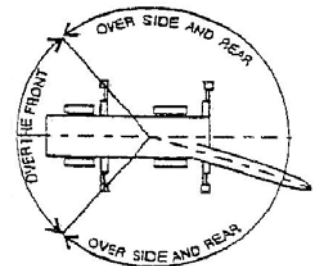


# **ROUGH TERRAIN CRANE**

**TR-200M-5-00101**

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**  
**WITH OUTRIGGERS SET - BOOM**

OUTRIGGERS FULLY EXTENDED (6.0m): 360°						
A (m) \ B (m)	7.0m	11.7m	16.4m	21.1m	25.8m	30.5m
2.5	20.0	12.0	12.0	9.0		
3.0	20.0	12.0	12.0	9.0		
3.5	20.0	12.0	12.0	9.0	7.0	
4.0	18.5	12.0	12.0	9.0	7.0	
4.5	16.5	12.0	12.0	9.0	7.0	5.0
5.0	14.2	12.0	12.0	9.0	7.0	5.0
5.5		12.0	11.9	9.0	7.0	5.0
6.0		12.0	11.1	9.0	7.0	5.0
6.5		11.3	10.35	8.5	7.0	5.0
7.0		10.0	9.7	8.1	6.65	5.0
8.0		7.85	7.45	7.2	5.95	4.65
9.0		6.3	5.9	6.4	5.3	4.2
10.0			4.75	5.2	4.75	3.8
11.0			3.9	4.35	4.3	3.45
12.0			3.2	3.65	3.85	3.15
13.0			2.7	3.1	3.35	2.9
14.0			2.25	2.65	2.9	2.65
15.0				2.25	2.5	2.45
16.0				1.9	2.15	2.25
17.0				1.6	1.85	2.0
18.0				1.35	1.6	1.75
19.0				1.15	1.4	1.55
20.0					1.2	1.35
22.0					0.9	1.05
24.0					0.75	0.8
26.0					(23.0m)	0.55
28.0						0.4
a (°)	0 ~ 82					



WORKING RADIUS DIAGRAM

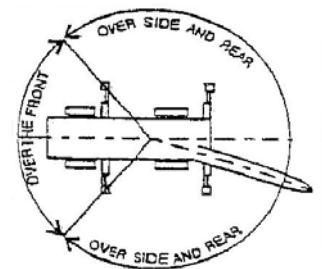
A : BOOM LENGTH (m)  
 B : WORKING RADIUS (m)  
 a : Boom angle range  
 (for unladen condition)

**TADANO TR-200M-5-00101  
HYDRAULIC ROUGH TERRAIN CRANE  
TOTAL RATED LOAD IN KILOGRAMS**

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.

**WITH OUTRIGGERS SET – BOOM**

OUTRIGGERS MIDDLE EXTENDED (5.6m): Over sides							
A (m) \ B (m)	7.0m	11.7m	16.4m	21.1m	25.8m	30.5m	
2.5	20.0	12.0	12.0	9.0			
3.0	20.0	12.0	12.0	9.0			
3.5	20.0	12.0	12.0	9.0	7.0		
4.0	18.5	12.0	12.0	9.0	7.0		
4.5	16.5	12.0	12.0	9.0	7.0	5.0	
5.0	14.2	12.0	12.0	9.0	7.0	5.0	
5.5		12.0	11.9	9.0	7.0	5.0	
6.0		12.0	11.1	9.0	7.0	5.0	
6.5		10.3	10.1	8.5	7.0	5.0	
7.0		8.9	8.8	8.1	6.65	5.0	
8.0		6.9	6.75	7.2	5.95	4.65	
9.0		5.5	5.35	5.8	5.3	4.2	
10.0			4.3	4.75	4.75	3.8	
11.0			3.5	3.95	4.15	3.45	
12.0			2.9	3.3	3.6	3.15	
13.0			2.35	2.75	3.05	2.9	
14.0			1.95	2.3	2.6	2.65	
15.0				1.95	2.25	2.35	
16.0				1.65	1.9	2.1	
17.0				1.4	1.65	1.8	
18.0				1.15	1.4	1.55	
19.0				1.0	1.2	1.35	
20.0					1.0	1.15	
22.0					0.7	0.85	
24.0					0.6	0.6	
26.0					(23.0m)	0.4	
a (°)	0~82						26~82



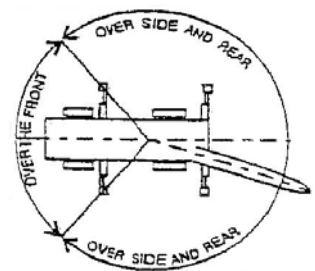
WORKING RADIUS DIAGRAM

A : BOOM LENGTH (m)  
B : WORKING RADIUS (m)  
a : Boom angle range  
(for unladen condition)

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**

**WITH OUTRIGGERS SET – BOOM**

OUTRIGGERS MIDDLE EXTENDED (4.7m): Over sides						
A (m) B (m)	7.0m	11.7m	16.4m	21.1m	25.8m	30.5m
2.5	20.0	12.0	12.0	9.0		
3.0	20.0	12.0	12.0	9.0		
3.5	20.0	12.0	12.0	9.0	7.0	
4.0	18.5	12.0	12.0	9.0	7.0	
4.5	16.5	12.0	12.0	9.0	7.0	5.0
5.0	13.0	12.0	12.0	9.0	7.0	5.0
5.5		10.4	10.2	9.0	7.0	5.0
6.0		8.8	8.7	9.0	7.0	5.0
6.5		7.5	7.35	7.9	7.0	5.0
7.0		6.5	6.4	6.9	6.65	5.0
8.0		5.05	4.85	5.4	5.55	4.65
9.0		3.95	3.8	4.3	4.55	4.2
10.0			3.0	3.45	3.75	3.8
11.0			2.4	2.8	3.15	3.25
12.0			1.9	2.3	2.6	2.75
13.0			1.5	1.9	2.2	2.35
14.0			1.15	1.55	1.8	1.95
15.0				1.25	1.5	1.65
16.0				1.0	1.25	1.4
17.0				0.8	1.05	1.2
18.0				0.6	0.85	1.0
19.0				0.45	0.65	0.8
20.0					0.5	0.65
22.0						0.4
a (°)	0-82			34-82		40-82

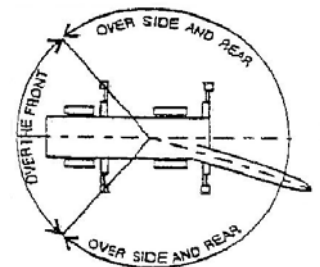


**WORKING RADIUS DIAGRAM**

A : BOOM LENGTH (m)  
 B : WORKING RADIUS (m)  
 a : Boom angle range  
 (for unladen condition)

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**  
**WITH OUTRIGGERS SET – BOOM**

OUTRIGGERS MINIMUM EXTENDED (3.6m): Over sides						
A (m) \ B (m)	7.0m	11.7m	16.4m	21.1m	25.8m	30.5m
2.5	20.0	12.0	12.0	9.0		
3.0	20.0	12.0	12.0	9.0		
3.5	16.0	12.0	12.0	9.0	7.0	
4.0	12.3	12.0	11.7	9.0	7.0	
4.5	9.8	9.6	9.4	9.0	7.0	5.0
5.0	7.7	7.8	7.65	8.0	7.0	5.0
5.5		6.5	6.3	6.8	7.0	5.0
6.0		5.5	5.35	5.85	6.2	5.0
6.5		4.7	4.6	5.05	5.35	5.0
7.0		4.1	3.95	4.4	4.7	4.7
8.0		3.1	3.0	3.4	3.7	3.85
9.0		2.35	2.25	2.65	2.95	3.1
10.0			1.7	2.05	2.35	2.5
11.0			1.2	1.6	1.85	2.0
12.0			0.8	1.25	1.45	1.65
13.0			0.5	0.95	1.15	1.35
14.0				0.65	0.9	1.05
15.0				0.45	0.7	0.85
16.0					0.5	0.65
17.0						0.5
a (°)	0~82		26~82	39~82	48~82	54~82



**WORKING RADIUS DIAGRAM**

A : BOOM LENGTH (m)  
 B : WORKING RADIUS (m)  
 a : Boom angle range  
 (for unladen condition)

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**CHART 5: TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**

**JIB**

OUTRIGGERS FULLY EXTENDED (6.0m): 360°						
E (°)	30.5m Boom + 3.8m Jib					
	5°		25°		45°	
C D	B (m)	M (t)	B (m)	M (t)	B (m)	M (t)
82	4.4	3.0	6.0	2.0	6.9	1.4
80	5.6	3.0	7.2	2.0	8.1	1.4
75	8.6	3.0	10.3	2.0	11.1	1.4
73	9.8	2.6	11.4	2.0	12.2	1.4
70	11.4	2.3	13.2	1.9	13.8	1.37
65	14.1	1.85	15.8	1.65	16.4	1.33
60	16.7	1.5	18.3	1.4	18.9	1.3
55	19.1	1.25	20.6	1.2	21.1	1.15
50	21.5	1.05	22.8	1.0	23.1	1.0
45	23.5	0.75	24.7	0.75	25.0	0.75
40	25.4	0.55	26.4	0.55		
35	27.1	0.4	27.9	0.4		
A (°)	34~82				44~82	

- B = Working radius
- C = Jib length
- D = Jib offset
- E = Boom angle
- M = Total rated loads
- A = Boom angle range (for the unladen condition)

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**CHART 5: TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**

**JIB**

OUTRIGGERS MIDDLE EXTENDED (5.6m): Over sides						
C D	30.5m Boom + 3.8m Jib					
	5°		25°		45°	
E (°)	B (m)	M (t)	B (m)	M (t)	B (m)	M (t)
82	4.4	3.0	6.0	2.0	6.9	1.4
80	5.6	3.0	7.2	2.0	8.1	1.4
75	8.6	3.0	10.3	2.0	11.1	1.4
73	9.8	2.6	11.4	2.0	12.2	1.4
70	11.4	2.3	13.2	1.9	13.8	1.37
65	14.1	1.85	15.8	1.65	16.4	1.33
60	16.7	1.5	18.3	1.4	18.9	1.3
55	19.1	1.2	20.6	1.15	21.1	1.15
50	21.4	0.85	22.7	0.85	23.1	0.85
45	23.5	0.6	24.7	0.6	24.9	0.6
40	25.4	0.4	26.4	0.4		
A (°)	39-82				44-82	

- B = Working radius
- C = Jib length
- D = Jib offset
- E = Boom angle
- M = Total rated loads
- A = Boom angle range (for the unladen condition)

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**CHART 5: TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**

**JIB**

OUTRIGGERS MIDDLE EXTENDED (4.7m): Over sides						
C D	30.5m Boom + 3.8m Jib					
	5°		25°		45°	
E (°)	B (m)	M (t)	B (m)	M (t)	B (m)	M (t)
82	4.4	3.0	6.0	2.0	6.9	1.4
80	5.6	3.0	7.2	2.0	8.1	1.4
75	8.6	3.0	10.3	2.0	11.1	1.4
73	9.8	2.6	11.4	2.0	12.2	1.4
70	11.4	2.3	13.2	1.9	13.8	1.37
65	14.1	1.75	15.8	1.65	16.4	1.33
60	16.7	1.15	18.2	1.15	18.8	1.05
55	19.1	0.75	20.5	0.75	21.0	0.7
50	21.4	0.45	22.6	0.45	23.0	0.45
A (°)	49 ~ 82					

- B = Working radius
- C = Jib length
- D = Jib offset
- E = Boom angle
- M = Total rated loads
- A = Boom angle range (for the unladen condition)



**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**CHART 5: TOTAL RATED LOAD IN KILOGRAMS**  
**THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.**

**JIB**

OUTRIGGERS MINIMUM EXTENDED (3.6m): Over sides						
C D	30.5m Boom + 3.8m Jib					
	5°		25°		45°	
E (°)	B (m)	M (t)	B (m)	M (t)	B (m)	M (t)
82	4.4	3.0	6.0	2.0	6.9	1.4
80	5.6	3.0	7.2	2.0	8.1	1.4
78	6.9	3.0	8.5	2.0	9.4	1.4
75	8.6	2.7	10.3	2.0	11.1	1.4
70	11.4	1.7	13.1	1.55	13.8	1.37
65	14.1	1.0	15.6	0.95	16.3	0.9
60	16.6	0.55	18.0	0.5	18.6	0.5
A (°)	59 ~ 82					

- B = Working radius
- C = Jib length
- D = Jib offset
- E = Boom angle
- M = Total rated loads
- A = Boom angle range (for the unladen condition)

## PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE EXTENDED

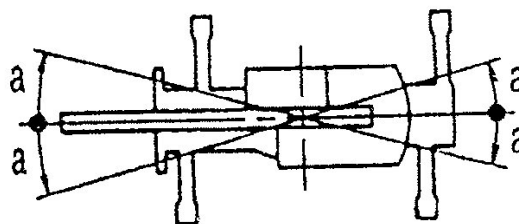
1. The total rated loads shown are for the case where the crane is set horizontally on firm level ground. They include the weights of the slings and hooks (main hook: 220kg, auxiliary hook: 60kg). The values above the bold lines are based on the crane strength while those below are based on the crane stability.
2. Total rated loads below bold lines do not exceed 75% of tipping load. Ratings meet the minimum requirement of AS1418.5-2002
3. Since the working radii are based on the actual values including the deflection of the boom, operations should be performed in accordance with the working radii.
4. Jib operations should be performed in accordance with the boom angle, irrespective of the boom length. The working radii are reference values for the case where the jib is mounted on a 30.5m boom.
5. The total rated load for the single top shall be the value obtained by subtracting the weight of the hook mounted on the boom from the total rated load of the boom and must not exceed 3.5t.
6. As a rule, free-fall operation should be performed only when lowering the hook alone. If a hoisted load must be lowered by free-fall operation, the load must be kept below 1/5<sup>th</sup> of the total rated load and sudden braking operations must be avoided.
7. The chart below shows the standard number of part lines for each boom length. The load per line should not exceed 32.7kN (3.33tf) for the main winch and 34.3kN (3.5tf) for the auxiliary winch.

<b>A</b>	<b>7.0m</b>	<b>11.7m</b>	<b>16.4m</b>	<b>21.1m</b>	<b>25.8m</b>	<b>30.5m</b>	<b>Single top</b>
<b>H</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>1</b>

**A = Boom length    H = No. of part lines**

8. The hoisting performance for the "Over sides" range will differ according to the extended width of the outriggers. Operations should be performed in accordance with the performance corresponding to the extended width. Also, although the hoisting performances for the "Over front" and "Over rear" ranges are equivalent to those of the "outriggers fully extended" condition, the front and rear ranges (angle a) will differ according to the width to which the outriggers are extended in the left and right directions.

<b>Extended width</b>	<b>Middle extended (5.6 m)</b>	<b>Middle extended (4.7 m)</b>	<b>Minimum extended (3.6 m)</b>
<b>Angle a°</b>	<b>35</b>	<b>25</b>	<b>15</b>



9. Special weather caution: Refer to the operation and maintenance manual.
10. Refer to the crane manual.
11. **WIRE ROPE**  
**Main Winch:** 16mm x 170m (Diameter x Length) Spin-resistant wire rope  
**Auxiliary Winch:** 16mm x 80m (Diameter x Length) Spin-resistant wire rope

**TADANO TR-200M-5-00101**  
**HYDRAULIC ROUGH TERRAIN CRANE**  
**TOTAL RATED LOAD IN KILOGRAMS**

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.M.L.

**WITHOUT OUTRIGGERS**

B (m)	Stationary							
	7.0m Boom		11.7m Boom		16.4m Boom		21.1m Boom	
	K	G	K	G	K	G	K	G
3.0	12.2	7.0	8.7	6.5	8.0	5.5	6.2	5.3
3.5	10.7	5.6	8.7	5.2	8.0	4.6	6.2	5.3
4.0	9.6	4.5	8.7	4.1	7.5	3.7	6.2	4.4
4.5	8.5	3.7	7.5	3.3	6.6	3.1	6.0	3.6
5.0	7.5	3.0	6.4	2.7	5.8	2.5	5.6	3.0
5.5			5.5	2.2	5.0	2.0	5.1	2.5
6.0			4.7	1.7	4.4	1.6	4.6	2.0
6.5			4.0	1.3	3.7	1.2	4.1	1.6
7.0			3.4	1.0	3.2	0.9	3.7	1.3
8.0			2.5	0.5	2.4	0.4	2.9	0.8
9.0			1.9		1.8		2.2	
10.0					1.3		1.7	
11.0					0.9		1.25	
12.0							0.9	
13.0							0.6	
A (°)	0~82		35~82		40~82	55~82	47~82	64~82

B (m)	Creep (travelling at 1.6km/h or less)							
	7.0m Boom		11.7m Boom		16.4m Boom		21.1m Boom	
	K	G	K	G	K	G	K	G
3.0	8.5	5.9	6.7	5.5	6.2	4.6	5.2	4.4
3.5	8.0	4.7	6.7	4.4	6.2	3.8	5.2	4.4
4.0	7.5	3.8	6.7	3.4	6.2	3.1	5.2	3.7
4.5	6.8	3.1	6.3	2.8	5.5	2.6	5.0	3.0
5.0	6.1	2.5	5.4	2.25	4.9	2.1	4.7	2.5
5.5			4.6	1.8	4.2	1.65	4.3	2.05
6.0			3.9	1.4	3.7	1.3	3.85	1.65
6.5			3.3	1.1	3.2	1.0	3.45	1.3
7.0			2.8	0.8	2.7	0.8	3.1	1.05
8.0			2.1	0.4	2.0		2.4	0.65
9.0			1.6		1.5		1.8	
10.0					1.1		1.4	
11.0					0.75		1.0	
12.0							0.7	
13.0							0.5	
A (°)	0~82		35~82		40~82	55~82	47~82	64~82

B = Working radius    K = Front    G = 360°  
a = Boom angle range (for the unladen condition)

## PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE NOT MOUNTED

1. The total rated loads shown are for the case where the tyre size 525/80R25 and air pressure on firm level ground is as specified 900kPa (9.00kgf/cm<sup>2</sup>) and the suspension-lock cylinder is retracted as much as possible. They include the weights of the slings and hooks (main hook: 220kg, auxiliary hook: 60kg).

The values above the bold lines are based on the crane strength while those below are based on the crane stability. The foundation, working conditions, etc. should be taken into consideration for actual work.

2. Since the working radii are based on the actual values including the deflection of the boom, operations should be performed in accordance with the working radii.
3. The chart below shows the standard number of part lines for each boom length. The load per line should not exceed 32.7kN (3.33tf) for the main winch and 34.3kN (3.5tf) for the auxiliary winch.

A	7.0m	11.7m	16.4m	21.1m	Single top
H	4	4	4	4	1

A = Boom Length H = No. of part lines

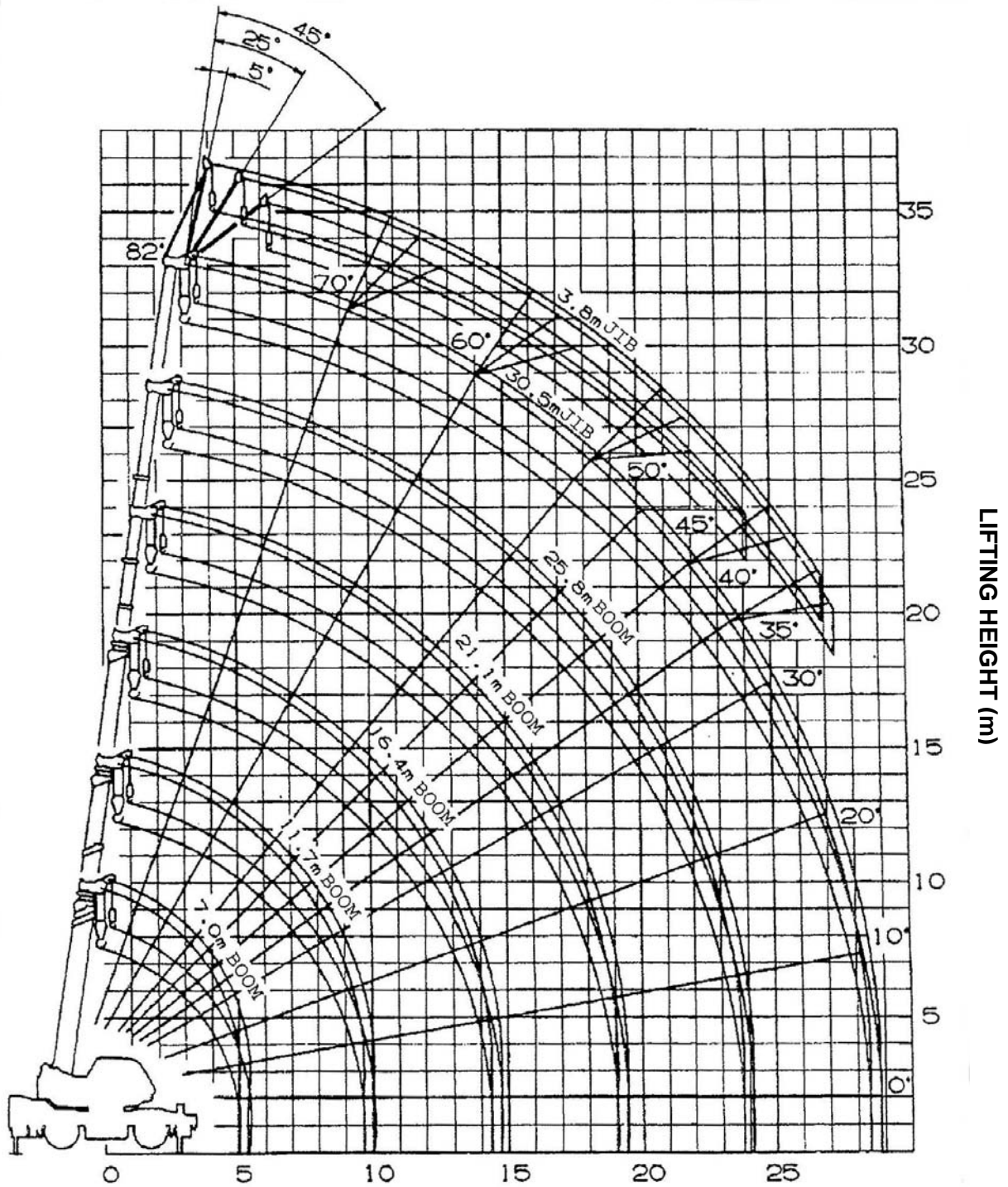
4. "Over front" crane operations should be performed only when the AML "Over-front area indicator lamp" is lit. The boom must be kept inside a 2° area over front of the carrier when performing "Over front" crane operations without the outriggers.
5. The total rated load for the single top shall be the value obtained by subtracting the weight of the hook mounted on the boom from the total rated load of the boom and must not exceed 3.5t.

Approx. 2°



6. Free-fall operations should not be performed without outriggers. Booms over 21.1m in length and jibs should not be used without outriggers.
7. The "Drive Mode Selection" switch should be set to "4-wheel / Lo" for creeping while hoisting a load and the shift lever should be set to first.
8. When creeping while hoisting a load, the swing brake should be applied, the load should be kept as close to the ground as possible but not touching the ground and the speed should be kept at 1.6km/h or less. In particular, any abrupt steering, starting or braking must be avoided.
9. Crane operations should not be performed when creeping while hoisting a load.
10. Special weather caution: Refer to the operation and maintenance manual.
11. Refer to the crane manual.
12. **WIRE ROPE**  
**Main Winch:** 16mm x 170m (Diameter x Length) Spin-resistant wire rope  
**Auxiliary Winch:** 16mm x 80m (Diameter x Length) Spin-resistant wire rope

## WORKING RADIUS – LIFTING HEIGHT



### NOTES:

1. The deflection of the boom is not incorporated in the figure above.
2. The figure above is for the case where the outriggers are fully extended (360°)

# TR-200M

## CRANE SPECIFICATIONS

### CRANE CAPACITY

7.0m Boom	20,000kg	at 3.5m	( 6part-line)
11.7m Boom	12,000kg	at 6.0m	( 4part-line)
16.4m Boom	12,000kg	at 5.0m	( 4part-line)
21.1m Boom	9,000kg	at 6.0m	( 4part-line)
25.8m Boom	7,000kg	at 6.5m	( 4part-line)
30.5m Boom	5,000kg	at 7.0m	( 4part-line)
3.8m Jib	3,000kg	at 75°	( 1part-line)
Single top	3,500kg		( 1part-line)

### MAX.LIFTING HEIGHT

Boom	30.9m
Jib	35.1m

### MAX.WORKING RADIUS

Boom	28.0m
Jib	27.9m

### BOOM LENGTH

7.0m – 30.5m

### BOOM EXTENSION

23.5m

### BOOM EXTENSION SPEED

23.5m/86s

### JIB LENGTH

3.8m

### MAIN WINCH SINGLE LINE WINDING SPEED

110m/min (5th layer)

### MAIN WINCH HOOK SPEED

27.5m/min (4 part-line)

### AUXILIARY WINCH SINGLE LINE WINDING SPEED

90m/min (2nd layer)

### AUXILIARY WINCH HOOK SPEED

90m/min (1 part-line)

### BOOM ELEVATION ANGLE

-3° – 82°

### BOOM ELEVATION SPEED

-3° – 82°/41s

### SWING ANGLE

360° continue

### SWING SPEED

2.6min<sup>-1</sup> (rpm)

### WIRE ROPE

Main Winch

16mm x 170m (Diameter x Length)

Spin-resistant wire rope

Auxiliary Winch

16mm x 80m (Diameter x Length)

Spin-resistant wire rope

### BOOM

6-section hydraulically telescoping boom of box construction

(stages 2,3: synchronized; stages 4,5,6: synchronized)

### BOOM EXTENSION

2 double-acting hydraulic cylinders

2 wire rope type telescoping devices

With flow regulator valve with pressure compensation

### JIB

Single stage which swings from and stores under the boom

Triple offset (5°, 25°, 45°) type

### SINGLE TOP

Mounted and fixed on the top boom section.

### HOIST

Driven by hydraulic motor and via spur gear reducer.

With free-fall device.

Automatic brake (with foot brake for free-fall device)

2 single winches

With flow regulator valve with pressure compensation

### BOOM ELEVATION

1 double-acting hydraulic cylinders

With flow regulator valve with pressure compensation

### SWING

Hydraulic motor driven planetary gear reducer

Swing bearing

Swing free/lock changeover type

Negative brake

### OUTRIGGERS

Fully hydraulic X-type (floats mounted integrally)

Slides and jacks each provided with independent operation device.

Fully extended width 6.0m

Middle extended width 5.6m, 4.7m

Minimum extended width 3.6m

### OPERATION METHOD

Hydraulic pilot valve operation

### MAX. VERTICAL LOAD CAPACITY OF OUTRIGGER

23.6t

### POWER TAKE-OFF

PTO wet multi-plate clutch

### HYDRAULIC PUMPS

2 variable piston pumps

2 gear pumps

### HYDRAULIC OIL TANK CAPACITY

375 liters

### SAFETY DEVICES

Automatic moment limiter (AML)

Swing automatic stop device

Over-winding cutout device

Working area control device

Free-fall interlock device

Outrigger extension width detector

Level gauge

Hook safety latch

Hydraulic safety valve

Telescopic counterbalance valve

Elevation counterbalance valve

Jack pilot check valve

### EQUIPMENT

Air-conditioner with dehumidifier

Hydraulic oil temperature indication lamp

Radio

Oil cooler

Visual-type winch drum rotation indicator

Operation pedals

ISO arrangement: for telescoping/auxiliary hoisting

TADANO arrangement: for elevating/telescoping

## CARRIER SPECIFICATIONS

### ENGINE

Model HINO H07C-TF  
 Type 4-cycle, 6-cylinder, direct-injection, water-cooled diesel engine (with turbo charger)  
 Piston displacement 6,728cc  
 Max. output 162kW (220PS) at 2,800rpm  
 Max. torque 657N·m (67.0kgf·m) at 1,600rpm

### TORQUE CONVERTER

3-element, 1-stage unit (with automatic lock-up mechanism)

### TRANSMISSION

Power shift type (wet multi-plate clutch)  
 4 forward and 1 reverse speeds (with Hi/Low settings)

### REDUCER

Axle dual-ratio reduction

### DRIVE

2-wheel drive (4X2) / 4-wheel drive (4X4) selection

### FRONT AXLE

Full floating type

### REAR AXLE

Full floating type

### SUSPENSION

Front Hydro-pneumatic suspension (with hydraulic lock cylinder)

Rear Hydro-pneumatic suspension (with hydraulic lock cylinder)

### STEERING

Fully hydraulic power steering  
 With reverse steering correction mechanism

### BRAKE SYSTEM

Service Brake

Hydro-pneumatic disk brake

Parking Brake

Mechanically operated, internal expanding duo-servo shoe type acting on drum at transmission case rear.

Auxiliary Brake

Electro-pneumatic operated exhaust brake

Eddy current retarder

Auxiliary braking device for operations

### FRAME

Welded box-shaped structure

### ELECTRIC SYSTEM

12 V DC. 2 batteries of 24V (120Ah)

### FUEL TANK CAPACITY

300 liters

### TIRES

Front 385/95R25 170E ROAD

Rear 385/95R25 170E ROAD

### CAB

One-man type

With interior equipment

Liquid filled rubber mounted type

Fully adjustable foldable seat

(with headrest and seat belt)

Adjustable handle (tilt, telescoping)

Intermittent type windshield/roof wiper (with washer)

Power window

Side visor

### SAFETY DEVICES

Emergency steering device

Suspension lock device

Rear wheel steering lock device

Engine over-run alarm

Overshift prevention device

Parking brake alarm

### EQUIPMENT

Centralized oiling device

Electric mirror

## GENERAL DATA

### DIMENSIONS

Overall length	8,990mm
Overall width	2,490mm
Overall height	3,410mm
Wheel base	3,300mm
Tread Front	2,065mm
Rear	2,065mm

### WEIGHTS

Gross vehicle weight	
Total	23,495kg
Front	12,020kg
Rear	11,475kg

### PERFORMANCE

Max. traveling speed	49km/h
Gradeability (tan $\theta$ )	0.6
Min. turning radius	4.8m (4-wheel steering) 8.1m (2-wheel steering)

Note:

This crane is covered by Class B Conditions under the Basic Running Conditions of the Road Traffic Act.

# DIMENSIONS (1/100)

