

# TORO T 501 DL

## TECHNICAL SPECIFICATION

### Main dimensions

Total length		10 530	mm
Maximum width (without bucket)		2 710	mm
Height without safety canopy		2 355	mm
Height with safety canopy		2 850	mm
Weights			
Operating weight	appr.	36 700	kg
Total loaded weight	appr.	50 700	kg
Shipping weight	appr.	36 100	kg
Axle weights			
Without load	front axle	15 800	kg
	Rear axle	20 900	kg
With load of 14 000 kg :	front axle	38 200	kg
	Rear axle	12 500	kg

### Capacities

Traming capacity	14 000	kg	
Breakout force, tilt	257	KN	(26 200 kp)
Breakout force, lift	301	kN	(30 700 kp)
Tipping load (SAE)	27 000	kg	
Bucket (nominally heaped SAE)	4,3 – 7,5	m <sup>3</sup>	

### Bucket motion times

Raising time	7,7	sec
Lowering time	4,0	sec
Tipping time	1,6	sec
Extent of motions, see page 3		

### Driving speed

1 <sup>st</sup> gear	5,4	km/h
2 <sup>nd</sup> gear	9,2	km/h
3 <sup>rd</sup> gear	15,5	km/h
4 <sup>th</sup> gear	25,5	km/h

### Engine

Diesel engine	CAT 3406 PC-TA
Engine output (DIN 6270 B II)	242 kW (326 hp)/2100 r/min
Max torque	1256 Nm 1300 r/min
Number of cylinders	in line 6
Displacement	14 600 cm <sup>3</sup>
Cooling système	water
Electric system	24 V
Weight	1120 kg
Combustion principle	pre-chamber/turbo+after cooler/4-stroke

## Transmission

Torque converter		Clark C 8602, ratio 3,05:1
Transmission		Clark 5422, power shift gear box, 4 + 4 speeds
Axles, front and rear		Clark D 75 830 or 21 D 3960, front axle fixed, rear axle oscillating 12°
Tyres		26,5 x 25, L5S
Pressure	front	550 Kpa (5,5 bar)
	Rear	350 Kpa (3,5 bar)

## Steering

Fully hydraulic servo controlled power steering, articulated frame with two double-acting diam. 180 mm hydraulic cylinders, turning angle  $\neq 38^\circ$   
Turning radius : 3680 mm innermost, 7230 outermost ( with 6,0 m<sup>3</sup> bucket).

## Main components

Steering and servo hydraulic pumps gear type	Hamworthy Hydreco
Steering servo control	Rexroth
Steering cylinders	ARA
Main valve for steering	Monsun Tison
Pressure setting for the steering hydraulics	12,0 Mpa (120 bar)
Pressure setting for the shock load valves	17,5 Mpa (175 bar)

## Bucket hydraulics

Lift by two  $\varnothing$  200 mm cylinders. Breakout by one  $\varnothing$  250 mm cylinder. The bucket hydraulics has two pumps. One is for the servo circuit and other delivers oil to the bucket hydraulic main valve. The oil flow from steering hydraulic pump is directed to bucket hydraulics when steering is not used.

Bucket hydraulic cylinders		ARA
Bucket hydraulic pumps (gear type)		Hamworthy Hydreco
Control valve		Rexroth
Main valve		Hamworthy Hydreco
Pressure setting for the servo circuit	2,5	Mpa (25 bar)
Pressure setting for the bucket hydraulics	18,0	Mpa (180 bar)
Pressure setting for the shock load valves	21,0	Mpa (210 bar)
Capacity of the hydraulic oil tank app.	500	

