

DOOSAN

Operation and Maintenance Manual

DL420-7 Wheel Loader

Serial Number **10001 and Up**



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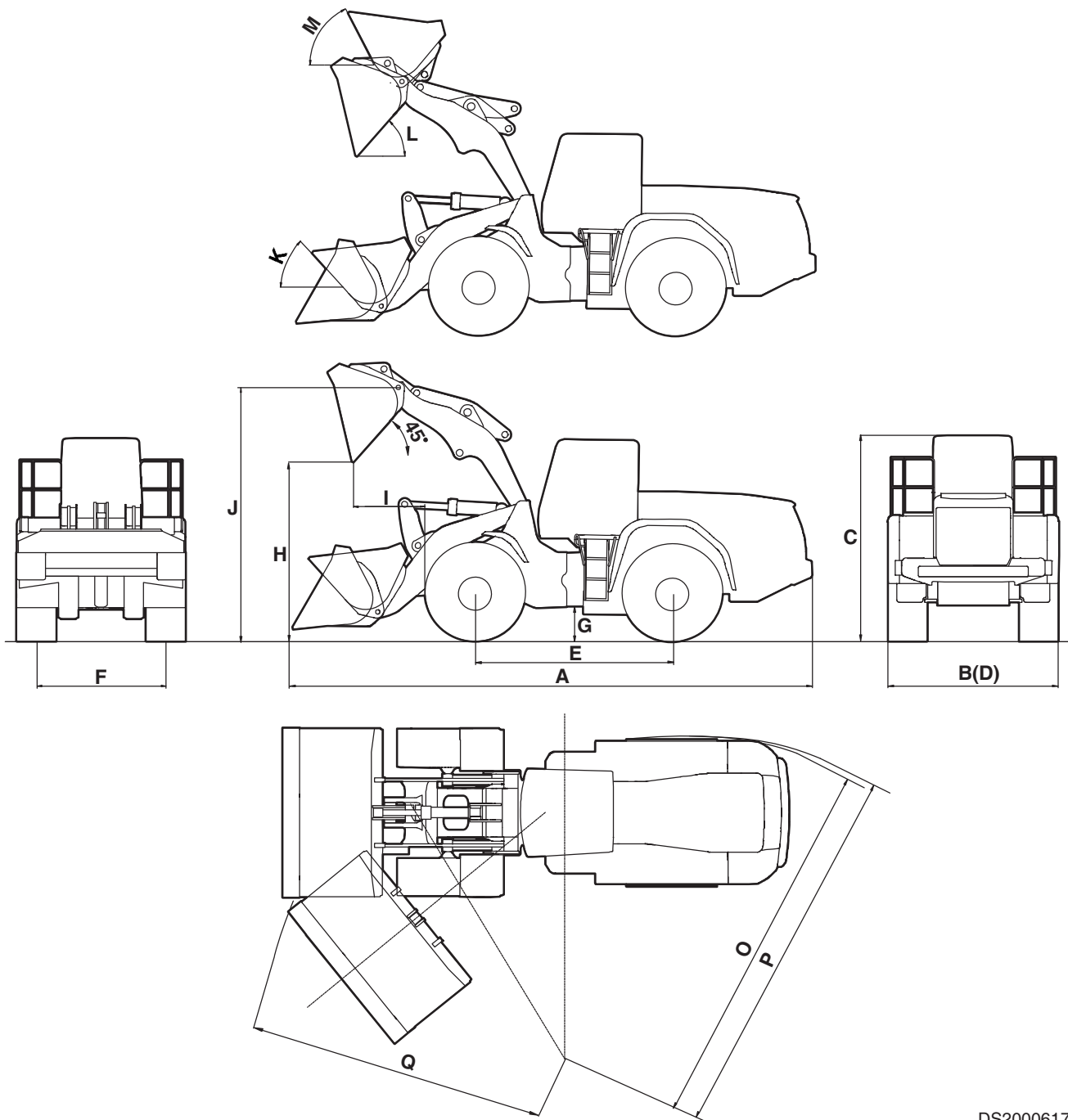
Specification

General Specifications

Item		Specification	
Standard Bucket Capacity (BOT / BOC)		4.3 m ³ (5.6 yd ³) / 4.5 m ³ (5.9 yd ³)	
Operating Weight		23,419 kg (51,630 lb)	
Engine	Emission	EU Stage V	
	Maker and Model	SCANIA / DC 13	
	Type	4-Cycle Water Cooled, Turbocharge, Air to Air Intercooled Direct Injection	
	Injection System	Extra High-pressure Fuel Injection System, XPI	
	Rated Gross Power	257 kW (345 HP) @ 1,800 rpm (SAE J1995)	
Transmission	Type	Full Automatic Power Shift	
	Speeds	5 Forward, 3 Reverse	
Brake Systems	Travel Brakes	4 Wheel, Wet Disk	
	Parking Brake	SAHR (Spring-Applied Hydraulic-Released), Dry Disk Type	
Performance	Travel Speed km/h (MPH)	Forward	7.2 (4.5) / 13.6 (8.5) / 19.7 (12.2) / 38.3 (23.8) / 40 (24.9)
		Reverse	7.2 (4.5) / 13.6 (8.5) / 19.7 (12.2)
	Steering Angle	±40°	
	Minimum Tire Turning Radius (Out Tire Edge)	6,385 mm (20' 11")	
	Rated Operating Load	8,535 kg (18,816 lb)	
	Maximum Breakout Force (Bucket)	183 kN (41,140 lb.f)	
	Arm Raise Time	6.0 ±0.5 Sec.	
	Arm Lowering Time	2.0 ±0.4 Sec.	
	Bucket Dump Time	2.7 ±0.3 Sec.	
	Maximum Gradeability	27° (51%)	

Working Range and Dimensions

Figure 1, illustrates exterior machine dimensions and working range of machine when it is equipped with a standard bucket.



DS2000617

Figure 1

Category		Dimension	
Tire Size		26.5R25 (L3)	
Bucket		4.3 m ³ (BOT)	4.5 m ³ (BOC)
A	Overall Length	9,138 mm (30' 0")	8,926 mm (29' 3")
B	Overall Width	3,200 mm (10' 6")	
C	Overall Height	3,660 mm (12' 0")	
D	Bucket Width	3,200 mm (10' 6")	
E	Wheel Base	3,525 mm (11' 7")	
F	Tread	2,300 mm (7' 7")	
G	Ground Clearance	495 mm (1' 7")	
H	Dump Height, at 45° (to BOT / BOC)	2,835 mm (9' 4")	2,990 mm (9' 10")
I	Dump Reach, at 45° (to BOT/ BOC)	1,465 mm (4' 10")	1,320 mm (4' 4")
J	Bucket Hinge Height	4,265 mm (14' 0")	
K	Max. Tilt Angle at Carry	48 °	
L	Max. Dump Angle at Fully Raised	45 °	
M	Max. Tilt Angle at Fully Raised	62 °	
Turning Radius			
O	Outer Tire Edge	6,385 mm (20' 11")	
P	Counterweight Edge	6,385 mm (20' 11")	
Q	Bucket Edge	7,065 mm (23' 2")	7,000 mm (23' 0")

Working Capacities

Bucket Capacity

Standard toothed bucket has a capacity of 4.3 m³ (5.6 yd³).

Stability Data (EN - and ISO - Norms)

[Unit: kg (lb)]

Bucket Mount	Pin On	Remark
Configuration	Bolt-on Tooth (4.3 m ³)	* Base On 26.5R25 (L3)
Lifting Capacity @ Max. Height	10,980 (24,207)	** This data is applicable on firm and level ground.
Static Tipping Load @ Max. Reach - Straight	19,351 (42,662)	*** Do not lift the load which exceeds legal "Rated Operating Load" when you work with the specific tools.
Static Tipping Load @ Max. Reach - Full Turn	17,071 (37,635)	
Rated Operating Load	8,535 (18,816)	