition

STEERING:

80 degree steering of rear wheels.

OSCILLATING REAR STEERING BOX:

Keeps all steering wheels in contact with ground.

OUTSIDE TURNING RADIUS:

Counterweight Retracted: 18'0" (5,486 mm)

Counterweight Extended 5' (1,524 mm): 23'0" (7,010 mm)

TRAVEL SPEED:

0.0 - 3.64mph (0 - 5.85 km/h)

GRADABILITY:

Unloaded maximum grade is 20%

Loaded maximum grade is 8%

GROUND BEARING PRESSURE:

Loaded Front Tires: 653 psi maximum (45.9 kg/cm²)

Unloaded Rear Tires: 479 psi maximum (33.7 kg/cm²)

TELESCOPING COUNTERWEIGHT:

Standard counterweight section telescopes 5' (1,524 mm) using (2) hydraulic cylinders..
Push button control.

LIFT CYLINDERS:

Qty. (4) double acting lift cylinders capable of lifting and lowering with a full load.

Safety holding valves installed on all cylinders. Spherical bearings ensure constant alignment with the boom.

Front: Qty. (2) 4-stage cylinders

Rear: Qty. (2) 3-stage cylinders

BOOM TELESCOPE CYLINDERS:

Twin double-acting single-stage cylinders capable of telescoping the boom in and out with a full load.

Safety holding valves are installed on both cylinders.

LIFTING EYES:

Qty. (2) located on corners of boom with 37.5 ton (34 tonne) capacity each.

WEIGHTS:

Base Machine: 40,500 lbs. (18,387 kg)

Counterweights: 29,400 lbs. (13,344 kg) total

Qty. (6) 4,900 lbs. (2,224 kg) each

Fork Buttress: 1,300 lbs. (590 kg)

75 ton Forks: 7,170 total (3,255 kg)

65 ton Spinner: 350 lbs. (159 kg)

Spreader Bar: 1,390 lbs. (631 kg)

Jib: 5,500 lbs. (2,497 kg)

Riggers Boom: 6,400 lbs. (2,906 kg)

COUNTERWEIGHTS:

Fork Loops installed for ease of handling.

TIE DOWN / LIFTING EYES:

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

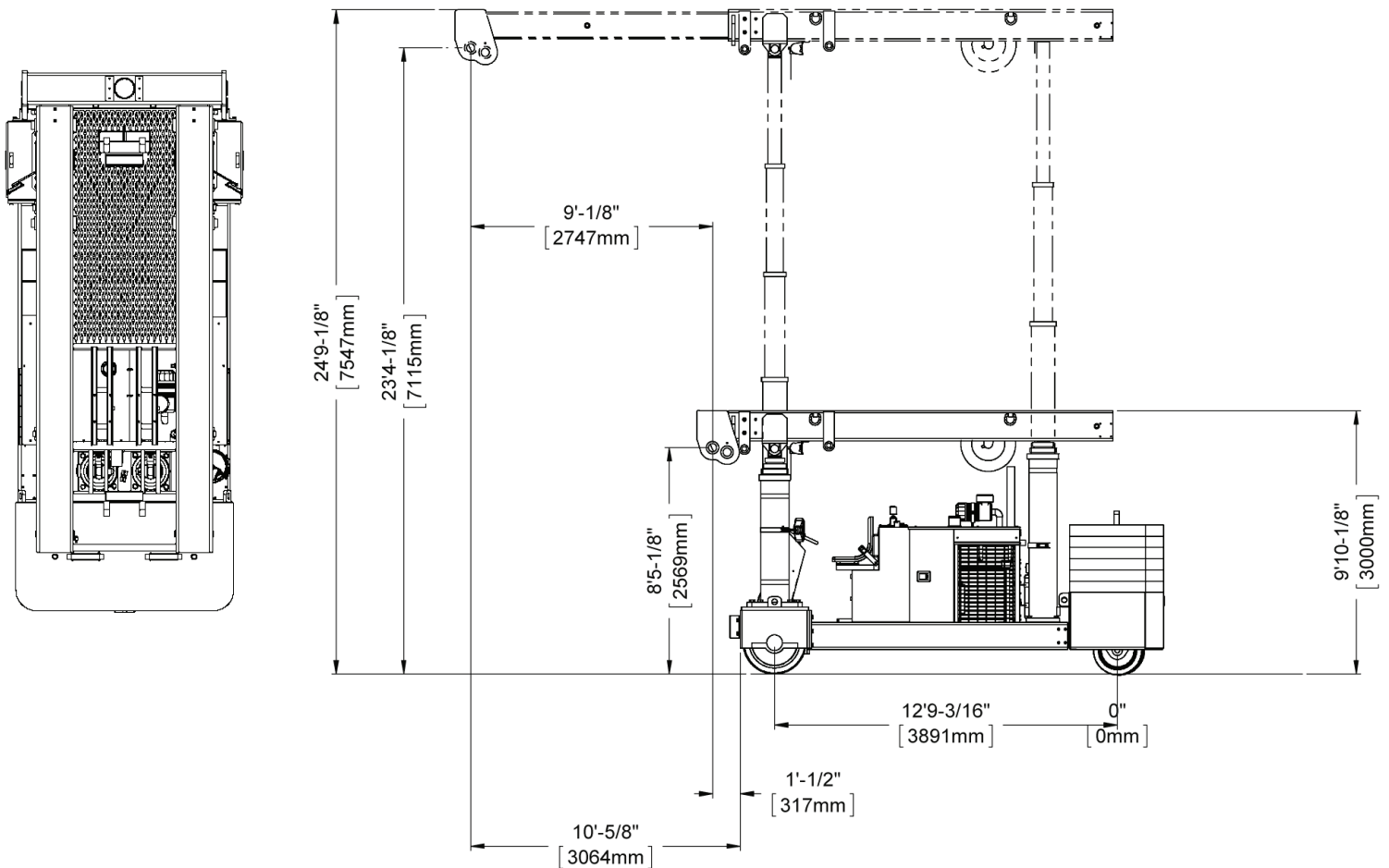
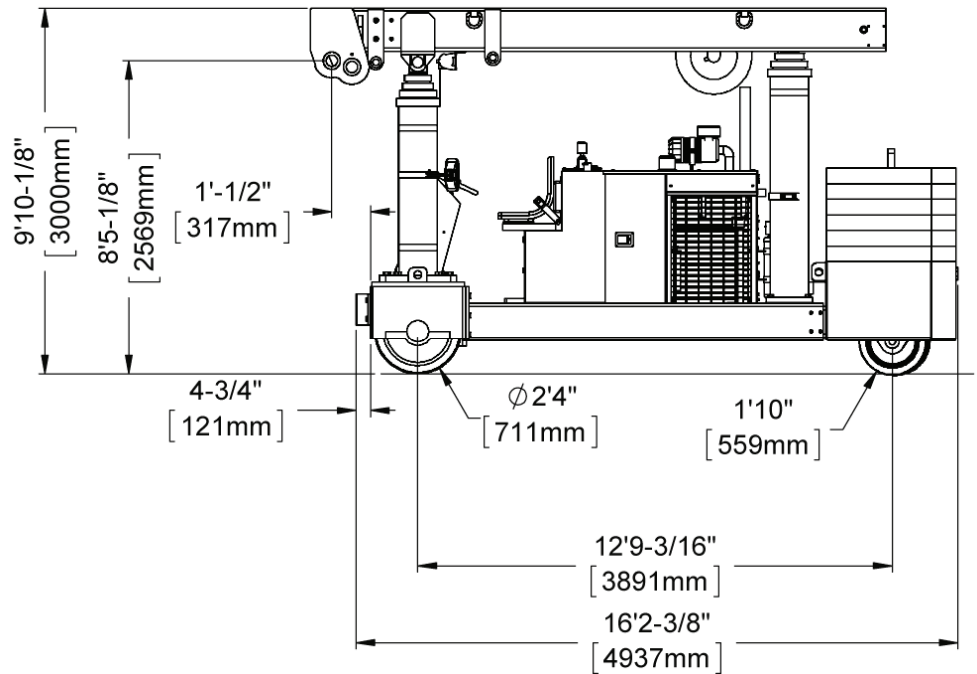
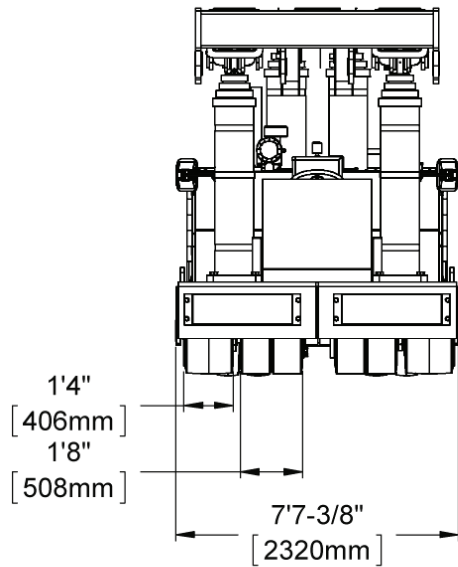
OTHER STANDARD FEATURES:

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



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TL150BW DIMENSIONS



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TL150BW LOAD CHARTS

TL150BW LIFTING CAPACITY FROM LIFTING EYES

BOOM EXTENSION INCHES	COUNTERWEIGHT IN POUNDS	COUNTERWEIGHT OUT POUNDS
36	112,000	150,000
48	90,000	122,000
60	76,000	102,000
72	64,000	88,000
84	56,000	76,000
96	50,000	68,000
108	46,000	62,000
120	42,000	56,000

TL150BW LOAD CHARTS—METRIC

TL150BW LIFTING CAPACITY FROM LIFTING EYES

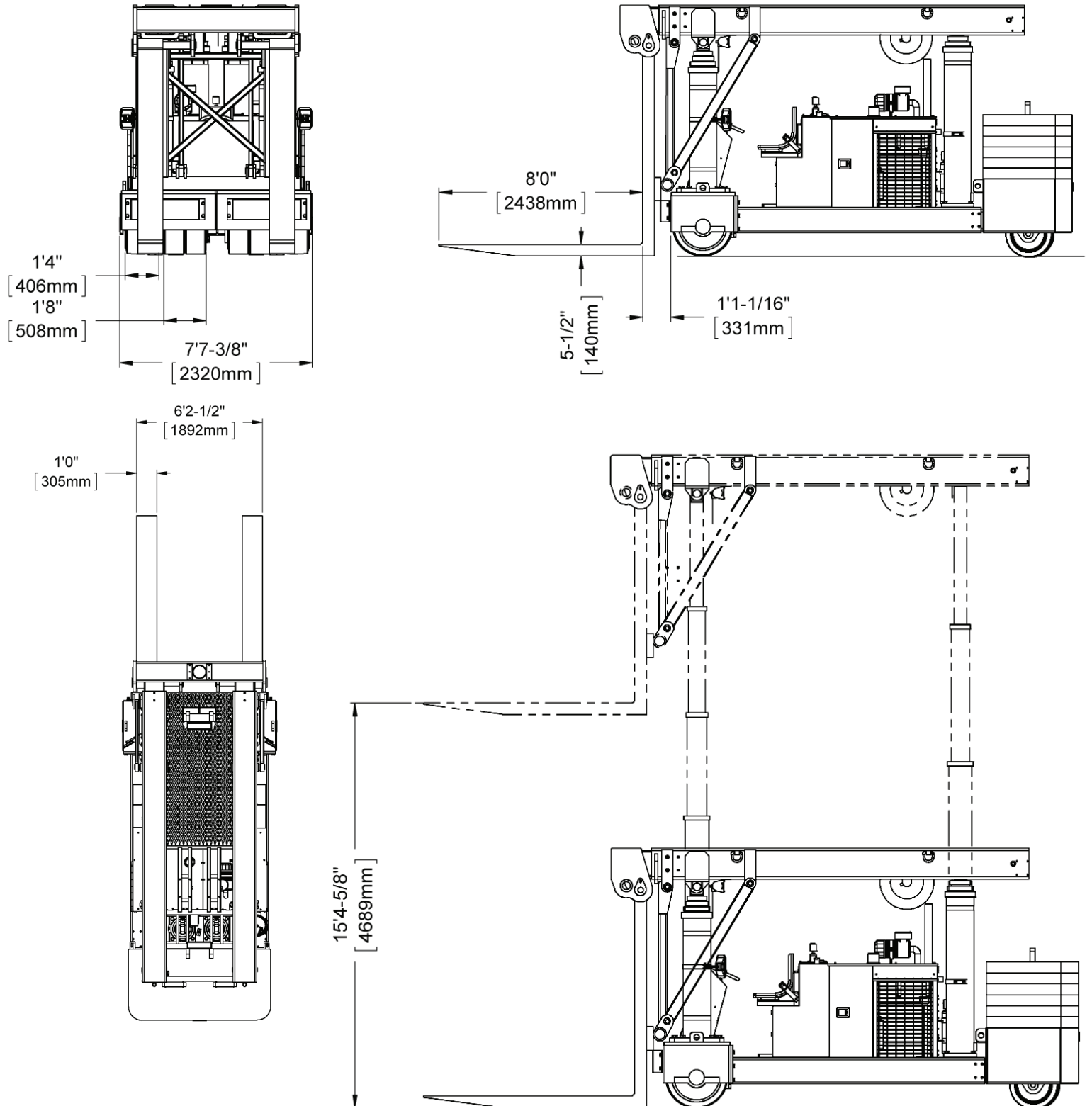
BOOM EXTENSION MILLIMETERS	COUNTERWEIGHT IN KILOGRAMS	COUNTERWEIGHT OUT KILOGRAMS
914	50,800	68,000
1,219	40,800	55,400
1,524	34,400	46,200
1,829	29,000	40,000
2,134	25,400	34,500
2,348	22,700	30,800
2,743	20,900	28,000
3,048	19,000	25,400



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TL150BW DIMENSIONS WITH FORKS



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TL150BW LOAD CHARTS WITH FORKS

TL150BW LIFTING CAPACITY FROM 75 TON FORKS

LOAD CENTER INCHES	COUNTERWEIGHT IN POUNDS	COUNTERWEIGHT OUT POUNDS
24	111,800	147,400
36	88,600	117,500
48	72,800	94,500
60	61,400	75,600
72	52,700	63,000
84	45,900	54,000
96	40,300	48,300

TL150BW LOAD CHARTS WITH FORKS—METRIC

TL150BW LIFTING CAPACITY FROM 68 TONNE FORKS

LOAD CENTER MILLIMETERS	COUNTERWEIGHT IN KILOGRAMS	COUNTERWEIGHT OUT KILOGRAMS
610	50,710	66,860
914	40,185	53,295
1,219	33,020	42,865
1,524	27,850	34,290
1,829	23,900	28,570
2,134	20,820	24,490
2,438	18,280	21,905



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TL-150BW-12 TRI LIFTER LOAD CHARTS WITH 5 1/2 X 12 FORKS

0 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	18,600	19,500	19,750	20,000	20,000
	36 IN	14,000	14,500	14,750	15,000	15,000
	48 IN	10,500	11,000	11,500	11,500	11,500
	60 IN	8,000	8,500	8,750	9,000	9,000
	72 IN	6,000	6,500	6,500	6,500	7,000
	84 IN	4,300	4,800	5,000	5,000	5,100
	94 IN	2,500	3,000	3,200	3,200	3,300

4900 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	30,600	33,500	34,700	35,900	37,000
	36 IN	24,000	26,571	27,400	28,500	29,400
	48 IN	19,300	21,400	22,200	23,000	23,900
	60 IN	15,700	17,500	18,300	19,000	19,700
	72 IN	12,900	14,400	15,100	15,800	16,500
	84 IN	10,600	12,000	12,600	13,200	13,700
	94 IN	8,300	9,600	10,100	10,600	10,900

9800 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	42,300	46,900	49,000	51,100	53,100
	36 IN	33,900	37,800	39,500	41,200	42,900
	48 IN	27,700	31,100	32,600	34,100	35,600
	60 IN	23,100	26,000	27,400	28,700	30,000
	72 IN	19,500	22,100	23,200	24,500	25,700
	84 IN	16,500	18,900	19,900	21,000	22,000
	94 IN	13,500	16,700	17,600	18,000	18,500



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TL-150BW-12 TRI LIFTER LOAD CHARTS WITH 5 1/2 X 12 FORKS

14700 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	54,100	60,600	63,600	66,600	69,500
	36 IN	43,800	49,300	51,700	54,300	56,800
	48 IN	36,300	41,000	43,100	45,400	47,500
	60 IN	30,600	34,800	36,700	38,600	40,500
	72 IN	26,200	29,800	34,500	33,300	35,100
	84 IN	22,600	25,900	27,400	29,000	30,400
	94 IN	18,000	22,000	23,300	24,600	25,700

19600 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	65,900	74,200	78,100	82,100	85,900
	36 IN	53,700	60,700	64,000	67,300	70,600
	48 IN	44,900	50,900	53,700	56,600	59,500
	60 IN	38,200	43,500	46,000	48,500	51,000
	72 IN	32,900	37,600	39,800	42,200	44,400
	84 IN	28,700	32,900	34,900	37,000	38,900
	94 IN	24,500	28,200	30,000	31,800	33,400

24500 # COUNTERWEIGHT ADDED

		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	77,700	87,900	92,700	97,600	102,400
	36 IN	63,700	72,200	76,310	80,400	84,400
	48 IN	53,500	60,800	64,300	67,900	71,400
	60 IN	45,700	52,200	55,300	58,400	61,500
	72 IN	39,700	45,400	48,100	51,000	53,800
	84 IN	34,700	40,000	42,400	44,900	47,300
	94 IN	29,900	34,600	36,700	38,800	41,800



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TL-150BW-12 TRI LIFTER LOAD CHARTS WITH 5 1/2 X 12 FORKS

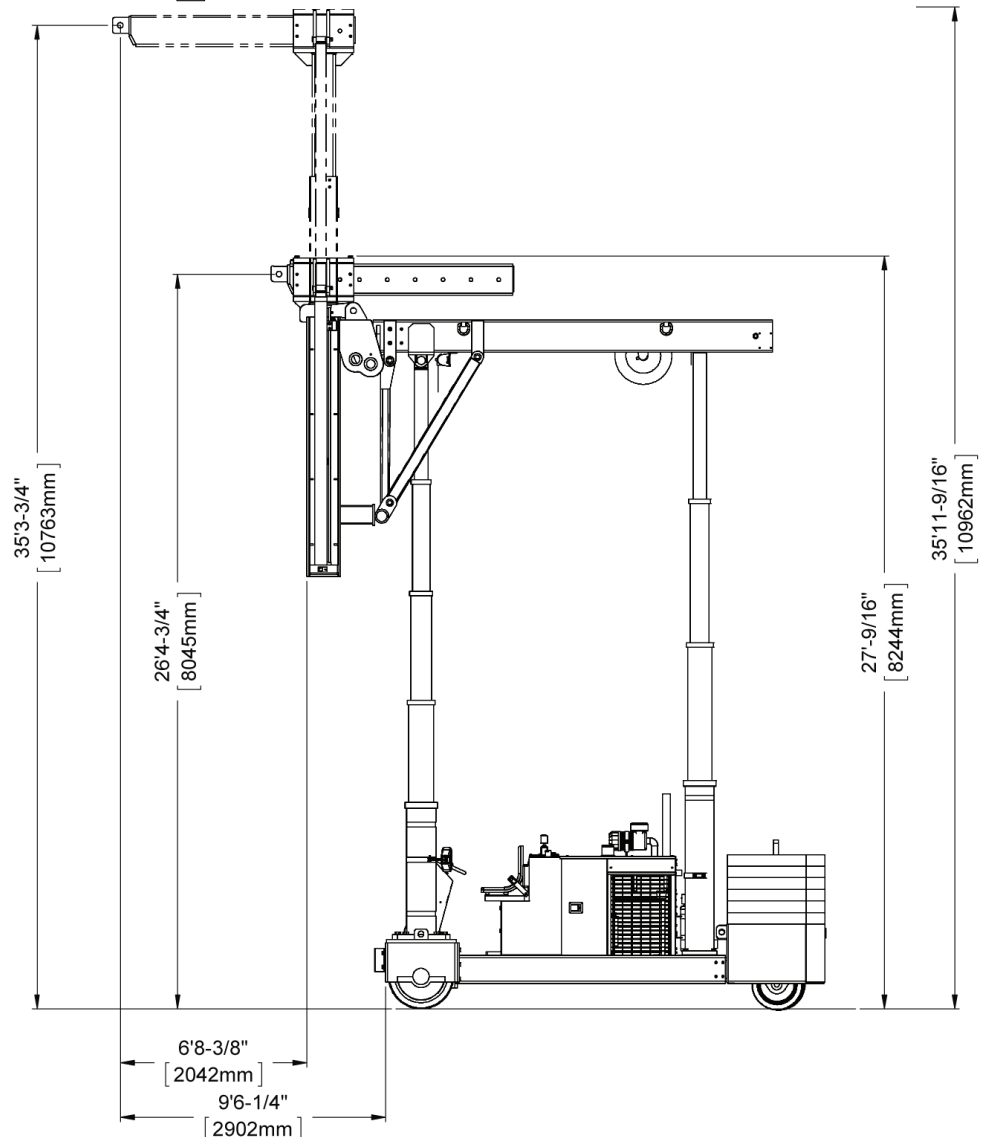
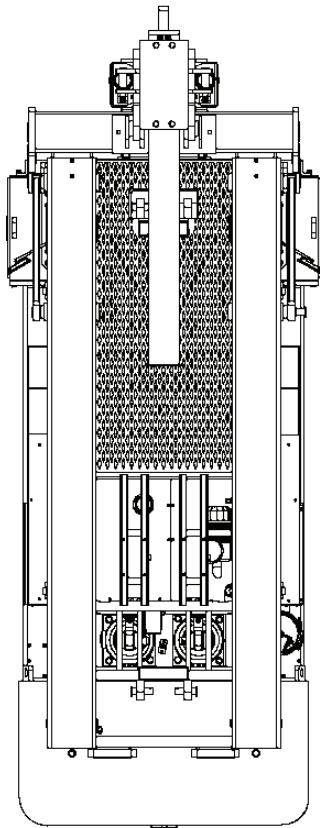
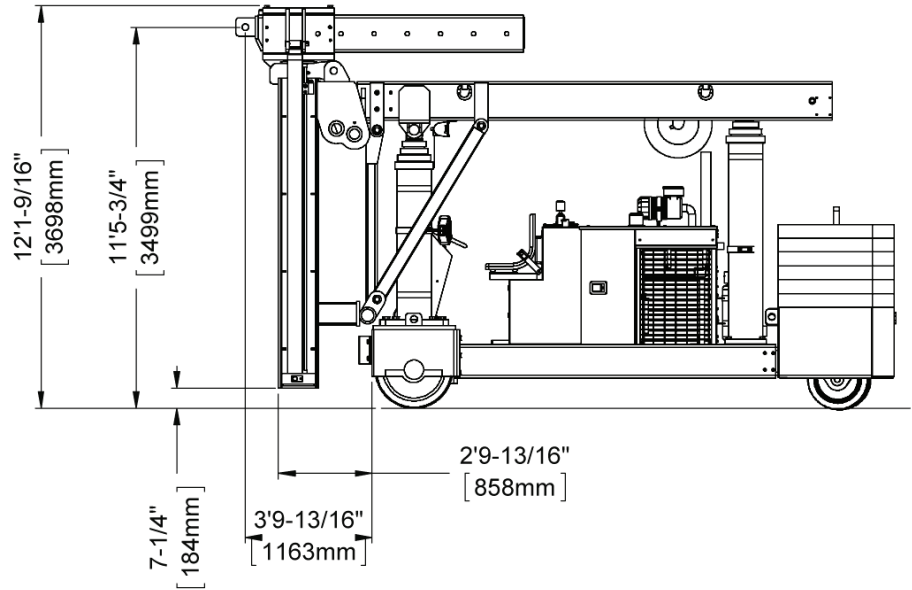
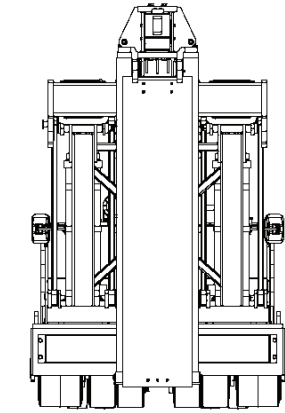
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		COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
DISTANCE ON FORKS	24 IN	91,000	103,200	109,100	114,600	114,600
	36 IN	74,800	85,100	90,000	95,000	95,300
	48 IN	63,100	72,000	76,200	80,500	81,300
	60 IN	54,200	62,000	65,700	69,500	70,600
	72 IN	47,200	54,100	57,500	60,900	62,200
	84 IN	41,500	47,800	50,900	53,900	55,500
	94 IN	35,800	41,500	44,300	46,900	48,800



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TL150BW DIMENSIONS WITH RIGGERS BOOM



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TL150BW LOAD CHARTS WITH RIGGERS BOOM

TL150BW LIFTING CAPACITY FROM RIGGERS BOOM

BOOM EXTENSION FROM FACE INCHES	COUNTERWEIGHT IN POUNDS	COUNTERWEIGHT OUT POUNDS
12	50,000	50,000
20	50,000	50,000
32	50,000	50,000
44	50,000	50,000
56	50,000	50,000
68	45,600	50,000
80	40,200	50,000

TL150BW LOAD CHARTS WITH RIGGERS BOOM—METRIC

TL150BW LIFTING CAPACITY FROM RIGGERS BOOM

BOOM EXTENSION FROM FACE MILLIMETERS	COUNTERWEIGHT IN KILOGRAMS	COUNTERWEIGHT OUT KILOGRAMS
305	22,680	22,860
508	22,680	22,860
813	22,680	22,860
1,118	22,680	22,860
1,422	22,680	22,860
1,727	20,680	22,860
2,032	18,235	22,860



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TL-150BW TRI LIFTER LOAD CHARTS - Units Expressed in US Tons

0 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	12	13	13	13	13
	48 IN	10	10	10	10	10
	60 IN	8	8	8	8	8
	72 IN	6	6	7	7	7
	84 IN	5	5	6	6	6
	96 IN	5	5	5	5	5
	With optional 10 foot Boom Extension					
	108 IN	4	5	4	4	4
	120 IN	4	4	4	4	4
	With optional 12 foot Boom Extension					
	132 IN	3	3	3	3	3
	144 IN	3	3	3	3	3

3 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	21	23	24	24	25
	48 IN	17	18	19	20	20
	60 IN	14	15	15	16	17
	72 IN	12	13	13	14	14
	84 IN	10	11	11	12	12
	96 IN	9	9	10	10	11
	With optional 10 foot Boom Extension					
	108 IN	8	8	9	9	9
	120 IN	7	7	7	8	8
	With optional 12 foot Boom Extension					
	132 IN	6	6	7	7	8
	144 IN	6	6	6	7	7



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TL-150BW TRI LIFTER LOAD CHARTS - Units Expressed in US Tons

6 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	30	33	35	36	38
	48 IN	24	27	28	29	30
	60 IN	20	22	23	24	25
	72 IN	17	19	20	20	22
	84 IN	15	16	17	18	19
	96 IN	13	14	16	16	17
	With optional 10 foot Boom Extension					
	108 IN	11	12	13	14	15
	120 IN	10	11	12	12	13
	With optional 12 foot Boom Extension					
	132 IN	9	10	11	11	12
	144 IN	8	9	9	10	11

9 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	39	44	46	48	50
	48 IN	31	35	37	38	40
	60 IN	26	29	30	32	33
	72 IN	22	25	26	27	28
	84 IN	19	21	23	24	25
	96 IN	17	19	20	21	22
	With optional 10 foot Boom Extension					
	108 IN	15	17	18	19	20
	120 IN	13	15	16	17	18
	With optional 12 foot Boom Extension					
	132 IN	12	14	14	15	16
	144 IN	11	12	13	14	15



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TL-150BW TRI LIFTER LOAD CHARTS - Units Expressed in US Tons

6 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	48	54	57	60	62
	48 IN	38	43	46	48	50
	60 IN	32	36	38	40	42
	72 IN	27	31	33	34	36
	84 IN	24	27	28	30	31
	96 IN	21	24	25	26	28
	With optional 10 foot Boom Extension					
	108 IN	19	21	22	24	25
	120 IN	17	19	20	21	22
	132 IN	16	17	18	19	20
	144 IN	14	16	16	18	19

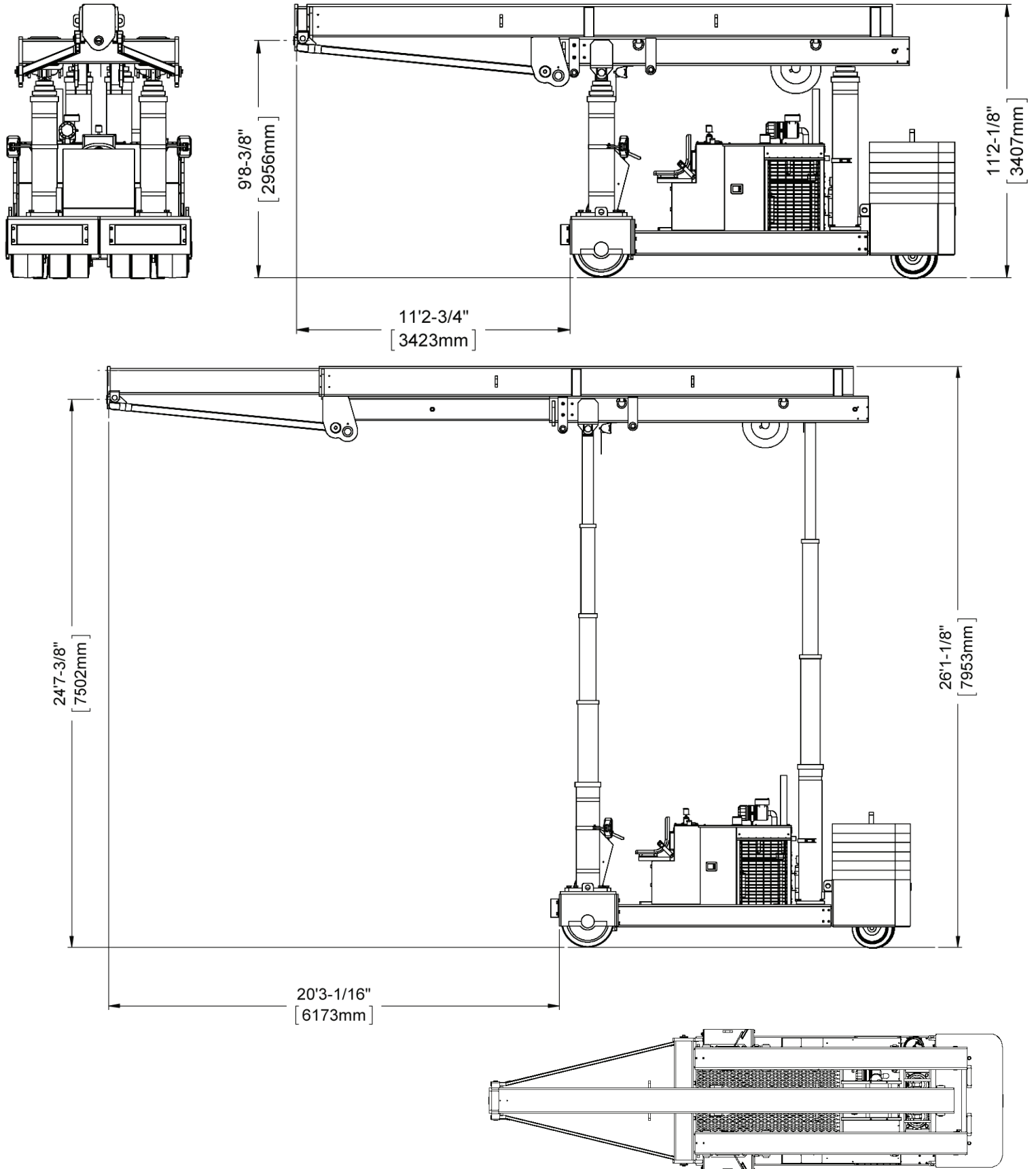
9 TONS COUNTERWEIGHT

		COUNTERWEIGHT EXTENSION				
BOOM EXTENSION	TONS	0 IN	24 IN	36 IN	48 IN	60 IN
	36 IN	57	64	68	71	75
	48 IN	46	52	55	57	60
	60 IN	38	43	45	48	50
	72 IN	32	37	39	41	43
	84 IN	28	32	34	36	37
	96 IN	25	29	30	32	33
	With optional 10 foot Boom Extension					
	108 IN	22	25	27	28	30
	120 IN	20	23	24	26	27
	With optional 12 foot Boom Extension					
	132 IN	18	21	22	23	25
	144 IN	17	19	20	21	23



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TL150BW DIMENSIONS WITH JIB



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TL150BW LOAD CHARTS WITH JIB

TL150BW LIFTING CAPACITY FROM JIB

BOOM EXTENSION INCHES	JIB EXTENSION INCHES	COUNTERWEIGHT IN POUNDS	COUNTERWEIGHT OUT POUNDS
24	148	33,000	44,000
36	160	30,200	40,400
48	172	28,000	37,400
60	184	26,000	34,800
72	196	23,600	32,000
84	208	22,000	28,800
96	220	20,400	27,800
108	232	19,000	26,000
120	244	17,600	24,200

TL150BW LOAD CHARTS WITH JIB—METRIC

TL150BW LIFTING CAPACITY FROM JIB

BOOM EXTENSION MILLIMETERS	JIB EXTENSION MILLIMETERS	COUNTERWEIGHT IN KILOGRAMS	COUNTERWEIGHT OUT KILOGRAMS
610	3,760	14,965	19,955
914	4,064	13,695	18,325
1,219	4,369	12,700	16,960
1,524	4,674	11,790	15,785
1,829	4,979	10,705	14,515
2,134	5,284	9,975	13,060
2,438	5,588	9,250	12,610
2,743	5,893	8,615	11,790
3,048	6,198	7,980	10,975



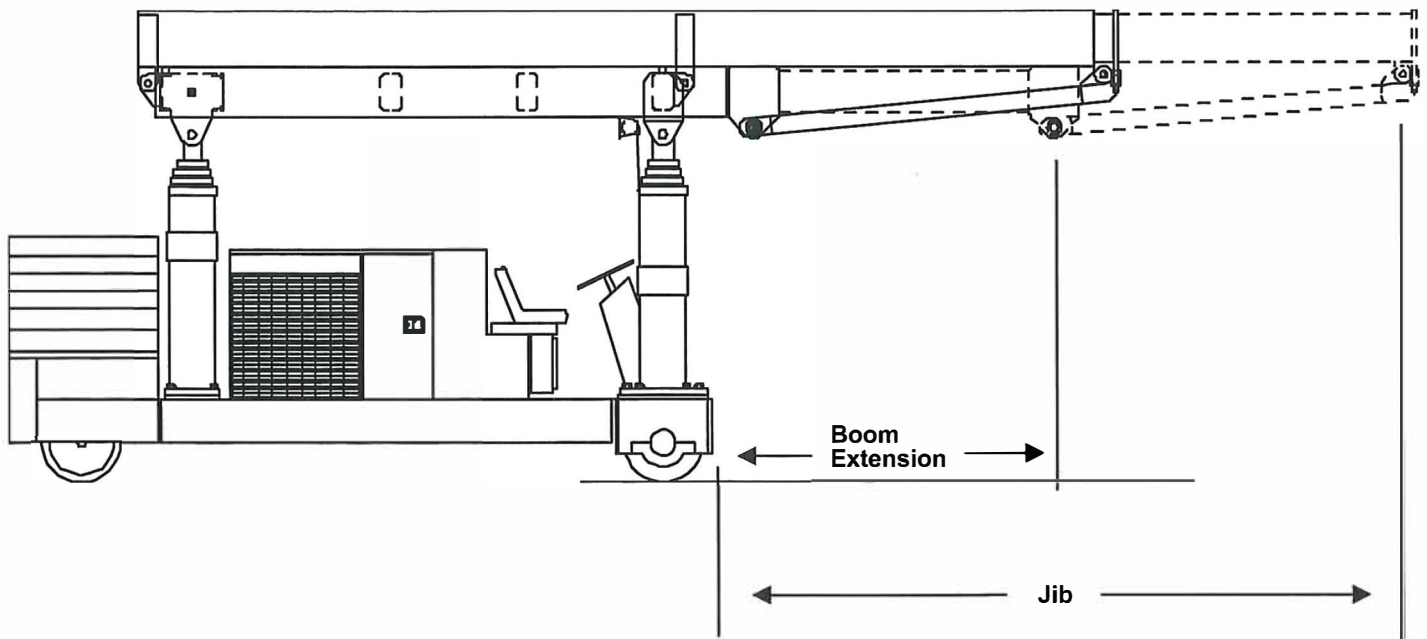
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JIB LOAD CHART

TL 150BW-12 WITH JIB ATTACHMENT
LIFTING CAPACITY IN US TONS WITH FULL 15 TONS OF COUNTERWEIGHT

BOOM EXTENSION	JIB EXTENSION	COUNTERWEIGHT EXTENSION				
		0 IN	24 IN	36 IN	48 IN	60 IN
24 IN	162 IN	17	19	20	21	22
36 IN	174 IN	15	18	19	20	21
48 IN	186 IN	14	16	17	18	19
60 IN	198 IN	13	15	16	17	18
72 IN	210 IN	12	14	15	16	17
84 IN	222 IN	12	13	14	15	16
96 IN	234 IN	11	13	13	14	15
108 IN	246 IN	10	12	13	13	14
120 IN	258 IN	10	11	12	12	16
132 IN	270 IN	9	10	11	12	12
144 IN	282 IN	9	10	11	11	12



TL 150BW FLOOR LOADING CALCULATIONS

REAR WHEELS:

Empty Tri Lifter	16,000	lbs.
Counterweight	30,000	lbs.
Total	46,000	lbs.

Wheel width	8 IN
Number of wheels	4
Wheel spread	3 IN
Surface contact area	96 SQ IN
Floor loading per square inch	479 lbs.

Note: Calculations assume 15 ton of counterweight with no load.

FRONT WHEELS:

Empty Tri Lifter	23,500	lbs.	23,500	lbs.	23,500	lbs.
Load	150,000	lbs.	100,000	lbs.	50,000	lbs.
Load shift back to front	38,000	lbs.	25,333	lbs.	12,667	lbs.
Total	211,500	lbs.	148,833	lbs.	86,167	lbs.

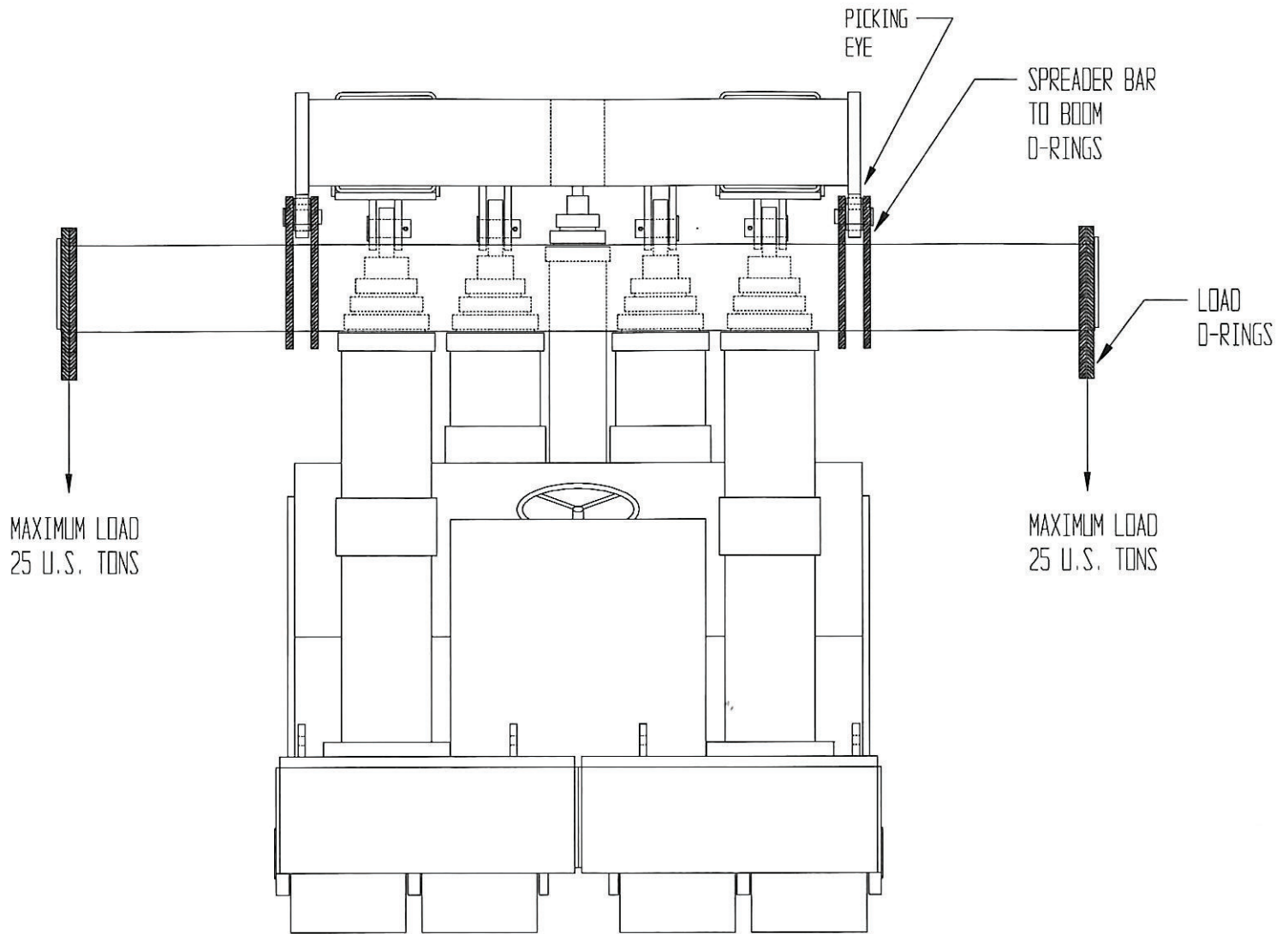
Wheel width	16 IN	16 IN	16 IN
Number of wheels	2	2	2
Wheel width	10 IN	10 IN	10 IN
Number of wheels	4	4	4
Wheel spread	4.5 IN	4.25 IN	4 IN
Surface contact area	324 SQ IN	306 SQ IN	288 SQ IN
Floor loading per square inch	653 lbs.	486 lbs.	299 lbs.

Note: Calculations assume load being lifted 3 feet out.



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CENTERED SPREADER BAR LOAD DIAGRAM



NOTICE: DO NOT lift a load with only one ear of the Spreader Bar without counter balance load. Lifting with only one ear and no counter balance load will cause the boom to go out of level and the load will not lift.

SHIFTED SPREADER BAR LOAD DIAGRAM

