



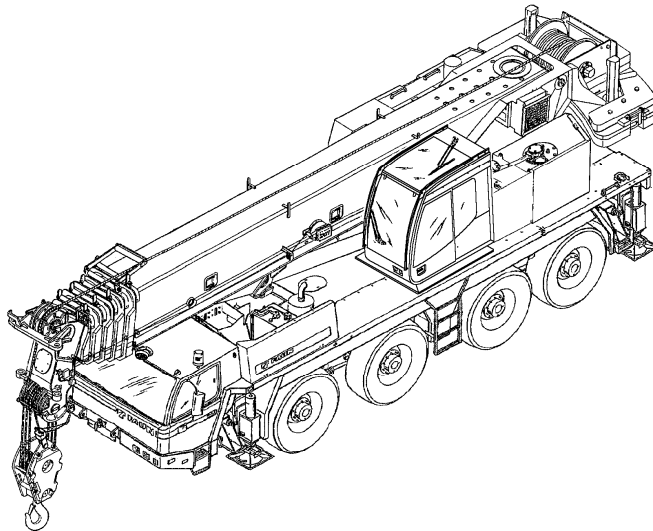
# TADANO

## ALL-TERRAIN-CRANE

### ATF 80-4

Serial-No.: 2043162

Version: 00



01261

## LOAD RATING CHARTS

INSTRUCTION FOR LIFTING CAPACITIES

OUTRIGGER REACTION FORCE CHARTS

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**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 39,683 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)								
	35.4		47.9		47.9		60.0		60.0		60.0			72.5		72.5		72.5			
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°		
9	70	200.0*																	9		
10	68	167.5	74	163.5	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10
12	64	148.5	71	148.5	71	84.3	76	138.0	76	86.0	76	130.5	76	56.8	79	107.5	79	63.3	79	50.9	12
14	60	129.0	69	128.5	69	79.4	74	126.5	74	82.5	74	121.0	74	53.7	77	101.5	77	59.8	77	50.2	14
16	56	114.0	66	113.5	66	74.4	71	113.0	71	79.0	71	111.0	71	50.6	75	95.6	75	56.3	75	48.6	16
18	52	103.0	64	102.5	64	69.6	70	101.0	70	75.7	70	99.8	70	47.6	74	89.5	74	52.8	74	47.0	18
20	47	92.3	61	92.3	61	64.9	68	90.3	68	72.2	68	88.6	68	44.5	72	83.5	72	49.3	72	45.4	20
25	33	72.1	53	72.1	53	56.0	62	70.1	62	60.9	62	68.4	62	37.7	68	68.4	68	41.2	68	41.3	25
30			44	58.1	44	49.3	56	56.3	56	52.7	56	54.6	56	32.5	64	55.0	64	35.5	64	36.3	30
35			34	48.2	34	44.5	50	46.4	50	46.7	50	44.9	50	28.7	58	45.3	58	31.0	58	31.9	35
40			19	38.9	19	40.2	43	38.8	43	41.3	43	37.3	43	25.7	53	37.7	53	27.4	53	28.3	40
45							35	31.7	35	36.6	35	30.2	35	23.2	48	30.8	48	24.6	48	25.4	45
50							22	26.6	22	31.1	22	25.1	22	21.1	42	25.6	42	22.4	42	23.3	50
55															35	21.4	35	20.5	35	21.3	55
60															26	17.6	26	18.7	26	19.3	60
65															12	12.9	12	17.4	12	16.4	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
130																					130
140																					140
150																					150
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	Tel. 1	
Tel. 2	0	50	0	50	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	Tel. 2	
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3	
Tel. 4	0	0	0	0	50	0	0	0	0	0	0	0	0	100	50	0	0	0	0	Tel. 4	
Tel. 5	0	0	50	0	50	0	100	0	0	0	100	0	0	50	100	0	0	0	0	Tel. 5	
<b>Code</b>	<b>0 XX 01 0</b>	<b>0 15 01 0</b>	<b>0 10 01 0</b>	<b>0 16 01 0</b>	<b>0 11 01 0</b>	<b>0 05 01 0</b>	<b>0 01 01 0</b>	<b>0 15 01 0</b>	<b>0 10 01 0</b>	<b>0 09 01 0</b>	<b>Code</b>										

\* Over rear with superstructure swing lock pin engaged and additional equipment, Code 0 01 01 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707788721  
**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)			
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5			72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		m	F	
9	200.0	63.9																				9
10	167.5	67.5	163.5	66.4	89.3	41.1	140.5	58.7	89.5	40.8	139.5	59.0	59.9	31.1	113.5	50.1	66.9	33.3	50.9	27.8		10
12	148.5	67.0	148.5	66.8	84.3	42.3	138.0	62.1	86.0	42.5	130.5	60.4	56.8	32.0	107.5	51.9	63.3	34.3	50.9	29.4		12
14	129.0	65.5	128.5	65.5	79.4	43.4	126.5	63.6	82.5	44.0	121.0	61.5	53.7	32.9	101.5	53.3	59.8	35.2	50.2	31.0		14
16	114.0	63.6	113.5	63.6	74.4	44.3	113.0	63.2	79.0	45.4	111.0	62.1	50.6	33.5	95.6	54.5	56.3	35.9	48.6	32.0		16
18	103.0	62.3	102.5	62.3	69.6	44.8	101.0	62.3	75.7	46.6	99.8	62.1	47.6	34.2	89.5	55.5	52.8	36.5	47.0	33.0		18
20	92.3	60.3	92.3	60.4	64.9	45.5	90.3	59.8	72.2	48.7	88.6	59.6	44.5	34.9	83.5	56.5	49.3	37.2	45.4	34.8		20
25	72.1	58.4	72.1	58.7	56.0	46.2	70.1	58.0	60.9	48.7	68.4	57.8	37.7	35.2	68.4	56.4	41.2	37.2	41.3	36.3		25
30			58.1	56.8	49.3	46.8	56.3	56.0	52.7	48.9	54.6	55.8	32.5	35.5	55.0	55.3	35.5	37.3	36.3	37.5		30
35			48.2	55.2	44.5	47.6	46.4	54.4	46.7	49.3	44.9	54.2	28.7	35.8	45.3	53.6	31.0	37.7	31.9	37.8		35
40			38.9	54.1	40.2	48.3	38.8	53.4	41.3	49.4	37.3	53.2	25.7	36.2	37.7	52.7	27.4	37.7	28.3	37.9		40
45							31.7	52.4	36.6	50.2	30.2	52.1	23.2	36.6	30.8	52.0	24.6	38.2	25.4	38.3		45
50							26.6	51.4	31.1	50.1	25.1	51.2	21.1	37.0	25.6	51.1	22.4	38.3	23.3	38.5		50
55															21.4	48.5	20.5	38.8	21.3	39.0		55
60															17.6	46.6	18.7	39.6	19.3	39.9		60
65															12.9	45.3	17.4	40.2	16.4	40.4		65
70																						70
75																						75
80																						80
85																						85
90																						90
95																						95
100																						100
110																						110
120																						120
130																						130
140																						140
150																						150

Telescoping sequence %

Tel. 1	0	0	0	50	0	100	0	100	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	50	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	100	50	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.



### Load rating chart ATF 80-4

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom  
**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)								
	85.0		85.0		85.0		97.4		97.4		97.4			109.9		109.9		109.9			
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°		
9																				9	
10																					10
12																					12
14	79	81.5	79	62.5	79	44.6															14
16	78	79.0	78	60.2	78	42.9															16
18	77	76.4	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9									18
20	75	73.7	75	55.2	75	39.6	78	59.6	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0	20
25	72	63.9	72	49.0	72	35.8	75	54.1	75	42.5	75	37.4	77	45.8	77	45.1	77	41.0	77	33.9	25
30	68	54.4	68	42.9	68	31.6	72	48.6	72	38.7	72	35.0	74	42.4	74	41.6	74	38.1	74	31.8	30
35	64	45.3	64	37.5	64	28.0	69	42.8	69	34.9	69	31.9	72	38.7	72	38.3	72	35.6	72	29.5	35
40	60	37.9	60	32.8	60	24.6	66	37.2	66	30.7	66	28.3	69	35.5	69	35.0	69	32.7	69	27.3	40
45	56	31.0	56	29.3	56	22.1	62	31.7	62	27.5	62	25.3	66	31.8	66	31.3	66	29.9	66	25.1	45
50	51	25.9	51	26.5	51	20.0	58	26.7	58	24.7	58	23.1	63	27.5	63	27.1	63	27.0	63	23.1	50
55	47	21.7	47	24.0	47	18.3	54	22.5	54	22.3	54	21.0	59	23.5	59	23.1	59	24.6	59	21.0	55
60	42	18.2	42	22.0	42	16.9	50	23.6	50	20.2	50	19.1	56	20.0	56	19.7	56	22.5	56	19.1	60
65	36	15.3	36	20.5	36	15.6	46	16.2	46	18.7	46	17.8	53	17.3	53	16.9	53	19.9	53	17.6	65
70	28	13.1	28	18.4	28	14.7	42	13.8	42	17.3	42	16.5	50	14.9	50	14.5	50	17.7	50	16.2	70
75	21	10.9	21	16.2	21	13.9	37	11.7	37	16.2	37	15.4	46	12.8	46	12.4	46	15.7	46	15.0	75
80							31	10.0	31	15.1	31	14.6	42	11.1	42	10.6	42	13.9	42	13.9	80
85							23	8.5	23	13.5	23	13.7	37	9.6	37	9.1	37	12.4	37	13.3	85
90													32	8.2	32	7.8	32	11.2	32	12.4	90
95													26	7.1	26	6.6	26	10.1	26	11.6	95
100													19	6.1	19	5.6	19	8.9	19	10.8	100
110																					110
120																					120
130																					130
140																					140
150																					150

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	100	Tel. 5
<b>Code</b>	<b>0 04 01 0</b>	<b>0 11 01 0</b>	<b>0 01 01 0</b>	<b>0 14 01 0</b>	<b>0 10 01 0</b>	<b>0 08 01 0</b>	<b>0 13 01 0</b>	<b>0 03 01 0</b>	<b>0 11 01 0</b>	<b>0 01 01 0</b>	<b>Code</b>	

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707788721  
**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																Working Radius (ft)						
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9			109.9		109.9			
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		m	F	m	F		
9																						9	
10																							10
12																							12
14	81.5	45.0	62.5	36.2	44.6	28.7																	14
16	79.0	46.7	60.2	37.3	42.9	29.7																	16
18	76.4	48.4	57.7	38.4	41.3	30.5	61.9	41.7	47.5	33.4	40.9	30.0											18
20	73.7	51.4	55.2	40.1	39.6	31.9	59.6	44.0	46.1	35.4	40.0	32.0	49.4	38.5	48.5	38.2	43.9	34.8	36.0	30.1			20
25	63.9	52.7	49.0	41.5	35.8	33.1	54.1	46.1	42.5	37.2	37.4	33.6	45.8	40.6	45.1	40.3	41.0	36.6	33.9	31.8			25
30	54.4	53.3	42.9	42.3	31.6	34.1	48.6	47.6	38.7	38.5	35.0	35.2	42.4	42.5	41.6	42.3	38.1	38.4	31.8	33.2			30
35	45.3	53.3	37.5	42.8	28.0	34.6	42.8	48.9	34.9	39.6	31.9	36.6	38.7	44.2	38.3	43.8	35.6	39.8	29.5	34.6			35
40	37.9	52.7	32.8	43.0	24.6	34.9	37.2	49.4	30.7	40.6	28.3	37.7	35.5	45.4	35.0	45.3	32.7	41.2	27.3	35.8			40
45	31.0	51.7	29.3	43.1	22.1	35.4	31.7	49.9	27.5	40.9	25.3	38.1	31.8	46.4	31.3	46.3	29.9	42.5	25.1	36.6			45
50	25.9	51.1	26.5	43.1	20.0	35.3	26.7	49.8	24.7	40.9	23.1	38.2	27.5	47.5	27.1	47.4	27.0	43.4	23.1	37.5			50
55	21.7	48.4	24.0	43.4	18.3	35.8	22.5	48.6	22.3	41.3	21.0	38.5	23.5	48.3	23.1	48.2	24.6	44.6	21.0	38.8			55
60	18.2	46.8	22.0	43.9	16.9	36.3	23.6	46.8	20.2	41.6	19.1	39.3	20.0	47.1	19.7	46.9	22.5	44.9	19.1	39.6			60
65	15.3	45.3	20.5	44.3	15.6	37.2	16.2	45.5	18.7	41.8	17.8	39.6	17.3	45.6	16.9	45.7	19.9	45.8	17.6	39.8			65
70	13.1	44.1	18.4	45.3	14.7	37.8	13.8	44.4	17.3	42.5	16.5	40.3	14.9	44.7	14.5	44.6	17.7	45.2	16.2	40.3			70
75	10.9	43.3	16.2	44.6	13.9	38.8	11.7	43.3	16.2	43.0	15.4	40.7	12.8	43.7	12.4	43.5	15.7	44.5	15.0	40.7			75
80							10.0	42.6	15.1	43.9	14.6	41.6	11.1	43.0	10.6	42.8	13.9	43.8	13.9	41.0			80
85							8.5	42.0	13.5	43.4	13.7	42.4	9.6	42.4	9.1	42.2	12.4	43.3	13.3	42.1			85
90													8.2	41.8	7.8	41.6	11.2	43.1	12.4	42.5			90
95													7.1	41.6	6.6	41.4	10.1	42.6	11.6	42.7			95
100													6.1	41.4	5.6	41.2	8.9	42.3	10.8	43.0			100
110																							110
120																							120
130																							130
140																							140
150																							150

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 39,683 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1		
9																			9
10																			10
12																			12
14																			14
16																			16
18																			18
20																			20
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6							25
30	76	34.0	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4			30
35	74	32.0	74	30.2	74	27.3	75	27.4	75	28.3	75	24.4	77	22.9	77	21.2	78	19.8	35
40	72	30.0	72	28.4	72	26.3	74	26.0	74	27.2	74	23.5	75	22.2	75	20.9	77	19.8	40
45	69	28.1	69	26.6	69	25.1	71	24.5	71	26.0	71	22.6	73	21.3	73	20.2	75	19.3	45
50	67	26.0	67	24.7	67	24.0	69	23.4	69	25.0	69	21.8	71	20.8	71	19.8	73	18.6	50
55	64	23.4	64	23.0	64	22.9	67	22.2	67	23.4	67	20.8	69	20.1	69	19.4	71	18.0	55
60	61	20.4	61	21.3	61	21.8	65	20.6	65	21.1	65	19.7	68	19.3	68	18.9	70	17.5	60
65	58	17.7	58	19.6	58	20.2	62	18.5	62	18.4	62	18.8	65	18.8	65	18.6	68	16.8	65
70	55	15.4	55	17.9	55	18.7	59	16.2	59	16.0	59	17.4	63	16.8	63	17.5	66	16.3	70
75	52	13.3	52	16.2	52	17.1	57	14.2	57	13.9	57	16.2	61	14.8	61	15.9	64	15.1	75
80	49	11.5	49	14.4	49	15.5	54	12.4	54	12.2	54	15.1	58	13.0	58	14.2	61	13.3	80
85	45	10.0	45	12.9	45	14.0	51	10.9	51	10.7	51	13.5	56	11.3	56	12.9	59	12.0	85
90	41	8.7	41	11.7	41	12.8	48	9.5	48	9.3	48	12.2	53	10.1	53	11.5	57	10.8	90
95	38	7.5	38	10.5	38	11.6	45	8.4	45	8.2	45	11.1	50	9.0	50	10.3	55	9.6	95
100	33	6.5	33	9.4	33	10.5	42	7.4	42	7.2	42	10.0	47	7.8	47	9.2	52	8.5	100
110	21	4.7	21	7.8	21	8.8	33	5.6	33	5.3	33	8.2	41	6.0	41	7.5	47	6.7	110
120							23	4.2	23	3.9	23	6.8	34	4.6	34	5.9	42	5.3	120
130													25	3.4	25	4.8	35	4.1	130
140													11	2.4	11	3.7	27	2.9	140
150																	13	2.1	150

Telescoping sequence %

Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5
<b>Code</b>	<b>0 12 01 0</b>	<b>0 10 01 0</b>	<b>0 07 01 0</b>	<b>0 11 01 0</b>	<b>0 02 01 0</b>	<b>0 01 01 0</b>	<b>0 10 01 0</b>	<b>0 06 01 0</b>	<b>0 01 01 0</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707788721 <b>Counterweight 39,683 lbs</b> On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>																		Working Radius (ft)
	Boom length (ft)																		
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9																			9
10																			10
12																			12
14																			14
16																			16
18																			18
20																			20
25	36.2	34.8	34.0	32.4	29.7	29.4	28.9	30.0	29.5	30.5	25.6	27.1							25
30	34.0	36.7	32.0	34.0	28.5	30.9	28.8	32.2	29.4	32.7	25.4	29.0	23.1	28.5	21.4	26.7			30
35	32.0	38.3	30.2	35.5	27.3	32.6	27.4	34.3	28.3	34.9	24.4	30.8	22.9	30.3	21.2	28.4	19.8	27.8	35
40	30.0	39.9	28.4	37.0	26.3	33.9	26.0	35.9	27.2	36.7	23.5	32.1	22.2	32.1	20.9	30.0	19.8	29.4	40
45	28.1	41.3	26.6	38.2	25.1	35.4	24.5	37.3	26.0	38.2	22.6	33.6	21.3	33.6	20.2	31.6	19.3	31.0	45
50	26.0	42.6	24.7	39.4	24.0	36.8	23.4	38.7	25.0	39.8	21.8	34.8	20.8	35.1	19.8	33.0	18.6	32.7	50
55	23.4	44.9	23.0	41.3	22.9	39.1	22.2	40.9	23.4	42.5	20.8	37.3	20.1	37.6	19.4	35.5	18.0	35.3	55
60	20.4	46.2	21.3	42.7	21.8	41.2	20.6	43.4	21.1	45.0	19.7	39.6	19.3	40.4	18.9	38.2	17.5	37.6	60
65	17.7	45.7	19.6	43.8	20.2	43.1	18.5	44.8	18.4	45.8	18.8	41.1	18.8	42.5	18.6	40.6	16.8	39.9	65
70	15.4	44.8	17.9	44.4	18.7	43.9	16.2	45.0	16.0	45.0	17.4	42.9	16.8	45.0	17.5	43.2	16.3	41.8	70
75	13.3	43.8	16.2	44.5	17.1	44.3	14.2	44.0	13.9	43.9	16.2	43.2	14.8	44.3	15.9	44.1	15.1	43.8	75
80	11.5	43.1	14.4	43.8	15.5	43.9	12.4	43.3	12.2	43.2	15.1	44.0	13.0	43.6	14.2	43.4	13.3	43.1	80
85	10.0	42.5	12.9	43.3	14.0	43.4	10.9	42.7	10.7	42.7	13.5	43.5	11.3	42.7	12.9	43.2	12.0	42.9	85
90	8.7	41.9	11.7	43.1	12.8	43.2	9.5	42.1	9.3	42.1	12.2	42.9	10.1	42.5	11.5	42.6	10.8	42.6	90
95	7.5	41.7	10.5	42.6	11.6	42.7	8.4	41.9	8.2	41.9	11.1	42.8	9.0	41.9	10.3	42.1	9.6	42.1	95
100	6.5	41.2	9.4	42.6	10.5	42.3	7.4	41.4	7.2	41.4	10.0	42.4	7.8	41.4	9.2	42.0	8.5	41.6	100
110	4.7	40.9	7.8	42.3	8.8	42.4	5.6	41.1	5.3	41.1	8.2	42.1	6.0	41.1	7.5	41.7	6.7	41.3	110
120							4.2	41.0	3.9	41.0	6.8	42.0	4.6	41.0	5.9	41.2	5.3	41.2	120
130													3.4	40.7	4.8	40.9	4.1	40.9	130
140													2.4	40.7	3.7	40.9	2.9	41.0	140
150																	2.1	40.6	150
Telescoping sequence %																			
Tel. 1	100	0	0	100	100	0	100	100	0	100	50	100	Tel. 1						
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	100	Tel. 2						
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3						
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	100	Tel. 4						
Tel. 5	0	50	100	50	0	100	50	100	100	100	100	100	Tel. 5						

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.





**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)									
	35.4		47.9		47.9		60.0		60.0		60.0			60.0		72.5		72.5		72.5		
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°	∠	°	∠
9	70	170.5																				9
10	68	160.0	74	160.0	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9		10
12	64	142.0	71	142.5	71	84.3	76	138.0	76	86.0	76	130.5	76	56.8	79	107.5	79	63.3	79	50.9		12
14	60	128.0	69	128.5	69	79.4	74	127.0	74	82.5	74	121.0	74	53.7	77	101.5	77	59.8	77	50.2		14
16	56	113.5	66	114.0	66	74.4	71	114.0	71	79.0	71	111.5	71	50.6	75	95.6	75	56.3	75	48.6		16
18	52	99.4	64	99.1	64	69.6	70	97.3	70	75.7	70	95.2	70	47.6	74	87.7	74	52.8	74	47.0		18
20	47	82.0	61	81.4	61	64.9	68	80.1	68	72.2	68	77.9	68	44.5	72	78.7	72	49.3	72	45.4		20
25	33	55.4	53	54.8	53	55.5	62	53.7	62	58.5	62	51.7	62	37.7	68	52.3	68	41.2	68	41.3		25
30			44	39.6	44	42.7	56	38.5	56	44.2	56	37.0	56	32.5	64	37.4	64	35.5	64	36.3		30
35			34	30.4	34	33.3	50	29.5	50	34.6	50	27.8	50	28.7	58	28.4	58	31.0	58	31.9		35
40			19	23.9	19	26.8	43	23.2	43	28.0	43	21.7	43	25.7	53	22.2	53	27.7	53	28.2		40
45							35	18.5	35	23.2	35	17.0	35	23.2	48	17.8	48	23.5	48	24.5		45
50							22	14.9	22	19.7	22	13.6	22	20.0	42	14.2	42	20.1	42	20.9		50
55															35	11.2	35	17.2	35	17.9		55
60															26	8.7	26	14.6	26	15.5		60
65															12	7.0	12	12.8	12	13.5		65
70																						70
75																						75
80																						80
85																						85
90																						90
95																						95
100																						100
110																						110
120																						120
130																						130
Telescoping sequence %																						
Tel. 1	0	0	0	50	0	100	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	50	0	0	0	0	0	0	100	50	0	0	0	0	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	100	0	0	0	0	0	0	50	100	0	0	0	0	Tel. 5
<b>Code</b>	<b>0 XX 01 1</b>	<b>0 15 01 1</b>	<b>0 10 01 1</b>	<b>0 16 01 1</b>	<b>0 11 01 1</b>	<b>0 05 01 1</b>	<b>0 01 01 1</b>	<b>0 15 01 1</b>	<b>0 10 01 1</b>	<b>0 09 01 1</b>	<b>Code</b>											

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789897  
**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5			72.5	
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		m	F
9	170.5	71.6																			9
10	160.0	71.7	160.0	71.8	89.3	43.6	140.5	64.1	89.5	43.2	139.5	64.6	59.9	31.9	113.5	54.2	66.9	34.5	50.9	28.0	10
12	142.0	71.6	142.5	72.0	84.3	45.4	138.0	69.7	86.0	45.6	130.5	67.1	56.8	33.3	107.5	56.8	63.3	35.9	50.9	30.1	12
14	128.0	71.7	128.5	71.9	79.4	47.1	127.0	71.8	82.5	47.8	121.0	68.9	53.7	34.6	101.5	59.0	59.8	37.3	50.2	32.3	14
16	113.5	71.7	114.0	72.0	74.4	48.5	114.0	71.6	79.0	49.7	111.5	70.2	50.6	35.6	95.6	60.9	56.3	38.4	48.6	33.7	16
18	99.4	71.7	99.1	71.9	69.6	49.4	97.3	71.2	75.7	51.5	95.2	70.8	47.6	36.5	87.7	62.4	52.8	39.3	47.0	35.1	18
20	82.0	63.5	81.4	63.4	64.9	50.7	80.1	63.0	72.2	54.6	77.9	62.4	44.5	37.8	78.7	62.1	49.3	40.6	45.4	37.6	20
25	55.4	56.6	54.8	56.4	55.5	52.0	53.7	56.2	58.5	55.1	51.7	55.7	37.7	38.4	52.3	55.9	41.2	40.9	41.3	39.8	25
30			39.6	52.1	42.7	52.5	38.5	51.9	44.2	53.4	37.0	51.3	32.5	39.0	37.4	51.1	35.5	41.3	36.3	41.5	30
35			30.4	49.1	33.3	49.9	29.5	48.8	34.6	50.1	27.8	48.4	28.7	39.6	28.4	48.6	31.0	42.0	31.9	42.1	35
40			23.9	46.9	26.8	47.5	23.2	46.6	28.0	47.8	21.7	46.3	25.7	40.3	22.2	46.4	27.7	42.3	28.2	42.4	40
45							18.5	45.1	23.2	46.2	17.0	44.6	23.2	41.0	17.8	44.9	23.5	42.9	24.5	43.1	45
50							14.9	44.0	19.7	45.0	13.6	43.7	20.0	41.7	14.2	43.7	20.1	43.7	20.9	43.5	50
55															11.2	41.8	17.2	43.1	17.9	43.1	55
60															8.7	40.5	14.6	41.6	15.5	41.6	60
65															7.0	39.8	12.8	40.4	13.5	40.7	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
130																					130

Telescoping sequence %

Tel. 1	0	0	0	50	0	100	0	100	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	50	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	100	50	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	50	100	Tel. 5

**The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.**



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)																					
	85.0		85.0		85.0		97.4		97.4		97.4			109.9		109.9		109.9		109.9														
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°	∠	°	∠	°											
9																						9												
10																							10											
12																							12											
14	79	81.5	79	62.5	79	44.6																	14											
16	78	79.0	78	60.2	78	42.9																	16											
18	77	76.4	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9											18											
20	75	73.0	75	55.2	75	39.6	78	59.6	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0			20											
25	72	52.8	72	49.0	72	35.8	75	51.8	75	42.5	75	37.4	77	45.8	77	45.1	77	41.0	77	33.9			25											
30	68	37.8	68	42.7	68	31.6	72	38.7	72	38.7	72	35.0	74	40.0	74	39.6	74	38.1	74	31.8			30											
35	64	28.8	64	34.6	64	28.0	69	29.7	69	34.6	69	31.9	72	30.8	72	30.3	72	33.5	72	29.5			35											
40	60	22.6	60	28.0	60	24.6	66	23.7	66	28.7	66	28.2	69	24.3	69	24.3	69	27.6	69	27.2			40											
45	56	17.9	56	23.2	56	22.1	62	19.0	62	24.0	62	24.9	66	19.6	66	19.6	66	22.5	66	24.2			45											
50	51	14.5	51	19.7	51	20.2	58	15.3	58	20.1	58	21.4	63	16.3	63	16.0	63	19.0	63	21.0			50											
55	47	11.7	47	16.8	47	18.0	54	12.4	54	17.1	54	18.3	59	13.5	59	13.1	59	16.0	59	18.1			55											
60	42	9.4	42	14.4	42	15.3	50	10.0	50	14.8	50	15.7	56	11.1	56	10.6	56	13.4	56	15.5			60											
65	36	7.5	36	12.4	36	13.5	46	8.2	46	12.8	46	13.7	53	9.1	53	8.6	53	11.7	53	13.5			65											
70	28	5.8	28	10.7	28	11.9	42	6.6	42	11.1	42	12.1	50	7.5	50	7.1	50	10.0	50	11.9			70											
75	21	4.1	21	9.0	21	10.4	37	5.2	37	9.7	37	10.7	46	6.1	46	5.7	46	8.6	46	10.5			75											
80							31	3.9	31	8.5	31	9.4	42	4.8	42	4.6	42	7.4	42	9.2			80											
85							23	2.9	23	7.3	23	8.4	37	3.8	37	3.6	37	6.2	37	8.0			85											
90													32	3.0	32	2.6	32	5.4	32	7.1			90											
95													26	2.2	26	1.8	26	4.5	26	6.3			95											
100													19	1.6	19	1.1	19	3.7	19	5.5			100											
110																							110											
120																							120											
130																							130											
Telescoping sequence %																																		
Tel. 1	100	0	0	100	0	0	100	0	0	100	100	0	0	100	100	0	0	100	100	0	0	Tel. 1												
Tel. 2	100	0	0	100	0	0	100	0	0	100	100	100	100	100	100	100	0	0	100	100	0	Tel. 2												
Tel. 3	0	100	0	50	100	50	100	100	50	100	50	100	100	100	100	100	100	100	100	100	100	Tel. 3												
Tel. 4	0	50	100	0	100	100	100	100	50	100	50	0	50	100	100	100	100	100	100	100	100	Tel. 4												
Tel. 5	0	50	100	0	50	100	100	100	0	50	100	0	0	50	100	100	100	100	100	100	100	Tel. 5												
<b>Code</b>	<b>0 04 01 1</b>	<b>0 11 01 1</b>	<b>0 01 01 1</b>	<b>0 14 01 1</b>	<b>0 10 01 1</b>	<b>0 08 01 1</b>	<b>0 13 01 1</b>	<b>0 03 01 1</b>	<b>0 11 01 1</b>	<b>0 01 01 1</b>	<b>Code</b>																							

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789897  
**Counterweight 39,683 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9				
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F			
9																			9		
10																			10		
12																			12		
14	81.5	49.1	62.5	38.5	44.6	29.6													14		
16	79.0	51.5	60.2	40.1	42.9	31.0													16		
18	76.4	53.9	57.7	41.7	41.3	32.0	61.9	45.8	47.5	35.7	40.9	31.5							18		
20	73.0	58.1	55.2	44.2	39.6	34.1	59.6	49.1	46.1	38.4	40.0	34.1	49.4	42.4	48.5	42.0	43.9	37.7	36.0	31.9	20
25	52.8	56.0	49.0	46.2	35.8	35.8	51.8	52.0	42.5	40.9	37.4	36.4	45.8	45.2	45.1	44.8	41.0	40.2	33.9	34.2	25
30	37.8	51.6	42.7	47.5	31.6	37.3	38.7	51.9	38.7	42.7	35.0	38.6	40.0	47.9	39.6	47.6	38.1	42.7	31.8	36.2	30
35	28.8	48.7	34.6	48.3	28.0	38.0	29.7	48.9	34.6	44.4	31.9	40.6	30.8	49.3	30.3	49.0	33.5	44.7	29.5	38.1	35
40	22.6	46.5	28.0	47.8	24.6	38.6	23.7	46.7	28.7	45.9	28.2	42.1	24.3	46.9	24.3	46.8	27.6	46.6	27.2	39.8	40
45	17.9	45.0	23.2	46.2	22.1	39.4	19.0	45.2	24.0	46.4	24.9	42.8	19.6	45.5	19.6	45.3	22.5	45.9	24.2	40.9	45
50	14.5	43.9	19.7	45.0	20.2	39.4	15.3	43.9	20.1	45.2	21.4	43.1	16.3	44.1	16.0	44.0	19.0	44.7	21.0	42.2	50
55	11.7	42.0	16.8	43.0	18.0	40.3	12.4	42.0	17.1	42.9	18.3	43.2	13.5	42.3	13.1	42.2	16.0	42.9	18.1	43.2	55
60	9.4	40.7	14.4	41.5	15.3	41.7	10.0	40.7	14.8	41.7	15.7	41.7	11.1	41.0	10.6	40.9	13.4	41.4	15.5	41.8	60
65	7.5	39.7	12.4	40.6	13.5	40.8	8.2	39.7	12.8	40.5	13.7	40.5	9.1	40.1	8.6	39.9	11.7	40.5	13.5	40.6	65
70	5.8	39.2	10.7	39.8	11.9	39.7	6.6	39.2	11.1	39.7	12.1	39.7	7.5	39.2	7.1	39.1	10.0	39.7	11.9	39.8	70
75	4.1	38.4	9.0	39.0	10.4	39.3	5.2	38.7	9.7	38.9	10.7	39.3	6.1	38.8	5.7	38.6	8.6	38.9	10.5	39.4	75
80							3.9	38.1	8.5	38.8	9.4	38.8	4.8	38.2	4.6	38.4	7.4	38.7	9.2	38.8	80
85							2.9	37.9	7.3	38.1	8.4	38.6	3.8	38.0	3.6	38.2	6.2	38.1	8.0	38.2	85
90													3.0	37.9	2.6	37.6	5.4	38.0	7.1	38.1	90
95													2.2	38.0	1.8	37.7	4.5	37.6	6.3	37.7	95
100													1.6	37.7	1.1	37.5	3.7	37.3	5.5	37.5	100
110																					110
120																					120
130																					130

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom


**Counterweight 39,683 lbs**

On outriggers, 360° working area

**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)											
	122.4		122.4		122.4		134.5		134.5			134.5		147.0		147.0		159.1				
	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°	∠	°			
9																				9		
10																					10	
12																					12	
14																					14	
16																					16	
18																					18	
20																					20	
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6									25	
30	76	34.0	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4					30	
35	74	30.6	74	30.2	74	27.3	75	27.4	75	28.3	75	24.4	77	22.9	77	21.2	78	19.8			35	
40	72	25.2	72	27.8	72	26.2	74	25.7	74	25.7	74	23.5	75	22.1	75	20.9	77	19.8			40	
45	69	20.5	69	23.0	69	23.8	71	21.3	71	21.1	71	22.6	73	20.9	73	20.2	75	19.3			45	
50	67	16.9	67	19.4	67	20.5	69	17.8	69	17.5	69	20.0	71	18.1	71	18.6	73	17.9			50	
55	64	13.9	64	16.6	64	17.6	67	14.8	67	14.4	67	17.1	69	15.3	69	16.5	71	15.9			55	
60	61	11.5	61	14.2	61	15.3	65	12.4	65	11.8	65	14.5	68	12.8	68	14.2	70	13.5			60	
65	58	9.5	58	12.2	58	13.3	62	10.4	62	10.1	62	12.8	65	10.8	65	12.2	68	11.5			65	
70	55	7.5	55	10.4	55	11.5	59	8.8	59	8.6	59	11.1	63	9.3	63	10.6	66	9.9			70	
75	52	6.5	52	9.0	52	10.1	57	7.4	57	7.2	57	9.6	61	7.8	61	9.2	64	8.5			75	
80	49	5.3	49	7.9	49	9.0	54	6.1	54	5.9	54	8.3	58	6.6	58	7.9	61	7.2			80	
85	45	4.2	45	6.7	45	7.8	51	5.1	51	4.9	51	7.3	56	5.6	56	6.9	59	6.2			85	
90	41	3.4	41	5.8	41	6.9	48	4.1	48	3.9	48	6.5	53	4.7	53	5.9	57	5.2			90	
95	38	2.6	38	5.0	38	6.1	45	3.3	45	3.1	45	5.6	50	3.9	50	5.1	55	4.4			95	
100	33	1.8	33	4.2	33	5.3	42	2.7	42	2.4	42	4.9	47	3.1	47	4.4	52	3.8			100	
110			21	3.0	21	4.1	33	1.5	33	1.3	33	3.7	41	1.9	41	3.1	47	2.4			110	
120												23	2.5		0.9	34	2.1	42	1.4			120
130																25	1.2					130
Telescoping sequence %																						
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1												
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2												
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3												
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4												
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5												
<b>Code</b>	<b>0 12 01 1</b>	<b>0 10 01 1</b>	<b>0 07 01 1</b>	<b>0 11 01 1</b>	<b>0 02 01 1</b>	<b>0 01 01 1</b>	<b>0 10 01 1</b>	<b>0 06 01 1</b>	<b>0 01 01 1</b>	<b>Code</b>												

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

 <b>Outrigger reaction force chart ATF 80-4</b>																			
Outrigger reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707789897 <b>Counterweight 39,683 lbs</b> On outriggers, 360° working area <b>Outrigger base 16.40 ft</b>																			
Working Radius (ft)	Boom length (ft)																		Working Radius (ft)
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9																			9
10																			10
12																			12
14																			14
16																			16
18																			18
20																			20
25	36.2	<b>38.1</b>	34.0	<b>35.1</b>	29.7	<b>31.2</b>	28.9	<b>32.1</b>	29.5	<b>32.7</b>	25.6	<b>28.5</b>							25
30	34.0	<b>40.7</b>	32.0	<b>37.3</b>	28.5	<b>33.4</b>	28.8	<b>35.0</b>	29.4	<b>35.7</b>	25.4	<b>31.0</b>	23.1	<b>30.4</b>	21.4	<b>28.2</b>			30
35	30.6	<b>42.9</b>	30.2	<b>39.3</b>	27.3	<b>35.6</b>	27.4	<b>37.9</b>	28.3	<b>38.6</b>	24.4	<b>33.4</b>	22.9	<b>32.9</b>	21.2	<b>30.4</b>	19.8	<b>29.7</b>	35
40	25.2	<b>45.0</b>	27.8	<b>41.3</b>	26.2	<b>37.5</b>	25.7	<b>40.0</b>	25.7	<b>41.0</b>	23.5	<b>35.1</b>	22.1	<b>35.3</b>	20.9	<b>32.6</b>	19.8	<b>31.9</b>	40
45	20.5	<b>45.5</b>	23.0	<b>43.0</b>	23.8	<b>39.4</b>	21.3	<b>42.0</b>	21.1	<b>43.1</b>	22.6	<b>37.1</b>	20.9	<b>37.3</b>	20.2	<b>34.6</b>	19.3	<b>34.0</b>	45
50	16.9	<b>44.2</b>	19.4	<b>44.7</b>	20.5	<b>41.3</b>	17.8	<b>43.9</b>	17.5	<b>44.5</b>	20.0	<b>38.9</b>	18.1	<b>39.3</b>	18.6	<b>36.6</b>	17.9	<b>36.2</b>	50
55	13.9	<b>42.4</b>	16.6	<b>42.9</b>	17.6	<b>43.2</b>	14.8	<b>42.5</b>	14.4	<b>42.5</b>	17.1	<b>42.3</b>	15.3	<b>42.7</b>	16.5	<b>40.0</b>	15.9	<b>39.7</b>	55
60	11.5	<b>41.1</b>	14.2	<b>41.4</b>	15.3	<b>41.8</b>	12.4	<b>41.2</b>	11.8	<b>41.2</b>	14.5	<b>41.5</b>	12.8	<b>41.2</b>	14.2	<b>41.6</b>	13.5	<b>41.3</b>	60
65	9.5	<b>40.2</b>	12.2	<b>40.5</b>	13.3	<b>40.6</b>	10.4	<b>40.3</b>	10.1	<b>40.3</b>	12.8	<b>40.4</b>	10.8	<b>40.3</b>	12.2	<b>40.4</b>	11.5	<b>40.4</b>	65
70	7.9	<b>39.3</b>	10.4	<b>39.7</b>	11.5	<b>39.8</b>	8.8	<b>39.5</b>	8.6	<b>39.5</b>	11.1	<b>39.8</b>	9.3	<b>39.4</b>	10.6	<b>39.6</b>	9.9	<b>39.6</b>	70
75	6.5	<b>38.9</b>	9.0	<b>38.9</b>	10.1	<b>39.0</b>	7.4	<b>39.1</b>	7.2	<b>39.0</b>	9.6	<b>39.1</b>	7.8	<b>39.0</b>	9.2	<b>39.1</b>	8.5	<b>39.2</b>	75
80	5.3	<b>38.3</b>	7.9	<b>38.7</b>	9.0	<b>38.8</b>	6.1	<b>38.5</b>	5.9	<b>38.5</b>	8.3	<b>38.5</b>	6.6	<b>38.4</b>	7.9	<b>38.6</b>	7.2	<b>38.6</b>	80
85	4.2	<b>38.1</b>	6.7	<b>38.1</b>	7.8	<b>38.2</b>	5.1	<b>38.3</b>	4.9	<b>38.3</b>	7.3	<b>38.3</b>	5.6	<b>38.3</b>	6.9	<b>38.4</b>	6.2	<b>38.4</b>	85
90	3.4	<b>38.0</b>	5.8	<b>38.0</b>	6.9	<b>38.1</b>	4.1	<b>37.7</b>	3.9	<b>37.7</b>	6.5	<b>38.2</b>	4.7	<b>38.2</b>	5.9	<b>37.8</b>	5.2	<b>37.9</b>	90
95	2.6	<b>37.6</b>	5.0	<b>37.6</b>	6.1	<b>37.7</b>	3.3	<b>37.8</b>	3.1	<b>37.8</b>	5.6	<b>37.8</b>	3.9	<b>37.8</b>	5.1	<b>37.9</b>	4.4	<b>38.0</b>	95
100	1.8	<b>37.4</b>	4.2	<b>37.4</b>	5.3	<b>37.5</b>	2.7	<b>37.6</b>	2.4	<b>37.6</b>	4.9	<b>37.6</b>	3.1	<b>37.6</b>	4.4	<b>37.7</b>	3.8	<b>37.8</b>	100
110			3.0	<b>37.5</b>	4.1	<b>37.6</b>	1.5	<b>37.8</b>	1.3	<b>37.8</b>	3.7	<b>37.8</b>	1.9	<b>37.7</b>	3.1	<b>37.3</b>	2.4	<b>37.4</b>	110
120											2.5	<b>37.1</b>	0.9		2.1	<b>37.2</b>	1.4	<b>37.3</b>	120
130															1.2	<b>37.6</b>			130
Telescoping sequence %																			
Tel. 1	100	0	0	100	100	0	100	100	0	100	50	100	100	100	100	100	100	100	Tel. 1
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 4
Tel. 5	0	50	100	50	0	100	50	0	100	50	100	100	100	100	100	100	100	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)								
	35.4		47.9		47.9		60.0		60.0		60.0			72.5		72.5		72.5			
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°		
9	70	200.0*																	9		
10	68	166.0	74	163.0	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10
12	64	141.5	71	141.5	71	84.3	76	136.5	76	86.0	76	130.5	76	56.8	79	107.5	79	63.3	79	50.9	12
14	60	121.5	69	121.0	69	79.4	74	120.0	74	82.5	74	118.5	74	53.7	77	101.5	77	59.8	77	50.2	14
16	56	106.5	66	106.5	66	74.4	71	106.0	71	79.0	71	105.5	71	50.6	75	95.6	75	56.3	75	48.6	16
18	52	95.8	64	95.8	64	69.6	70	95.1	70	75.7	70	94.2	70	47.6	74	89.5	74	52.8	74	47.0	18
20	47	85.9	61	85.9	61	64.9	68	84.9	68	72.2	68	83.1	68	44.5	72	83.1	72	49.3	72	45.4	20
25	33	67.6	53	67.6	53	56.0	62	65.6	62	60.9	62	64.1	62	37.7	68	64.3	68	41.2	68	41.3	25
30			44	54.1	44	49.3	56	52.3	56	52.7	56	50.6	56	32.5	64	51.1	64	35.5	64	36.3	30
35			34	42.2	34	44.2	50	40.7	50	45.9	50	39.1	50	28.7	58	39.7	58	31.0	58	31.9	35
40			19	33.6	19	36.4	43	32.5	43	38.2	43	31.0	43	25.7	53	31.4	53	27.4	53	28.3	40
45							35	26.7	35	31.8	35	25.1	35	23.2	48	25.6	48	24.6	48	25.4	45
50							22	22.2	22	27.1	22	20.6	22	21.1	42	21.1	42	22.4	42	23.3	50
55															35	17.3	35	20.5	35	21.3	55
60															26	14.1	26	18.7	26	19.3	60
65															12	11.8	12	17.4	12	16.4	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
130																					130
140																					140
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	100	0	0	0	0	0	0	0	0	0	Tel. 1	
Tel. 2	0	50	0	50	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	Tel. 2	
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3	
Tel. 4	0	0	0	0	50	0	0	0	0	0	0	0	0	0	100	50	0	0	0	Tel. 4	
Tel. 5	0	0	50	0	50	0	100	0	100	0	0	0	0	0	50	100	0	0	0	Tel. 5	
<b>Code</b>	<b>0 XX 02 0</b>	<b>0 15 02 0</b>	<b>0 10 02 0</b>	<b>0 16 02 0</b>	<b>0 11 02 0</b>	<b>0 05 02 0</b>	<b>0 01 02 0</b>	<b>0 15 02 0</b>	<b>0 10 02 0</b>	<b>0 09 02 0</b>	<b>Code</b>										

\* Over rear with superstructure swing lock pin engaged and additional equipment, Code 0 01 02 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789898  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9	200.0	62.4																			9
10	166.0	67.1	163.0	66.2	89.3	41.1	140.5	59.0	89.5	40.9	139.5	59.1	59.9	31.1	113.5	50.2	66.9	33.3	50.9	27.8	10
12	141.5	63.9	141.5	64.0	84.3	42.6	136.5	62.5	86.0	42.9	130.5	60.8	56.8	32.2	107.5	52.2	63.3	34.5	50.9	29.8	12
14	121.5	61.0	121.0	61.0	79.4	43.8	120.0	60.9	82.5	44.6	118.5	60.7	53.7	33.1	101.5	53.8	59.8	35.5	50.2	31.5	14
16	106.5	59.9	106.5	59.2	74.4	44.6	106.0	59.3	79.0	46.2	105.5	59.6	50.6	33.9	95.6	55.1	56.3	36.3	48.6	32.7	16
18	95.8	57.8	95.8	58.0	69.6	45.0	95.1	58.0	75.7	47.5	94.2	58.1	47.6	34.4	89.5	55.9	52.8	36.7	47.0	33.8	18
20	85.9	56.6	85.9	56.8	64.9	45.4	84.9	56.7	72.2	48.6	83.1	56.4	44.5	34.8	83.1	56.2	49.3	37.1	45.4	34.9	20
25	67.6	54.1	67.6	54.3	56.0	46.5	65.6	53.6	60.9	48.8	64.1	53.4	37.7	35.3	64.3	53.3	41.2	37.2	41.3	36.9	25
30			54.1	52.1	49.3	47.6	52.3	51.6	52.7	49.2	50.6	51.0	32.5	35.7	51.1	51.1	35.5	37.6	36.3	37.7	30
35			42.2	48.9	44.2	48.7	40.7	48.5	45.9	49.3	39.1	47.8	28.7	36.4	39.7	47.9	31.0	37.9	31.9	38.1	35
40			33.6	46.6	36.4	47.3	32.5	45.8	38.2	47.4	31.0	45.5	25.7	37.0	31.4	45.6	27.4	38.3	28.3	38.4	40
45							26.7	44.2	31.8	45.5	25.1	43.9	23.2	37.6	25.6	44.0	24.6	38.6	25.4	38.9	45
50							22.2	43.0	27.1	44.2	20.6	42.7	21.1	38.1	21.1	42.7	22.4	39.2	23.3	39.5	50
55															17.3	41.6	20.5	39.8	21.3	40.0	55
60															14.1	40.6	18.7	40.2	19.3	40.1	60
65															11.8	40.0	17.4	40.8	16.4	38.8	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
130																					130
140																					140

Telescoping sequence %

Tel. 1	0	0	0	50	0	100	0	100	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	50	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	100	50	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



<b>TADANO</b>													<b>Load rating chart ATF 80-4</b>												
Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom																									
Counterweight 27,558 lbs																									
On outriggers, 360° working area																									
Outrigger base 23.62 ft																									
Working Radius (ft)	Boom length (ft)												Working Radius (ft)												
	85.0		85.0		85.0		97.		97.4		97.4			109.9		109.9		109.9		109.9					
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°			
9																						9			
10																							10		
12																							12		
14	79	81.5	79	62.5	79	44.6																	14		
16	78	79.0	78	60.2	78	42.9																	16		
18	77	76.4	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9											18		
20	75	73.7	75	55.2	75	39.6	78	59.6	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0			20		
25	72	63.4	72	49.0	72	35.8	75	54.1	75	42.5	75	37.4	77	45.8	77	45.1	77	41.0	77	33.9			25		
30	68	51.3	68	42.9	68	31.6	72	48.6	72	38.7	72	35.0	74	42.4	74	41.6	74	38.1	74	31.8			30		
35	64	40.0	64	37.5	64	28.0	69	40.9	69	34.9	69	31.9	72	38.7	72	38.3	72	35.6	72	29.5			35		
40	60	31.9	60	32.8	60	24.6	66	32.8	66	30.7	66	28.3	69	33.9	69	33.4	69	32.7	69	27.3			40		
45	56	26.0	56	29.3	56	22.1	62	26.9	62	27.5	62	25.3	66	27.8	66	27.6	66	29.9	66	25.1			45		
50	51	21.5	51	26.3	51	20.0	58	22.2	58	24.7	58	23.1	63	23.3	63	22.9	63	25.9	63	23.1			50		
55	47	17.7	47	23.2	47	18.3	54	18.5	54	22.3	54	21.0	59	19.6	59	19.1	59	22.3	59	21.0			55		
60	42	14.5	42	20.0	42	16.9	50	15.4	50	20.1	50	19.1	56	16.5	56	16.0	56	19.4	56	19.1			60		
65	36	12.0	36	17.5	36	15.6	46	12.9	46	17.9	46	17.8	53	14.0	53	13.3	53	16.8	53	17.6			65		
70	28	9.9	28	15.4	28	14.7	42	10.8	42	15.9	42	16.5	50	11.9	50	11.2	50	14.8	50	16.2			70		
75	21	7.9	21	13.4	21	13.9	37	9.0	37	14.0	37	15.0	46	10.1	46	9.4	46	12.9	46	14.7			75		
80							31	7.4	31	12.4	31	13.6	42	8.5	42	7.9	42	11.3	42	13.1			80		
85							23	6.2	23	11.1	23	12.2	37	7.1	37	6.7	37	10.0	37	11.8			85		
90													32	5.9	32	5.5	32	9.0	32	10.7			90		
95													26	4.9	26	4.5	26	8.0	26	9.7			95		
100													19	3.9	19	3.7	19	7.0	19	8.7			100		
110																							110		
120																							120		
130																							130		
140																							140		
Telescoping sequence %																									
Tel. 1	100	0	0	100	0	0	100	100	0	0	100	100	0	0	Tel. 1										
Tel. 2	100	0	0	100	0	0	100	100	100	0	100	100	100	0	Tel. 2										
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	100	100	100	Tel. 3										
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	100	100	100	Tel. 4										
Tel. 5	0	50	100	0	50	100	0	50	100	100	100	100	100	100	Tel. 5										
Code	0 04 02 0	0 11 02 0	0 01 02 0	0 14 02 0	0 10 02 0	0 08 02 0	0 13 02 0	0 03 02 0	0 11 02 0	0 01 02 0	Code														

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789898  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9				
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F			
9																				9	
10																					10
12																					12
14	81.5	45.8	62.5	36.7	44.6	29.2															14
16	79.0	47.9	60.2	38.1	42.9	30.2															16
18	76.4	49.8	57.7	39.2	41.3	31.1	61.9	42.7	47.5	34.3	40.9	30.9									18
20	73.7	51.4	55.2	40.2	39.6	31.9	59.6	44.1	46.1	35.5	40.0	32.0	49.4	38.6	48.5	38.3	43.9	34.9	36.0	30.1	20
25	63.4	52.6	49.0	41.9	35.8	33.6	54.1	46.9	42.5	37.9	37.4	34.5	45.8	41.7	45.1	41.4	41.0	37.6	33.9	32.6	25
30	51.3	51.2	42.9	42.7	31.6	34.5	48.6	48.9	38.7	39.7	35.0	36.7	42.4	44.0	41.6	43.9	38.1	39.9	31.8	34.7	30
35	40.0	48.4	37.5	43.0	28.0	35.1	40.9	48.2	34.9	40.7	31.9	37.9	38.7	46.0	38.3	45.9	35.6	42.0	29.5	36.3	35
40	31.9	45.7	32.8	43.0	24.6	35.3	32.8	45.9	30.7	40.9	28.3	38.2	33.9	46.2	33.4	46.1	32.7	43.4	27.3	37.6	40
45	26.0	44.1	29.3	43.3	22.1	35.7	26.9	44.3	27.5	41.2	25.3	38.4	27.8	44.4	27.6	44.5	29.9	44.3	25.1	38.5	45
50	21.5	42.9	26.3	43.5	20.0	36.0	22.2	43.0	24.7	41.4	23.1	38.9	23.3	43.2	22.9	43.1	25.9	43.8	23.1	39.2	50
55	17.7	41.8	23.2	43.0	18.3	36.6	18.5	41.9	22.3	41.6	21.0	39.3	19.6	42.2	19.1	42.0	22.3	43.0	21.0	39.6	55
60	14.5	40.7	20.0	42.1	16.9	37.2	15.4	41.0	20.1	41.6	19.1	39.6	16.5	41.3	16.0	41.1	19.4	42.0	19.1	39.8	60
65	12.0	40.0	17.5	41.4	15.6	37.6	12.9	40.2	17.9	41.3	17.8	40.1	14.0	40.6	13.3	40.2	16.8	41.3	17.6	40.2	65
70	9.9	39.3	15.4	40.8	14.7	38.4	10.8	39.6	15.9	40.8	16.5	40.5	11.9	40.0	11.2	39.5	14.8	40.7	16.2	40.5	70
75	7.9	38.7	13.4	40.3	13.9	39.2	9.0	39.0	14.0	40.3	15.0	40.4	10.1	39.4	9.4	38.9	12.9	40.2	14.7	40.3	75
80							7.4	38.6	12.4	39.8	13.6	40.2	8.5	38.9	7.9	38.5	11.3	39.7	13.1	39.9	80
85							6.2	38.4	11.1	39.5	12.2	39.9	7.1	38.5	6.7	38.3	10.0	39.4	11.8	39.5	85
90													5.9	38.1	5.5	37.9	9.0	39.3	10.7	39.5	90
95													4.9	37.8	4.5	37.8	8.0	39.1	9.7	39.3	95
100													3.9	37.4	3.7	37.7	7.0	38.8	8.7	39.0	100
110																					110
120																					120
130																					130
140																					140

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 27,558 lbs**  
On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)									
	122.4		122.4		122.4		134.5		134.5			134.5		147.0		147.0		159.11		
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		
9																				9
10																				10
12																				12
14																				14
16																				16
18																				18
20																				20
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6								25
30	76	34.0	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4				30
35	74	32.0	74	30.2	74	27.3	75	27.4	75	28.3	75	24.4	77	22.9	77	21.2	78	19.8		35
40	72	29.9	72	28.4	72	26.3	74	26.0	74	27.2	74	23.5	75	22.2	75	20.9	77	19.8		40
45	69	27.6	69	26.6	69	25.1	71	24.5	71	26.0	71	22.6	73	21.3	73	20.2	75	19.3		45
50	67	23.7	67	24.7	67	24.0	69	23.0	69	23.5	69	21.8	71	20.8	71	19.8	73	18.6		50
55	64	20.0	64	22.5	64	22.6	67	20.8	67	20.5	67	20.8	69	19.8	69	19.4	71	18.0		55
60	61	16.9	61	19.8	61	20.9	65	17.8	65	17.6	65	19.5	68	18.3	68	18.6	70	17.4		60
65	58	14.4	58	17.3	58	18.4	62	15.3	62	15.1	62	17.6	65	15.7	65	16.8	68	16.0		65
70	55	12.3	55	15.2	55	16.3	59	13.2	59	13.0	59	15.8	63	13.7	63	15.1	66	14.4		70
75	52	10.5	52	13.4	52	14.5	57	11.4	57	11.2	57	14.0	61	11.8	61	13.4	64	12.7		75
80	49	8.9	49	11.8	49	12.9	54	9.8	54	9.5	54	12.4	58	10.2	58	11.7	61	11.1		80
85	45	7.6	45	10.4	45	11.5	51	8.2	51	8.0	51	11.1	56	8.9	56	10.2	59	9.6		85
90	41	6.2	41	9.4	41	10.5	48	7.2	48	7.0	48	9.9	53	7.7	53	9.2	57	8.4		90
95	38	5.2	38	8.4	38	9.5	45	6.2	45	6.0	45	8.8	50	6.7	50	8.2	55	7.4		95
100	33	4.3	33	7.5	33	8.5	42	5.2	42	5.0	42	7.9	47	5.9	47	7.2	52	6.5		100
110	21	2.6	21	5.8	21	6.8	33	3.6	33	3.3	33	6.4	41	4.2	41	5.6	47	4.8		110
120							23	2.4	23	2.2	23	5.1	34	2.9	34	4.2	42	3.5		120
130													25	1.9	25	3.0	35	2.3		130
140														11	2.3	27	1.6			140
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1										
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2										
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3										
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4										
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5										
<b>Code</b>	<b>0 12 02 0</b>	<b>0 10 02 0</b>	<b>0 07 02 0</b>	<b>0 11 02 0</b>	<b>0 02 02 0</b>	<b>0 01 02 0</b>	<b>0 10 02 0</b>	<b>0 06 02 0</b>	<b>0 01 02 0</b>	<b>Code</b>										

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789898  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1				
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F			
9																				9	
10																					10
12																					12
14																					14
16																					16
18																					18
20																					20
25	36.2	<b>35.9</b>	34.0	<b>33.3</b>	29.7	<b>30.3</b>	28.9	<b>31.3</b>	29.5	<b>31.7</b>	25.6	<b>28.2</b>									25
30	34.0	<b>38.4</b>	32.0	<b>35.6</b>	28.5	<b>32.7</b>	28.8	<b>34.5</b>	29.4	<b>35.1</b>	25.4	<b>30.9</b>	23.1	<b>30.5</b>	21.4	<b>28.5</b>					30
35	32.0	<b>40.7</b>	30.2	<b>37.7</b>	27.3	<b>34.8</b>	27.4	<b>36.8</b>	28.3	<b>37.6</b>	24.4	<b>33.0</b>	22.9	<b>33.0</b>	21.2	<b>31.0</b>	19.8	<b>30.4</b>			35
40	29.9	<b>42.6</b>	28.4	<b>39.5</b>	26.3	<b>36.9</b>	26.0	<b>38.8</b>	27.2	<b>39.9</b>	23.5	<b>35.0</b>	22.2	<b>35.2</b>	20.9	<b>33.2</b>	19.8	<b>32.8</b>			40
45	27.6	<b>43.9</b>	26.6	<b>40.9</b>	25.1	<b>38.7</b>	24.5	<b>40.5</b>	26.0	<b>42.0</b>	22.6	<b>36.9</b>	21.3	<b>37.2</b>	20.2	<b>35.1</b>	19.3	<b>34.8</b>			45
50	23.7	<b>43.3</b>	24.7	<b>42.1</b>	24.0	<b>40.3</b>	23.0	<b>41.9</b>	23.5	<b>42.5</b>	21.8	<b>38.6</b>	20.8	<b>39.3</b>	19.8	<b>37.1</b>	18.6	<b>36.6</b>			50
55	20.0	<b>42.3</b>	22.5	<b>42.4</b>	22.6	<b>41.5</b>	20.8	<b>42.3</b>	20.5	<b>42.2</b>	20.8	<b>40.1</b>	19.8	<b>40.8</b>	19.4	<b>39.1</b>	18.0	<b>38.4</b>			55
60	16.9	<b>41.4</b>	19.8	<b>42.0</b>	20.9	<b>42.1</b>	17.8	<b>41.6</b>	17.6	<b>41.5</b>	19.5	<b>41.0</b>	18.3	<b>41.6</b>	18.6	<b>40.6</b>	17.4	<b>39.9</b>			60
65	14.4	<b>40.7</b>	17.3	<b>41.3</b>	18.4	<b>41.4</b>	15.3	<b>40.8</b>	15.1	<b>40.8</b>	17.6	<b>41.1</b>	15.7	<b>40.8</b>	16.8	<b>40.6</b>	16.0	<b>40.5</b>			65
70	12.3	<b>40.1</b>	15.2	<b>40.8</b>	16.3	<b>40.8</b>	13.2	<b>40.2</b>	13.0	<b>40.2</b>	15.8	<b>40.8</b>	13.7	<b>40.2</b>	15.1	<b>40.5</b>	14.4	<b>40.5</b>			70
75	10.5	<b>39.5</b>	13.4	<b>40.2</b>	14.5	<b>40.3</b>	11.4	<b>39.7</b>	11.2	<b>39.6</b>	14.0	<b>40.4</b>	11.8	<b>39.7</b>	13.4	<b>40.1</b>	12.7	<b>40.1</b>			75
80	8.9	<b>39.0</b>	11.8	<b>39.8</b>	12.9	<b>39.9</b>	9.8	<b>39.1</b>	9.5	<b>39.1</b>	12.4	<b>39.9</b>	10.2	<b>39.2</b>	11.7	<b>39.6</b>	11.1	<b>39.6</b>			80
85	7.6	<b>38.6</b>	10.4	<b>39.4</b>	11.5	<b>39.5</b>	8.2	<b>38.5</b>	8.0	<b>38.5</b>	11.1	<b>39.6</b>	8.9	<b>38.8</b>	10.2	<b>39.0</b>	9.6	<b>39.0</b>			85
90	6.2	<b>38.0</b>	9.4	<b>39.3</b>	10.5	<b>39.4</b>	7.2	<b>38.3</b>	7.0	<b>38.3</b>	9.9	<b>39.3</b>	7.7	<b>38.4</b>	9.2	<b>38.8</b>	8.4	<b>38.6</b>			90
95	5.2	<b>37.7</b>	8.4	<b>39.1</b>	9.5	<b>39.2</b>	6.2	<b>38.1</b>	6.0	<b>38.1</b>	8.8	<b>38.9</b>	6.7	<b>38.3</b>	8.2	<b>38.6</b>	7.4	<b>38.4</b>			95
100	4.3	<b>37.5</b>	7.5	<b>38.9</b>	8.5	<b>38.9</b>	5.2	<b>37.8</b>	5.0	<b>37.8</b>	7.9	<b>38.8</b>	5.9	<b>38.1</b>	7.2	<b>38.3</b>	6.5	<b>38.3</b>			100
110	2.6	<b>36.8</b>	5.8	<b>38.3</b>	6.8	<b>38.4</b>	3.6	<b>37.2</b>	3.3	<b>37.1</b>	6.4	<b>38.5</b>	4.2	<b>37.5</b>	5.6	<b>37.7</b>	4.8	<b>37.7</b>			110
120							2.4	<b>37.0</b>	2.2	<b>37.0</b>	5.1	<b>38.2</b>	2.9	<b>37.2</b>	4.2	<b>37.3</b>	3.5	<b>37.2</b>			120
130														<b>37.1</b>	3.0	<b>36.8</b>	2.3	<b>36.8</b>			130
140															2.3	<b>37.0</b>	1.6	<b>37.0</b>			140
Telescoping sequence %																					
Tel. 1	100	0	0	100	100	0	100	100	100	50	100	Tel. 1									
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	Tel. 2									
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	Tel. 3									
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	Tel. 4									
Tel. 5	0	50	100	50	0	100	50	100	100	100	100	Tel. 5									

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 27,558 lbs**

On outriggers, 360° working area

**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5			72.5	
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°
9	70	169.5																			9
10	68	158.5	74	158.5	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10
12	64	141.0	71	141.5	71	84.3	76	137.5	76	86.0	76	130.5	76	56.8	79	107.5	79	63.3	79	50.9	12
14	60	126.0	69	126.0	69	79.4	74	124.0	74	82.5	74	120.0	74	53.7	77	101.5	77	59.8	77	50.2	14
16	56	106.0	66	105.5	66	74.4	71	103.5	71	79.0	71	101.0	71	50.6	75	95.6	75	56.3	75	48.6	16
18	52	86.5	64	85.7	64	69.6	70	84.2	70	75.7	70	81.8	70	47.6	74	81.1	74	52.8	74	47.0	18
20	47	68.9	61	68.2	61	64.6	68	66.7	68	71.5	68	64.5	68	44.5	72	65.4	72	49.3	72	45.4	20
25	33	45.9	53	45.3	53	48.8	62	44.2	62	50.3	62	42.3	62	37.7	68	43.0	68	41.2	68	41.3	25
30			44	32.4	44	35.5	56	31.4	56	36.8	56	29.6	56	32.5	64	30.3	64	35.4	64	36.3	30
35			34	24.4	34	27.3	50	23.5	50	28.7	50	21.9	50	28.3	58	22.4	58	29.1	58	30.0	35
40			19	19.0	19	21.6	43	18.1	43	23.1	43	16.5	43	23.5	53	17.1	53	23.5	53	24.4	40
45							35	14.4	35	18.9	35	12.6	35	19.3	48	13.1	48	19.5	48	20.4	45
50							22	11.3	22	15.9	22	9.9	22	15.9	42	10.3	42	16.3	42	17.2	50
55															35	7.9	35	13.7	35	14.4	55
60															26	5.9	26	11.6	26	12.1	60
65															12	4.2	12	9.9	12	10.5	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	100	0	0	0	0	0	0	0	0	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	0	0	100	50	0	0	0	0	0	0	0	0	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	100	0	0	0	0	0	0	50	100	0	0	0	Tel. 5
<b>Code</b>	<b>0 XX 02 1</b>	<b>0 15 02 1</b>	<b>0 10 02 1</b>	<b>0 16 02 1</b>	<b>0 11 02 1</b>	<b>0 05 02 1</b>	<b>0 01 02 1</b>	<b>0 15 02 1</b>	<b>0 10 02 1</b>	<b>0 09 02 1</b>	<b>Code</b>										

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789899

**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9	169.5	71.8																		9	
10	158.5	71.7	158.5	71.8	89.3	44.3	140.5	65.2	89.5	44.0	139.5	65.4	59.9	32.5	113.5	55.0	66.9	35.1	50.9	28.7	10
12	141.0	71.7	141.5	71.9	84.3	46.5	137.5	70.7	86.0	46.8	130.5	68.2	56.8	34.2	107.5	58.0	63.3	36.9	50.9	31.3	12
14	126.0	71.3	126.0	71.4	79.4	48.3	124.0	70.9	82.5	49.3	120.0	69.6	53.7	35.6	101.5	60.5	59.8	38.4	50.2	33.6	14
16	106.0	67.3	105.5	67.4	74.4	49.7	103.5	66.8	79.0	51.6	101.0	66.2	50.6	36.8	95.6	62.6	56.3	39.6	48.6	35.3	16
18	86.5	61.2	85.7	61.1	69.6	50.6	84.2	60.6	75.7	53.5	81.8	60.0	47.6	37.7	81.1	59.0	52.8	40.4	47.0	36.9	18
20	68.9	55.4	68.2	55.1	64.6	51.2	66.7	54.8	71.5	54.8	64.5	54.2	44.5	38.4	65.4	54.4	49.3	41.1	45.4	38.4	20
25	45.9	47.7	45.3	47.5	48.8	48.4	44.2	47.2	50.3	48.9	42.3	46.8	37.7	39.3	43.0	47.0	41.2	41.7	41.3	41.3	25
30			32.4	43.2	35.5	44.0	31.4	43.0	36.8	44.4	29.6	42.7	32.5	40.2	30.3	42.8	35.4	42.5	36.3	42.7	30
35			24.4	40.7	27.3	41.4	23.5	40.6	28.7	41.7	21.9	40.3	28.3	41.2	22.4	40.3	29.1	41.8	30.0	42.0	35
40			19.0	39.2	21.6	39.7	18.1	38.9	23.1	40.1	16.5	38.6	23.5	40.0	17.1	38.9	23.5	40.2	24.4	40.4	40
45							14.4	37.7	18.9	38.8	12.6	37.6	19.3	38.7	13.1	37.6	19.5	38.7	20.4	38.9	45
50							11.3	36.8	15.9	37.8	9.9	36.7	15.9	37.8	10.3	36.8	16.3	37.6	17.2	37.9	50
55															7.9	36.0	13.7	36.9	14.4	37.1	55
60															5.9	35.4	11.6	36.3	12.1	36.5	60
65															4.2	34.9	9.9	35.9	10.5	35.9	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
Telescoping sequence %																					
Tel. 1	0	0	0	0	50	0	100	0	100	0	0	0	0	0	0	0	0	0	0	Tel. 1	
Tel. 2	0	50	0	0	50	0	0	0	50	0	0	0	0	0	0	0	0	0	0	Tel. 2	
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3	
Tel. 4	0	0	0	0	0	50	0	0	0	0	0	100	50	0	0	0	0	0	0	Tel. 4	
Tel. 5	0	0	50	0	50	0	0	100	0	0	0	0	0	50	100	0	0	0	0	Tel. 5	

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 27,558 lbs**  
On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)											
	85.0		85.0		85.0		97.4		97.4		97.4			109.9		109.9		109.9		109.9				
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°	∠	°			
9																						9		
10																							10	
12																							12	
14	79	81.5	79	62.5	79	44.6																	14	
16	78	79.0	78	60.2	78	42.9																	16	
18	77	73.1	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9											18	
20	75	65.8	75	55.2	75	39.6	78	59.1	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0	79	36.0	20	
25	72	43.4	72	48.0	72	35.8	75	44.4	75	42.5	75	37.4	77	43.6	77	43.0	77	41.0	77	33.9	77	33.9	25	
30	68	30.5	68	36.8	68	31.6	72	31.6	72	37.5	72	35.0	74	32.7	74	32.2	74	36.0	74	31.8	74	31.8	30	
35	64	22.8	64	28.7	64	28.0	69	23.7	69	29.3	69	30.4	72	24.8	72	24.4	72	27.8	72	29.2	72	29.2	35	
40	60	17.4	60	23.1	60	24.4	66	18.3	66	23.9	66	25.0	69	19.3	69	18.9	69	22.2	69	24.4	69	24.4	40	
45	56	13.7	56	18.9	56	20.2	62	14.6	62	19.7	62	20.5	66	15.3	66	14.9	66	18.4	66	20.2	66	20.2	45	
50	51	10.7	51	15.9	51	17.2	58	11.6	58	16.5	58	17.4	63	12.4	63	11.8	63	15.0	63	17.1	63	17.1	50	
55	47	8.2	47	13.4	47	14.7	54	9.0	54	13.9	54	14.9	59	9.9	59	9.4	59	12.4	59	14.6	59	14.6	55	
60	42	6.3	42	11.1	42	12.5	50	7.0	50	11.8	50	12.7	56	7.8	56	7.6	56	10.5	56	12.4	56	12.4	60	
65	36	4.6	36	9.5	36	10.8	46	5.3	46	9.9	46	11.0	53	6.2	53	5.9	53	8.8	53	10.6	53	10.6	65	
70	28	3.2	28	8.1	28	9.4	42	3.9	42	8.5	42	9.5	50	4.9	50	4.6	50	7.4	50	9.2	50	9.2	70	
75	21	1.9	21	6.7	21	8.1	37	2.7	37	7.3	37	8.2	46	3.7	46	3.4	46	6.2	46	7.9	46	7.9	75	
80							31	1.7	31	6.2	31	7.2	42	2.7	42	2.4	42	5.1	42	6.8	42	6.8	80	
85										23	5.3	23	6.2	37	1.8	37	1.4	37	4.2	37	6.0	37	6.0	85
90																		32	3.4	32	5.2	32	5.2	90
95																		26	2.7	26	4.4	26	4.4	95
100																		19	2.0	19	3.8	19	3.8	100
110																								110
120																								120

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5
<b>Code</b>	<b>0 04 02 1</b>	<b>0 11 02 1</b>	<b>0 01 02 1</b>	<b>0 14 02 1</b>	<b>0 10 02 1</b>	<b>0 08 02 1</b>	<b>0 13 02 1</b>	<b>0 03 02 1</b>	<b>0 11 02 1</b>	<b>0 01 02 1</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789899

**Counterweight 27,558 lbs**

On outriggers, 360° working area

**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)	
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9		109.9			
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		
9																					9	
10																						10
12																						12
14	81.5	50.9	62.5	39.9	44.6	30.8																14
16	79.0	53.8	60.2	41.8	42.9	32.3																16
18	73.1	54.8	57.7	43.4	41.3	33.6	61.9	47.9	47.5	37.5	40.9	33.3										18
20	65.8	54.6	55.2	44.9	39.6	34.8	59.1	49.6	46.1	39.1	40.0	34.9	49.4	43.2	48.5	42.8	43.9	38.4	36.0	32.6	20	
25	43.4	47.1	48.0	47.1	35.8	37.2	44.4	47.3	42.5	42.5	37.4	38.3	43.6	46.1	43.0	45.9	41.0	42.3	33.9	36.0	25	
30	30.5	42.9	36.8	44.4	31.6	38.6	31.6	43.1	37.5	44.6	35.0	41.3	32.7	43.4	32.2	43.3	36.0	44.2	31.8	38.9	30	
35	22.8	40.5	28.7	41.7	28.0	39.6	23.7	40.7	29.3	41.9	30.4	42.0	24.8	40.9	24.4	40.8	27.8	41.4	29.2	41.1	35	
40	17.4	38.8	23.1	40.1	24.4	39.8	18.3	39.0	23.9	40.0	25.0	40.3	19.3	39.3	18.9	39.1	22.2	39.8	24.4	40.3	40	
45	13.7	37.6	18.9	38.8	20.2	38.9	14.6	37.8	19.7	38.8	20.5	39.0	15.3	38.1	14.9	38.0	18.4	38.5	20.2	39.1	45	
50	10.7	36.7	15.9	37.8	17.2	38.0	11.6	36.9	16.5	37.7	17.4	38.0	12.4	37.1	11.8	37.1	15.0	37.6	17.1	37.9	50	
55	8.2	36.1	13.4	36.9	14.7	37.1	9.0	36.2	13.9	37.0	14.9	37.2	9.9	36.3	9.4	36.4	12.4	36.8	14.6	37.0	55	
60	6.3	35.6	11.1	36.1	12.5	36.4	7.0	35.6	11.8	36.4	12.7	36.4	7.8	35.7	7.6	35.8	10.5	36.1	12.4	36.4	60	
65	4.6	35.2	9.5	35.7	10.8	36.0	5.3	35.1	9.9	35.7	11.0	36.0	6.2	35.2	5.9	35.4	8.8	35.6	10.6	35.8	65	
70	3.2	34.8	8.1	35.4	9.4	35.6	3.9	34.8	8.5	35.3	9.5	35.5	4.9	35.1	4.6	35.0	7.4	35.3	9.2	35.4	70	
75	1.9	34.4	6.7	35.0	8.1	35.3	2.7	34.6	7.3	35.0	8.2	35.1	3.7	34.8	3.4	34.8	6.2	34.9	7.9	35.0	75	
80							1.7	34.5	6.2	34.6	7.2	35.0	2.7	34.5	2.4	34.6	5.1	34.6	6.8	34.7	80	
85										34.6	6.2	34.6	1.8	34.5		34.2	4.2	34.6	6.0	34.7	85	
90																	3.4	34.3	5.2	34.4	90	
95																	2.7	34.1	4.4	34.2	95	
100																	2.0	33.9	3.8	34.1	100	
110																						110
120																						120

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.





**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 27,558 lbs**  
On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)									
	122.4		122.4		122.4		134.5		134.5			134.5		147.0		147.0		159.1		
	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	
9																				9
10																				10
12																				12
14																				14
16																				16
18																				18
20																				20
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6								25
30	76	33.3	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4				30
35	74	25.3	74	28.3	74	27.3	75	25.9	75	25.9	75	24.4	77	22.9	77	21.2	78	19.8		35
40	72	19.8	72	22.8	72	24.2	74	20.9	74	20.8	74	23.1	75	21.7	75	20.7	77	19.6		40
45	69	15.7	69	18.6	69	20.2	71	16.8	71	16.5	71	19.2	73	17.3	73	18.7	75	17.6		45
50	67	12.8	67	15.7	67	16.9	69	13.6	69	13.5	69	16.3	71	14.3	71	15.8	73	15.0		50
55	64	10.4	64	13.2	64	14.3	67	11.1	67	11.0	67	13.8	69	11.9	69	13.2	71	12.6		55
60	61	8.3	61	10.9	61	12.2	65	9.2	65	8.9	65	11.6	68	9.8	68	11.1	70	10.5		60
65	58	6.6	58	9.2	58	10.4	62	7.5	62	7.3	62	9.9	65	8.1	65	9.5	68	8.6		65
70	55	5.2	55	7.9	55	9.0	59	6.1	59	5.9	59	8.5	63	6.8	63	8.1	66	7.2		70
75	52	4.1	52	6.6	52	7.7	57	4.9	57	4.7	57	7.3	61	5.5	61	6.8	64	6.0		75
80	49	3.1	49	5.5	49	6.6	54	3.9	54	3.7	54	6.2	58	4.4	58	5.7	61	5.0		80
85	45	2.3	45	4.7	45	5.8	51	2.9	51	2.7	51	5.3	56	3.6	56	4.7	59	4.0		85
90	41	1.4	41	3.8	41	4.9	48	2.2	48	2.0	48	4.5	53	2.7	53	4.0	57	3.3		90
95			38	3.1	38	4.2	45	1.6	45	1.3	45	3.8	50	2.0	50	3.3	55	2.7		95
100			33	2.5	33	3.6					42	3.1	47	1.4	47	2.7	52	2.0		100
110			21	1.5	21	2.6					33	2.1			41	1.5				110
120											23	1.2								120
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1										
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2										
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3										
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4										
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5										
<b>Code</b>	<b>0 12 02 1</b>	<b>0 10 02 1</b>	<b>0 07 02 1</b>	<b>0 11 02 1</b>	<b>0 02 02 10</b>	<b>0 01 02 1</b>	<b>0 10 02 1</b>	<b>0 06 02 1</b>	<b>0 01 02 1</b>	<b>Code</b>										

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789899  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9																			9
10																			10
12																			12
14																			14
16																			16
18																			18
20																			20
25	36.2	<b>40.2</b>	34.0	<b>37.0</b>	29.7	<b>33.1</b>	28.9	<b>34.5</b>	29.5	<b>35.1</b>	25.6	<b>30.5</b>							25
30	33.3	<b>43.2</b>	32.0	<b>40.1</b>	28.5	<b>36.4</b>	28.8	<b>38.7</b>	29.4	<b>39.5</b>	25.4	<b>34.2</b>	23.1	<b>33.7</b>	21.4	<b>31.3</b>			30
35	25.3	<b>41.0</b>	28.3	<b>41.4</b>	27.3	<b>39.3</b>	25.9	<b>40.7</b>	25.9	<b>40.9</b>	24.4	<b>37.0</b>	22.9	<b>37.2</b>	21.2	<b>34.5</b>	19.8	<b>33.8</b>	35
40	19.8	<b>39.3</b>	22.8	<b>40.0</b>	24.2	<b>40.3</b>	20.9	<b>39.6</b>	20.8	<b>39.4</b>	23.1	<b>39.3</b>	21.7	<b>39.7</b>	20.7	<b>37.3</b>	19.6	<b>36.9</b>	40
45	15.7	<b>38.2</b>	18.6	<b>38.7</b>	20.2	<b>38.8</b>	16.8	<b>38.3</b>	16.5	<b>38.3</b>	19.2	<b>38.7</b>	17.3	<b>38.5</b>	18.7	<b>38.2</b>	17.6	<b>38.2</b>	45
50	12.8	<b>37.2</b>	15.7	<b>37.7</b>	16.9	<b>37.8</b>	13.6	<b>37.5</b>	13.5	<b>37.3</b>	16.3	<b>37.9</b>	14.3	<b>37.5</b>	15.8	<b>37.6</b>	15.0	<b>37.6</b>	50
55	10.4	<b>36.3</b>	13.2	<b>36.8</b>	14.3	<b>37.0</b>	11.1	<b>36.7</b>	11.0	<b>36.5</b>	13.8	<b>37.0</b>	11.9	<b>36.7</b>	13.2	<b>36.8</b>	12.6	<b>36.9</b>	55
60	8.3	<b>35.7</b>	10.9	<b>36.1</b>	12.2	<b>36.4</b>	9.2	<b>35.9</b>	8.9	<b>35.9</b>	11.6	<b>36.2</b>	9.8	<b>36.2</b>	11.1	<b>36.3</b>	10.5	<b>36.3</b>	60
65	6.6	<b>34.9</b>	9.2	<b>35.6</b>	10.4	<b>35.7</b>	7.5	<b>35.4</b>	7.3	<b>35.4</b>	9.9	<b>35.8</b>	8.1	<b>35.8</b>	9.5	<b>35.9</b>	8.6	<b>35.6</b>	65
70	5.2	<b>34.9</b>	7.9	<b>35.3</b>	9.0	<b>35.4</b>	6.1	<b>35.1</b>	5.9	<b>35.1</b>	8.5	<b>35.5</b>	6.8	<b>35.4</b>	8.1	<b>35.5</b>	7.2	<b>35.2</b>	70
75	4.1	<b>34.7</b>	6.6	<b>34.9</b>	7.7	<b>35.0</b>	4.9	<b>34.9</b>	4.7	<b>34.9</b>	7.3	<b>35.1</b>	5.5	<b>35.1</b>	6.8	<b>35.2</b>	6.0	<b>35.0</b>	75
80	3.1	<b>34.6</b>	5.5	<b>34.6</b>	6.6	<b>34.7</b>	3.9	<b>34.7</b>	3.7	<b>34.7</b>	6.2	<b>34.8</b>	4.4	<b>34.8</b>	5.7	<b>34.8</b>	5.0	<b>34.8</b>	80
85	2.3	<b>34.6</b>	4.7	<b>34.6</b>	5.8	<b>34.7</b>	2.9	<b>34.3</b>	2.7	<b>34.3</b>	5.3	<b>34.8</b>	3.6	<b>34.7</b>	4.7	<b>34.4</b>	4.0	<b>34.5</b>	85
90	1.4	<b>34.3</b>	3.8	<b>34.3</b>	4.9	<b>34.4</b>	2.2	<b>34.4</b>	2.0	<b>34.3</b>	4.5	<b>34.5</b>	2.7	<b>34.4</b>	4.0	<b>34.5</b>	3.3	<b>34.5</b>	90
95			3.1	<b>34.1</b>	4.2	<b>34.2</b>	1.6	<b>34.3</b>	1.3	<b>34.3</b>	3.8	<b>34.3</b>	2.0	<b>34.3</b>	3.3	<b>34.4</b>	2.7	<b>34.5</b>	95
100			2.5	<b>34.0</b>	3.6	<b>34.1</b>					3.1	<b>34.2</b>	1.4	<b>34.2</b>	2.7	<b>34.2</b>	2.0	<b>34.3</b>	100
110			1.5	<b>33.8</b>	2.6	<b>34.1</b>					2.1	<b>34.3</b>			1.5	<b>33.8</b>			110
120											1.2	<b>34.0</b>							120

Telescoping sequence %										
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 12,346 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)												
	35.4			47.9			47.9			60.0			60.0			60.0				60.0			72.5			72.5			72.5		
	70	70	200.0*	74	74	155.0	74	74	89.3	78	78	140.5	78	78	89.5	78	78	139.5		78	78	59.9	80	80	113.5	80	80	66.9	80	80	50.9
9	68	157.0	74	155.0	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10										
10	64	132.5	71	132.0	71	84.3	76	131.5	76	86.0	76	128.0	76	56.8	79	107.5	79	63.3	79	50.9	12										
12	60	113.0	69	113.0	69	79.4	74	112.5	74	82.5	74	111.0	74	53.7	77	101.5	77	59.8	77	50.2	14										
14	56	98.8	66	98.8	66	74.4	71	98.0	71	79.0	71	96.5	71	50.6	75	95.6	75	56.3	75	48.6	16										
16	52	88.1	64	87.6	64	69.6	70	86.9	70	75.7	70	85.7	70	47.6	74	86.2	74	52.8	74	47.0	18										
18	47	78.4	61	77.6	61	64.9	68	76.9	68	72.2	68	75.9	68	44.5	72	76.4	72	49.3	72	45.4	20										
20	33	59.7	53	59.8	53	56.0	62	57.9	62	60.9	62	56.2	62	37.7	68	56.8	68	41.2	68	41.3	25										
25			44	43.6	44	46.7	56	41.9	56	48.1	56	40.0	56	32.5	64	40.6	64	35.5	64	36.3	30										
30			34	33.2	34	36.1	50	31.8	50	37.5	50	30.0	50	28.7	58	30.7	58	31.0	58	31.9	35										
35			19	26.0	19	28.9	43	25.0	43	30.4	43	23.4	43	25.7	53	23.8	53	27.4	53	28.3	40										
40							35	20.1	35	25.0	35	18.4	35	23.2	48	18.8	48	24.6	48	25.4	45										
45							22	16.0	22	21.0	22	14.3	22	20.7	42	14.7	42	21.3	42	22.2	50										
50															35	11.4	35	18.2	35	19.1	55										
55															26	8.6	26	15.5	26	16.3	60										
60															12	6.9	12	13.3	12	14.2	65										
65																					70										
70																					75										
75																					80										
80																					85										
85																					90										
90																					95										
95																					100										
100																					110										
110																					120										
120																															
Telescoping sequence %																															
Tel. 1	0	0	0	50	0	100	0	100	0	100	0	100	0	100	0	100	0	100	0	100	Tel. 1										
Tel. 2	0	50	0	50	0	0	0	50	0	0	0	50	0	0	0	50	0	0	0	0	Tel. 2										
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3										
Tel. 4	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	100	50	0	0	0	Tel. 4										
Tel. 5	0	0	50	0	50	0	50	0	100	0	100	0	100	0	50	100	0	100	0	100	Tel. 5										
<b>Code</b>	<b>0 XX 04 0</b>	<b>0 15 04 0</b>	<b>0 10 04 0</b>	<b>0 16 04 0</b>	<b>0 11 04 0</b>	<b>0 05 04 0</b>	<b>0 01 04 0</b>	<b>0 15 04 0</b>	<b>0 10 04 0</b>	<b>0 09 04 0</b>	<b>Code</b>																				

\* Over rear with superstructure swing lock pin engaged and additional equipment, Code 0 01 04 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789900

**Counterweight 12,346 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9	200.0	61.7																			9
10	157.0	64.2	155.0	63.5	89.3	40.9	140.5	58.4	89.5	40.6	139.5	58.8	59.9	30.9	113.5	49.9	66.9	33.1	50.9	27.6	10
12	132.5	61.3	132.0	61.3	84.3	42.1	131.5	61.4	86.0	42.3	128.0	60.4	56.8	31.8	107.5	51.7	63.3	34.1	50.9	29.2	12
14	113.0	58.7	113.0	58.8	79.4	43.2	112.5	58.9	82.5	43.8	111.0	58.5	53.7	32.7	101.5	53.1	59.8	35.0	50.2	30.8	14
16	98.8	56.7	98.8	56.9	74.4	44.1	98.0	56.9	79.0	45.2	96.5	56.9	50.6	33.3	95.6	54.3	56.3	35.7	48.6	31.8	16
18	88.1	55.3	87.6	55.4	69.6	44.6	86.9	55.3	75.7	46.4	85.7	55.1	47.6	34.0	86.2	55.3	52.8	36.3	47.0	32.8	18
20	78.4	53.0	77.6	52.7	64.9	45.3	76.9	52.8	72.2	48.5	75.9	52.9	44.5	34.7	76.4	52.9	49.3	37.0	45.4	34.6	20
25	59.7	51.4	59.8	51.5	56.0	46.0	57.9	51.2	60.9	48.5	56.2	50.9	37.7	35.0	56.8	50.9	41.2	37.0	41.3	36.1	25
30			43.6	48.7	46.7	46.6	41.9	48.0	48.1	48.7	40.0	47.5	32.5	35.3	40.6	47.7	35.5	37.1	36.3	37.3	30
35			33.2	45.6	36.1	46.4	31.8	44.8	37.5	46.6	30.0	44.4	28.7	35.6	30.7	44.6	31.0	37.5	31.9	37.6	35
40			26.0	43.3	28.9	44.1	25.0	42.6	30.4	44.3	23.4	42.3	25.7	36.0	23.8	42.4	27.4	37.5	28.3	37.7	40
45							20.1	41.0	25.0	42.6	18.4	40.6	23.2	36.4	18.8	40.8	24.6	38.0	25.4	38.1	45
50							16.0	39.8	21.0	41.2	14.3	39.5	20.7	36.8	14.7	39.5	21.3	38.1	22.2	38.3	50
55															11.4	37.6	18.2	38.6	19.1	38.8	55
60															8.6	36.1	15.5	37.8	16.3	38.1	60
65															6.9	34.8		36.7	14.2	36.9	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
120																					120
Telescoping sequence %																					
Tel. 1	0		0		0		50		0		100		0		100		0		0		Tel. 1
Tel. 2	0		50		0		50		0		0		0		50		0		0		Tel. 2
Tel. 3	0		0		0		0		0		0		0		0		0		0		Tel. 3
Tel. 4	0		0		0		0		50		0		0		0		100		50		Tel. 4
Tel. 5	0		0		50		0		50		0		100		0		50		100		Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 12,346 lbs**  
On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)												Working Radius (ft)											
	85.0		85.0		85.0		97.		97.4		97.4			109.9		109.9		109.9		109.9				
	∠	°	∠	°	∠	°	∠	°	∠	°	∠	°		∠	°	∠	°	∠	°	∠	°			
9																						9		
10																							10	
12																							12	
14	79	81.5	79	62.5	79	44.6																	14	
16	78	79.0	78	60.2	78	42.9																	16	
18	77	76.4	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9											18	
20	75	73.4	75	55.2	75	39.6	78	59.6	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0			20	
25	72	57.2	72	49.0	72	35.8	75	54.1	75	42.5	75	37.4	77	45.8	77	45.1	77	41.0	77	33.9			25	
30	68	41.1	68	42.9	68	31.6	72	42.1	72	38.7	72	35.0	74	41.9	74	41.0	74	38.1	74	31.8			30	
35	64	31.2	64	37.0	64	28.0	69	32.0	69	34.9	69	31.9	72	33.0	72	32.4	72	35.4	72	29.5			35	
40	60	24.3	60	30.4	60	24.6	66	25.2	66	30.5	66	28.3	69	26.3	69	25.8	69	29.5	69	27.3			40	
45	56	19.4	56	25.0	56	22.1	62	20.3	62	25.6	62	25.3	66	21.2	66	21.0	66	24.3	66	25.1			45	
50	51	15.4	51	21.0	51	20.0	58	16.3	58	21.7	58	22.2	63	17.3	63	16.9	63	20.4	63	22.1			50	
55	47	12.0	47	17.7	47	18.1	54	12.8	54	18.4	54	19.3	59	14.0	59	13.6	59	17.1	59	19.1			55	
60	42	9.3	42	15.0	42	16.3	50	10.0	50	15.6	50	16.6	56	11.3	56	10.9	56	14.4	56	16.3			60	
65	36	7.1	36	12.8	36	14.2	46	8.2	46	13.3	46	14.4	53	9.1	53	8.8	53	12.2	53	14.2			65	
70	28	5.4	28	11.1	28	12.4	42	6.2	42	11.5	42	12.6	50	7.3	50	7.0	50	10.4	50	12.3			70	
75	21	3.7	21	9.4	21	10.7	37	4.6	37	10.0	37	11.1	46	5.9	46	5.4	46	8.9	46	10.7			75	
80							31	3.5	31	8.7	31	9.7	42	4.5	42	4.1	42	7.6	42	9.4			80	
85							23	2.3	23	7.6	23	8.7	37	3.2	37	2.7	37	6.5	37	8.2			85	
90													32	2.3	32	1.9	32	5.6	32	7.4			90	
95													26	1.6			26	4.8	26	6.5			95	
100																	19	3.9	19	5.7			100	
110																							110	
120																							120	
Telescoping sequence %																								
Tel. 1	100	0	0	100	0	0	100	0	0	100	100	0	0	Tel. 1										
Tel. 2	100	0	0	100	0	0	100	0	0	100	100	100	0	Tel. 2										
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	100	100	Tel. 3										
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	100	100	Tel. 4										
Tel. 5	0	50	100	0	50	100	0	50	100	0	0	50	100	Tel. 5										
<b>Code</b>	<b>0 04 04 0</b>	<b>0 11 04 0</b>	<b>0 01 04 0</b>	<b>0 14 04 0</b>	<b>0 10 04 0</b>	<b>0 08 04 0</b>	<b>0 13 04 0</b>	<b>0 03 04 0</b>	<b>0 11 04 0</b>	<b>0 01 04 0</b>	<b>Code</b>													

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789900

**Counterweight 12,346 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)		
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9		109.9				
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F			
9																						9	
10																							10
12																							12
14	81.5	<b>44.8</b>	62.5	<b>36.0</b>	44.6	<b>28.5</b>																	14
16	79.0	<b>46.5</b>	60.2	<b>37.1</b>	42.9	<b>29.5</b>																	16
18	76.4	<b>48.2</b>	57.7	<b>38.2</b>	41.3	<b>30.3</b>	61.9	<b>41.5</b>	47.5	<b>33.2</b>	40.9	<b>29.8</b>											18
20	73.4	<b>51.2</b>	55.2	<b>39.9</b>	39.6	<b>31.7</b>	59.6	<b>43.8</b>	46.1	<b>35.2</b>	40.0	<b>31.7</b>	49.4	<b>38.3</b>	48.5	<b>38.0</b>	43.9	<b>34.6</b>	36.0	<b>29.9</b>			20
25	57.2	<b>50.8</b>	49.0	<b>41.3</b>	35.8	<b>32.9</b>	54.1	<b>45.9</b>	42.5	<b>37.0</b>	37.4	<b>33.4</b>	45.8	<b>40.4</b>	45.1	<b>40.1</b>	41.0	<b>36.4</b>	33.9	<b>31.6</b>			25
30	41.1	<b>47.8</b>	42.9	<b>42.1</b>	31.6	<b>33.9</b>	42.1	<b>47.4</b>	38.7	<b>38.3</b>	35.0	<b>35.0</b>	41.9	<b>42.3</b>	41.0	<b>42.1</b>	38.1	<b>38.2</b>	31.8	<b>33.0</b>			30
35	31.2	<b>44.7</b>	37.0	<b>42.6</b>	28.0	<b>34.3</b>	32.0	<b>44.9</b>	34.9	<b>39.4</b>	31.9	<b>36.4</b>	33.0	<b>44.0</b>	32.4	<b>43.6</b>	35.4	<b>39.6</b>	29.5	<b>34.4</b>			35
40	24.3	<b>42.5</b>	30.4	<b>42.8</b>	24.6	<b>34.6</b>	25.2	<b>42.7</b>	30.5	<b>40.4</b>	28.3	<b>37.5</b>	26.3	<b>42.9</b>	25.8	<b>42.5</b>	29.5	<b>41.0</b>	27.3	<b>35.6</b>			40
45	19.4	<b>40.8</b>	25.0	<b>42.6</b>	22.1	<b>35.2</b>	20.3	<b>41.1</b>	25.6	<b>40.7</b>	25.3	<b>37.9</b>	21.2	<b>41.3</b>	21.0	<b>41.1</b>	24.3	<b>42.3</b>	25.1	<b>36.4</b>			45
50	15.4	<b>39.7</b>	21.0	<b>41.4</b>	20.0	<b>35.1</b>	16.3	<b>39.9</b>	21.7	<b>40.7</b>	22.2	<b>38.0</b>	17.3	<b>40.1</b>	16.9	<b>40.0</b>	20.4	<b>41.2</b>	22.1	<b>37.3</b>			50
55	12.0	<b>37.8</b>	17.7	<b>39.3</b>	18.1	<b>35.6</b>	12.8	<b>38.0</b>	18.4	<b>39.3</b>	19.3	<b>38.3</b>	14.0	<b>38.3</b>	13.6	<b>38.1</b>	17.1	<b>39.0</b>	19.1	<b>38.5</b>			55
60	9.3	<b>36.3</b>	15.0	<b>37.7</b>	16.3	<b>36.1</b>	10.0	<b>36.5</b>	15.6	<b>37.9</b>	16.6	<b>38.0</b>	11.3	<b>37.0</b>	10.9	<b>36.7</b>	14.4	<b>37.6</b>	16.3	<b>38.0</b>			60
65	7.1	<b>35.0</b>	12.8	<b>36.5</b>	14.2	<b>36.8</b>	8.2	<b>35.2</b>	13.3	<b>36.8</b>	14.4	<b>36.8</b>	9.1	<b>35.6</b>	8.8	<b>35.4</b>	12.2	<b>36.5</b>	14.2	<b>36.9</b>			65
70	5.4	<b>33.9</b>	11.1	<b>35.7</b>	12.4	<b>35.9</b>	6.2	<b>34.2</b>	11.5	<b>35.9</b>	12.6	<b>36.0</b>	7.3	<b>34.6</b>	7.0	<b>34.4</b>	10.4	<b>35.6</b>	12.3	<b>36.0</b>			70
75	3.7	<b>33.2</b>	9.4	<b>35.0</b>	10.7	<b>35.3</b>	4.6	<b>33.5</b>	10.0	<b>35.0</b>	11.1	<b>35.4</b>	5.9	<b>33.9</b>	5.4	<b>33.7</b>	8.9	<b>35.0</b>	10.7	<b>35.4</b>			75
80							3.5	<b>32.6</b>	8.7	<b>34.6</b>	9.7	<b>34.6</b>	4.5	<b>33.1</b>	4.1	<b>32.9</b>	7.6	<b>34.5</b>	9.4	<b>34.7</b>			80
85							2.3	<b>32.2</b>	7.6	<b>34.1</b>	8.7	<b>34.5</b>	3.2	<b>32.5</b>	2.7	<b>32.6</b>	6.5	<b>34.0</b>	8.2	<b>34.2</b>			85
90													2.3	<b>32.3</b>	1.9	<b>32.1</b>	5.6	<b>33.6</b>	7.4	<b>34.1</b>			90
95													1.6	<b>32.3</b>			4.8	<b>33.7</b>	6.5	<b>33.8</b>			95
100																	3.9	<b>33.6</b>	5.7	<b>33.6</b>			100
110																							110
120																							120
Telescoping sequence %																							
Tel. 1	100	0	0	100	0	0	100	100	0	0	100	100	0	0	100	100	0	0	Tel. 1				
Tel. 2	100	0	0	100	0	0	100	100	100	0	0	100	100	100	0	0	100	0	Tel. 2				
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	100	100	100	100	100	100	100	Tel. 3				
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	50	0	50	100	100	100	100	Tel. 4				
Tel. 5	0	50	100	0	50	100	0	50	100	100	0	0	50	100	100	100	100	100	Tel. 5				

The chart shows the maximum existing outrigger reaction forces in the worst condition,  
 dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 12,346 lbs**  
On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)										
	122.4		122.4		122.4		134.5		134.5			134.5		147.0		147.0		159.11			
	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠	∠		
9																				9	
10																				10	
12																				12	
14																				14	
16																				16	
18																				18	
20																				20	
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6								25	
30	76	34.0	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4				30	
35	74	31.7	74	30.2	74	27.3	75	27.4	75	28.3	75	24.4	77	22.9	77	21.2	78	19.8		35	
40	72	26.9	72	28.2	72	26.3	74	25.8	74	26.7	74	23.5	75	22.2	75	20.9	77	19.8		40	
45	69	21.7	69	24.5	69	24.9	71	22.1	71	22.0	71	22.6	73	21.3	73	20.2	75	19.3		45	
50	67	17.9	67	20.8	67	22.0	69	18.7	69	18.4	69	20.7	71	18.7	71	19.4	73	18.4		50	
55	64	14.6	64	17.5	64	18.9	67	15.5	67	15.2	67	18.2	69	15.9	69	17.4	71	16.4		55	
60	61	11.7	61	14.8	61	16.1	65	12.6	65	12.4	65	15.5	68	13.5	68	14.6	70	13.8		60	
65	58	9.5	58	12.6	58	13.9	62	10.4	62	10.2	62	13.3	65	11.3	65	12.6	68	11.9		65	
70	55	7.8	55	10.9	55	12.0	59	8.7	59	8.4	59	11.5	63	9.6	63	10.9	66	10.1		70	
75	52	6.3	52	9.4	52	10.5	57	7.3	57	7.0	57	10.0	61	8.0	61	9.3	64	8.5		75	
80	49	5.0	49	8.1	49	9.2	54	6.1	54	5.7	54	8.7	58	6.5	58	7.9	61	7.2		80	
85	45	3.8	45	6.9	45	8.0	51	4.9	51	4.5	51	7.6	56	5.4	56	6.9	59	6.0		85	
90	41	2.8	41	6.0	41	7.1	48	3.7	48	3.5	48	6.5	53	4.3	53	5.9	57	5.0		90	
95	38	1.9	38	5.2	38	6.2	45	2.8	45	2.6	45	5.6	50	3.3	50	4.9	55	4.0		95	
100			33	4.4	33	5.3	42	2.0	42	1.7	42	4.9	47	2.4	47	3.9	52	3.1		100	
110			21	2.9	21	4.1						33	3.5			41	2.6	47	1.9		110
120												23	2.5			34	1.6				120
Telescoping sequence %																					
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1											
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2											
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3											
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4											
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5											
<b>Code</b>	<b>0 12 04 0</b>	<b>0 10 04 0</b>	<b>0 07 04 0</b>	<b>0 11 04 0</b>	<b>0 02 04 0</b>	<b>0 01 04 0</b>	<b>0 10 04 0</b>	<b>0 06 04 0</b>	<b>0 01 04 0</b>	<b>Code</b>											

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789900  
**Counterweight 12,346 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)	
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1			
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		
9																				9
10																				10
12																				12
14																				14
16																				16
18																				18
20																				20
25	36.2	<b>34.6</b>	34.0	<b>32.2</b>	29.7	<b>29.2</b>	28.9	<b>29.8</b>	29.5	<b>30.3</b>	25.6	<b>26.9</b>								25
30	34.0	<b>36.5</b>	32.0	<b>33.8</b>	28.5	<b>30.7</b>	28.8	<b>32.0</b>	29.4	<b>32.5</b>	25.4	<b>28.8</b>	23.1	<b>28.3</b>	21.4	<b>26.5</b>				30
35	31.7	<b>38.1</b>	30.2	<b>35.3</b>	27.3	<b>32.4</b>	27.4	<b>34.1</b>	28.3	<b>34.7</b>	24.4	<b>30.6</b>	22.9	<b>30.1</b>	21.2	<b>28.2</b>	19.8	<b>27.6</b>		35
40	26.9	<b>39.7</b>	28.2	<b>36.8</b>	26.3	<b>33.7</b>	25.8	<b>35.7</b>	26.7	<b>36.5</b>	23.5	<b>31.9</b>	22.2	<b>31.9</b>	20.9	<b>29.8</b>	19.8	<b>29.2</b>		40
45	21.7	<b>40.9</b>	24.5	<b>38.0</b>	24.9	<b>35.2</b>	22.1	<b>37.1</b>	22.0	<b>38.0</b>	22.6	<b>33.4</b>	21.3	<b>33.4</b>	20.2	<b>31.4</b>	19.3	<b>30.8</b>		45
50	17.9	<b>40.2</b>	20.8	<b>39.2</b>	22.0	<b>36.6</b>	18.7	<b>38.5</b>	18.4	<b>39.6</b>	20.7	<b>34.6</b>	18.7	<b>34.9</b>	19.4	<b>32.8</b>	18.4	<b>32.5</b>		50
55	14.6	<b>38.1</b>	17.5	<b>39.3</b>	18.9	<b>38.9</b>	15.5	<b>38.3</b>	15.2	<b>38.2</b>	18.2	<b>37.1</b>	15.9	<b>37.4</b>	17.4	<b>35.3</b>	16.4	<b>35.1</b>		55
60	11.7	<b>36.9</b>	14.8	<b>37.7</b>	16.1	<b>37.8</b>	12.6	<b>37.2</b>	12.4	<b>37.2</b>	15.5	<b>37.8</b>	13.5	<b>37.0</b>	14.6	<b>37.4</b>	13.8	<b>37.1</b>		60
65	9.5	<b>35.6</b>	12.6	<b>36.5</b>	13.9	<b>36.8</b>	10.4	<b>36.0</b>	10.2	<b>35.8</b>	13.3	<b>36.6</b>	11.3	<b>36.3</b>	12.6	<b>35.9</b>	11.9	<b>35.9</b>		65
70	7.8	<b>34.7</b>	10.9	<b>35.6</b>	12.0	<b>36.0</b>	8.7	<b>34.8</b>	8.4	<b>34.8</b>	11.5	<b>35.7</b>	9.6	<b>35.1</b>	10.9	<b>35.5</b>	10.1	<b>35.2</b>		70
75	6.3	<b>34.0</b>	9.4	<b>35.0</b>	10.5	<b>35.1</b>	7.3	<b>34.1</b>	7.0	<b>34.1</b>	10.0	<b>35.1</b>	8.0	<b>34.4</b>	9.3	<b>34.6</b>	8.5	<b>34.6</b>		75
80	5.0	<b>33.1</b>	8.1	<b>34.5</b>	9.2	<b>34.6</b>	6.1	<b>33.6</b>	5.7	<b>33.6</b>	8.7	<b>34.7</b>	6.5	<b>33.6</b>	7.9	<b>33.8</b>	7.2	<b>33.8</b>		80
85	3.8	<b>32.6</b>	6.9	<b>34.1</b>	8.0	<b>34.2</b>	4.9	<b>33.1</b>	4.5	<b>33.1</b>	7.6	<b>34.2</b>	5.4	<b>33.1</b>	6.9	<b>33.6</b>	6.0	<b>33.6</b>		85
90	2.8	<b>32.4</b>	6.0	<b>33.6</b>	7.1	<b>33.7</b>	3.7	<b>33.0</b>	3.5	<b>32.6</b>	6.5	<b>33.8</b>	4.3	<b>33.0</b>	5.9	<b>33.1</b>	5.0	<b>33.1</b>		90
95	1.9	<b>32.0</b>	5.2	<b>33.7</b>	6.2	<b>33.4</b>	2.8	<b>32.2</b>	2.6	<b>32.2</b>	5.6	<b>33.5</b>	3.3	<b>32.2</b>	4.9	<b>32.7</b>	4.0	<b>32.8</b>		95
100			4.4	<b>33.1</b>	5.3	<b>33.2</b>	2.0	<b>32.0</b>	1.7	<b>32.0</b>	4.9	<b>33.3</b>	2.4	<b>32.4</b>	3.9	<b>32.1</b>	3.1	<b>32.2</b>		100
110			2.9	<b>33.2</b>	4.1	<b>33.3</b>					3.5	<b>33.4</b>			2.6	<b>32.2</b>	1.9	<b>32.2</b>		110
120											2.5	<b>32.9</b>			1.6	<b>32.1</b>				120

Telescoping sequence %										
Tel. 1	100	0	0	100	100	0	100	50	100	Tel. 1
Tel. 2	100	100	50	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	50	100	100	50	100	100	100	100	100	Tel. 4
Tel. 5	0	50	100	50	0	100	50	100	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



Working Radius (ft)		Load rating chart ATF 80-4														Working Radius (ft)					
		Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom Counterweight 12,346 lbs On outriggers, 360° working area Outrigger base 16.40 ft																			
		Boom length (ft)																			
		35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5	
		°		°		°		°		°		°		°		°		°		°	
		∠		∠		∠		∠		∠		∠		∠		∠		∠		∠	
9	70	167.0																			9
10	68	157.0	74	157.5	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10
12	64	138.0	71	138.0	71	84.3	76	135.0	76	86.0	76	129.5	76	56.8	79	107.5	79	63.3	79	50.9	12
14	60	110.5	69	110.0	69	79.4	74	108.0	74	82.5	74	105.5	74	53.7	77	98.0	77	59.8	77	50.2	14
16	56	82.7	66	81.8	66	74.4	71	80.2	71	79.0	71	77.3	71	50.6	75	78.4	75	56.3	75	48.6	16
18	52	65.9	64	65.0	64	65.3	70	63.6	70	68.6	70	61.1	70	47.6	74	61.9	74	52.8	74	47.0	18
20	47	52.0	61	51.2	61	55.3	68	49.8	68	57.0	68	47.7	68	44.5	72	48.3	72	49.3	72	45.4	20
25	33	34.0	53	33.3	53	36.7	62	32.1	62	38.4	62	30.2	62	36.8	68	30.8	68	38.6	68	38.9	25
30			44	23.1	44	26.2	56	22.1	56	27.6	56	20.3	56	27.7	64	21.0	64	28.0	64	29.1	30
35			34	16.8	34	19.8	50	15.9	50	21.1	50	14.3	50	21.2	58	14.8	58	21.5	58	22.4	35
40			19	12.5	19	15.4	43	11.7	43	16.6	43	10.2	43	16.8	53	10.6	53	17.0	53	17.9	40
45							35	8.5	35	13.4	35	7.2	35	13.4	48	7.6	48	13.6	48	14.5	45
50							22	6.2	22	10.9	22	4.8	22	10.9	42	5.3	42	11.1	42	12.0	50
55															35	3.3	35	9.1	35	9.9	55
60															26	1.7	26	7.5	26	8.1	60
65																	12	6.1	12	6.8	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	100	0	0	0	0	0	0	0	0	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	0	50	0	0	0	0	0	0	0	0	100	50	0	0	0	0	Tel. 4
Tel. 5	0	0	50	0	50	0	100	0	100	0	0	0	0	0	50	100	0	0	0	0	Tel. 5
Code	0 XX 04 1	015 04 1	010 04 1	016 04 1	011 04 1	005 04 1	001 04 1	015 04 1	010 04 1	009 04 1	Code										

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789901  
**Counterweight 12,346 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																				Working Radius (ft)
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9	167.0	71.6																			9
10	157.0	71.6	157.5	72.0	89.3	44.7	140.5	65.3	89.5	44.4	139.5	65.8	59.9	33.0	113.5	55.4	66.9	35.7	50.9	29.2	10
12	138.0	71.7	138.0	71.9	84.3	46.6	135.0	70.9	86.0	46.8	129.5	68.3	56.8	34.4	107.5	58.0	63.3	37.1	50.9	31.3	12
14	110.5	69.0	110.0	69.2	79.4	48.3	108.0	68.4	82.5	48.9	105.5	68.2	53.7	35.7	98.0	60.2	59.8	38.5	50.2	33.4	14
16	82.7	61.2	81.8	61.0	74.4	49.6	80.2	60.4	79.0	50.9	77.3	59.6	50.6	36.8	78.4	59.8	56.3	39.6	48.6	34.9	16
18	65.9	54.7	65.0	54.4	65.3	50.6	63.6	54.0	68.6	52.7	61.1	53.1	47.6	37.7	61.9	53.5	52.8	40.5	47.0	36.3	18
20	52.0	46.3	51.2	46.0	55.3	47.3	49.8	45.7	57.0	47.8	47.7	45.1	44.5	39.0	48.3	45.4	49.3	41.7	45.4	38.8	20
25	34.0	41.7	33.3	41.5	36.7	42.4	32.1	41.3	38.4	42.8	30.2	40.7	36.8	39.6	30.8	40.9	38.6	42.1	38.9	40.9	25
30		38.7	23.1	38.5	26.2	39.4	22.1	38.3	27.6	39.8	20.3	37.9	27.7	39.7	21.0	38.1	28.0	39.9	29.1	40.2	30
35			16.8	36.4	19.8	37.2	15.9	36.3	21.1	37.6	14.3	35.9	21.2	37.7	14.8	36.1	21.5	37.7	22.4	37.9	35
40			12.5	35.0	15.4	35.8	11.7	35.1	16.6	36.1	10.2	34.6	16.8	36.2	10.6	34.8	17.0	36.2	17.9	36.4	40
45							8.5	34.0	13.4	34.9	7.2	33.5	13.4	35.0	7.6	33.7	13.6	35.0	14.5	35.2	45
50							6.2	33.1	10.9	34.1	4.8	32.5	10.9	34.2	5.3	33.1	11.1	34.2	12.0	34.4	50
55															3.3	31.8	9.1	32.8	9.9	33.1	55
60															1.7	31.2	7.5	32.0	8.1	32.0	60
65																	6.1	31.2	6.8	31.2	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	0	0	0	100	0	0	0	0	0	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	0	0	50	0	0	50	0	0	0	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	0	0	0	0	100	50	0	0	100	50	0	0	0	0	Tel. 4
Tel. 5	0	0	50	0	50	0	50	0	100	0	100	0	50	0	50	100	0	0	0	0	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 12,346 lbs**  
On outriggers, 360° working area  
**Outrigger base 16,40 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)												
	85.0		85.0		85.0		97.		97.4			97.4		109.9		109.9		109.9		109.9			
	°	°	°	°	°	°	°	°	°	°		°	°	°	°	°	°	°	°	°	°	°	
9																						9	
10																							10
12																							12
14	79	81.5	79	62.5	79	44.6																	14
16	78	75.8	78	60.2	78	42.9																	16
18	77	62.6	77	57.7	77	41.3	79	57.8	79	47.5	79	40.9											18
20	75	49.0	75	54.5	75	39.6	78	50.3	78	46.1	78	40.0	79	48.6	79	47.8	79	43.9	79	36.0			20
25	72	31.3	72	38.4	72	35.8	75	32.5	75	38.8	75	37.4	77	33.8	77	33.2	77	36.9	77	33.9			25
30	68	21.4	68	27.6	68	29.3	72	22.3	72	28.2	72	29.5	74	23.4	74	23.0	74	26.7	74	29.1			30
35	64	15.2	64	21.1	64	22.6	69	16.2	69	21.7	69	22.8	72	17.3	72	16.8	72	20.2	72	22.6			35
40	60	11.1	60	16.6	60	18.1	66	11.9	66	17.2	66	18.3	69	13.0	69	12.6	69	15.9	69	18.1			40
45	56	7.9	56	13.4	56	14.7	62	8.8	62	13.9	62	15.0	66	9.9	66	9.4	66	12.5	66	14.7			45
50	51	5.5	51	10.9	51	12.2	58	6.4	58	11.3	58	12.4	63	7.3	63	7.0	63	10.0	63	12.1			50
55	47	3.6	47	8.8	47	10.1	54	4.4	54	9.3	54	10.3	59	5.3	59	5.1	59	8.0	59	10.0			55
60	42	1.9	42	7.0	42	8.3	50	2.8	50	7.7	50	8.6	56	3.7	56	3.5	56	6.4	56	8.3			60
65			36	5.7	36	7.0	46	1.5	46	6.1	46	7.2	53	2.4	53	2.1	53	5.0	53	6.8			65
70			28	4.6	28	5.8			42	5.1	42	6.0					50	4.0	50	5.7			70
75			21	3.6	21	4.6			37	4.2	37	5.0					46	3.0	46	4.8			75
80									31	3.3	31	4.2					42	2.0	42	4.0			80
85									23	2.5	23	3.6								3.1			85
90																				2.6			90
95																				2.0			95

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5
<b>Code</b>	<b>0 04 04 1</b>	<b>0 11 04 1</b>	<b>0 01 04 1</b>	<b>0 14 04 1</b>	<b>0 10 04 1</b>	<b>0 08 04 1</b>	<b>0 13 04 1</b>	<b>0 03 04 1</b>	<b>0 11 04 1</b>	<b>0 01 04 1</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on telescopic boom,  
 load rating chart 99707789901  
**Counterweight 12,346 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)																		Working Radius (ft)		
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9				
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F			
9																				9	
10																					10
12																					12
14	81.5	<b>50.3</b>	62.5	<b>39.7</b>	44.6	<b>30.8</b>															14
16	75.8	<b>52.7</b>	60.2	<b>41.3</b>	42.9	<b>32.2</b>															16
18	62.6	<b>53.3</b>	57.7	<b>42.9</b>	41.3	<b>32.1</b>	57.8	<b>47.0</b>	47.5	<b>36.8</b>	40.9	<b>32.7</b>									18
20	49.0	<b>45.5</b>	54.5	<b>45.4</b>	39.6	<b>35.3</b>	50.3	<b>45.9</b>	46.1	<b>39.5</b>	40.0	<b>35.3</b>	48.6	<b>43.6</b>	47.8	<b>43.2</b>	43.9	<b>38.9</b>	36.0	<b>33.1</b>	20
25	31.3	<b>41.0</b>	38.4	<b>42.8</b>	35.8	<b>37.0</b>	32.5	<b>41.3</b>	38.8	<b>42.0</b>	37.4	<b>37.6</b>	33.8	<b>41.7</b>	33.2	<b>41.6</b>	36.9	<b>41.4</b>	33.9	<b>35.4</b>	25
30	21.4	<b>38.2</b>	27.6	<b>39.8</b>	29.3	<b>38.5</b>	22.3	<b>38.4</b>	28.2	<b>40.0</b>	29.5	<b>39.8</b>	23.4	<b>38.7</b>	23.0	<b>38.6</b>	26.7	<b>39.4</b>	29.1	<b>37.4</b>	30
35	15.2	<b>36.2</b>	21.1	<b>37.6</b>	22.6	<b>38.0</b>	16.2	<b>36.4</b>	21.7	<b>37.8</b>	22.8	<b>38.2</b>	17.3	<b>36.8</b>	16.8	<b>36.7</b>	20.2	<b>37.4</b>	22.6	<b>38.0</b>	35
40	11.1	<b>34.8</b>	16.6	<b>36.1</b>	18.1	<b>36.4</b>	11.9	<b>34.9</b>	17.2	<b>36.3</b>	18.3	<b>36.5</b>	13.0	<b>35.4</b>	12.6	<b>35.3</b>	15.9	<b>35.8</b>	18.1	<b>36.5</b>	40
45	7.9	<b>33.9</b>	13.4	<b>34.9</b>	14.7	<b>35.3</b>	8.8	<b>34.1</b>	13.9	<b>35.1</b>	15.0	<b>35.3</b>	9.9	<b>34.3</b>	9.4	<b>34.2</b>	12.5	<b>34.6</b>	14.7	<b>35.1</b>	45
50	5.5	<b>33.0</b>	10.9	<b>34.1</b>	12.2	<b>34.5</b>	6.4	<b>33.2</b>	11.3	<b>34.3</b>	12.4	<b>34.5</b>	7.3	<b>33.5</b>	7.0	<b>33.4</b>	10.0	<b>34.0</b>	12.1	<b>34.3</b>	50
55	3.6	<b>32.0</b>	8.8	<b>32.7</b>	10.1	<b>32.9</b>	4.4	<b>32.0</b>	9.3	<b>32.9</b>	10.3	<b>33.0</b>	5.3	<b>32.3</b>	5.1	<b>32.2</b>	8.0	<b>32.7</b>	10.0	<b>33.0</b>	55
60	1.9	<b>31.1</b>	7.0	<b>31.8</b>	8.3	<b>32.1</b>	2.8	<b>31.4</b>	7.7	<b>31.8</b>	8.6	<b>32.1</b>	3.7	<b>31.4</b>	3.5	<b>31.5</b>	6.4	<b>31.8</b>	8.3	<b>32.2</b>	60
65			5.7	<b>31.1</b>	7.0	<b>31.3</b>	1.5	<b>30.9</b>	6.1	<b>31.3</b>	7.2	<b>31.3</b>	2.4	<b>30.9</b>	2.1	<b>30.7</b>	5.0	<b>31.0</b>	6.8	<b>31.4</b>	65
70			4.6	<b>30.6</b>	5.8	<b>30.9</b>			5.1	<b>30.6</b>	6.0	<b>30.9</b>					4.0	<b>30.6</b>	5.7	<b>30.6</b>	70
75			3.6	<b>30.5</b>	4.6	<b>30.4</b>			4.2	<b>30.4</b>	5.0	<b>30.4</b>					3.0	<b>30.4</b>	4.8	<b>30.5</b>	75
80									3.3	<b>29.9</b>	4.2	<b>30.3</b>					2.0	<b>29.8</b>	4.0	<b>29.9</b>	80
85									2.5	<b>29.8</b>	3.6	<b>29.8</b>							3.1	<b>29.9</b>	85
90																			2.6	<b>29.6</b>	90
95																			2.0	<b>29.6</b>	95
Telescoping sequence %																					
Tel. 1	100	0	0	100	0	0	100	100	0	0	100	100	0	0	Tel. 1						
Tel. 2	100	0	0	100	0	0	100	100	100	0	100	100	100	0	Tel. 2						
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	100	100	100	Tel. 3						
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	100	100	100	Tel. 4						
Tel. 5	0	50	100	0	50	100	0	50	100	0	0	50	100	100	Tel. 5						

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom

**Counterweight 12,346 lbs**

On outriggers, 360° working area

**Outrigger base 16.40 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)									
	122.4	122.4	122.4	134.5	134.5	134.5	147.0	147.0	159.11											
9											9									
10											10									
12											12									
14											14									
16											16									
18											18									
20											20									
25	78	33.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6					25			
30	76	24.0	76	27.3	76	28.1	78	25.1	78	24.9	78	25.4	79	23.0	79	21.4		30		
35	74	17.7	74	20.9	74	22.2	75	18.8	75	18.4	75	21.5	77	19.3	77	20.4	78	19.3	35	
40	72	13.5	72	16.4	72	17.7	74	14.4	74	14.1	74	17.2	75	15.0	75	16.6	77	15.7	40	
45	69	10.3	69	13.2	69	14.3	71	11.2	71	11.0	71	13.9	73	11.8	73	13.2	75	12.5	45	
50	67	7.8	67	10.7	67	11.8	69	8.7	69	8.4	69	11.3	71	9.3	71	10.7	73	10.0	50	
55	64	5.8	64	8.6	64	9.7	67	6.7	67	6.4	67	9.2	69	7.2	69	8.6	71	7.9	55	
60	61	4.2	61	6.8	61	8.1	65	5.0	65	4.8	65	7.5	68	5.5	68	7.0	70	6.1	60	
65	58	2.8	58	5.5	58	6.6	62	3.7	62	3.5	62	6.1	65	4.3	65	5.7	68	4.8	65	
70	55	1.8	55	4.4	55	5.5	59	2.6	59	2.4	59	5.1	63	3.2	63	4.5	66	3.7	70	
75			52	3.5	52	4.6	57	1.7				57	4.1	61	2.2	61	3.5	64	2.8	75
80			49	2.7	49	3.8						54	3.1			58	2.7	61	2.0	80
85			45	1.8	45	2.9						51	2.5			56	2.0			85
90					41	2.4						48	1.8							90
95					38	1.8														95
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	100	0	100	50	100	Tel. 1							
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	100	Tel. 2							
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3							
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	100	Tel. 4							
Tel. 5	0	50	100	50	0	100	50	100	100	100	100	100	Tel. 5							
<b>Code</b>	<b>0 12 04 1</b>	<b>0 10 04 1</b>	<b>0 07 04 1</b>	<b>0 11 04 1</b>	<b>0 02 04 1</b>	<b>0 01 04 1</b>	<b>0 10 04 1</b>	<b>0 06 04 1</b>	<b>0 01 04 1</b>	<b>Code</b>										

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force F in ton (US) Lifting capacities m in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707789901 <b>Counterweight 12,346 lbs</b> On outriggers, 360° working area <b>Outrigger base 16.40 ft</b>																		Working Radius (ft)	
	Boom length (ft)																			
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1			
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		
9																				9
10																				10
12																				12
14																				14
16																				16
18																				18
20																				20
25	33.2	<b>39.3</b>	34.0	<b>36.2</b>	29.7	<b>32.4</b>	28.9	<b>33.3</b>	29.5	<b>33.9</b>	25.6	<b>29.6</b>								25
30	24.0	<b>38.9</b>	27.3	<b>38.5</b>	28.1	<b>34.6</b>	25.1	<b>36.2</b>	24.9	<b>36.9</b>	25.4	<b>32.1</b>	23.0	<b>31.6</b>	21.4	<b>29.4</b>				30
35	17.7	<b>36.9</b>	20.9	<b>37.6</b>	22.2	<b>36.7</b>	18.8	<b>37.1</b>	18.4	<b>37.1</b>	21.5	<b>34.6</b>	19.3	<b>34.0</b>	20.4	<b>31.6</b>	19.3	<b>30.9</b>		35
40	13.5	<b>35.4</b>	16.4	<b>36.0</b>	17.7	<b>36.3</b>	14.4	<b>35.7</b>	14.1	<b>35.7</b>	17.2	<b>36.1</b>	15.0	<b>35.7</b>	16.6	<b>33.8</b>	15.7	<b>33.0</b>		40
45	10.3	<b>34.4</b>	13.2	<b>34.8</b>	14.3	<b>35.1</b>	11.2	<b>34.5</b>	11.0	<b>34.5</b>	13.9	<b>34.9</b>	11.8	<b>34.7</b>	13.2	<b>34.8</b>	12.5	<b>34.8</b>		45
50	7.8	<b>33.5</b>	10.7	<b>34.0</b>	11.8	<b>34.3</b>	8.7	<b>33.9</b>	8.4	<b>33.9</b>	11.3	<b>34.1</b>	9.3	<b>33.8</b>	10.7	<b>34.2</b>	10.0	<b>34.2</b>		50
55	5.8	<b>32.4</b>	8.6	<b>32.7</b>	9.7	<b>33.0</b>	6.7	<b>32.5</b>	6.4	<b>32.5</b>	9.2	<b>32.8</b>	7.2	<b>32.7</b>	8.6	<b>33.1</b>	7.9	<b>32.9</b>		55
60	4.2	<b>31.5</b>	6.8	<b>31.8</b>	8.1	<b>31.9</b>	5.0	<b>31.6</b>	4.8	<b>31.6</b>	7.5	<b>31.9</b>	5.5	<b>31.9</b>	7.0	<b>32.0</b>	6.1	<b>32.0</b>		60
65	2.8	<b>31.0</b>	5.5	<b>31.0</b>	6.6	<b>31.4</b>	3.7	<b>31.1</b>	3.5	<b>31.1</b>	6.1	<b>31.1</b>	4.3	<b>31.1</b>	5.7	<b>31.5</b>	4.8	<b>31.2</b>		65
70	1.8	<b>30.6</b>	4.4	<b>30.6</b>	5.5	<b>30.6</b>	2.6	<b>30.7</b>	2.4	<b>30.7</b>	5.1	<b>30.7</b>	3.2	<b>30.7</b>	4.5	<b>30.8</b>	3.7	<b>30.8</b>		70
75			3.5	<b>30.4</b>	4.6	<b>30.5</b>	1.7	<b>30.6</b>			4.1	<b>30.2</b>	2.2	<b>30.5</b>	3.5	<b>30.6</b>	2.8	<b>30.7</b>		75
80			2.7	<b>29.9</b>	3.8	<b>29.9</b>					3.1	<b>30.0</b>			2.7	<b>30.5</b>	2.0	<b>30.2</b>		80
85			1.8	<b>29.8</b>	2.9	<b>29.9</b>					2.5	<b>30.0</b>			2.0	<b>30.1</b>				85
90					2.4	<b>29.6</b>					1.8	<b>29.7</b>								90
95					1.8	<b>29.6</b>														95
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	100	0	100	50	100	Tel. 1							
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	100	Tel. 2							
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3							
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	100	Tel. 4							
Tel. 5	0	50	100	50	0	100	50	100	100	100	100	100	Tel. 5							

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.





**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 at telescopic boom, load rating chart 99707788725 <b>Counterweight 0 lbs</b> On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>																				Working Radius (ft)
	Boom length (ft)																				
	35.4		47.9		47.9		60.0		60.0		60.0		60.0		72.5		72.5		72.5		
	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	
9	170.0	67.4																			9
10	153.5	63.1	153.5	63.2	89.3	40.8	139.5	58.4	89.5	40.6	139.5	58.8	59.9	30.8	113.5	49.9	66.9	33.1	50.9	27.5	10
12	127.5	59.6	127.5	59.7	84.3	42.1	125.0	59.1	86.0	42.2	123.0	58.7	56.8	31.8	107.5	51.6	63.3	34.1	50.9	29.1	12
14	108.5	56.9	108.5	57.1	79.4	43.2	106.0	56.4	82.5	43.8	104.5	56.1	53.7	32.6	101.0	53.0	59.8	34.9	50.2	30.7	14
16	94.0	54.8	94.0	54.9	74.4	44.0	91.7	54.2	79.0	45.1	90.0	54.1	50.6	33.3	90.2	54.0	56.3	35.7	48.6	31.8	16
18	83.2	53.1	83.2	53.2	69.6	44.6	81.0	52.6	75.7	46.3	79.3	52.3	47.6	33.9	79.5	42.6	52.8	36.2	47.0	32.8	18
20	72.9	50.6	72.9	50.7	64.9	45.2	70.8	50.0	71.8	48.5	68.9	49.7	44.5	34.6	69.2	49.6	49.3	36.9	45.4	34.6	20
25	48.0	44.9	47.3	44.8	51.1	46.0	46.4	44.6	52.8	46.3	44.3	44.0	37.7	34.9	45.0	44.3	41.2	37.0	41.3	36.1	25
30			33.3	40.9	36.6	41.8	32.2	40.8	38.1	42.3	30.4	40.3	32.5	35.2	31.0	40.5	35.5	37.1	36.3	37.3	30
35			24.6	38.4	27.9	39.2	23.5	38.1	29.2	39.6	21.7	37.8	28.6	35.5	22.3	37.9	29.5	37.4	30.6	37.6	35
40			18.7	36.5	21.5	37.4	17.7	36.3	23.0	37.7	15.8	35.9	23.2	35.9	16.4	35.9	23.5	37.5	24.5	37.7	40
45							13.2	34.6	18.5	36.1	11.4	34.1	18.7	36.2	12.1	34.4	18.9	36.2	19.8	36.6	45
50							9.7	33.6	15.3	34.9	8.1	33.0	15.4	35.0	8.8	33.2	15.5	35.0	16.4	35.4	50
55															6.2	31.2	12.8	33.0	13.7	33.3	55
60															4.1	29.9	10.7	31.6	11.6	31.9	60
65															2.4	28.9	9.0	30.8	9.7	31.1	65
70																					70
75																					75
80																					80
85																					85
90																					90
95																					95
100																					100
110																					110
Telescoping sequence %																					
Tel. 1	0	0	0	50	0	100	0	100	0	0	0	0	100	0	0	0	0	0	0	0	Tel. 1
Tel. 2	0	50	0	50	0	0	0	0	0	50	0	0	50	0	0	0	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	50	0	50	0	0	0	0	0	0	100	50	0	0	0	0	0	Tel. 4
Tel. 5	0	0	50	0	50	0	50	0	100	0	100	0	50	100	0	50	100	0	0	0	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.





**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765, at telescopic boom  
**Counterweight 0 lbs**  
 On outriggers, 360° working area  
**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)											
	85.0		85.0		85.0		97.4		97.4			97.4		109.9		109.9		109.9				
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°			
9																				9		
10																				10		
12																				12		
14	79	81.5	79	62.5	79	44.6														14		
16	78	79.0	78	60.2	78	42.9														16		
18	77	74.8	77	57.7	77	41.3	79	61.9	79	47.5	79	40.9								18		
20	75	69.3	75	55.2	75	39.6	78	59.4	78	46.1	78	40.0	79	49.4	79	48.5	79	43.9	79	36.0	20	
25	72	45.5	72	49.0	72	35.8	75	46.6	75	42.5	75	37.4	77	44.6	77	44.0	77	41.0	77	33.9	25	
30	68	31.5	68	38.1	68	31.6	72	32.4	72	38.2	72	35.0	74	34.0	74	33.3	74	37.2	74	31.8	30	
35	64	22.8	64	29.2	64	28.0	69	23.7	69	29.9	69	30.9	72	25.1	72	24.6	72	28.4	72	29.5	35	
40	60	16.9	60	23.0	60	24.4	66	17.9	66	23.7	66	25.0	69	19.3	69	18.8	69	22.2	69	24.6	40	
45	56	12.5	56	18.5	56	20.0	62	13.4	62	19.1	62	20.3	66	14.7	66	14.3	66	17.8	66	20.0	45	
50	51	9.1	51	15.3	51	16.6	58	10.1	58	15.7	58	16.8	63	11.3	63	10.9	63	14.4	63	16.6	50	
55	47	6.4	47	12.6	47	13.9	54	7.4	54	13.0	54	14.1	59	8.6	59	8.2	59	11.6	59	13.9	55	
60	42	4.3	42	10.2	42	11.8	50	5.2	50	10.9	50	12.0	56	6.5	56	6.1	56	9.4	56	11.8	60	
65	36	2.6	36	8.4	36	9.9	46	3.5	46	9.0	46	10.1	53	4.6	53	4.4	53	7.7	53	9.9	65	
70			28	7.0	28	8.4	42	2.3	42	7.6	42	8.6	50	3.2	50	2.9	50	6.2	50	8.4	70	
75			21	5.6	21	6.9	37	1.1	37	6.3	37	7.4	46	2.1	46	1.4	46	4.9	46	7.1	75	
80										31	5.1	31	6.4	42	1.1			42	3.9	42	6.1	80
85										23	4.2	23	5.4					37	2.9	37	4.9	85
90																		32	2.2	32	4.2	90
95																		26	1.6	26	3.4	95
100																				19	2.6	100
110																						110

Telescoping sequence %

Tel. 1	100	0	0	100	0	0	100	100	0	0	Tel. 1
Tel. 2	100	0	0	100	0	0	100	100	100	0	Tel. 2
Tel. 3	0	100	0	50	100	50	50	100	100	100	Tel. 3
Tel. 4	0	50	100	0	100	100	50	0	50	100	Tel. 4
Tel. 5	0	50	100	0	50	100	0	0	50	100	Tel. 5
<b>Code</b>	<b>0 04 05 0</b>	<b>0 11 05 0</b>	<b>0 01 05 0</b>	<b>0 14 05 0</b>	<b>0 10 05 0</b>	<b>0 08 05 0</b>	<b>0 13 05 0</b>	<b>0 03 05 0</b>	<b>0 11 05 0</b>	<b>0 01 05 0</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765, at telescopic boom, load rating chart 99707788725 <b>Counterweight 0 lbs</b> On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>																		Working Radius (ft)				
	Boom length (ft)																						
	85.0		85.0		85.0		97.4		97.4		97.4		109.9		109.9		109.9			109.9			
	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>			
9																						9	
10																							10
12																							12
14	81.5	<b>44.8</b>	62.5	<b>36.0</b>	44.6	<b>28.5</b>																	14
16	79.0	<b>46.5</b>	60.2	<b>37.1</b>	42.9	<b>29.5</b>																	16
18	74.8	<b>48.2</b>	57.7	<b>38.2</b>	41.3	<b>30.2</b>	61.9	<b>41.4</b>	47.5	<b>33.2</b>	40.9	<b>29.8</b>											18
20	69.3	<b>49.5</b>	55.2	<b>39.9</b>	39.6	<b>31.7</b>	59.4	<b>43.8</b>	46.1	<b>35.1</b>	40.0	<b>31.7</b>	49.4	<b>38.3</b>	48.5	<b>38.0</b>	43.9	<b>34.5</b>	36.0	<b>29.9</b>			20
25	45.5	<b>44.4</b>	49.0	<b>41.3</b>	35.8	<b>32.9</b>	46.6	<b>44.6</b>	42.5	<b>36.9</b>	37.4	<b>33.4</b>	44.6	<b>40.3</b>	44.0	<b>40.0</b>	41.0	<b>36.4</b>	33.9	<b>31.6</b>			25
30	31.5	<b>40.6</b>	38.1	<b>42.1</b>	31.6	<b>33.9</b>	32.4	<b>40.9</b>	38.2	<b>38.2</b>	35.0	<b>34.9</b>	34.0	<b>41.1</b>	33.3	<b>41.0</b>	37.2	<b>38.2</b>	31.8	<b>33.0</b>			30
35	22.8	<b>38.1</b>	29.2	<b>39.6</b>	28.0	<b>34.3</b>	23.7	<b>38.2</b>	29.9	<b>39.4</b>	30.9	<b>36.4</b>	25.1	<b>38.6</b>	24.6	<b>38.5</b>	28.4	<b>39.4</b>	29.5	<b>34.4</b>			35
40	16.9	<b>36.0</b>	23.0	<b>37.7</b>	24.4	<b>34.6</b>	17.9	<b>36.4</b>	23.7	<b>37.9</b>	25.0	<b>37.5</b>	19.3	<b>36.7</b>	18.8	<b>36.6</b>	22.2	<b>37.5</b>	24.6	<b>35.6</b>			40
45	12.5	<b>34.5</b>	18.5	<b>36.1</b>	20.0	<b>35.1</b>	13.4	<b>34.7</b>	19.1	<b>36.3</b>	20.3	<b>36.7</b>	14.7	<b>35.1</b>	14.3	<b>35.0</b>	17.8	<b>35.9</b>	20.0	<b>36.4</b>			45
50	9.1	<b>33.3</b>	15.3	<b>34.9</b>	16.6	<b>35.1</b>	10.1	<b>33.7</b>	15.7	<b>35.1</b>	16.8	<b>35.5</b>	11.3	<b>34.1</b>	10.9	<b>34.0</b>	14.4	<b>34.6</b>	16.6	<b>35.3</b>			50
55	6.4	<b>31.4</b>	12.6	<b>32.9</b>	13.9	<b>33.3</b>	7.4	<b>31.6</b>	13.0	<b>33.1</b>	14.1	<b>33.4</b>	8.6	<b>32.1</b>	8.2	<b>32.0</b>	11.6	<b>32.9</b>	13.9	<b>33.4</b>			55
60	4.3	<b>29.8</b>	10.2	<b>32.0</b>	11.8	<b>32.0</b>	5.2	<b>30.3</b>	10.9	<b>31.7</b>	12.0	<b>32.0</b>	6.5	<b>30.6</b>	6.1	<b>30.5</b>	9.4	<b>31.4</b>	11.8	<b>32.0</b>			60
65	2.6	<b>28.9</b>	8.4	<b>30.7</b>	9.9	<b>31.2</b>	3.5	<b>29.1</b>	9.0	<b>30.9</b>	10.1	<b>31.2</b>	4.6	<b>29.7</b>	4.4	<b>29.6</b>	7.7	<b>30.4</b>	9.9	<b>31.3</b>			65
70			7.0	<b>29.8</b>	8.4	<b>30.3</b>	2.3	<b>28.4</b>	7.6	<b>30.1</b>	8.6	<b>30.4</b>	3.2	<b>28.7</b>	2.9	<b>28.9</b>	6.2	<b>29.7</b>	8.4	<b>30.4</b>			70
75			5.6	<b>29.3</b>	6.9	<b>29.6</b>	1.1	<b>28.1</b>	6.3	<b>29.6</b>	7.4	<b>29.6</b>	2.1	<b>28.1</b>	1.4	<b>28.0</b>	4.9	<b>28.9</b>	7.1	<b>29.7</b>			75
80									5.1	<b>28.7</b>	6.4	<b>29.4</b>	1.1	<b>27.8</b>			3.9	<b>28.6</b>	6.1	<b>29.4</b>			80
85									4.2	<b>28.5</b>	5.4	<b>28.9</b>					2.9	<b>28.1</b>	4.9	<b>28.6</b>			85
90																	2.2	<b>28.0</b>	4.2	<b>28.5</b>			90
95																	1.6	<b>27.9</b>	3.4	<b>27.8</b>			95
100																			2.6	<b>27.2</b>			100
110																							110
Telescoping sequence %																							
Tel. 1	100	0	0	100	0	0	100	100	0	0	100	100	0	0	Tel. 1								
Tel. 2	100	0	0	100	0	0	100	100	100	0	100	100	100	0	Tel. 2								
Tel. 3	0	100	0	50	100	50	50	100	100	100	100	100	100	100	Tel. 3								
Tel. 4	0	50	100	0	100	100	50	0	50	100	100	100	100	100	Tel. 4								
Tel. 5	0	50	100	0	50	100	0	50	0	50	100	100	100	100	Tel. 5								

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765, at telescopic boom

**Counterweight 0 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length (ft)										Working Radius (ft)									
	122.4	122.4	122.4	134.5	134.5	134.5	147.0	147.0	159.1											
9												9								
10												10								
12												12								
14												14								
16												16								
18												18								
20												20								
25	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6			25					
30	76	33.4	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4			30	
35	74	25.6	74	28.6	74	27.3	75	25.6	75	25.6	75	24.4	77	22.9	77	21.2	78	19.8	35	
40	72	19.7	72	22.8	72	24.3	74	20.4	74	20.2	74	23.1	75	20.9	75	20.6	77	19.5	40	
45	69	15.2	69	18.3	69	19.8	71	16.2	71	16.0	71	18.9	73	16.7	73	17.7	75	17.0	45	
50	67	11.7	67	15.1	67	16.4	69	13.0	69	12.6	69	15.6	71	13.4	71	14.7	73	14.1	50	
55	64	9.0	64	12.4	64	13.6	67	10.2	67	9.8	67	13.0	69	10.8	69	12.1	71	11.5	55	
60	61	6.9	61	10.0	61	11.3	65	7.9	65	7.6	65	10.9	68	8.7	68	10.0	70	9.4	60	
65	58	5.1	58	8.2	58	9.5	62	6.4	62	5.7	62	9.0	65	6.8	65	8.2	68	7.5	65	
70	55	3.7	55	6.8	55	8.1	59	4.8	59	4.5	59	7.5	63	5.3	63	6.9	66	5.9	70	
75	52	2.5	52	5.5	52	6.7	57	3.5	57	3.3	57	6.2	61	4.0	61	5.7	64	4.7	75	
80	49	1.5	49	4.4	49	5.5	54	2.4	54	2.2	54	5.1	58	2.9	58	4.6	61	3.7	80	
85			45	3.4	45	4.7	51	1.6	51	1.4	51	4.2	56	2.2	56	3.8	59	2.7	85	
90			41	2.7	41	4.0						48	3.4	53	1.4	53	2.8	57	2.0	90
95			38	2.0	38	3.2						45	2.7			50	2.1	55	1.3	95
100			33	1.3	33	2.5						42	2.0			47	1.6			100
110					21	1.6						33	1.0							110
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	50	100	100	Tel. 1									
Tel. 2	100	100	50	100	100	100	100	100	100	100	Tel. 2									
Tel. 3	100	100	100	100	100	100	100	100	100	100	Tel. 3									
Tel. 4	50	100	100	50	100	100	100	100	100	100	Tel. 4									
Tel. 5	0	50	100	50	0	100	50	100	100	100	Tel. 5									
<b>Code</b>	<b>0 12 05 0</b>	<b>0 10 05 0</b>	<b>0 07 05 0</b>	<b>0 11 05 0</b>	<b>0 02 05 0</b>	<b>0 01 05 0</b>	<b>0 10 05 0</b>	<b>0 06 05 0</b>	<b>0 01 05 0</b>	<b>Code</b>										


Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**


Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765, at telescopic boom, load rating chart 99707788725 <b>Counterweight 0 lbs</b> On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>																		Working Radius (ft)	
	Boom length (ft)																			
	122.4		122.4		122.4		134.5		134.5		134.5		147.0		147.0		159.1			
	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>	<b>m</b>	<b>F</b>		
9																				9
10																				10
12																				12
14																				14
16																				16
18																				18
20																				20
25	36.2	<b>34.6</b>	34.0	<b>32.2</b>	29.7	<b>29.1</b>	28.9	<b>29.8</b>	29.5	<b>30.2</b>	25.6	<b>26.8</b>								25
30	33.4	<b>36.5</b>	32.0	<b>33.8</b>	28.5	<b>30.7</b>	28.8	<b>31.9</b>	29.4	<b>32.4</b>	25.4	<b>28.7</b>	23.1	<b>28.2</b>	21.4	<b>26.5</b>				30
35	25.6	<b>38.0</b>	28.6	<b>35.3</b>	27.3	<b>32.3</b>	25.6	<b>34.1</b>	25.6	<b>34.7</b>	24.4	<b>30.6</b>	22.9	<b>30.1</b>	21.2	<b>28.1</b>	19.8	<b>27.6</b>		35
40	19.7	<b>36.8</b>	22.8	<b>36.8</b>	24.3	<b>33.7</b>	20.4	<b>35.7</b>	20.2	<b>36.4</b>	23.1	<b>31.8</b>	20.9	<b>31.9</b>	20.6	<b>29.8</b>	19.5	<b>29.2</b>		40
45	15.2	<b>35.3</b>	18.3	<b>36.1</b>	19.8	<b>35.2</b>	16.2	<b>35.1</b>	16.0	<b>34.9</b>	18.9	<b>33.3</b>	16.7	<b>33.4</b>	17.7	<b>31.3</b>	17.0	<b>30.8</b>		45
50	11.7	<b>34.2</b>	15.1	<b>34.8</b>	16.4	<b>35.3</b>	13.0	<b>34.1</b>	12.6	<b>34.1</b>	15.6	<b>34.6</b>	13.4	<b>34.1</b>	14.7	<b>32.8</b>	14.1	<b>32.4</b>		50
55	9.0	<b>32.2</b>	12.4	<b>32.9</b>	13.6	<b>33.4</b>	10.2	<b>32.5</b>	9.8	<b>32.5</b>	13.0	<b>33.0</b>	10.8	<b>32.5</b>	12.1	<b>32.6</b>	11.5	<b>32.6</b>		55
60	6.9	<b>30.7</b>	10.0	<b>31.9</b>	11.3	<b>32.0</b>	7.9	<b>31.3</b>	7.6	<b>31.0</b>	10.9	<b>31.8</b>	8.7	<b>31.3</b>	10.0	<b>31.4</b>	9.4	<b>31.4</b>		60
65	5.1	<b>29.8</b>	8.2	<b>30.6</b>	9.5	<b>31.0</b>	6.4	<b>29.9</b>	5.7	<b>29.9</b>	9.0	<b>31.0</b>	6.8	<b>30.4</b>	8.2	<b>30.6</b>	7.5	<b>30.6</b>		65
70	3.7	<b>28.8</b>	6.8	<b>29.8</b>	8.1	<b>30.1</b>	4.8	<b>29.5</b>	4.5	<b>29.0</b>	7.5	<b>30.2</b>	5.3	<b>29.5</b>	6.9	<b>29.7</b>	5.9	<b>29.7</b>		70
75	2.5	<b>28.2</b>	5.5	<b>29.2</b>	6.7	<b>29.6</b>	3.5	<b>28.7</b>	3.3	<b>28.7</b>	6.2	<b>29.4</b>	4.0	<b>28.7</b>	5.7	<b>29.4</b>	4.7	<b>28.8</b>		75
80	1.5	<b>27.9</b>	4.4	<b>28.7</b>	5.5	<b>28.8</b>	2.4	<b>28.1</b>	2.2	<b>28.1</b>	5.1	<b>28.8</b>	2.9	<b>28.1</b>	4.6	<b>28.9</b>	3.7	<b>28.6</b>		80
85			3.4	<b>28.1</b>	4.7	<b>28.6</b>	1.6	<b>27.8</b>	1.4	<b>27.8</b>	4.2	<b>28.6</b>	2.2	<b>28.2</b>	3.8	<b>28.7</b>	2.7	<b>28.0</b>		85
90			2.7	<b>28.0</b>	4.0	<b>28.5</b>					3.4	<b>28.2</b>	1.4	<b>27.7</b>	2.8	<b>27.9</b>	2.0	<b>27.9</b>		90
95			2.0	<b>27.7</b>	3.2	<b>27.8</b>					2.7	<b>27.9</b>			2.1	<b>27.9</b>	1.3	<b>27.7</b>		95
100			1.3	<b>27.6</b>	2.5	<b>27.7</b>					2.0	<b>27.8</b>			1.6	<b>27.8</b>				100
110					1.6	<b>28.0</b>					1.0	<b>27.8</b>								110
Telescoping sequence %																				
Tel. 1	100	0	0	100	100	0	100	50	100	100	0	100	50	100	100	0	100	50	100	Tel. 1
Tel. 2	100	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	50	100	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 4
Tel. 5	0	50	100	50	0	100	50	0	100	50	100	50	100	50	100	50	100	50	100	Tel. 5

The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.


 <b>Load rating chart ATF 80-4</b>										
Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom <b>Counterweight 39,683 lbs</b> <b>On tire, over rear</b>										
Working Radius (ft)	Boom length (ft)									Working Radius (ft)
	35.4			47.9			60.0			
	°	**		°	**		°	**		
	∠			∠			∠			
10	68	40.5		74	41.0		78	41.0		10
12	64	36.3		71	36.9		76	37.2		12
14	60	32.6		69	33.4		74	33.7		14
16	56	29.5		66	30.4		71	30.7		16
18	52	26.8		64	27.8		70	28.3		18
20	47	24.4		61	25.5		68	25.9		20
25	33	19.6		53	20.8		62	21.4		25
30				44	17.2		56	18.0		30
35				34	14.5		50	15.5		35
40				19	12.3		43	13.4		40
45							35	11.0		45
50							22	9.1		50
Telescoping sequence %										
Tel. 1		0			0			0		Tel. 1
Tel. 2		0			0			0		Tel. 2
Tel. 3		0			0			0		Tel. 3
Tel. 4		0			0			0		Tel. 4
Tel. 5		0			50			100		Tel. 5
<b>Code</b>	<b>0 XX 01 6</b>			<b>0 10 01 6</b>				<b>0 01 01 6</b>		<b>Code</b>

\*\* Over rear with superstructure swing lock pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.


 <b>Tireload reaction force chart ATF 80-4</b>										
Working Radius (ft)	Tireload reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707788728 <b>Counterweight 39,683 lbs</b> <b>On tire, over rear</b>									Working Radius (ft)
	Boom length (ft)									
	35.4			47.9			60.0			
	Over rear			Over rear			Over rear			
	<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>		
10	40.5	<b>15.0</b>		41.0	<b>15.2</b>		41.0	<b>15.3</b>		10
12	36.3	<b>15.0</b>		36.9	<b>14.8</b>		37.2	<b>14.7</b>		12
14	32.6	<b>15.0</b>		33.4	<b>14.9</b>		33.7	<b>14.8</b>		14
16	29.5	<b>15.1</b>		30.4	<b>14.9</b>		30.7	<b>14.7</b>		16
18	26.8	<b>15.1</b>		27.8	<b>14.9</b>		28.3	<b>14.8</b>		18
20	24.4	<b>15.1</b>		25.5	<b>15.0</b>		25.9	<b>14.9</b>		20
25	19.6	<b>15.2</b>		20.8	<b>15.1</b>		21.4	<b>14.9</b>		25
30		<b>15.2</b>		17.2	<b>15.1</b>		18.0	<b>14.9</b>		30
35				14.5	<b>15.1</b>		15.5	<b>15.1</b>		35
40				12.3	<b>15.2</b>		13.4	<b>15.2</b>		40
45							11.0	<b>15.3</b>		45
50							9.1	<b>15.4</b>		50
Telescoping sequence %										
Tel. 1	0			0			0			Tel. 1
Tel. 2	0			0			0			Tel. 2
Tel. 3	0			0			0			Tel. 3
Tel. 4	0			0			0			Tel. 4
Tel. 5	0			50			100			Tel. 5

**The chart shows the maximum existing tireload reaction forces in the worst condition, dynamic influences are not being taken into account.**

 <b>Load rating chart ATF 80-4</b>										
Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom <b>Counterweight 27,558 lbs</b> <b>On tire, over rear</b>										
Working Radius (ft)	Boom length (ft)									Working Radius (ft)
	35.4			47.9			60.0			
	°	**		°	**		°	**		
10	68	41.5		74	42.0		78	42.0		10
12	64	37.1		71	37.7		76	37.9		12
14	60	33.3		69	34.2		74	34.4		14
16	56	30.1		66	31.0		71	31.4		16
18	52	27.4		64	28.5		70	28.9		18
20	47	24.8		61	26.1		68	26.6		20
25	33	19.3		53	21.2		62	21.9		25
30				44	16.2		56	17.3		30
35				34	12.4		50	13.5		35
40				19	9.6		43	11.0		40
45							35	8.8		45
50							22	7.0		50
Telescoping sequence %										
Tel. 1		0			0			0		Tel. 1
Tel. 2		0			0			0		Tel. 2
Tel. 3		0			0			0		Tel. 3
Tel. 4		0			0			0		Tel. 4
Tel. 5		0			50			100		Tel. 5
<b>Code</b>	<b>0 XX 02 6</b>			<b>0 10 02 6</b>				<b>0 01 02 6</b>		<b>Code</b>


\*\* Over rear with superstructure swing lock pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

 <b>Tireload reaction force chart ATF 80-4</b>											
Working Radius (ft)	Tireload reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707789904 <b>Counterweight 27,558 lbs</b> <b>On tire, over rear</b>										Working Radius (ft)
	Boom length (ft)										
	35.4			47.9			60.0				
	Over rear			Over rear			Over rear				
	<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>			
10	41.5	<b>15.0</b>		42.0	<b>14.8</b>		42.0	<b>14.6</b>			10
12	37.1	<b>15.0</b>		37.7	<b>14.8</b>		37.9	<b>14.7</b>			12
14	33.3	<b>15.0</b>		34.2	<b>14.9</b>		34.4	<b>14.7</b>			14
16	30.1	<b>15.1</b>		31.0	<b>14.9</b>		31.4	<b>14.8</b>			16
18	27.4	<b>15.1</b>		28.5	<b>15.0</b>		28.9	<b>14.8</b>			18
20	24.8	<b>15.1</b>		26.1	<b>15.0</b>		26.6	<b>14.9</b>			20
25	19.3	<b>14.9</b>		21.2	<b>15.0</b>		21.9	<b>15.0</b>			25
30				16.2	<b>14.6</b>		17.3	<b>14.6</b>			30
35				12.4	<b>14.2</b>		13.5	<b>14.2</b>			35
40				9.6	<b>13.9</b>		11.0	<b>14.1</b>			40
45							8.8	<b>13.8</b>			45
50							7.0	<b>13.7</b>			50
Telescoping sequence %											
Tel. 1	0			0			0				Tel. 1
Tel. 2	0			0			0				Tel. 2
Tel. 3	0			0			0				Tel. 3
Tel. 4	0			0			0				Tel. 4
Tel. 5	0			50			100				Tel. 5


The chart shows the maximum existing tireload reaction forces in the worst condition, dynamic influences are not being taken into account.




 <b>Load rating chart ATF 80-4</b>										
Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom <b>Counterweight 12,346 lbs</b> <b>On tire, over rear</b>										
Working Radius (ft)	Boom length (ft)									Working Radius (ft)
	35.4			47.9			60.0			
	°	**		°	**		°	**		
	∠			∠			∠			
10	68	42.5		74	43.0		78	43.0		10
12	64	38.2		71	38.6		76	38.9		12
14	60	33.9		69	35.0		74	35.2		14
16	56	28.7		66	30.9		71	32.0		16
18	52	24.1		64	26.4		70	27.8		18
20	47	20.1		61	22.2		68	23.6		20
25	33	13.7		53	15.7		62	17.0		25
30				44	11.4		56	12.5		30
35				34	8.3		50	9.4		35
40				19	6.1		43	7.3		40
45							35	5.6		45
50							22	4.2		50
Telescoping sequence %										
Tel. 1		0			0			0		Tel. 1
Tel. 2		0			0			0		Tel. 2
Tel. 3		0			0			0		Tel. 3
Tel. 4		0			0			0		Tel. 4
Tel. 5		0			50			100		Tel. 5
<b>Code</b>	<b>0 XX 04 6</b>			<b>0 10 04 6</b>				<b>0 01 04 6</b>		<b>Code</b>

\*\* Over rear with superstructure swing lock pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.


 <b>Tireload reaction force chart ATF 80-4</b>											
Working Radius (ft)	Tireload reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707789905 <b>Counterweight 12,346 lbs</b> <b>On tire, over rear</b>										Working Radius (ft)
	Boom length (ft)										
	35.4			47.9			60.0				
	Over rear			Over rear			Over rear				
	<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>			
10	42.5	<b>15.0</b>		43.0	<b>14.8</b>		43.0	<b>14.6</b>			10
12	38.2	<b>15.0</b>		38.6	<b>14.8</b>		38.9	<b>14.7</b>			12
14	33.9	<b>15.0</b>		35.0	<b>14.8</b>		35.2	<b>14.6</b>			14
16	28.7	<b>14.9</b>		30.9	<b>14.9</b>		32.0	<b>14.7</b>			16
18	24.1	<b>14.5</b>		26.4	<b>14.7</b>		27.8	<b>14.7</b>			18
20	20.1	<b>13.7</b>		22.2	<b>13.8</b>		23.6	<b>14.0</b>			20
25	13.7	<b>13.1</b>		15.7	<b>13.3</b>		17.0	<b>13.4</b>			25
30				11.4	<b>12.9</b>		12.5	<b>13.0</b>			30
35				8.3	<b>12.6</b>		9.4	<b>12.7</b>			35
40				6.1	<b>12.4</b>		7.3	<b>12.5</b>			40
45							5.6	<b>12.3</b>			45
50							4.2	<b>12.2</b>			50
Telescoping sequence %											
Tel. 1	0			0			0			Tel. 1	
Tel. 2	0			0			0			Tel. 2	
Tel. 3	0			0			0			Tel. 3	
Tel. 4	0			0			0			Tel. 4	
Tel. 5	0			50			100			Tel. 5	

The chart shows the maximum existing tireload reaction forces in the worst condition, dynamic influences are not being taken into account.

 <b>Load rating chart ATF 80-4</b>										
Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom <b>Counterweight 0 lbs</b> <b>On tire, over rear</b>										
Working Radius (ft)	Boom length (ft)									Working Radius (ft)
	35.4			47.9			60.0			
	°	**		°	**		°	**		
	∠			∠			∠			
10	68	42.0		74	42.5		78	43.0		10
12	64	33.3		71	36.1		76	37.5		12
14	60	26.0		69	28.4		74	29.9		14
16	56	20.8		66	23.0		71	24.5		16
18	52	17.2		64	19.3		70	20.7		18
20	47	13.9		61	16.0		68	17.3		20
25	33	8.7		53	10.8		62	11.9		25
30				44	7.2		56	8.3		30
35				34	4.8		50	6.0		35
40				19	3.1		43	4.2		40
45							35	2.9		45
50							22	1.7		50
Telescoping sequence %										
Tel. 1		0			0			0		Tel. 1
Tel. 2		0			0			0		Tel. 2
Tel. 3		0			0			0		Tel. 3
Tel. 4		0			0			0		Tel. 4
Tel. 5		0			50			100		Tel. 5
<b>Code</b>	<b>0 XX 05 6</b>			<b>0 10 05 6</b>				<b>0 01 05 6</b>		<b>Code</b>

\*\* Over rear with superstructure swing lock pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

 <b>Tireload reaction force chart ATF 80-4</b>											
Working Radius (ft)	Tireload reaction force <b>F</b> in ton (US) Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on telescopic boom, load rating chart 99707788730 <b>Counterweight 0 lbs</b> <b>On tire, over rear</b>										Working Radius (ft)
	Boom length (ft)										
	35.4			47.9			60.0				
	Over rear			Over rear			Over rear				
	<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>		<b>m</b>	<b>F</b>			
10	42.0	<b>14.9</b>		42.5	<b>14.6</b>		43.0	<b>14.4</b>		10	
12	33.3	<b>14.0</b>		36.1	<b>14.3</b>		37.5	<b>14.4</b>		12	
14	26.0	<b>13.2</b>		28.4	<b>13.4</b>		29.9	<b>13.6</b>		14	
16	20.8	<b>12.6</b>		23.0	<b>12.8</b>		24.5	<b>12.9</b>		16	
18	17.2	<b>12.2</b>		19.3	<b>12.4</b>		20.7	<b>12.5</b>		18	
20	13.9	<b>11.6</b>		16.0	<b>11.7</b>		17.3	<b>11.8</b>		20	
25	8.7	<b>11.1</b>		10.8	<b>11.3</b>		11.9	<b>11.4</b>		25	
30				7.2	<b>11.0</b>		8.3	<b>11.1</b>		30	
35				4.8	<b>11.2</b>		6.0	<b>10.7</b>		35	
40				3.1	<b>10.6</b>		4.2	<b>10.6</b>		40	
45							2.9	<b>10.5</b>		45	
50							1.7	<b>10.4</b>		50	
Telescoping sequence %											
Tel. 1	0			0			0				Tel. 1
Tel. 2	0			0			0				Tel. 2
Tel. 3	0			0			0				Tel. 3
Tel. 4	0			0			0				Tel. 4
Tel. 5	0			50			100				Tel. 5

The chart shows the maximum existing tireload reaction forces in the worst condition, dynamic influences are not being taken into account.















**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force F in ton (US)												Working Radius (ft)									
	Lifting capacities m in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft, load rating chart 99707789906																					
	Counterweight 27,558 lbs On outriggers, 360° working area Outrigger base 23.62 ft																					
Boom length 35.4 ft to 147.0 ft				Boom length 35.4 ft to 147.0 ft				Boom length 147.0 ft to 159.1 ft				Boom length 35.4 ft to 159.1 ft										
Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 52.5 ft offset										
5°		20°		40°		5°		20°		40°		5°		20°		40°						
m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F					
35	13.9	26.3				13.0	24.9											35				
40	13.4	27.8	9.0	23.1		12.9	26.7	9.0	22.5									40				
45	12.7	29.2	8.6	24.5		12.4	28.1	8.6	23.7									45				
50	12.2	30.6	8.2	25.8	5.8	22.1	29.6	8.2	24.9	5.8	21.4	30.4	8.4	25.5	7.1	24.1		50				
55	11.7	32.0	7.8	26.9	5.7	23.4	31.0	7.8	26.0	5.7	22.6	31.8	8.1	26.8	6.8	25.2		55				
60	11.1	33.2	7.4	28.0	5.6	24.8	32.1	7.4	27.0	5.6	23.9	33.4	7.8	28.1	6.5	26.2	4.0	21.7	60			
65	10.4	34.2	7.2	29.3	5.3	25.8	33.0	7.2	28.2	5.3	24.8	34.6	7.4	29.2	6.2	27.1	3.9	22.7	65			
70	9.9	35.3	6.9	30.4	5.2	27.1	34.0	6.9	29.2	5.2	26.0	35.7	7.2	30.3	5.8	27.9	3.8	23.6	70			
75	9.4	36.3	6.7	31.6	5.1	28.4	34.9	6.7	30.3	5.1	27.2	36.6	6.9	31.3	5.4	28.7	3.7	24.4	75			
80	8.8	37.2	6.5	32.8	5.0	29.6	35.8	6.5	31.4	5.0	28.3	37.4	6.7	32.4	5.2	29.4	3.5	25.4	80			
85	8.4	38.1	6.3	34.0	5.0	31.0	36.5	6.3	32.5	5.0	29.6	38.2	6.5	33.8	5.1	30.5	3.4	26.5	85			
90	7.8	38.8	6.0	34.9	4.9	32.1	37.4	6.0	33.4	4.9	30.6	39.0	6.3	35.0	5.0	31.8	3.3	27.3	90			
95	7.0	39.0	5.8	36.0	4.8	33.2	38.3	5.8	34.3	4.8	31.6	39.1	6.2	36.1	4.9	33.0	3.1	28.1	95			
100	6.0	38.6	5.7	37.1	4.7	34.4	38.9	5.7	35.3	4.7	32.7	39.9	6.1	37.2	4.8	34.0	3.0	28.9	100			
110	4.3	38.1	4.8	38.2	4.7	37.1	38.4	5.4	37.6	4.7	35.3	4.8	38.4	5.2	38.4	4.7	36.4	2.8	30.7	110		
120	3.1	37.7	3.4	38.0	3.6	37.8	4.2	38.1	4.4	37.9	4.4	37.4	3.4	37.9	3.7	37.8	4.0	38.0	3.6	36.0	120	
130	1.8	37.4	2.1	37.4	2.2	37.4	3.0	37.6	3.2	37.6	3.4	37.7	2.3	37.6	2.6	37.5	2.8	37.5	3.3	37.4	130	
140			1.1	37.1	1.1	36.7	2.0	37.4	2.2	37.5	2.3	37.6	1.2	37.2	1.5	37.3	1.7	37.3	2.5	37.4	140	
150							1.2	37.1	1.3	37.3	1.3	37.3							1.6	37.1	150	
160																				1.2	37.3	160
Telescoping sequence %																						
Tel.1			100				50													100		Tel.1
Tel.2			100				100													100		Tel.2
Tel.3			100				100													100		Tel.3
Tel.4			100				100													100		Tel.4
Tel.5			50				100													100		Tel.5

08-02-2005 The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft

**Counterweight 27,558 lbs**

On outriggers, 360° working area

**Outrigger base 16.40 ft**

Working Radius (ft)

Working Radius (ft)	Boom length 35.4 ft to 147.0 ft												Boom length 147.0 ft to 159.1 ft												Boom length 35.4 ft to 159.1 ft											
	Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 52.5 ft offset				Fly jib 52.5 ft offset				Fly jib 52.5 ft offset											
	5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°					
35	79	13.9		79	13.0			79	13.0			79	13.0			79	13.0			79	13.0			79	13.0			79	13.0							
40	78	13.4	80	9.0	78	12.9	80	9.0	78	12.9	80	9.0	78	12.5	80	8.7	78	12.5	80	8.7	78	12.5	80	8.7	78	12.5	80	8.7	78	12.5	80	8.7				
45	76	12.7	78	8.6	76	12.4	78	8.6	76	12.4	78	8.6	76	12.2	78	8.4	76	12.2	78	8.4	76	12.2	78	8.4	76	12.2	78	8.4	76	12.2	78	8.4				
50	75	12.2	77	8.2	75	12.0	77	8.2	75	12.0	77	8.2	75	11.6	77	8.1	75	11.6	77	8.1	75	11.6	77	8.1	75	11.6	77	8.1	75	11.6	77	8.1				
55	73	11.4	75	7.8	73	11.5	75	7.8	73	11.5	75	7.8	73	11.1	75	7.7	73	11.1	75	7.7	73	11.1	75	7.7	73	11.1	75	7.7	73	11.1	75	7.7				
60	72	10.1	74	7.4	72	10.9	74	7.4	72	10.9	74	7.4	72	10.6	74	7.8	72	10.6	74	7.8	72	10.6	74	7.8	72	10.6	74	7.8	72	10.6	74	7.8				
65	70	8.4	72	7.2	70	9.4	72	7.2	70	9.4	72	7.2	70	8.8	74	7.4	70	8.8	74	7.4	70	8.8	74	7.4	70	8.8	74	7.4	70	8.8	74	7.4				
70	69	6.9	71	6.9	69	8.0	71	6.9	69	8.0	71	6.9	69	7.3	73	7.2	69	7.3	73	7.2	69	7.3	73	7.2	69	7.3	73	7.2	69	7.3	73	7.2				
75	67	5.7	69	6.3	67	6.8	69	6.7	67	6.8	69	6.7	67	6.1	69	6.1	67	6.1	69	6.1	67	6.1	69	6.1	67	6.1	69	6.1	67	6.1	69	6.1				
80	65	4.6	67	5.3	65	5.7	67	6.2	65	5.7	67	6.2	65	4.9	69	5.6	65	4.9	69	5.6	65	4.9	69	5.6	65	4.9	69	5.6	65	4.9	69	5.6				
85	63	3.7	65	4.2	63	4.7	65	5.2	63	4.7	65	5.2	63	4.0	67	4.6	63	4.0	67	4.6	63	4.0	67	4.6	63	4.0	67	4.6	63	4.0	67	4.6				
90	62	2.8	64	3.4	62	3.9	64	4.4	62	3.9	64	4.4	62	3.3	66	3.7	62	3.3	66	3.7	62	3.3	66	3.7	62	3.3	66	3.7	62	3.3	66	3.7				
95	60	2.1	62	2.6	60	3.2	62	3.6	60	3.2	62	3.6	60	2.5	64	3.0	60	2.5	64	3.0	60	2.5	64	3.0	60	2.5	64	3.0	60	2.5	64	3.0				
100	58	1.5	60	1.9	58	2.6	60	2.9	58	2.6	60	2.9	58	1.8	63	2.3	58	1.8	63	2.3	58	1.8	63	2.3	58	1.8	63	2.3	58	1.8	63	2.3				
110								56	1.7	57	2.1																									
120																																				
130																																				

Telescoping sequence %

Tel. 1	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 1
Tel. 2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 4
Tel. 5	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 5	
<b>Code</b>	<b>1 02 02 3</b>	<b>1 02 02 4</b>	<b>1 02 02 5</b>	<b>1 16 02 3</b>	<b>1 16 02 4</b>	<b>1 16 02 5</b>	<b>1 01 02 3</b>	<b>1 01 02 4</b>	<b>1 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>2 01 02 3</b>	<b>2 01 02 4</b>	<b>2 01 02 5</b>	<b>Code</b>		

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft,  
 load rating chart 99707789907  
**Counterweight 27,558 lbs**  
 On outriggers, 360° working area  
**Outrigger base 16.40 ft**

Working Radius (ft)

Working Radius (ft)

Working Radius (ft)	Boom length 35.4 ft to 147.0 ft												Boom length 147.0 ft to 159.1 ft												Boom length 35.4 ft to 159.1 ft											
	Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 52.5 ft offset											
	5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°									
35	13.9	28.5		13.0	26.7			13.0	26.7			13.0	29.9			13.0	29.9			7.1	26.0									35						
40	13.4	30.6	9.0	12.9	29.2	9.0	23.7	12.5	32.1	8.7	26.4	12.5	34.2	8.4	27.9	12.5	34.2	8.4	27.9	6.8	27.5								40							
45	12.7	32.5	8.6	12.4	31.1	8.6	25.4	12.4	33.1	8.2	27.0	11.6	36.0	8.1	29.5	11.6	36.0	8.1	29.5	5.8	25.0								45							
50	12.2	34.4	8.2	12.0	33.1	8.2	27.0	11.5	34.9	7.8	28.5	10.6	37.1	7.8	31.3	10.6	37.1	7.8	31.3	5.7	26.6	4.0	23.0						50							
55	11.4	36.0	7.8	11.5	34.9	7.8	28.5	10.9	36.2	7.4	29.8	9.4	36.4	7.2	31.5	9.4	36.4	7.2	31.5	5.6	25.8	5.5	28.2						55							
60	10.1	36.9	7.4	10.9	36.2	7.4	29.8	9.4	36.4	7.2	31.5	8.0	36.2	6.9	32.8	8.0	36.2	6.9	32.8	5.3	27.0	5.4	29.7						60							
65	8.4	36.3	7.2	9.4	36.4	7.2	31.5	8.0	36.2	6.9	32.8	5.1	30.2	6.1	35.9	5.1	30.2	6.1	35.9	5.2	31.4	5.4	32.3	3.7	26.7	2.4	22.0	75								
70	6.9	36.1	6.9	8.0	36.2	6.9	32.8	5.7	35.6	6.2	35.4	4.7	35.3	4.0	35.6	4.7	35.3	4.0	35.6	5.0	31.7	5.2	33.1	3.5	27.9	2.4	23.3	80								
75	5.7	35.8	6.3	5.7	35.6	6.2	35.4	4.7	35.3	5.2	35.1	5.0	33.5	4.6	35.5	5.0	33.5	4.6	35.5	4.6	35.5	5.1	34.6	3.4	29.4	2.3	24.4	85								
80	4.6	35.5	5.3	4.7	35.3	5.0	35.3	3.9	35.1	4.4	35.0	4.6	34.5	3.3	35.1	4.6	34.5	3.3	35.1	4.0	34.9	4.4	35.0	3.3	30.5	2.3	25.7	90								
85	3.7	35.2	4.2	3.9	35.2	3.9	35.1	3.2	35.0	3.6	34.9	4.0	34.9	2.5	35.0	4.0	34.9	2.5	35.0	3.0	35.1	3.5	34.9	3.1	31.6	2.3	27.1	95								
90	2.8	35.3	3.4	3.2	35.0	3.1	35.0	2.6	35.0	2.9	34.9	3.3	35.0	1.8	35.0	3.3	35.0	1.8	35.0	2.3	34.8	2.8	34.8	3.0	32.6	2.2	28.5	100								
95	2.1	35.0	2.6	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	100							
100	1.5	34.8	1.9	1.7	34.8	1.9	34.8	1.7	34.8	1.7	34.8	2.1	34.7	1.5	34.9	2.1	34.7	1.5	34.9	1.9	35.0	1.9	35.0	2.5	34.6	2.1	31.3	110								
110																													120							
120																													130							
130																													130							

Telescoping sequence %

Tel.1	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel.1
Tel.2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel.2
Tel.3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel.3
Tel.4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel.4
Tel.5	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel.5

08-02-2005 The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.



**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft

**Counterweight 12,346 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)

Working Radius (ft)

Working Radius (ft)	Boom length 35.4 ft to 147.0 ft												Boom length 147.0 ft to 159.1 ft												Boom length 35.4 ft to 159.1 ft											
	Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 52.5 ft offset															
	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°												
35	79	13.9		79	13.0																															
40	78	13.4	80	9.0			79	13.0																												
45	76	12.7	78	8.6			78	12.5	80	8.7																										
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	8.4																				
55	73	11.7	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.8	77	8.1	78	5.8	77	6.8																
60	72	11.1	74	7.4	76	5.6	72	11.0	74	7.4	76	5.6	74	11.5	76	7.8	77	5.7	76	6.5	79	4.0														
65	70	10.4	72	7.2	74	5.3	70	10.4	72	7.2	74	5.3	72	11.1	74	7.4	75	5.5	75	6.2	77	3.9														
70	69	9.6	71	6.9	73	5.2	69	9.9	71	6.9	73	5.2	71	10.0	73	7.2	74	5.4	74	5.8	76	3.8														
75	67	8.3	69	6.7	71	5.1	67	9.1	69	6.7	71	5.1	69	8.7	71	6.9	72	5.2	72	5.4	75	3.7	78	2.4												
80	65	6.9	67	6.4	69	5.0	65	8.1	67	6.5	69	5.0	68	7.4	69	6.7	71	5.2	71	5.1	74	3.5	77	2.4												
85	63	5.7	65	6.1	67	5.0	63	6.9	65	6.3	67	5.0	66	6.2	67	6.5	69	5.1	69	4.9	72	3.4	75	2.3												
90	62	4.7	64	5.3	65	4.9	62	6.0	64	6.0	65	4.9	65	5.2	66	5.6	68	5.0	68	4.7	71	3.3	74	2.3												
95	60	3.8	62	4.4	63	4.6	60	5.0	62	5.5	63	4.8	63	4.3	64	4.7	66	4.8	66	4.5	69	3.1	72	2.3												
100	58	3.0	60	3.5	61	4.0	58	4.2	60	4.7	61	4.6	61	3.5	63	3.9	64	4.4	65	4.3	68	3.0	71	2.2												
110	54	1.6	56	2.1	57	2.4	54	2.8	56	3.1	57	3.5	57	2.1	59	2.5	60	2.9	61	3.4	64	2.8	67	2.1												
120							49	1.7	51	2.0	52	2.2																								
130																																				
140																																				

Telescoping sequence %

Tel. 1	100	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 1
Tel. 2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 2
Tel. 3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3
Tel. 4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 4
Tel. 5	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 5
<b>Code</b>	<b>1 02 04 0</b>	<b>1 02 04 1</b>	<b>1 02 04 2</b>	<b>1 16 04 0</b>	<b>1 16 04 1</b>	<b>1 16 04 2</b>	<b>1 16 04 2</b>	<b>1 16 04 2</b>	<b>1 16 04 2</b>	<b>1 01 04 0</b>	<b>1 01 04 1</b>	<b>1 01 04 1</b>	<b>1 01 04 2</b>	<b>2 01 04 0</b>	<b>2 01 04 0</b>	<b>2 01 04 1</b>	<b>2 01 04 1</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>2 01 04 2</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US)																		Working Radius (ft)						
	Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft, load rating chart 99707789908																								
	Counterweight <b>12,346 lbs</b> On outriggers, 360° working area Outrigger base <b>23.62 ft</b>																								
Boom length 35.4 ft to 147.0 ft						Boom length 147.0 ft to 159.1 ft						Boom length 35.4 ft to 159.1 ft													
Fly jib 29.5 ft offset						Fly jib 29.5 ft offset						Fly jib 29.5 ft offset						Fly jib 52.5 ft offset							
5°		20°		40°		5°		20°		40°		5°		20°		40°		5°		20°		40°			
m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F		
35	13.9	26.5				13.0	25.2																	35	
40	13.4	27.5	9.0	22.8		12.9	26.4	9.0	22.2		13.0	26.9												40	
45	12.7	29.4	8.6	24.5		12.4	28.3	8.6	23.7		12.5	29.0	8.7	24.4										45	
50	12.2	30.3	8.2	25.4	5.8	12.0	29.2	8.2	24.5	5.8	20.3	12.2	29.9	8.4	25.2									50	
55	11.7	31.2	7.8	26.2	5.7	11.5	30.1	7.8	25.3	5.7	21.8	11.8	31.0	8.1	26.1	5.8	22.4				7.1	23.0		55	
60	11.1	32.9	7.4	27.6	5.6	11.0	31.7	7.4	26.6	5.6	23.4	11.5	32.9	7.8	27.6	5.7	24.1				6.8	24.5	4.0	60	
65	10.4	34.2	7.2	29.2	5.3	10.4	33.0	7.2	28.1	5.3	24.8	11.1	34.7	7.4	29.1	5.5	25.7				6.2	27.1	3.9	65	
70	9.6	34.7	6.9	29.9	5.2	9.9	33.6	6.9	28.8	5.2	25.5	10.0	34.9	7.2	29.8	5.4	26.5				5.8	27.6	3.8	70	
75	8.3	35.2	6.7	30.8	5.1	9.1	34.3	6.7	29.5	5.1	26.3	8.7	35.2	6.9	30.6	5.2	27.2				5.4	28.0	3.7	75	
80	6.9	34.5	6.4	32.2	5.0	8.1	34.8	6.5	30.9	5.0	27.9	7.4	34.5	6.7	32.1	5.2	28.8				5.1	29.0	3.5	80	
85	5.7	34.0	6.1	33.8	5.0	6.9	34.4	6.3	32.3	5.0	29.4	6.2	34.0	6.5	33.6	5.1	30.4				4.9	30.1	3.4	85	
90	4.7	33.8	5.3	33.3	4.9	6.0	34.0	6.0	32.8	4.9	30.1	5.2	33.8	5.6	33.4	5.0	31.2				4.7	30.9	3.3	90	
95	3.8	33.6	4.4	33.5	4.6	5.0	33.8	5.5	33.5	4.8	30.9	4.3	33.6	4.7	33.4	4.8	32.0				4.5	31.3	3.1	95	
100	3.0	33.1	3.5	33.1	4.0	4.2	33.5	4.7	33.5	4.6	32.4	3.5	33.3	3.9	33.4	4.4	33.4				4.3	32.4	3.0	100	
110	1.6	32.4	2.1	32.8	2.4	2.8	32.8	3.1	33.0	3.5	32.9	2.1	32.8	2.5	32.7	2.9	32.7				3.4	33.0	2.8	110	
120						1.7	32.3	2.0	32.2	2.2	32.3			1.3	32.5	1.7	32.6				2.1	32.3	2.6	120	
130																						1.8	32.3	2.0	130
140																						32.2	1.2	31.9	140
Telescoping sequence %																									
Tel.1	100						50						100						100						Tel.1
Tel.2	100						100						100						100						Tel.2
Tel.3	100						100						100						100						Tel.3
Tel.4	100						100						100						100						Tel.4
Tel.5	50						100						100						100						Tel.5

08-02-2005 The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.





**Outrigger reaction force chart ATF 80-4**

Working Radius (ft)	Outrigger reaction force <b>F</b> in ton (US)												Working Radius (ft)								
	Lifting capacities <b>m</b> in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft, load rating chart 99707789909																				
	Counterweight <b>12,346 lbs</b> On outriggers, 360° working area Outrigger base <b>16.40 ft</b>																				
Fly jib 29.5 ft offset Boom length 35.4 ft to 147.0 ft				Fly jib 29.5 ft offset Boom length 147.0 ft to 159.1 ft				Fly jib 52.5 ft offset Boom length 35.4 ft to 159.1 ft													
5°		20°		40°		5°		20°		40°		5°		20°		40°					
m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F				
35	13.9	29.6				13.0	27.9											35			
40	13.3	31.1	9.0	25.0		12.9	29.6	9.0	24.2									40			
45	12.3	33.4	8.6	27.3		12.4	32.1	8.6	26.3				8.7	27.2				45			
50	10.1	32.8	8.2	26.2	5.8	22.7	32.3	8.2	27.4	5.8	21.8	10.5	32.8	8.4	29.4		7.1	25.4	50		
55	8.0	32.4	7.8	29.5	5.7	24.9	32.5	7.8	28.4	5.7	23.9	8.3	32.5	8.1	30.5	5.8	24.7	27.4	55		
60	6.2	31.7	7.2	31.5	5.6	27.2	31.9	7.4	30.2	5.6	26.1	6.6	31.7	7.5	31.5	5.7	26.9	29.1	60		
65	4.8	31.2	5.7	31.3	5.3	29.2	31.4	6.6	31.4	5.3	27.8	5.1	31.2	6.0	31.3	5.5	29.0	30.9	65		
70	3.7	31.0	4.5	31.1	4.9	30.2	4.7	31.1	5.5	31.1	5.2	29.0	4.0	31.1	4.8	31.2	5.2	30.0	30.9	70	
75	2.7	30.8	3.4	30.9	4.1	31.0	3.7	31.0	4.4	31.0	4.8	29.9	3.0	31.0	3.7	31.0	4.5	31.0	3.8	75	
80	1.8	30.5	2.4	30.5	3.1	30.7	2.8	30.7	3.4	30.6	4.0	30.7	2.1	30.7	2.8	30.7	3.4	30.7	3.5	80	
85			1.6	30.5	2.2	30.4	2.0	30.6	2.6	30.6	3.1	30.4	1.4	30.6	2.0	30.5	2.6	30.4	3.4	85	
90				30.4	1.5	30.4	1.4	30.5	1.9	30.3	2.4	30.3			1.3	30.4	1.8	30.3	2.9	90	
95									1.2	30.3	1.7	30.2							2.2	95	
100																			1.6	100	
110																				1.3	110
Telescoping sequence %																					
Tel. 1			100					50											100	Tel. 1	
Tel. 2			100					100											100	Tel. 2	
Tel. 3			100					100											100	Tel. 3	
Tel. 4			100					100											100	Tel. 4	
Tel. 5			50					100											100	Tel. 5	

08-02-2005 The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.





**Load rating chart ATF 80-4**

Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft

**Counterweight 0 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)

Boom length 35.4 ft to 147.0 ft

Boom length 147.0 ft to 159.1 ft

Boom length 35.4 ft to 147.0 ft

Boom length 35.4 ft to 147.0 ft

Fly jib 29.5 ft  
offset

Fly jib 29.5 ft  
offset

Fly jib 29.5 ft  
offset

Fly jib 52.5 ft  
offset

5°

20°

40°

5°

20°

40°

5°

20°

40°

79

13.9

79

79

79

79

79

35

40

13.4

78

78

78

78

78

40

45

12.7

76

76

76

76

76

45

50

12.2

75

75

77

77

79

50

55

11.1

73

73

75

77

75

55

60

9.4

72

72

74

74

74

60

65

7.5

70

70

72

72

72

65

70

5.9

69

69

71

71

71

70

75

4.6

67

67

69

71

71

75

80

3.5

65

65

67

69

69

80

85

2.6

63

63

65

67

67

85

90

1.7

62

62

64

65

65

90

95

1.0

60

60

62

63

63

95

100

60

60

61

61

63

63

100

110

60

60

61

61

63

64

110

120

60

60

61

61

63

64

120

Telescoping sequence %

Tel. 1	100	50	100	100	100	100	100	100	Tel. 1				
Tel. 2	100	100	100	100	100	100	100	100	Tel. 2				
Tel. 3	100	100	100	100	100	100	100	100	Tel. 3				
Tel. 4	100	100	100	100	100	100	100	100	Tel. 4				
Tel. 5	50	100	100	100	100	100	100	100	Tel. 5				
<b>Code</b>	<b>1 02 05 0</b>	<b>1 02 05 1</b>	<b>1 02 05 2</b>	<b>1 16 05 0</b>	<b>1 16 05 1</b>	<b>1 16 05 2</b>	<b>1 01 05 0</b>	<b>1 01 05 1</b>	<b>1 01 05 2</b>	<b>2 01 05 0</b>	<b>2 01 05 1</b>	<b>2 01 05 2</b>	<b>Code</b>

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.



**Outrigger reaction force chart ATF 80-4**

Outrigger reaction force **F** in ton (US)  
 Lifting capacities **m** in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft,  
 load rating chart 99707788735

**Counterweight 0 lbs**

On outriggers, 360° working area

**Outrigger base 23.62 ft**

Working Radius (ft)	Boom length 35.4 ft to 147.0 ft												Boom length 147.0 ft to 159.1 ft												Boom length 35.4 ft to 159.1 ft											
	Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 29.5 ft offset				Fly jib 52.5 ft offset											
	5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°		5°	20°	40°									
m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F	m	F					
35	13.9	26.4		13.0	25.1																									35						
40	13.4	27.5	9.0	12.9	26.4	9.0	22.1					13.0	26.9																40							
45	12.7	29.3	8.6	12.4	28.2	8.6	23.7					12.5	28.9	8.7	24.4														45							
50	12.2	30.3	8.2	12.0	29.2	8.2	24.5	5.8	20.3			12.2	29.9	8.4	25.2								7.1	23.0					50							
55	11.1	31.2	7.8	11.5	30.1	7.8	25.2	5.7	21.8	11.3	31.0	8.1	26.0	5.8	22.4								6.8	24.5					55							
60	9.4	31.1	7.4	10.7	31.5	7.4	26.6	5.6	23.4	9.8	31.3	7.8	27.6	5.7	24.1								6.5	25.7	4.0	21.3			60							
65	7.5	30.3	7.2	8.7	30.6	7.2	28.1	5.3	24.7	7.8	30.3	7.4	29.1	5.5	25.6								6.2	27.1	3.9	22.5			65							
70	5.9	30.0	6.5	7.2	30.3	6.9	28.8	5.2	25.5	6.4	30.0	6.8	29.4	5.4	26.4								5.8	27.5	3.8	23.1			70							
75	4.6	29.6	5.5	5.8	29.9	6.4	29.5	5.1	26.3	5.1	29.7	5.8	29.8	5.2	27.1								5.4	28.0	3.7	23.8	2.4	20.1	75							
80	3.5	29.1	4.3	4.7	29.4	5.5	29.7	5.0	27.8	4.0	29.4	4.7	29.4	5.0	28.8								5.0	29.0	3.5	25.0	2.4	21.5	80							
85	2.6	28.8	3.3	3.8	29.1	4.4	29.1	4.9	29.2	2.9	28.7	3.7	29.1	4.3	29.2								4.3	29.2	3.4	26.2	2.3	22.7	85							
90	1.7	28.5	2.4	3.0	28.9	3.5	29.0	4.0	29.0	2.2	28.6	2.8	28.8	3.4	29.0								3.5	29.0	3.3	26.8	2.3	23.4	90							
95	1.0	28.4	1.7	2.2	28.7	2.7	28.9	3.1	28.8	1.5	28.5	2.0	28.6	2.6	28.8								2.8	28.8	3.1	27.3	2.3	24.1	95							
100			1.0	1.4	28.3	2.0	28.5	2.3	28.4	1.0	28.5	1.2	28.2	1.8	28.4								2.1	28.6	2.9	28.5	2.2	25.3	100							
110								1.0	28.2																1.7	28.2	2.1	27.9	110							
120																											1.2	27.9	120							
Telescoping sequence %																																				
Tel.1																														Tel.1						
Tel.2																														Tel.2						
Tel.3																														Tel.3						
Tel.4																														Tel.4						
Tel.5																														Tel.5						

10-28-2003    The chart shows the maximum existing outrigger reaction forces in the worst condition, dynamic influences are not being taken into account.

**GENERAL**

1. Total rated loads shown on the TADANO LOAD RATING CHART apply only to the machine as originally manufactured and normally equipped by TADANO. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the operation, safety and maintenance manual supplied with the machine. If this manual is missing, order replacement through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) safety standards for cranes.

**SET UP**

1. Total rated loads shown on the TADANO LOAD RATING CHART are the maximum allowable crane capacities and are based on the machine standing level on firm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats to spread the load to a larger bearing surface.
2. For on outrigger operation, outriggers shall be extended to the dimension according to the TADANO LOAD RATING CHART and secured by pins with tires free of supporting surface, before operating crane.
3. If counterweight is moved down from stop during crane operation ( indicator "counterweight center" goes out), all crane movements are switched off. Counterweight must raised again to its stop.

**OPERATION**

1. Total rated loads with outriggers fully extended do not exceed 85% of the tipping loads. Total rated loads with outriggers half extended are determined from the formular:  
total rated load = (tipping load -0,1 tip reaction) / 1.25
2. The crane's structural steelwork is in accordance with DIN 15018, part 3. Design and construction of the crane comply with DIN 15018, part 2 and with F.E.M. regulations.
3. Total rated loads above the bold lines in the TADANO LOAD RATING CHART are based on crane strength and those below the bold lines on crane stability.
4. Total rated loads include the weight of the main hook block, auxiliary hook ball, sling and other auxiliary lifting devices and all their weights shall be subtracted from the listed capacities to obtain the net load to be lifted.

Hookball/Hookblock (ton)	6.6	22.0			44.1				69.4				110.0			
No. of parts of line	1	2	3	4	5	6	7	8	9	10	11	12	14	16	17	
Max. lifting capacity (ton)	6.3	13.4	20.2	26.9	33.1	39.4	44.1	51.1	57.0	62.6	68.5	73.6	84.4	95.1	100.0	
Weight (lbs)	330	440			880				1,325				2,000			

5. Total rated loads are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, operating speeds, side loads, etc. Side pull on boom or jib is extremely dangerous.
6. Total rated loads do not account for wind on lifted load or boom. Total rated loads and boom length shall be appropriately reduced, when wind velocity is above 22 mph ( 32 ft/sec. ).
7. Total rated loads at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
8. Do not operate at boom lengths beyond radii or boom angles where no capacities are shown. Crane may overturn without any load on the hook.
9. Slewing of the superstructure is admissible only when the crane is supported on half or fully extended outriggers.

10. The lifting capacity ratings specified in the TADANO LOAD RATING CHART apply to the telescopic boom without extendible fly jib fixed in transport position or working position. If the extendible fly jib is secured to the telescopic boom in transport position or working position, the lifting capacities of the telescopic boom are reduced by the values specified below. The weight of the extendible fly jib (2,200 lbs) is detected in terms of a load, and the safe load indicator will shut off earlier.

29.5 ft / 52.5 ft extendible fly jib, mounted in transport position	900 lbs
29.5 ft extendible fly jib, mounted to the boom head	2,200 lbs
52.5 ft extendible fly jib, mounted to the boom head	3,310 lbs

11. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
12. Load per part line should not exceed 13,500 lbf for the main winch and 13,500 lbf for the auxiliary winch.
13. Loaded boom angles are approximate. The boom angle before loading should be greater to account for deflection.
14. Extension or retraction of the telescopic boom with loads may be attempted within the limits of the TADANO LOAD RATING CHART. The ability to telescope loads is limited by hydraulic pressure, boom angle, boom length, crane maintenance, etc.
15. When erecting or stowing the extendible fly jib, be sure to retain it by hand or by other means to prevent its free movement.
16. Use the Anti-Two Block (OVERWIND CUTOUT) disable switch when erecting or stowing the extendible fly jib and stowing the hook block. While the switch is pushed, the hoist will not stop, even when an overwind condition occurs.
17. The working radius specified in the TADANO LOAD RATING CHARTS for the extendible fly jib apply only if the telescopic boom is extended according to the TADANO LOAD RATING CHARTS. If one or more elements of the telescopic boom are retracted partially or completely, the specified boom angles will be decisive in determining total rated lifting capacities.
18. When lifting a load by using the extendible fly jib (auxiliary hoist) and telescopic boom (main hoist) simultaneously, do the following:
- A) Select the correct program for the safe load indicator in accordance with jib length, jib offset angle, counterweight and outrigger base.
  - B) Before starting the operation, make sure that the weight of the load is within the total rated load for the extendible fly jib.
19. Working with Single Top  
Operation with the single top is allowed with the main winch and the auxiliary winch (2nd winch). The maximum allowed capacity is limited by the selected S.L.I. code for main boom operation according to existing counterweight and outrigger base at one side and by the single line pull which is limited by hydraulic pressure at the other side.  
For operations with the single top mounted, use the TADANO LOAD RATING CHART for the telescopic boom in accordance with existing counterweight and outrigger base to find the total rated lifting capacity and also select the correct S.L.I. code for the telescopic boom in accordance with the existing counterweight and outrigger base. Find the total rated lifting capacity based on boom length and working radius. From that value, subtract 1,100 lbs and the weights of all lifting equipment used including hook block, sling and other auxiliary lifting devices.  
The result (<total rated lifting capacity> - <1,100 lbs> - <lifting equipment>) is the total rated lifting capacity for a single top lift.

**Definitions**

- Working Radius: Horizontal distance from a projection of the axis of rotation to supporting surface before loading to the center of the vertical hoist line or tackle with load applied. The deflection of the boom due to its deadweight and the rated load are taken into account.
- Loaded Boom Angle: The angle between the boom base section and the horizontal, after lifting the total rated load at the working radius.
- Working Area: Area measured in a circular arc about the centerline of rotation.
- Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
- Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

**WARNING AND OPERATING INSTRUCTIONS FOR ON TIRE CAPACITIES**

1. Total rated lifting capacities on tires are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J-765.
2. Total rated lifting capacities shown in the TADANO LOAD RATING CHART are based on the condition that the crane is set on firm level supporting surfaces with suspension let down to block. Those above the bold lines are based on tire capacity and those below the bold lines on crane stability. They are based on actual load radius increased by tire deformation and boom deflection.
3. Total rated lifting capacities are based on proper tire inflation, capacity and condition. Damaged tires are hazardous to safe operation of the crane.
4. Tires shall be inflated to correct air pressure, acc. to tire size at carrier:

Tire	Air Pressure
14.00 R 25	145 psi (10 kgf/cm <sup>2</sup> )
16.00 R 25	130 psi (9 kgf/cm <sup>2</sup> )
20.5 R 25	100 psi (7 kgf/cm <sup>2</sup> )

5. On tire lifting with "extendible fly jib" is not permitted.
6. When making a lift on tires, set the parking brake.
7. Traveling with the load is permitted only if the following conditions exist:

Machine is set on firm level supporting surface; tires inflated to specified pressure; boom must be centered over the rear of the machine; superstructure swing lock pin engaged; slewing brake engaged; maximum boom length not to exceed 60.0 ft; lifted load kept as close to the ground as possible and fastened to the chassis to prevent the lifted load from swinging or oscillating; travel slowly with a creeping speed not to exceed 0.9 mph; and especially avoid any abrupt steering, accelerating or braking.

If possible, extend the outriggers and lower the outrigger floats to just above ground level.

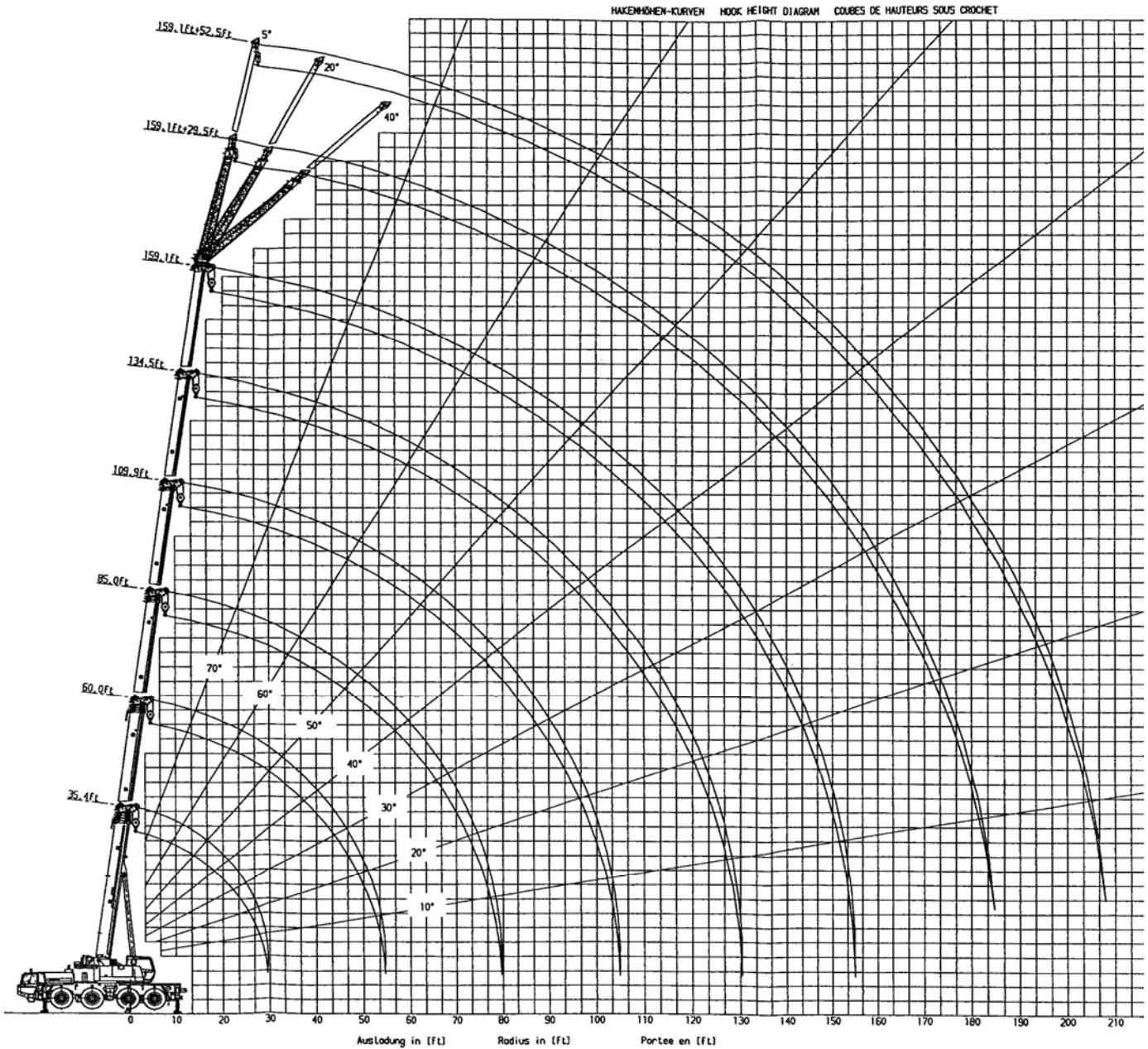
8. Do not operate the crane while carrying the load.

**Safe Load Indicator**

The Safe Load Indicator is intended as an aid to the operator. Under no condition should it be relied upon to replace use of TADANO LOAD RATING CHARTS and Operating Instructions. Sole reliance upon the Safe Load Indicator Aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.



with fly jib 29.5 ft / 52.5 ft



**NOTE :** Operating Radius is measured in feet from Axis of Rotation. Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.