

Wheel Loader Specifications

L 6.5 L 8.5



	L 6.5	L 8.5
Service weight	4,7 t	5,1 t
Engine output	42 kW	44 kW
Loading buckets	0,8 m ³	0,9 m ³

- Hydrostatic drive
- Multi-disc self locking differentials
- Wet fully enclosed multi disc brake
- Deluxe cab with multifunctional lever





Sleek, functional and advanced: The all-rounders L 6.5

**CE symbol according to EC Machinery Directive.
TÜV certificate for compliance with
DIN ISO EN 9001.**

Easy operation with
multifunctional lever

Rugged Z-geometry for exceptional
breakout forces and fast dumping
speeds

Integrated quick-hitch standard



and L 8.5 with futuristic operator comfort

Futuristic cab
with space to spare

Electric immobilizer
(optional)



Outstanding all-round visibility,
visibility forward and rear improved
even further

Fuel-efficient water-cooled
Perkins engine, powerful
and clean

Easy accessibility
for rapid maintenance

Oscillating rear axle

Planetary axles with multi-disc
self-locking differentials front
and (optionally) rear

Adjustment-free articulated
joint with widely-spaced
spherical bearings

Wet multi-disc brakes on the
rear axle, low maintenance and
unaffected by weather

A new standard of comfort for more productivity

A cab with new dimensions of comfort

This cab incorporates new dimensions of output-enhancing comfort. The futuristic design creates an atmosphere that is conducive to productivity. The comfortable suspension seat is adjustable to the weight of the operator. All of the controls are ergonomically positioned and conveniently placed.

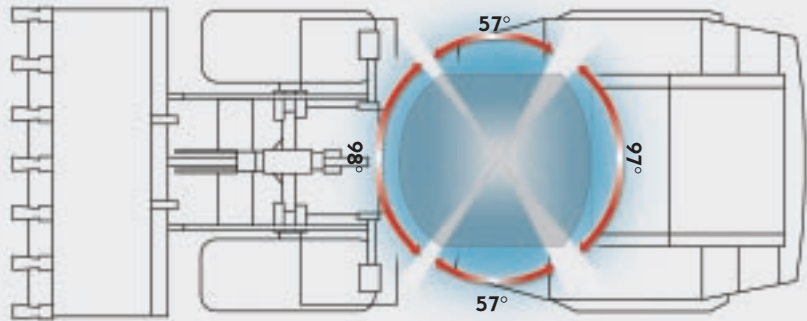
Space to spare inside allows the operator ample freedom of movement. There is enough head clearance even for the helmet. The heater/ventilation system with integrated fresh-air blower ensures an agreeable working climate. The multi-purpose lever conveniently controls lifting, lowering, rollback, dump and reversing-under-load functions. Single-handedly! All this speeds up work.

On a small wheel loader, the operator frequently has to get in and out of the machine. On this wheel loader, no problem. The door is extremely wide and the steering column steplessly adjustable.



Outstanding visibility

Visibility is unrivalled and again improved over the previous L 6/L 8. The equipment and rear zone are always in full view. The operator can even see downward between the wheels.



Practically full 360° visibility is guaranteed.

Electric immobilizer prevents theft and abuse

Optional on the L 6/L 8 is an electric immobilizer, which makes sure that the engine will only start up once a code has been entered. During working hours the immobilizer can be disconnected and then reactivated after hours, thus preventing theft, of increasing occurrence on construction sites.

Rugged frame and adjustment-free articulating joint

The sturdy frame is impeccably welded for absolute precision and outstanding durability.

Widely-spaced, sealed, self-aligning bearings optimize force distribution for even safer operation. Elastic stops prevent damage and easy accessibility facilitates maintenance.



Small units with big-brother features

Responsive and rugged: the fuel-efficient Perkins engine

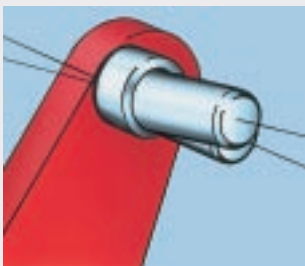
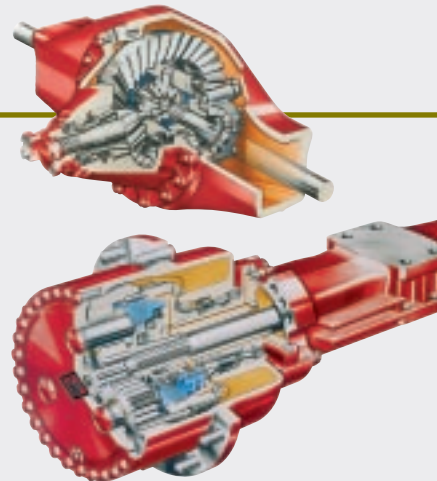


The powerful, water-cooled diesel 704-30 is one of Perkins' newest developments, quite and very clean. The hydrostatic ventilator ensures perfect matching to ambient conditions. The serviceable design facilitates routine maintenance.

Wet multi-disc brake and self-locking differential

The hydraulic braking system with inboard wet multi-disc brakes on the rear axle works efficiently under any conditions. The brakes need very little maintenance and are unaffected by weather.

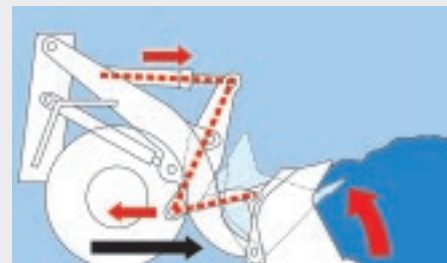
Even on treacherous terrain, the automatic self-locking differential assures best-possible power transfer, making life easier for the operator and giving the machine excellent ground adhesion.



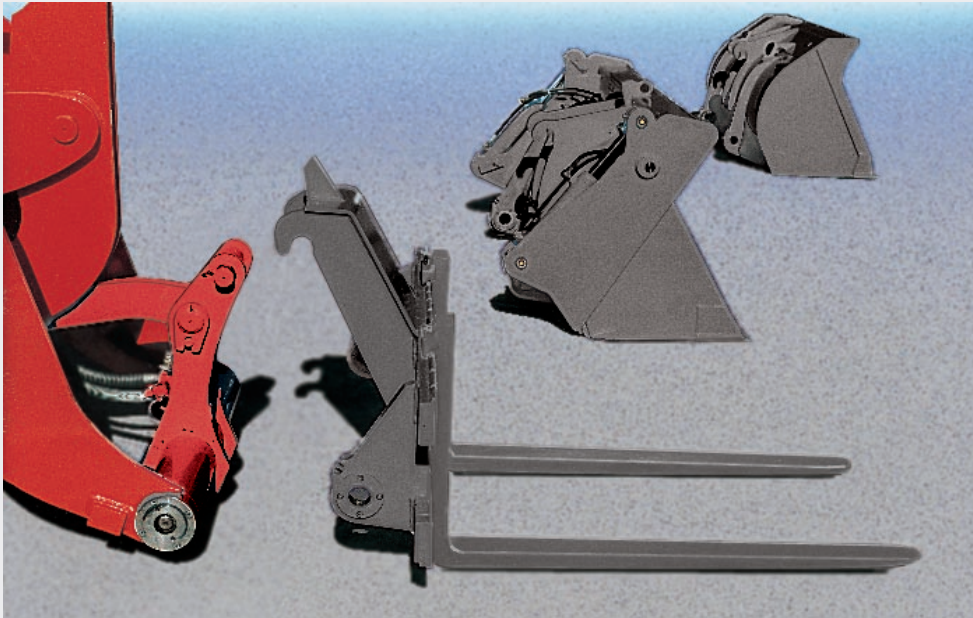
Rugged, powerful Z-geometry

Z-geometry with just one tilt cylinder delivers extraordinary breakout forces and fast dumping speeds.

The bearings are all sealed. The articulating points on the lift frame and cylinder have spherical bearings for reduced load even under punishing conditions. The outcome: less wear and high reliability, day in, day out.



Broad attachment range and service-friendly design



The integrated, hydraulic quick-hitch broadens the range of possible operations, turning the L 6.5/L 8.5 into a cost-efficient all-rounder.



The elastic bucket stop absorbs noise for reduced stress on material, operator and environment.



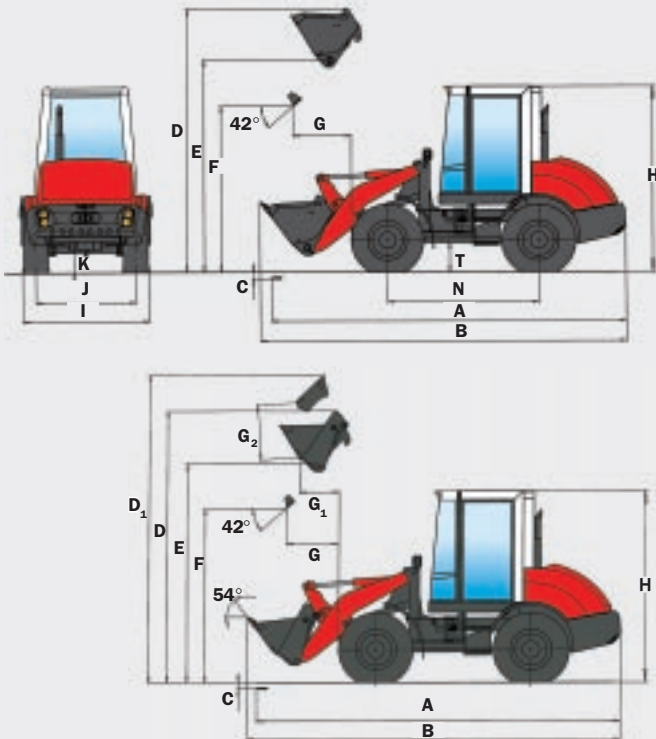
Time-saving maintenance



The large engine hood opens up widely and easily, and all the components are readily accessible. Routine daily maintenance is completed in no time at all. The slim patented longitudinal beam permits easy accessibility, from the side, top and even to components normally inaccessible without first removing any panelling.



Dimensions and weights



Bottom dump bucket L 6.5

0.7 m³ bucket 2050 mm wide $\gamma = 1.8 \text{ t/m}^3$

Bottom dump bucket L 8.5

0.85 m³ bucket 2050 mm wide $\gamma = 1.8 \text{ t/m}^3$

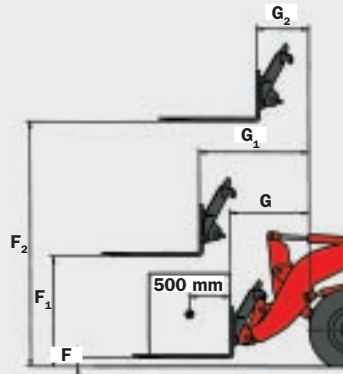
Loading bucket L 6.5

0.7 m ³ bucket	1950 mm wide	$\gamma = 2.0 \text{ t/m}^3$
0.8 m ³ bucket	1950 mm wide	$\gamma = 1.8 \text{ t/m}^3$
0.8 m ³ bucket	2050 mm wide	$\gamma = 1.8 \text{ t/m}^3$
0.9 m ³ bucket	2050 mm wide	$\gamma = 1.6 \text{ t/m}^3$

Loading bucket L 8.5

0.9 m ³ bucket	2050 mm wide	$\gamma = 1.8/2.0^* \text{ t/m}^3$
1.0 m ³ bucket	2100 mm wide	$\gamma = 1.6/1.8^* \text{ t/m}^3$

* with added ballast



Forks

100 x 45 x 1200 mm 2B

Fork carriage

FEM II, 1450 mm wide

L 6.5 Dimensions in mm with standard tyres (365/80/R20)

	0.7 m ³ Bucket	0.8 m ³ Bucket (1950 mm wide)	0.8 m ³ Bucket (2050 mm wide)	0.9 m ³ Bucket	0.7 m ³ Bottom dump bucket	Forks
A	5280	5305	5305	5340	5335	
B	5150	5185	5185	5250	5205	
C	80	85	85	85	110	
D	3885	3920	3920	3985	3955	
D₁					4405	
F	2580	2555	2555	2510	2525	100
F₁						1340
F₂						2930
G	700	720	720	770	715	810
G₁					540	1215
G₂					810	485

L 8.5 dimensions in mm with standard tyres (365/80/R20)

	0.9 m ³ Bucket	1.0 m ³ Bucket	0.85 m ³ Bottom dump bucket	Forks
A	5340	5345	5340	
B	5250	5250	5280	
C	85	90	110	
D	3985	4040	4045	
D₁			4505	
F	2510	2510	3475	100
F₁				1340
F₂				2930
G	770	770	775	810
G₁			550	1215
G₂			820	485

Dimensions and capacities with standard tyres (365/80/R20)

		L6.5	L8.5
Total weight	kg	4700	5100/5300*
Overall height	H	2765	2765
Wheelbase	N	2250	2250
Width over tyres	I	1945	1945
Track width	J	1526	1526
Ground clearance (at axles)	K	380	380
Ground clearance (at articulating joint)	T	460	460
Bucket pivot	E	3155	3155
Tipping load, art. (bucket)	kg	2250	2750
Payload, art. (forks)	S 1.25	1800	2200
	S 1.67	1350	1650
Lift capacity at ground level	kN	45.0	49.0
Breakout force ISO 8313	kN	55.0	60.0

* with 200 kg ballast

Stability factor 1.25 for tipping load on flat terrain.
Stability factor 1.67 for tipping load on uneven terrain.

Tipping load to DIN 24094.

All figures approximate



Engine

Perkins diesel engine 704.30
Liquid-cooled naturally aspirated engine • Direct injection

	L 6.5	L 8.5
Engine output ISO 9249	42 kW / at 2300 RPM	44 kW / 2500 RPM
Torque at 2300 RPM	187 Nm	
Torque at 2400 RPM		178 Nm
Max. torque at 160 RPM	210 Nm	210 Nm
Cylinders/displacement	4 / 3000 cm ³	4 / 3000 cm ³
Bore/stroke	97 mm /100 mm	97 mm /100 mm
Voltage	12 V	12V
Battery	12 V / 92 Ah	12 V /92 Ah
Alternator	780 W	780 W
Starter	2.5 kW	2.5 kW

Exhaust emissions according to COM 95/350 Step I
Road traffic lighting with halogen lamps
Cold start with glow coil.



Axles

All-wheel drive with planetary axles • Rear axle oscillating •
Multi-disc self-locking differential front (rear optional).
Axle articulation +/- 12°=24°



Travel speeds

Speeds in km/h with tyre size

Low range (max. tractive force/limited travel speed)	0 – 7 km/h
High range (max. tractive force/max. travel speed)	0 – 20 km/h



Hydraulics

Maximum output	L 6.5	L 8.5
Loading/steering hydraulics	62 l/min	67 l/min
Operating pressure, loader	210 bar	230 bar
Operating pressure, steering	175 bar	175 bar



Tyres

	L 6.5	L 8.5
Standard (radials)	365/80 R 20	365/80 R20
Special tyres on request		



Cylinders

Double-acting lift and tilt cylinders • Operation: single-lever control with lockup for road travel, automatic central position • Float • 3rd control circuit for quick-hitch and attachment with hydraulic function.



Brakes

Service brakes, accumulator type: operated hydraulically by inching/brake pedal, inboard wet multi-disc brakes for rear axle. Braking unaffected by dirt, moisture

Additional brake: wear-free all-wheel braking action from hydrostatic transmission, upstream of service brake, actuated from the inching/brake pedal.

Auxiliary and parking brake: mechanical, inboard wet-type multi-disc brake on the rear axle.



Drive

Output-controlled hydrostatic transmission with automotive-style control • Tractive force and speed are automatically adapted • Inching pedal for lowering travel speed at full engine RPM and hence added power for attachment hydraulics • On-the-go shifting.



Steering

Hydrostatic mid-mounted articulated frame steering, with 2 cylinders • Emergency steering with engine off • Articulated frame mounted in play-free tensioning elements and adjustment-free bearings • Articulating angle either side 41°



Loading equipment

Integrated hydraulic quick-hitch standard • Sealed bearings with extended lube intervals

	L 6.5	L 8.5
Loading bucket capacity* to SAE J 742b/CECE	0.7/0.8/0.9 m ³	0.9/1.0 m ³
Bottom dump bucket capacity* to SAE J 742b/CECE	0.7 m ³	0.85 m ³
Forks	1200 mm	1200 mm
Dump angle at max. height	42°	42°
Rollback at ground level/carry	45° / 55°	45° / 55°
Lift/lower/tilt	5.7/3.2/1.2 sec.	

* Stability to DIN 24094/ISO 5998/SAE J818b



Cab

Spacious, elastically cushioned cab • Flat access • Wiper front and rear, with washer • Tinted panoramic windscreen • Safety glass • Folding window, right • Hydraulically cushioned, weight-adjustable seat, with lap belt • Water heater • Defroster nozzles • Ventilation option: recirculating or outside air, with fresh-air filter • Steplessly adjustable steering wheel

ROPS to DIN/ISO 3471/SAE 1040 C

FOPS to DIN/ISO 3449



Capacities

Fuel tank	100 l
Hydraulics, total	65 l



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