

699

BACKHOE LOADERS

CUMMINS 4BTAA3.9 (BS III) ENGINE | GROSS POWER 99HP @ 2200 RPM | MAXIMUM
ENGINE TORQUE - 429 NM | POWER-SHIFT TRANSMISSION | OPERATING WEIGHT - 7,650 KG
BUCKET CAPACITY: LOADER - 1.1 M³ (2280 MM) | BACKHOE - 0.27 M³ (800 MM)
BACKHOE DIGGING DEPTH - 4600 MM | ERGONOMICALLY DESIGNED CABIN WITH
EXCELLENT VISIBILITY AND EXCAVATOR - LIKE CONTROLS AND COMFORT



LeeBoy

Unmatched Power, Performance & Productivity

MOTOR GRADERS | CRAWLER EXCAVATORS | BACKHOE LOADERS | CONCRETE BATCHING PLANTS | DRILL RIGS

BUILTBY
LISTENING
KNOWLEDGE
EXPERTISE

699 BACKHOE LOADER

New Generation Backhoe Loaders from LeeBoy that embody LeeBoy's commitment to excellence in engineering and manufacturing. Powering them with powerful engines from Cummins provides world-class performance and complies with all relevant environmental regulations. Its low fuel consumption and maintenance costs make operating the backhoe loaders even more attractive. The ergonomically designed cabins provide perfect operating comfort and excellent visibility with tinted safety glass. The front and side control panels are all equipped with the latest technology to guide the operator. Equipped with systems to improve performance and productivity, these backhoe loaders are an ideal combination of concentrated power, safety and extreme user-friendliness



ENGINE

- Model:** Cummins 4BTAA 3.9-C
(BS III Certified) 99hp
- Type:** 4 - stroke, turbo charged
- Cylinders:** 4
- Bore/ stroke:** 102 mm/ 120 mm
- Displacement:** 3.9 L
- Fuel injection:** Rotary high pressure
- Fuel:** Diesel
- Fuel filter:** 3 microns & 10 micron + moisture separator
- Cooling:** Liquid
- Engine speeds:**
- Rated speed, 2200 rpm
 - Low idle 850 -1000 rpm
 - High idle, no load 2350 - 2420 rpm
- Horsepower@2200 rpm:**
- Gross 99 hp (74 kW),
 - Net 87 hp (65 kW)
- Maximum torque @ 1500 rpm:** 429 Nm
- Torque rise at rated speed:** 34%
- Radiator:** Core size area 3971 cm²
- 50° Polymer fan style:** 10 blade suction,
- Diameter:** 550 mm, Ratio 1:1.1
- Water pump style:** Integral
- Engine oil pump:** Plate cooler with pressurized under-piston nozzles
- Pump operating angle ratings:**
- Side-to-side Rated 35°
 - Fore and aft Rated 35°
- Oil filtration:** Replaceable, full-flow spin-on

POWER TRAIN

Transmission (standard):

4F-3R Manual Power Shift Transmission, electrically actuated, twist grip on the left-hand side of the steering column

Gear ratios:

Forward/ Reverse

- 1st: 4.93 / 3.9
- 2nd: 2.68 / 2.1
- 3rd: 1.295 / 1.314
- 4th: 0.704

Travel speeds:

Forward I Reverse (km/hr)

- 1st: 6.12 / 7.7
- 2nd: 11.08 / 13.89
- 3rd: 22.21 / 21.91
- 4th: 37.71

Torque converter ratio:

Front 4WD/ rear axle:

- Differential ratio: 3.1
- Planetary hub ratio: 6.4
- Total reduction ratio : 19.84

Service brake: Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 3 per side

Disc area: 0.28 m²

Parking brake: Axle Mounted Spring Applied Hydraulic Release (SAHR)

TECHNICAL

ELECTRICAL

Voltage:	12 Volts, negative ground
Alternator:	95 amp
Battery:	800 cca heavy duty gel-type battery (can be tilted to 180° without spillage)
Lights:	Halogen type combination headlights (2) LED type worklights (6) Combination type head lights (2) Strobe lights - Amber LED type dual flash

HYDRAULICS

Pump:	Variable displacement, Axial Piston Pump
Standard main relief pressure:	230 +/- 5 bar @ 140 LPM
Filtration:	10-micron, return line, full flow, condition indicator light for filter.
Oil cooler:	4-section, Heavy-duty
Loader flow @ rated engine rpm:	140 lpm @ 2200 rpm
Loader control valve:	Two or three spool closed centre valve. Two & three spool valves have a single lever manual control for lift and tilt functions. Three spool valves use a manual control for the auxiliary function. The lift lever has a positive hold 'Float' position and a 'return-to-dig' feature. System main relief valve is single stage with manual Backhoe controls Loader auxiliary hydraulics with full available flow:140 lpm
Backhoe flow@ rated engine rpm:	140 lpm @ 2200 rpm
Pilot backhoe control valve:	Six, seven, or eight-spool sectional closed center control valve. post compensated, load independent proportional control valves with specific flows for each function.The post compensator ensures that oil is divided in preset ratios between functions when simultaneously actuated

OPERATING WEIGHT: 7, 650 Kg

(Base weight calculated on standard machine configuration with standard loader bucket (2280 mm/1.1m³), standard backhoe bucket (800 mm / 0.27m³) fully fueled and operator.

Optional Attachments

Attachment	Total weight	In lieu of weight
Multi-purpose clamshell bucket	654 kg	+302 kg
Extended dipper	421 kg	+ 218 kg
600 mm backhoe bucket	156 kg	- 29 kg
400 mm backhoe bucket	136 kg	- 19 kg
300 mm backhoe bucket	112 kg	- 43 kg

OTHER SPECIFICATIONS

Front tyres:	2WD - 9 x 16, 16-ply rating, 4WD - 12.5 x 18,16-ply rating
Rear tyres:	2/4WD - 16.9 x 28, 12-ply rating
Other features:	• Lifting hooks on standard bucket • Mechanical joystick with self-leveling and electric return-to-dig • Automatic transmission de-clutch on braking on 1" & 2 nd gear, Functions controlled by joystick lever are lift, dump, horn & ride control (optional).
Turn circle diameter: (without brakes):	Outer tyre clearance: 8.4 m Outer bucket clearance: 11.1 m
Turn circle diameter: (with brakes):	Outer tyre clearance: 7.3 m Outer bucket clearance: 10.5 m
Loader standard bucket:	Width/ Capacity = 2280 mm/ 1.1 m ³
Backhoe standard bucket:	Width/ Capacities = 800 mm/ 0.27 m ³
Backhoe optional buckets:	• 300 mm/ 0.083 m ³ • 400 mm/ 0.16 m ³ • 600 mm/ 0.21 m ³ • 700 mm/ 0.24 m ³

CAB CONTROLS AND FEATURES

Main features:

- Ergonomically designed cabin
- Suspension seat with 180° swivel mechanical suspension which is adjustable to operator's body weight
- Retractable seatbelt
- Joystick control
- Fully opening rear window
- Front & rear windscreen washers/wipers
- Adjustable steering column
- Rear view mirrors; Battery master switch;
- Tool box; Storage compartment:
- 4-Speaker CD Player, MP3 Player and Radio Receiver (With USB Compatibility).
- HVAC (Optional)

Gauges:

- Engine water temperature
- Transmission oil temperature
- Fuel level
- Tachometer / Hourmeter
- Speedometer

Warning lights:

- Air cleaner restriction
- Alternator
- Engine oil pressure low
- Parking brake engagement
- High Engine water temperature

Audible alarms: Backup

Horn: Dual switched front

SERVICE CAPACITY

Fuel tank:	125 Litres
Engine oil (with filters):	9.5 Litres
Cooling system:	17 Litres
Transmission:	16 Litres
Hydraulic tank:	75 Litres
Hydraulic system:	150 Litres
Axle oil:	• Front axle (4WD) 7.8 Litres • Rear 16 Litres
Brake oil:	2 Litres

SPECIFICATIONS

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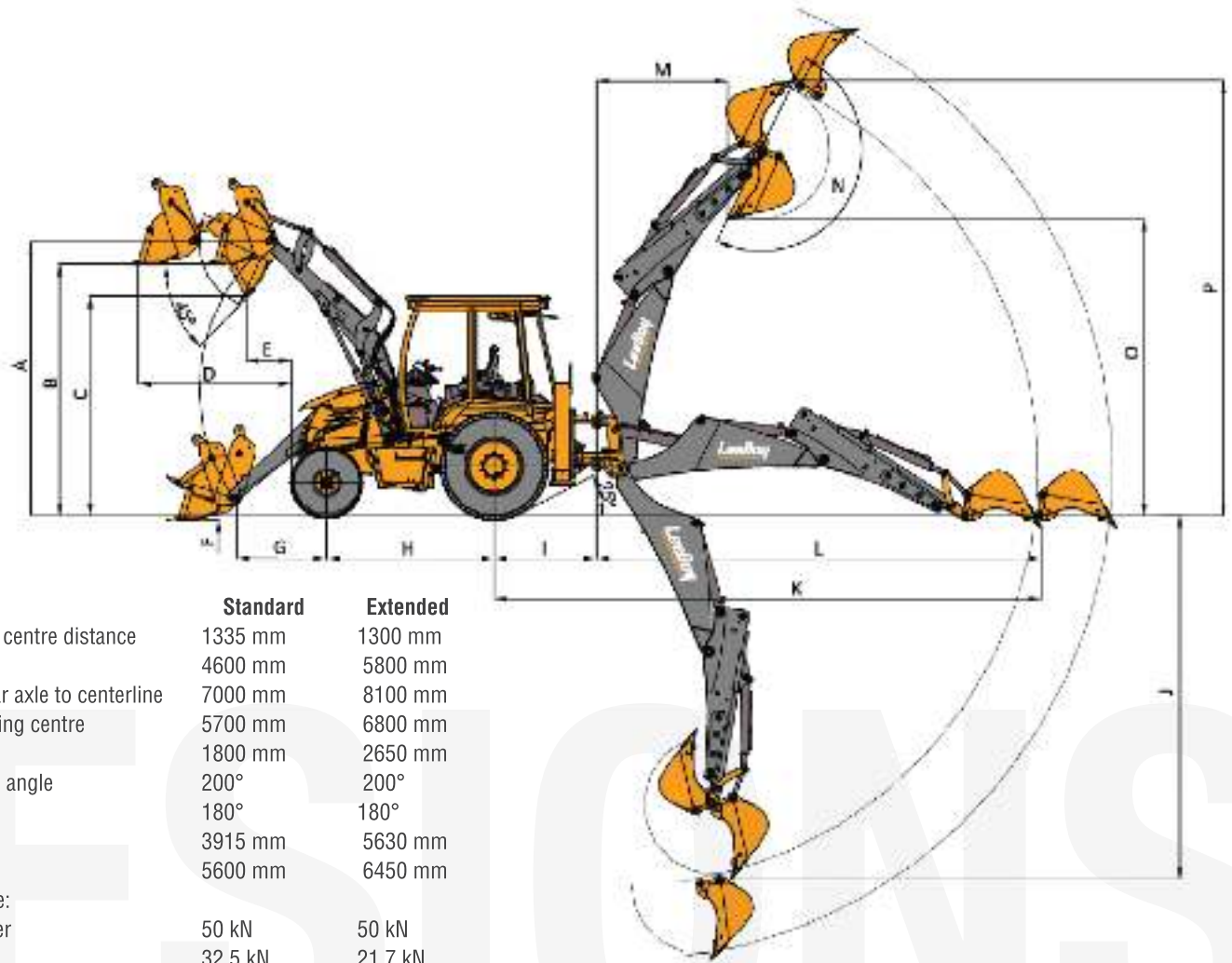
BACKHOE LOADER

LOADER

A. Hinge pin height	3560 mm
B. Load over height	3270 mm
C. Dump height	2720 mm
D. Maximum reach at full height	1018 mm
E. Dump reach at full height	566 mm
Dump angle at full height	48°
Bucket rollback at ground line	45°
Bucket rollback at SAE carry	45°
Bucket rollback at full height (Adjustable)	44.2°
F. Digging depth	100 mm
Width of bucket cutting edge	2280 mm
G. Distance between hinge pin and front-axle centre	1460 mm
Lift capacity to full height	3725 kgs
Breakout force: Loader	
• Lift	51 kN
• Bucket	60 kN
H. Wheelbase	2180 mm

BACKHOE

	Standard	Extended
I. Backhoe swing centre distance	1335 mm	1300 mm
J. Digging depth	4600 mm	5800 mm
K. Reach from rear axle to centerline	7000 mm	8100 mm
L. Reach from swing centre	5700 mm	6800 mm
M. Loading reach	1800 mm	2650 mm
N. Bucket rotation angle	200°	200°
• Swing arc	180°	180°
O. Loading height	3915 mm	5630 mm
P. Digging height	5600 mm	6450 mm
• Breakout force:		
• Bucket cylinder	50 kN	50 kN
• Arm cylinder	32.5 kN	21.7 kN



LeeBoy makes continuous improvements to all its products and reserves the right to change specifications without notice. Photos and illustrations may contain standard and optional equipment.

LeeBoy

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