

Reliability in Action

# L946H Wheel Loader

Gross Power: 175HP@2000rpm

Operating Weight: 13718KG

Payload: 4000KG

CEV-IV Certified

The best-in-class  
productivity, safety  
and efficiency.



Member of The Volvo Group



# Technical Specifications

Standard Equipment

Engine	
Make	WEICHA
Model	WP7G178E502
Type	Electronically controlled CRDI engine
Gross Power hp@2000rpm	175
Maximum Torque Nm@1400rpm	760
Engine exhaust after treatment	DOC + SCR + ASC
Working Modes	3

Transmission	
Make	SDLG
Model	TP170 - 5 Ton capacity Transmission
Torque Converter	Single phase, 4 elements, twin turbine, hydraulic converter
Travel Speed km/hr	Forward      Reverse
1 <sup>st</sup> gear	0~13      0~17
2 <sup>nd</sup> gear	0~38

Axles	
Make	SDLG make with Dry Disc brakes
Front	Heavy duty axles with 28 ton carrying capacity with planetary hub reduction
Rear	Heavy duty axles with 28 ton carrying capacity with planetary hub reduction

Hydraulic system	
Loader Hydraulic operation	Pilot operated with single Joystick
Pilot System working pressure	3.5MPa
Loader Arm Linkage	Z Bar
Main Pump Type	Gear Pump
Maximum Flow ltrs/min	287L/min
System working pressure Mpa	16

Hydraulic Cycle Time Sec	
Lifting Time (fully loaded)	5.7
Lowering Time (empty)	3.5
Dumping Time (Empty)	1
Total	10.2

Steering System	
	Gear pump
Type	Full hydraulic load sensing, articulated steering
Working pressure	14

Service & Maintenance	
Air-filter	Dual Air Filters with Turbo Precleaner
Fuel Filters	2
Water Separator	1 with electrical priming motor
Hydraulic Filter	1
Transmission filter	1

Optional Attachments	
HD Bucket m³	2
LM Bucket m³	3.5
Precleaner	Oil bath Pre cleaner

Brake System	
Service brake	Air over Hydraulic Disc Brakes with single brake pedal
Parking brake	Electronically controlled Pneumatic caliper disc brake

Tyres	Size
Front	20.5X25 L3
Rear	20.5X25 L3

System refill capacity (L) & Interval (Hrs)	Tank Capacity	Refill Interval
Fuel	200	
Adblue	16	
Engine coolant	25	2000
Engine oil	22	500
Transmission oil	44	1000
Axle & Final drive oil front	18	1000
Axle & Final drive oil rear	20.5	1000
Hydraulic oil volume in tank	128	2000
Brake System	4	

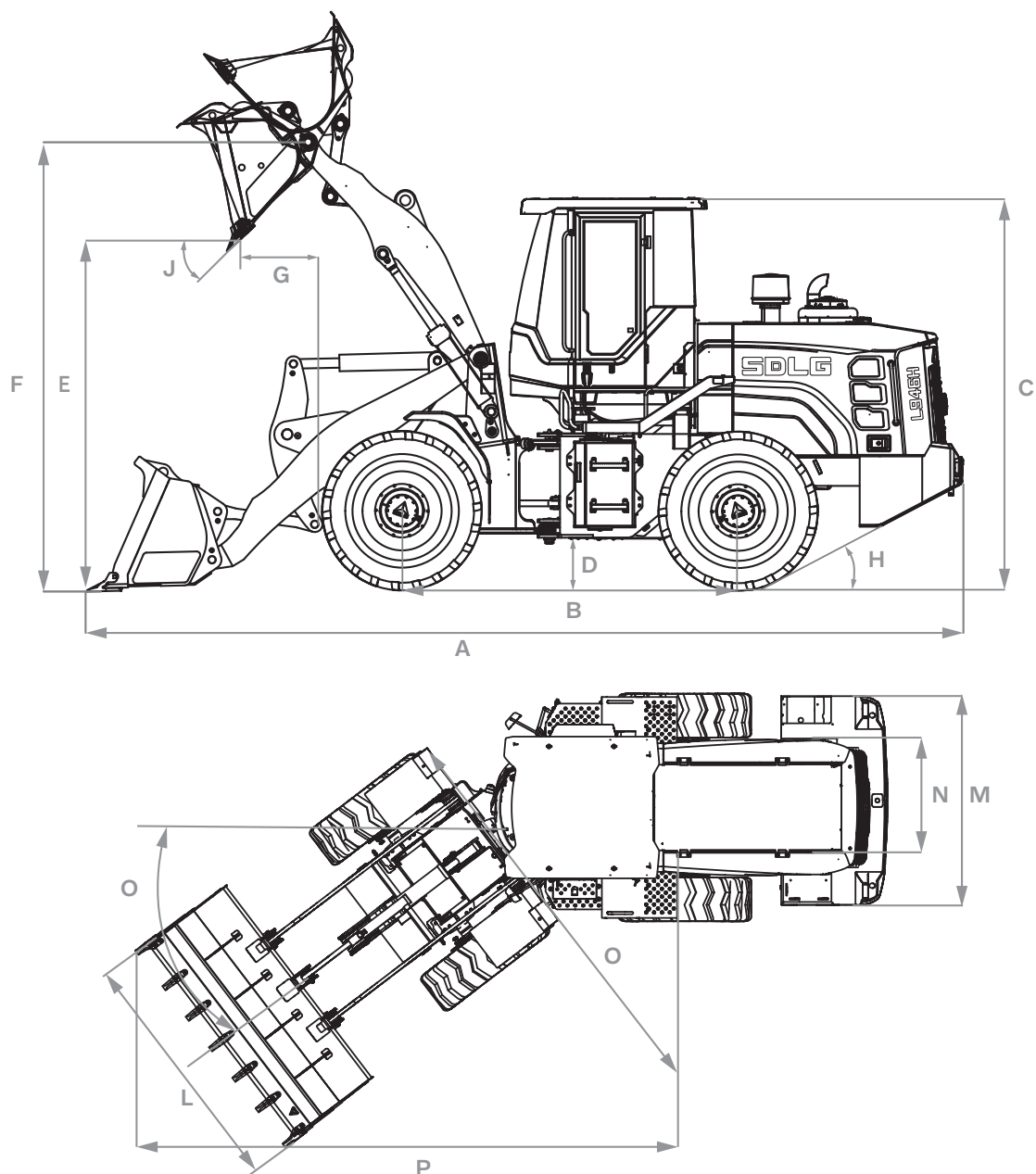
Electrical System		
Voltage	24V	
Batteries	2	

Cabin	
AC Cabin	Standard
AC	Standard with dual filters
Operator Seat	Mechanical Suspension Seat
Music System	MP3 Player with Bluetooth mobile connection
Seat Belt	Standard

Payload			
Payload Capacity kg	4000	4000	4000
Bucket Volume Heaped ISO/SAE cu.m (HD, GP, LM)	2	2.5	3.5
Volume at 110% Fill Factor m³	2.2	2.75	3.85
Operating Weight kg	13288	12921	13718
Breakout Force kN	125	119	96
Static Tipping Load Straight	9410	9780	8980
Static Tipping Load Full Turn	7610	7980	8980
Maximum Tractive Force kN	120	120	120

Noise dB			
Operator Ear Level			82
Pass by noise			106

## Dimensions



Loader Dimension (Bucket Size)	2	2.5	3.5
Length A	7450	7450	7625
Width L	2810	2766	3016
Height C	3340	3340	3340
Wheel Base B	2880	2880	2880
Minimum Ground clearance D	440	440	440
Maximum Dump Height E	3005	2915	2750
Maximum Hinge Pin Height F	3840	3840	3840
Maximum Reach G	995	10850	1250
Dumping Angle J	-45°	-45°	-45°
Bucket roll back at ground level K	45°	45°	45°
Width outside of rear wheel M	2574	2574	2574
Steering angle	37°		
Minimum turning radius outside rear wheels (mm) O	5275	5275	5275
Horizontal crossing radius outside bucket (mm) P	6115	6115	6115
Gradeability H	30°		
Wheel Tread N	2054	2054	2054