

Loaders

Wheeled Loader

L1204E | L1506E | L1706E | L1806E | L2106E | L2606E | L2706E



BELL

Customer inspiration Production driven

Serious productivity demands serious inspiration. Many of the innovative features and advantages of the E-series loaders have come from the brightest minds in the industry - owners and users such as yourself.

By fully understanding and responding to your needs. The E-series delivers the most advanced wheeled loader range with class-leading features available in the market. These productive material movers are equipped with spacious cabs, low-maintenance cooling systems, fatigue-beating ergonomics and even more options. All with the goal of increasing productivity and uptime, while lowering daily operating costs. Owners, operators, and service technicians will benefit from the numerous features found in Bell Loaders.



E-series Specification	L1204E	L1506E	L1706E	L1806E	L2106E	L2606E	L2706E
Rated Net Power	95 kW	125 kW	147 kW	173 kW	197 kW	227 kW	248 kW
Bucket Capacity (Heaped)	1.9 m ³	2.3 m ³	2.7 m ³	3.3 m ³	3.6 m ³	4.4 m ³	4.7 m ³
Tipping Load (Full Turn)	8 072 kg	9 434 kg	12 031 kg	13 126 kg	14 204 kg	17 123 kg	17 588 kg
Breakout Force	8 212 kg	10 284 kg	12 920 kg	15 577 kg	14 445 kg	19 515 kg	18 905 kg
Operating Weight	11 055 kg	12 820 kg	15 185 kg	18 160 kg	19 130 kg	24 182 kg	26 210 kg

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PowerTech™ emissions-certified diesel engines deliver power without compromise in all conditions. Torque reserves are impressive, it's an E-series advantage that helps maintain excellent boom and bucket speed in and out of the pile. For fully heaped loads, even in wet or hard-packed material.

Low center of gravity and optimized fore-and-aft balance deliver impressive stability and full-turn tippingload capacities. A wide footprint provides additional lateral stability for handling heavy loads and working on rough terrain.

Unsurpassed powertrain and hydraulic performance helps maintain quick ground speed and boom lift, even on steep ramps. For faster cycles.

Hard work made easier



Platforms, handrails and steps allow uninterrupted three point access. There are no crossbars, decreasing the risk of slipping.



Expanded sealed-switch module gives fingertip control of keyless start and 24 other machine functions. Enables the operator to optimally set up the machine to suit operating conditions.



Ten-percent more front glass, low-profile front console, large side and rear windows allow unsurpassed 360-degree visibility.



Optional rearview camera and radar object-detection system give an operator exceptional rear visibility on the LCD monitor screen. An audible alert is emitted for extra awareness in tight and high-traffic areas.



- Available premium high/wide-back air-suspension seat adjusts multiple ways for daylong comfort and support.
- Brake and throttle pedals have been repositioned and the front-console reshaped to make way for more legroom and comfort.
- You will find plenty of space for fluid bottles to stow a cooler and other carryons. Convenient 12-volt port powers cell phones and other electronic devices.
- Steering wheel and hydraulic levers are within easy reach and move with the operator for more control with less fatigue.
- Automotive-style directional louvers provide effective airflow to help keep the glass clear and pressurised cab comfortable.
- Cab noise has been noticeably minimized to help reduce operator fatigue.



What operator wouldn't be more productive in the high-back suspension seat of an E-series Loader? An enhanced multifunction monitor displays operating and diagnostic info on a colour LCD screen with easy-on-the-eyes clarity.

Expansive tinted front glass and a low-profile console provide a commanding view of the work ahead. The quiet and spacious cab boast generous leg room and exceptional ergonomics, including fatigue-beating features like seat-mounted loader controls. And an expanded sealed switch module with keyless start and easy push-button operation of even more functionality.

Maximise your productivity

If you want to get a handle on increased productivity, put your operator behind the controls of an E-series Loader.

But it's not just their big torque reserves that make them such impressive performers. Single-lever joystick controls provide smooth, near-effortless control. Excavator-style hydraulics sense the load and deliver the flow needed for smooth combined functions and fast work cycles. You won't find a smoother-shifting loader, either. The PowerShift™ torque-converter transmission employs SmartShift™ technology to continuously evaluate speed and load conditions, and adjusts clutch-pack engagement to suit.



Standard single-lever joystick with an FNR selector for convenient direction and full-range gear changes. Includes an innovative Quick-Shift feature for pushbutton gear changes, one gear at a time.



Programmable clutch cutoff increases productivity in all kinds of conditions. Engaging the brakes disconnects the transmission while maintaining high engine speed. For smooth dumps, fast cycles, and no machine rollback.



Boom-height kick-out sets maximum desired dump height, while return-to-carry determines lowered-boom position. Use these two E-series advantages to speed production in repetitive loading application.



Optional ride (Standard L2606E and L2706E) control smoothes travel over rough undulated terrain, allowing these loaders to navigate jobsites more quickly without losing their loads for maximum material retention.

SmartShift™ delivers smooth-as-silk gear changes, regardless of whether the bucket is empty or fully loaded.

Spin control boosts productivity by improving traction in loose material or difficult underfoot conditions. Reduces tyre wear, fuel costs and operator fatigue.

Responsive steering combines with full 80-degree articulation for exceptional maneuverability in tight areas - and faster cycle times.

Load-sensing closed-center hydraulics deliver only the power required for smooth boom and bucket functions. So there's no wasted power or fuel.

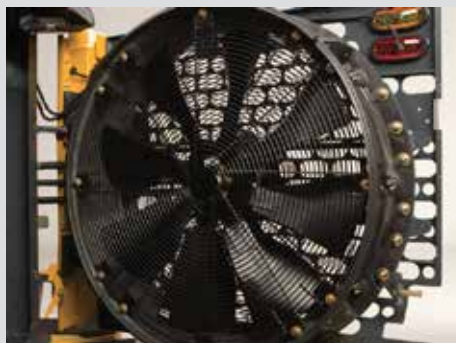
Uncompromised Uptime

When you have hungry hoppers or empty trucks depending on your loader, downtime is more than a downer. Its unacceptable.

Boost your uptime (and your bottom line) with E-series advantages such as solid-state electronics, highly efficient Quad-Cool™, and an advanced diagnostic monitor. You'll also benefit from traditional durability features such as heavy-duty wet-sleeve engines, self-adjusting wet-disc brakes, four-plate loader towers and double-tapered articulation-joint roller bearings. When you know how they're built, you'll run a Bell.



Quad-Cool™ places the radiator, airconditioner condenser, intercooler hydraulic, transmission and axle coolers in a unique boxed configuration that's isolated from engine heat. For increased efficiency and durability.



Hydrostatic swing-out fan automatically reverses at predetermined intervals, ejecting debris from the radiator and cooler cores. Or choose your own cleaning cycles through the monitor.



Optional (Standard L2606E and L2706E) 5-speed transmission with torque converter lockup increases acceleration, speeds cycles and optimizes power and fuel efficiency during transport, roading and ramp climbing.



Powered cab pre-cleaner provides a cleaner interior when working in airborne debris.

Advanced air-screen kits protect the engine and cooling system from debris while increasing airflow and preventing overheating.

Large-capacity fuel tanks let you run longer between fill-ups.

Find fewer fuses, relays, connectors and wiring harnesses. Instead, highly reliable circuit-board technology and sealed solid-state switches ensure the electrical integrity you need.

Sealed-switch module keeps out dust, moisture and debris. Proven marinegrade touchpad eliminates rocker switches and nearly 100 wires and unsealed connections.

Expansive air-inlet surfaces increase airflow and prevent overheating, while keeping the cooling cores debris free. Three-millimeter side-screen perforations serve as a "first filter".

Automatic park brake, bypass-start protection, continuous handrails and wide slip-resistant steps and platforms help keep operators out of harm's way.

The buck stops here

Servicing and maintenance should be simple and cost effective and it is on the E-series.

Swing open the large side panels and you'll see the many ways these loaders minimise maintenance. The unique Quad-Cool™ system and swing-out fan provide wide-open access to both sides of the individually mounted coolers for simplified cleanout. Grouped same-side service points make quick work of the daily routine. Easy-to read sight gauges, quick-change filters, extended service intervals and advanced self-diagnostics - plus numerous other time and money saving features help make maintenance manageable and improves owning and operating costs.



Vertical spin-on engine, transmission and in-tank hydraulic filters; quick-release fuel filters; and environmentally friendly fluid drains allow quick, no-spill changes.



Conveniently displayed periodic lubrication and maintenance chart helps ensure that nothing is overlooked.



If something goes wrong, the easy-to navigate LCD monitor provides diagnostics info and even offers possible troubleshooting solutions to reduce downtime.



Large hinged service doors swing open wide for ample ground-level access. All daily servicing is done on the same side.

Lockable compartment swings open, offering convenient ground-level access to batteries and electrical disconnect switch.

500, 2 000 and 4 000 hour engine, transmission and hydraulic oil and filter intervals decrease planned downtime and expense.

Technicians will appreciate the commonsense locations and ease with which powertrain, hydraulic and cab filters are replaced. Common hydraulic and transmission fluid and filter change intervals further simplify service.

Auto-idle automatically applies the brakes and reduces engine speed to help conserve fuel after a pre determined period of inactivity. Auto shutdown turns off the engine after an extended time of inactivity.

See-through reservoir and sight gauges simplify coolant, hydraulic and transmission fluid-level checks.

Coolers resist plugging, and both sides are easily accessible for cleaning. Hydraulically driven fan runs only as needed, reducing fuel consumption and debris flow through the cores.

Technical Data - LI204E

ENGINE

Type

John Deere POWERTECH™E 4045H

Non-road emissions standard

Certified to EPA Tier 3 emissions

Cylinders

4

Displacement

4.5 l

Net Peak Power

95 kW @ 2 100 rpm

Net Peak Torque

515 Nm @ 1 400 rpm

Fuel System

High Pressure Common Rail,
Electronically controlled

Aspiration

Turbocharged, charge air cooled

Air Cleaner

Dual-element dry type, restriction
indicator in cab monitor for service

Fan Drive

Hydraulically driven, proportionally
controlled, fan aft coolers

Lubrication

Full-flow spin-on filter and integral
cooler

Electrical System

24 volt with 80-amp alternator
(100-amp alternator optional)

Batteries

950 CCA (each)

TRANSMISSION

Type

Countershaft-type PowerShift™

Torque Converter

Single stage, single phase

Shift Control

Electronically modulated, adaptive,
load and speed dependant

Operator Interface

Joystick-mounted FNR and gear
select lever, kick-down button on
Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th);
quick-shift button with two selectable
modes: kick down or kick up/down;
and three clutch cutoff settings
adjustable on switch pad

Travel Speeds

Forward Maximum

Gear 1 7.3 km/h
Gear 2 12.1 km/h
Gear 3 23.1 km/h
Gear 4 36.0 km/h

Reverse Maximum

Gear 1 7.6 km/h
Gear 2 13.0 km/h
Gear 3 25.3 km/h
Gear 4 NA

AXLES /BRAKES

Final Drive

Heavy-duty outboard planetary

Differentials

Manual locking front, conventional
rear

Rear Axle Oscillation, Stop to Stop

24°

Brakes

(conform to SAE J1473, ISO3450)

Service Brakes

Hydraulically actuated, midboard final
drive carrier mounted, oil cooled, self-
adjusting retractors, multi disc

Parking Brakes

Automatic spring applied,
hydraulically released, driveline
mounted, oil cooled, multi-disc

TYRES

Standard Sizes

17.5 x 25, L4, 12 Ply

REFILL CAPACITY

Fuel Tank

(with ground-level fueling)
242 l

Cooling System

19 l

Engine Oil with Vertical Spin-on

Filter

17.5 l

Transmission Fluid with Vertical Filter

18.5 l

Axle Oil (front and rear)

22 l

Hydraulic Reservoir and Filters

91 l

Park Brake Oil (wet disc)

0.3 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)

Variable-displacement, load-sensing
axial-piston pump; closed-center,
pressure-compensating system

Maximum Rated Flow

140 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure (Loader and Steering)

24 821 kPa

Loader Controls

Two-function valve; single- or
dual-lever controls; control lever
lockout feature; optional third- and
fourth-function valve with auxiliary
lever

Steering (conforms to SAE J1511)

Type

Power, fully hydraulic

Articulation Angle

80° arc (40° each direction)

Hydraulic Cycle Times Standard Z-Bar

Raise

5.9 sec

Dump

1.0 sec

Lower (float down)

2.4 sec

Total

9.3 sec

Turning Radius (measured to centerline of outside tyre)

4.75 m

STANDARD Z-BAR PIN-ON

Type Bucket Information

Standard Z-Bar Linkage, with Pin-
On General-Purpose Bucket with
Bolt-On, Segments and Teeth

Bucket Type/Size

Capacity, Heaped
1.9 m³

Capacity, Struck

1.6 m³

Bucket Weight

870 kg

Bucket Width

2.55 m

Breakout Force

7 970 kg

Tipping Load, Straight

9 233 kg

Tipping Load, 40° Full Turn

8 047 kg

Safe Operating Load

4 024 kg

Reach, 45° Dump, Clearance (2.13 m)

1.44 m

Reach, 45° Dump, Full Height

•• 1.04 m

Dump Clearance, 45°, Full Height

• 2.67 m

Overall Length, Bucket on Ground

••• 6.86 m

Loader Clearance Circle, Bucket Carry Position

11.07 m

Operating Weight

11 203 kg

Material

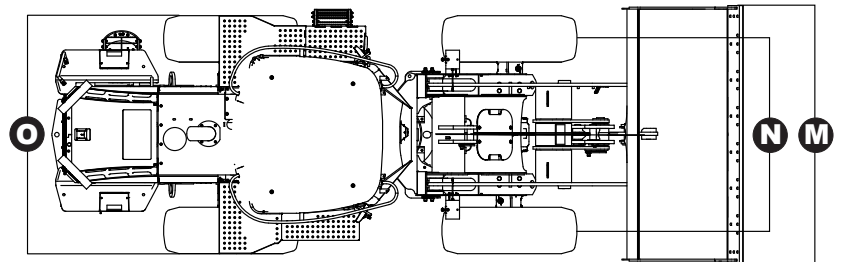
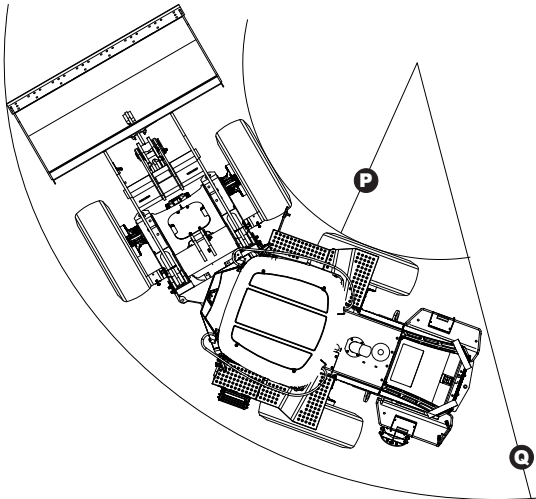
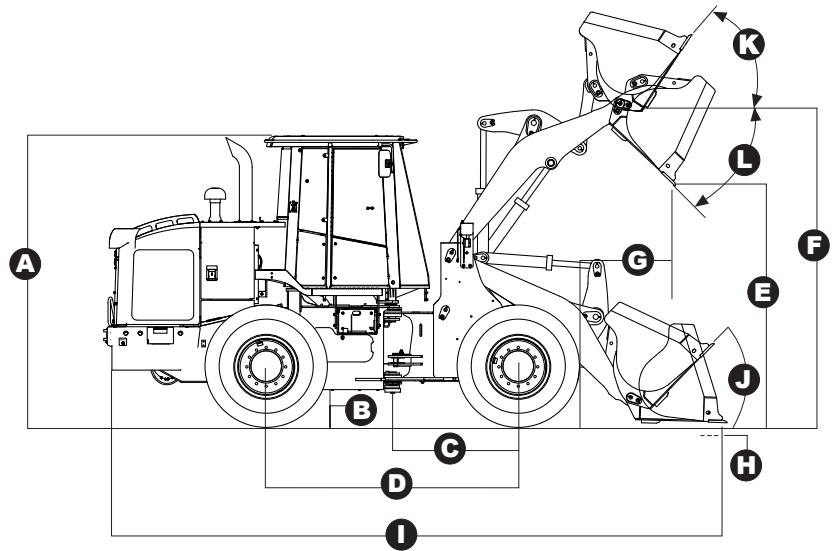
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

I Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.15 m
B	Ground Clearance	0.396 m
C	Length from Centerline to Front Axle	1.37 m
D	Wheelbase	2.77 m
E	Dump Clearance •	2.67 m
F	Height to Hinge Pin, Fully Raised	3.61 m
G	Dump Reach ••	1.04 m
H	Maximum Digging Depth	0.105 m
I	Overall Length•••	6.86 m
J	Maximum Rollback at Ground Level	41°
K	Maximum Rollback, Boom Fully Raised	55°
L	Maximum Bucket Angle, Fully Raised	50°
M	Overall Bucket Width	2.550 m
N	Wheel Track	1.910 m
O	Outside Wheel Width	2.366 m
P	Full Turn Radius, Inside	4.321 m
Q	Full Turn Radius, Outside	5.550 m



I Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
1.9 m³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
1.9 m³	GP	Straight	None	4 Piece Bolt-on
1.3 m³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
1.3 m³	High Density	Straight	None	4 Piece Bolt-on
1.4 m³	High Density	Spade	None	Weld-on Half Arrows
3 m³	Coal	Straight	None	4 Piece Bolt-on
3.4 m³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH BUCKETS

Size	Type	Blade/Lip	Teeth	Cutting Edge
1.9 m³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
1.9 m³	GP	Straight	None	4 Piece Bolt-on
3.4 m³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH IMPLEMENTS

Quick attach pallet fork frame
Quick attach materials handling boom
Quick attach cane grab

LOG GRABS

Load fork log grab
Sorting grapple
Millyard grapple

Technical Data - L1506E

ENGINE

Type

John Deere POWERTECH™E 6068H

Non-road emissions standard

Certified to EPA Tier 3 emissions

Cylinders

6 (2 valves per cylinder)

Displacement

6.8 l

Net Peak Power

125 kW @ 1 900 rpm

Net Peak Torque

673 Nm @ 1 600 rpm

Fuel System

High Pressure Common Rail

Aspiration

Turbocharged, charge air cooled

Air Cleaner

Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive

Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication

Full-flow spin-on filter and integral cooler

Electrical System

24 volt with 80-amp alternator (100-amp alternator optional)

Batteries (2 by 12V)

950 CCA (each)

TRANSMISSION

Type

Countershaft-type PowerShift™

Torque Converter

Single stage, single phase

Shift Control

Electronically modulated, adaptive, load and speed dependant

Operator Interface

Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Maximum

Gear 1 7.2 km/h
Gear 2 11.9 km/h
Gear 3 22.8 km/h
Gear 4 35.7 km/h

Reverse Maximum

Gear 1 7.2 km/h
Gear 2 12.6 km/h
Gear 3 24.1 km/h
Gear 4 NA

AXLES /BRAKES

Final Drive

Heavy-duty outboard planetary

Differentials

Manual locking front, conventional rear

Rear Axle Oscillation, Stop to Stop

24°

Brakes

(conform to SAE J1473, ISO3450)

Service Brakes

Hydraulically actuated, midboard final drive carrier mounted, oil cooled, self-adjusting retractors, multi disc

Parking Brakes

Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes

20.5 x 25, L5, 12 Ply

REFILL CAPACITY

Fuel Tank

(with ground-level fueling)

325 l

Cooling System

23 l

Engine Oil with Vertical Spin-on

Filter

19 l

Transmission Fluid with Vertical Filter

18.5 l

Axle Oil (front and rear)

17 l

Hydraulic Reservoir and Filters

92 l

Park Brake Oil (wet disc)

0.3 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)

Variable-displacement, load-sensing axial-piston pump; closed-center, pressure-compensating system

Maximum Rated Flow

189 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure

(Loader and Steering)

25 166 kPa

Loader Controls

Two-function valve; single- or dual-lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)

Type

Power, fully hydraulic

Articulation Angle

80° arc (40° each direction)

Hydraulic Cycle Times Standard

Z-Bar

Raise
5.8 sec

Dump

1.2 sec

Lower (float down)

3.2 sec

Total

10.2 sec

Turning Radius (measured to centerline of outside tyre)

5.00 m

STANDARD Z-BAR PIN-ON

Type Bucket Information

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size

Capacity, Heaped
2.3 m³

Capacity, Struck

2.0 m³

Bucket Weight

1 046 kg

Bucket Width

2,55 m

Breakout Force

10 110 kg

Tipping Load, Straight

10 878 kg

Tipping Load, 40o Full Turn

9 428 kg

Safe Operating Load

4 714 kg

Reach, 45° Dump, Clearance

(2.13 m)

1.46 m

Reach, 45° Dump, Full Height

•• 0.99 m

Dump Clearance, 45°, Full Height

• 2.76 m

Overall Length, Bucket on Ground

••• 7.43 m

Loader Clearance Circle, Bucket

Carry Position

11.65 m

Operating Weight

13 000 kg

Material

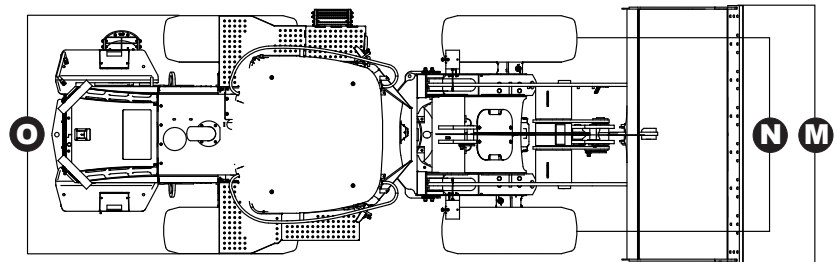
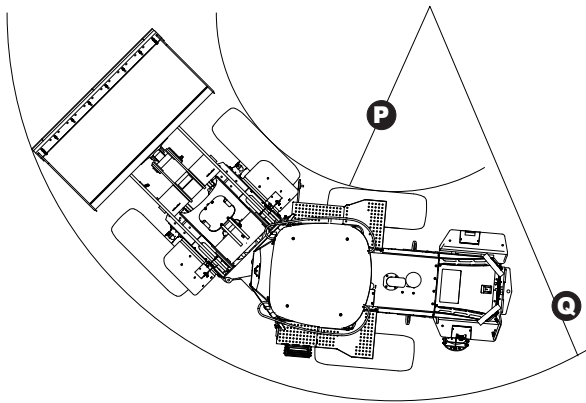
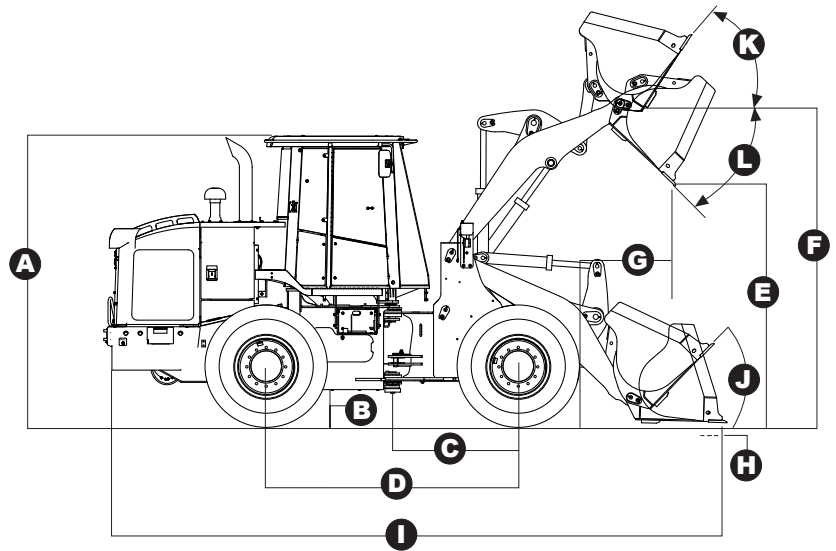
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.24 m
B	Ground Clearance	0.40 m
C	Length from Centerline to Front Axle	1.45 m
D	Wheelbase	2.93 m
E	Dump Clearance •	2.76 m
F	Height to Hinge Pin, Fully Raised	3.82 m
G	Dump Reach ••	0.99 m
H	Maximum Digging Depth	0.095 m
I	Overall Length •••	7.43 m
J	Maximum Rollback at Ground Level	42°
K	Maximum Rollback, Boom Fully Raised	55°
L	Maximum Bucket Angle, Fully Raised	49°
M	Overall Bucket Width	2.550 m
N	Wheel Track	1.947 m
O	Outside Wheel Width	2.470 m
P	Full Turn Radius, Inside	4.545 m
Q	Full Turn Radius, Outside	5.800 m



Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
2.3 m ³	GP	Straight	Bolt-on 2 strap, male adaptors S	Segments
2.3 m ³	GP	Straight	None	4 Piece Bolt-on
1.5 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
1.5 m ³	High Density	Straight	None	4 Piece Bolt-on
1.6 m ³	High Density	Spade	None	Weld-on Half Arrows
2.7 m ³	Low Density	Straight	None	4 Piece Bolt-on
3.6 m ³	Coal	Straight	None	4 Piece Bolt-on
4.5 m ³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH BUCKETS

Size	Type	Blade/Lip	Teeth	Cutting Edge
2.3 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments

QUICK ATTACH IMPLEMENTS

Quick attach pallet fork frame
Quick attach materials handling boom
Quick attach cane grab

LOG GRABS

Load fork log grab
Sorting grapple
Millyard grapple

Technical Data - L1706E

ENGINE

Type
John Deere POWERTECH™ 6068H

Non-road emissions standard
Certified to EPA Tier 2 EU Stage II

Cylinders
6 (4 valves per cylinder)

Displacement
6.8 l

Net Peak Power
147 kW @ 1 800 rpm

Net Peak Torque
836 Nm @ 1 600 rpm

Fuel System
High Pressure Common Rail

Aspiration
Turbocharged, charge air cooled

Air Cleaner
Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive
Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication
Full-flow spin-on filter and integral cooler

Electrical System
24 volt with 80-amp alternator (100-amp alternator option)

Batteries (2 by 12V)
950 CCA (each)

TRANSMISSION

Type
Countershaft-type PowerShift™

Torque Converter
Single stage, single phase

Shift Control
Electronically modulated, adaptive, load and speed dependant

Operator Interface
Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Maximum
Gear 1 7.6 km/h
Gear 2 12.5 km/h
Gear 3 25.0 km/h
Gear 4 39.5 km/h

Reverse Maximum
Gear 1 7.6 km/h
Gear 2 13.0 km/h
Gear 3 25.7 km/h
Gear 4 NA

AXLES /BRAKES

Final Drive
Heavy-duty inboard-mounted planetary

Differentials

Hydraulic locking front with conventional rear - standard; dual locking front and rear - optional

Rear Axle Oscillation, Stop to Stop
24°

Brakes
(conform to SAE J1473, ISO3450)

Service Brakes
Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting, single disc

Parking Brakes
Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes
20.5 x 25, L5, 12 Ply

REFILL CAPACITY

Fuel Tank
(with ground-level fueling)
352 l

Cooling System
27 l

Engine Oil with Vertical Spin-on Filter
19 l

Transmission Fluid with Vertical Filter
22 l

Axle Oil Front
22 l

Axle Oil Rear
17 l

Hydraulic Reservoir and Filters
110 l

Park Brake Oil (wet disc)
0.3 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)
Variable-displacement, axial-piston pump; closed-center, pressure-compensating system

Maximum Rated Flow
223 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure (Loader and Steering)
24 821 kPa

Loader Controls
Two-function valve; joystick control or fingertip controls; hydraulic-functionenable/disable; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)
Type
Power, fully hydraulic

Articulation Angle
80° arc (40° each direction)

Hydraulic Cycle Times Standard Z-Bar
Raise
5.9 sec

Dump
1.3 sec

Lower (float down)
2.7 sec

Total
9.9 sec

Turning Radius (measured to centerline of outside tyre)
5.27 m

STANDARD Z-BAR PIN-ON

Type Bucket Information
Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size
Capacity, Heaped
2.7 m³

Capacity, Struck
2.3 m³

Bucket Weight
1 148 kg

Bucket Width
2.69 m

Breakout Force
12 821 kg

Tipping Load, Straight
13 822 kg

Tipping Load, 40° Full Turn
11 979 kg

Safe Operating Load
5 989.5 kg

Reach, 45° Dump, Clearance
(2.13 m)
1.57 m

Reach, 45° Dump, Full Height
•• 1.02 m

Dump Clearance, 45°, Full Height
• 2.86 m

Overall Length, Bucket on Ground
••• 7.76 m

Loader Clearance Circle, Bucket Carry Position
12.24 m

Operating Weight
15 483 kg

Material

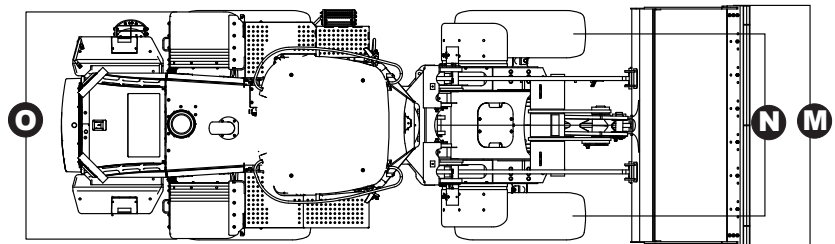
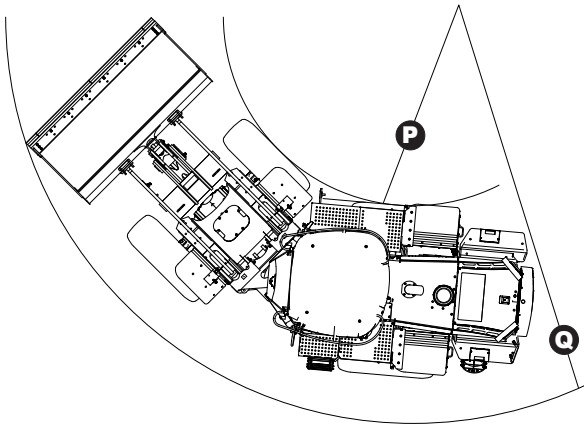
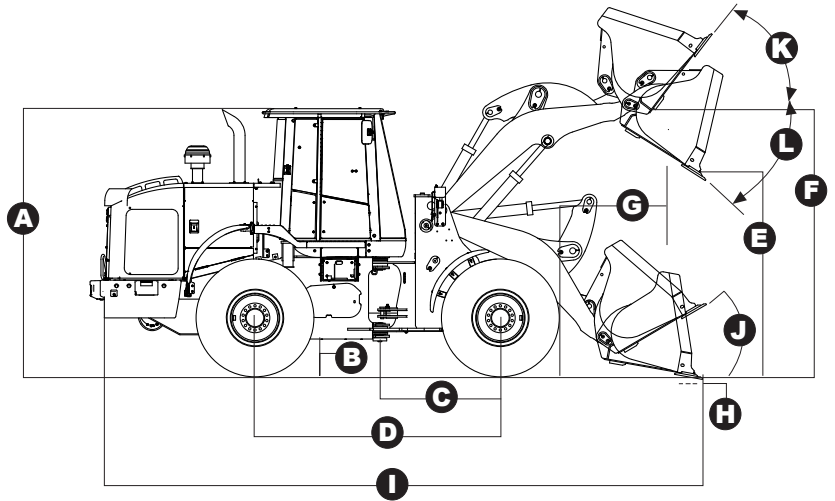
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.32 m
B	Ground Clearance	0.384 m
C	Length from Centerline to Front Axle	1.52 m
D	Wheelbase	3.09 m
E	Dump Clearance •	2.86 m
F	Height to Hinge Pin, Fully Raised	3.95 m
G	Dump Reach ••	1.02 m
H	Maximum Digging Depth	0.095 m
I	Overall Length •••	7.76 m
J	Maximum Rollback at Ground Level	37°
K	Maximum Rollback, Boom Fully Raised	50°
L	Maximum Bucket Angle, Fully Raised	45°
M	Overall Bucket Width	2.690 m
N	Wheel Track	2.048 m
O	Outside Wheel Width	2.572 m
P	Full Turn Radius, Inside	6.095 m
Q	Full Turn Radius, Outside	4.780 m



Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
2.7 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
2.7 m ³	GP	Straight	None	4 Piece Bolt-on
1.7 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
1.7 m ³	High Density	Straight	None	4 Piece Bolt-on
1.8 m ³	High Density	Spade	None	Weld-on Half Arrows
4.2 m ³	Coal	Straight	None	4 Piece Bolt-on
4.2 m ³	Coal	Spade	None	Weld-on Half Arrows
5.5 m ³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH BUCKETS

Size	Type	Blade/Lip	Teeth	Cutting Edge
2.7 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
5.5 m ³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH IMPLEMENTS

Quick attach pallet fork frame
Quick attach materials handling boom
Quick attach light materials bucket
Quick attach cane grab

LOG GRABS

Load fork log grab
Large diameter log grab
Sorting grapple
Millyard grapple

Technical Data - L1806E

ENGINE

Type

John Deere POWERTECH™ 6068H

Non-road emissions standard

Certified to EPA Tier 2 EU Stage II

Cylinders

6 (4 valves per cylinder)

Displacement

6.8 l

Net Peak Power

173 kW @ 1 700 rpm

Net Peak Torque

1 016 Nm @ 1 400 rpm

Fuel System

High Pressure Common Rail

Aspiration

Turbocharged, charge air cooled

Air Cleaner

Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive

Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication

Full-flow spin-on filter and integral cooler

Electrical System

24 volt with 80-amp alternator (100-amp alternator optional)

Batteries (2 by 12V)

950 CCA (each)

TRANSMISSION

Type

Countershaft-type PowerShift™

Torque Converter

Single stage, single phase

Shift Control

Electronically modulated, adaptive, load and speed dependant

Operator Interface

Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Maximum

Gear 1 7.6 km/h
Gear 2 12.6 km/h
Gear 3 24.7 km/h
Gear 4 36.6 km/h

Reverse Maximum

Gear 1 7.9 km/h
Gear 2 12.9 km/h
Gear 3 24.9 km/h
Gear 4 NA

AXLES /BRAKES

Final Drive

Heavy-duty inboard planetary

Differentials

Hydraulic locking front with conventional rear

Rear Axle Oscillation, Stop to Stop

26°

Brakes

(conform to SAE J1473, ISO3450)

Service Brakes

Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting, single disc

Parking Brakes

Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes

23.5 x 25, L5, 16 Ply

REFILL CAPACITY

Fuel Tank

(with ground-level fueling)

352 l

Cooling System

29.5 l

Engine Oil with Vertical Spin-on

Filter

24.5 l

Transmission Fluid with Vertical Filter

27 l

Axle Oil (front and rear)

22 l

Hydraulic Reservoir and Filters

110 l

Park Brake Oil (wet disc)

0.6 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)

Variable-displacement, axial-piston pump; closed-center, pressure-compensating system

Maximum Rated Flow

310 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure (Loader and Steering)

25 166 kPa

Loader Controls

Two-function valve; single-dual-lever controls; control lockout feature; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)

Type

Power, fully hydraulic

Articulation Angle

80° arc (40° each direction)

Hydraulic Cycle Times Standard

Z-Bar

Raise

6.4 sec

Dump

1.6 sec

Lower (float down)

3.0 sec

Total

11.0 sec

Turning Radius (measured to centerline of outside tyre)

5.57 m

STANDARD Z-BAR PIN-ON

Type Bucket Information

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size

Capacity, Heaped
3.3 m³

Capacity, Struck
2.8 m³

Bucket Weight
1 735 kg

Bucket Width
3.04 m

Breakout Force
15 378 kg

Tipping Load, Straight
14 906 kg

Tipping Load, 40° Full Turn
12 879 kg

Safe Operating Load
6 440 kg

Reach, 45° Dump, Clearance
(2.13 m)
1.61 m

Reach, 45° Dump, Full Height
•• 1.06 m

Dump Clearance, 45°, Full Height
• 2.91 m

Overall Length, Bucket on Ground
••• 8.10 m

Loader Clearance Circle, Bucket Carry Position
13.19 m

Operating Weight
18 333 kg

Material

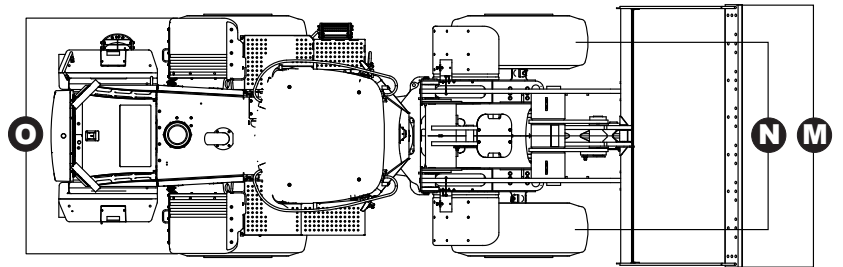
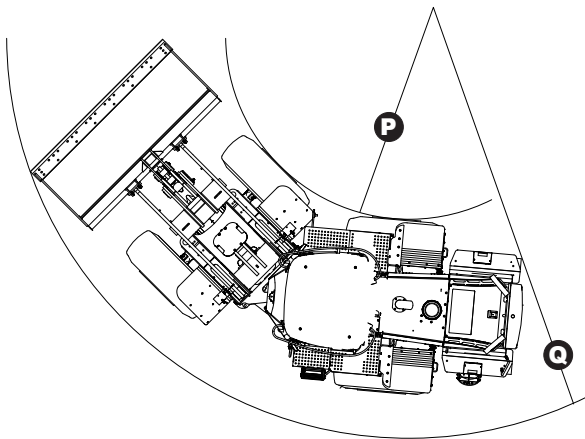
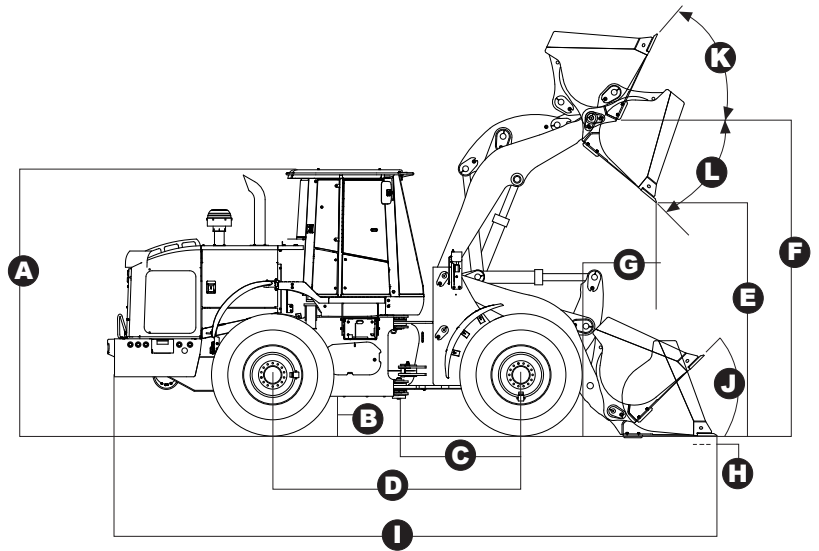
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

I Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.43 m
B	Ground Clearance	0.461 m
C	Length from Centerline to Front Axle	1.60 m
D	Wheelbase	3.26 m
E	Dump Clearance •	2.91 m
F	Height to Hinge Pin, Fully Raised	4.12 m
G	Dump Reach ••	1.06 m
H	Maximum Digging Depth	0.106 m
I	Overall Length •••	8.10 m
J	Maximum Rollback at Ground Level	42°
K	Maximum Rollback, Boom Fully Raised	55°
L	Maximum Bucket Angle, Fully Raised	50°
M	Overall Bucket Width	3.040 m
N	Wheel Track	2.143 m
O	Outside Wheel Width	2.705 m
P	Full Turn Radius, Inside	5.179 m
Q	Full Turn Radius, Outside	6.580 m



I Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
3.3 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
3.3 m ³	GP	Straight	None	4 Piece Bolt-on Segments
2 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
2 m ³	High Density	Straight	None	4 Piece Bolt-on
2.2 m ³	High Density	Spade	None	Weld-on Half Arrows
2.9 m ³	Rock	Spade	Bolt-on 2 strap, male adaptors	Segments
2.9 m ³	Rock	Spade	None	Weld-on Half Arrows
4 m ³	Low Density	Straight	None	4 Piece Bolt-on
4.9 m ³	Coal	Spade	None	4 Piece Bolt-on
9 m ³	Wood Chip	Straight	None	4 Piece Bolt-on

QUICK ATTACH BUCKETS

Size	Type	Blade/Lip	Teeth	Cutting Edge
3.3 m ³	GP Bucket	Straight	Bolt-on 2 strap, male adaptors	Segments
4.9 m ³	Coal	Straight	None	4 Piece Bolt-on

QUICK ATTACH IMPLEMENTS

Quick attach pallet fork frame
Quick attach cane grab

LOG GRABS

Load fork log grab
Large diameter log grab
Sorting grapple
Millyard grapple

Technical Data - L2106E

ENGINE

Type
John Deere POWERTECH™ 6090H

Non-road emissions standard
Certified to EPA Tier 2 EU Stage II

Cylinders
6 (4 valves per cylinder)

Displacement
9.0 l

Net Peak Power
197 kW @ 1 800 rpm

Net Peak Torque
1 159 Nm @ 1 300 rpm

Fuel System
High Pressure Common Rail

Aspiration
Turbocharged, charge air cooled

Air Cleaner
Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive
Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication
Full-flow spin-on filter and integral cooler

Electrical System
24 volt with 80-amp alternator (100-amp alternator optional)

Batteries (2 by 12V)
1 400 CCA (each)

TRANSMISSION

Type
Countershaft-type PowerShift™

Torque Converter
Single stage, single phase

Shift Control
Electronically modulated, adaptive, load and speed dependant

Operator Interface
Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Maximum
Gear 1 7.2 km/h
Gear 2 11.9 km/h
Gear 3 23.1 km/h
Gear 4 35.6 km/h

Reverse Maximum
Gear 1 7.6 km/h
Gear 2 12.5 km/h
Gear 3 24.2 km/h
Gear 4 NA

AXLES /BRAKES

Final Drive
Heavy-duty inboard planetary

Differentials
Hydraulic locking front with conventional rear

Rear Axle Oscillation, Stop to Stop
26°

Brakes
(conform to SAE J1473, ISO3450)
Service Brakes
Hydraulically actuated, inboard sun-gear mounted, oil cooled, self-adjusting, single disc

Parking Brakes
Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes
23.5 x 25, L5, 16 Ply

REFILL CAPACITY

Fuel Tank
(with ground-level fueling)
352 l

Cooling System
33.8 l

Engine Oil with Vertical Spin-on Filter
29.6 l

Transmission Fluid with Vertical Filter
27 l

Axle Oil (front and rear)
22 l

Hydraulic Reservoir and Filters
110 l

Park Brake Oil (wet disc)
0.7 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)
Variable-displacement, axial-piston pump; closed-center, pressure-compensating system

Maximum Rated Flow
310 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure (Loader and Steering)
25 166 kPa

Loader Controls
Two-function valve; single-dual-lever controls; control lockout feature; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)
Type
Power, fully hydraulic

Articulation Angle
80° arc (40° each direction)

Hydraulic Cycle Times Standard Z-Bar
Raise
6.4 sec

Dump
1.4 sec

Lower (float down)
3.0 sec

Total
10.8 sec

Turning Radius (measured to centerline of outside tyre)
5.64 m

STANDARD Z-BAR PIN-ON

Type Bucket Information
Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size
Capacity, Heaped
3.6 m³

Capacity, Struck
3.2 m³

Bucket Weight
1 822 kg

Bucket Width
3.040 m

Breakout Force
14 398 kg

Tipping Load, Straight
16 392 kg

Tipping Load, 40° Full Turn
14 132 kg

Safe Operating Load
7 066 kg

Reach, 45° Dump, Clearance (2.13 m)
1.67 m

Reach, 45° Dump, Full Height
•• 1.13 m

Dump Clearance, 45°, Full Height
• 2.84 m

Overall Length, Bucket on Ground
••• 8.31 m

Loader Clearance Circle, Bucket Carry Position
13.25 m

Operating Weight
19 264 kg

Material

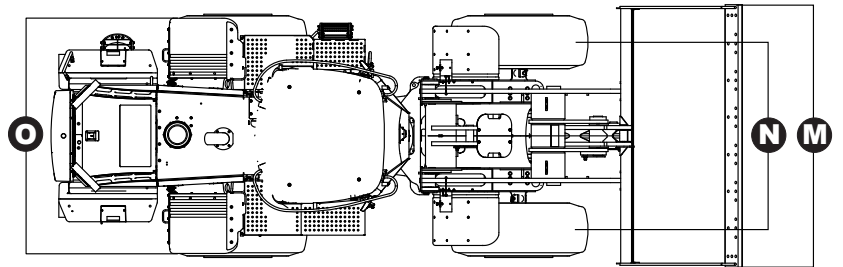
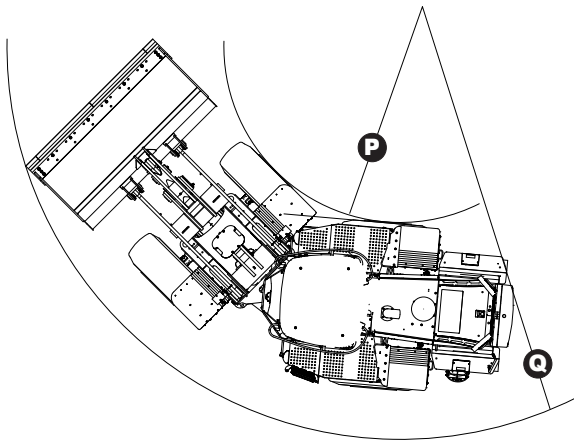
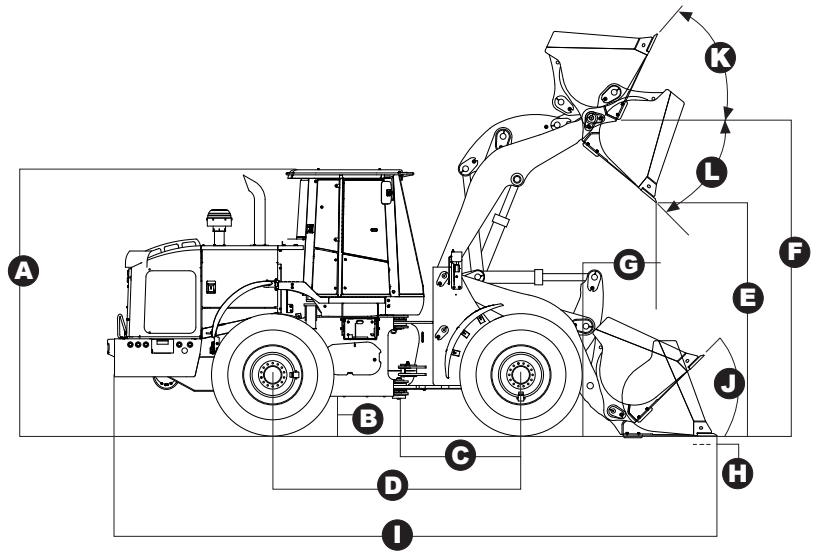
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.43 m
B	Ground Clearance	0.461 m
C	Length from Centerline to Front Axle	1.60 m
D	Wheelbase	3.26 m
E	Dump Clearance •	2.84 m
F	Height to Hinge Pin, Fully Raised	4.12 m
G	Dump Reach ••	1.13 m
H	Maximum Digging Depth	0.123 m
I	Overall Length •••	8.31 m
J	Maximum Rollback at Ground Level	41°
K	Maximum Rollback, Boom Fully Raised	55°
L	Maximum Bucket Angle, Fully Raised	50°
M	Overall Bucket Width	3.040 m
N	Wheel Track	2.150 m
O	Outside Wheel Width	2.712 m
P	Full Turn Radius, Inside	5.147 m
Q	Full Turn Radius, Outside	6.585 m



Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
3.6 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
3.6 m ³	GP	Straight	None	4 Piece Bolt-on Segments
2.2 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
2.2 m ³	High Density	Straight	None	4 Piece Bolt-on
2.4 m ³	High Density	Spade	None	Weld-on Half Arrows
2.4 m ³	High Density	Spade	None	3 Piece Bolt-on
2.9 m ³	High Density	Straight	None	4 Piece Bolt-on
3.1 m ³	Rock	Spade	Bolt-on 2 strap, male adaptors	Segments
3.1 m ³	Rock	Spade	None	Weld-on Half Arrows
5.3 m ³	Coal	Straight	None	4 Piece Bolt-on

QUICK ATTACH BUCKETS

Size	Type	Blade/Lip	Teeth	Cutting Edge
3.6 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
5.3 m ³	Coal	Straight	None	4 Piece Bolt-on

QUICK ATTACH IMPLEMENTS

Cane grab

LOG GRABS

Load fork log grab
Large diameter log grab
Sorting grapple
Millyard grapple

Technical Data - L2606E

ENGINE

Type
John Deere POWERTECH™ 6090H

Non-road emissions standard
Certified to EPA Tier 2 EU Stage II

Cylinders
6 (4 valves per cylinder)

Displacement
9.0 l

Net Peak Power
227 kW @ 1 500 rpm

Net Peak Torque
1 456 Nm @ 1 400 rpm

Fuel System
High Pressure Common Rail

Aspiration
Turbocharged, charge air cooled

Air Cleaner
Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive
Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication
Full-flow spin-on filter and integral cooler

Electrical System
24 volt with 80-amp alternator (100-amp alternator optional)

Batteries (2 by 12V)
1 400 CCA (each)

TRANSMISSION

Type
Countershaft-type PowerShift™

Torque Converter
Single stage, single phase

Shift Control
Electronically modulated, adaptive, load and speed dependant

Operator Interface
Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Max (5-speed Transmission)

Gear 1 7.4 km/h
Gear 2 14.3 km/h
Gear 3 22.2 km/h
Gear 4 32.2 km/h
Gear 5 40 km/h

Reverse Maximum

Gear 1 7.4 km/h
Gear 2 14.3 km/h
Gear 3 32.3 km/h
Gear 4 NA
Gear 5 NA

AXLES / BRAKES

Final Drive

Heavy-duty inboard planetary

Differentials

Hydraulic locking front with conventional rear

Rear Axle Oscillation, Stop to Stop
26°

Brakes

(conform to SAE J1473, ISO3450)

Service Brakes

Hydraulically actuated, inboard sun-gear mounted, oil cooled, self-adjusting, single disc

Parking Brakes

Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes

26.5 x 25, L5, 20 Ply

REFILL CAPACITY

Fuel Tank

(with ground-level fueling)
469 l

Cooling System

44.8 l

Engine Oil with Vertical Spin-on Filter

34 l

Transmission Fluid with Vertical Filter

27.9 l

Axle Oil (front and rear)

46 l

Hydraulic Reservoir and Filters

159 l

Park Brake Oil (wet disc)

0.71 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)

Two variable-displacement, load-sensing axial-piston pumps, closed-center system

Maximum Rated Flow

515 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure

(Loader and Steering)
22 670 kPa

Loader Controls

Two-function valve; single-dual-lever controls; control lockout feature; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)

Type

Power, fully hydraulic

Articulation Angle

80° arc (40° each direction)

Hydraulic Cycle Times Standard

Z-Bar

Raise
6.8 sec

Dump
1.6 sec

Lower (float down)
2.8 sec

Total

11.2 sec

Turning Radius (measured to centerline of outside tyre)

6.28 m

STANDARD Z-BAR PIN-ON

Type Bucket Information

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size

Capacity, Heaped
4.4 m³

Capacity, Struck
3.8 m³

Bucket Weight
2 595 kg

Bucket Width
3.274 m

Breakout Force
19 416 kg

Tipping Load, Straight
19 678 kg

Tipping Load, 40° Full Turn
16 946 kg

Safe Operating Load
8 473 kg

Reach, 45° Dump, Clearance (2.13 m)
1.85 m

Reach, 45° Dump, Full Height
•• 1.23 m

Dump Clearance, 45°, Full Height
• 3.04 m

Overall Length, Bucket on Ground
••• 9.01 m

Loader Clearance Circle, Bucket Carry Position
14.01 m

Operating Weight
24 425 kg

Material

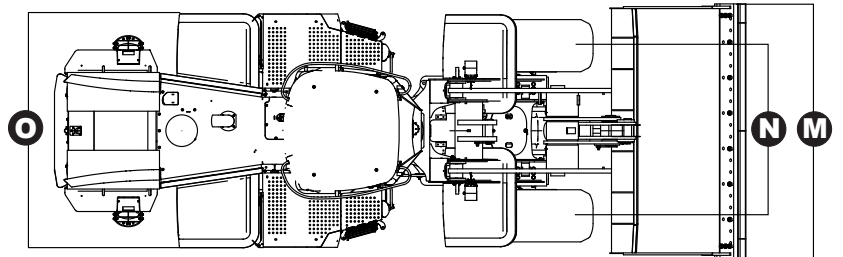
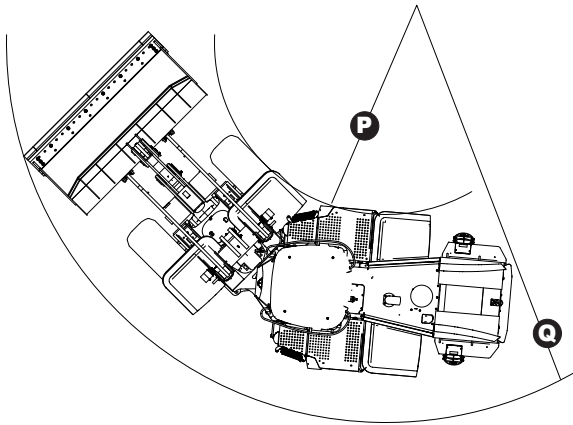
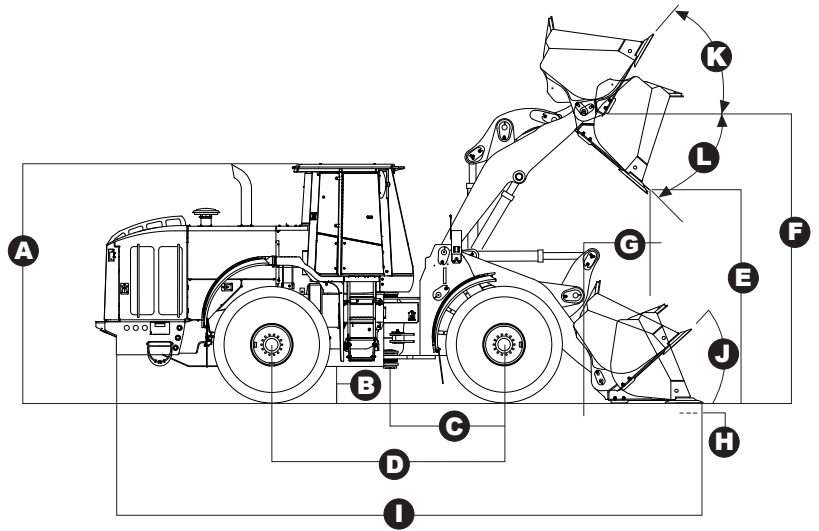
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

I Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.50 m
B	Ground Clearance	0.462 m
C	Length from Centerline to Front Axle	1.70 m
D	Wheelbase	3.46 m
E	Dump Clearance •	3.04 m
F	Height to Hinge Pin, Fully Raised	4.28 m
G	Dump Reach ••	1.23 m
H	Maximum Digging Depth	0.080 m
I	Overall Length •••	9.01 m
J	Maximum Rollback at Ground Level	39.5°
K	Maximum Rollback, Boom Fully Raised	54.9°
L	Maximum Bucket Angle, Fully Raised	49.4°
M	Overall Bucket Width	3.274 m
N	Wheel Track	2.209 m
O	Outside Wheel Width	2.877 m
P	Full Turn Radius, Inside	5.326 m
Q	Full Turn Radius, Outside	6.805 m



I Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
4.4 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
4.4 m ³	GP	Straight	None	4 Piece Bolt-on
2.7 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
2.7 m ³	High Density	Straight	None	4 Piece Bolt-on
2.9 m ³	High Density	Spade	None	Weld-on Half Arrows
3.9 m ³	Rock	Spade	Bolt-on 2 strap, male adaptors	Segments
3.9 m ³	Rock	Spade	None	4 Piece Bolt-on
6.5 m ³	Coal	Straight	None	4 Piece Bolt-on

IMPLEMENTS

Cane grab

LOG GRABS

Large diameter log grab
Sorting grapple
Millyard grapple

Technical Data - L2706E

ENGINE

Type
John Deere POWERTECH™ 6135H

Non-road emissions standard
Certified to EPA Tier 2 EU Stage II

Cylinders
6 (4 valves per cylinder)

Displacement
13.5 l

Net Peak Power
248 kW @ 1 600 rpm

Net Peak Torque
1 619 Nm @ 900 rpm

Fuel System
Mechanically actuated electronic unit injectors

Aspiration
Turbocharged, charge air cooled

Air Cleaner
Dual-element dry type, restriction indicator in cab monitor for service

Fan Drive
Hydraulically driven, proportionally controlled, fan aft coolers

Lubrication
Full-flow spin-on filter and integral cooler

Electrical System
24 volt with 80-amp alternator (100-amp alternator optional)

Batteries (2 by 12V)
1 400 CCA (each)

TRANSMISSION

Type
Countershaft-type PowerShift™

Torque Converter
Single stage, single phase

Shift Control
Electronically modulated, adaptive, load and speed dependant

Operator Interface
Joystick-mounted FNR and gear select lever, kick-down button on Joystick

Shift Modes

Manual/auto (1st-4th or 2nd-4th); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad

Travel Speeds

Forward Max (5-speed Transmission)

Gear 1	8.3 km/h
Gear 2	14.9 km/h
Gear 3	23.1 km/h
Gear 4	33.9 km/h
Gear 5	40.0 km/h

Reverse Maximum

Gear 1	8.3 km/h
Gear 2	14.0 km/h
Gear 3	33.9 km/h
Gear 4	NA
Gear 5	NA

AXLES / BRAKES

Final Drive
Heavy-duty inboard planetary

Differentials
Hydraulic locking front with conventional rear

Rear Axle Oscillation, Stop to Stop
26°

Brakes
(conform to SAE J1473, ISO3450)

Service Brakes
Hydraulically actuated, inboard sun-gear mounted, oil cooled, selfadjusting, single disc

Parking Brakes
Automatic spring applied, hydraulically released, driveline mounted, oil cooled, multi-disc

TYRES

Standard Sizes
26.5 x 25, L5, 20 Ply

REFILL CAPACITY

Fuel Tank
(with ground-level fueling)
469.4 l

Cooling System
47.4 l

Engine Oil with Vertical Spin-on Filter
36 l

Transmission Fluid with Vertical Filter
27.9 l

Axle Oil (front and rear)
27.9 l

Hydraulic Reservoir and Filters
159 l

Park Brake Oil (wet disc)
0.7 l

HYDRAULIC SYSTEM / STEERING

Pump (Loader and Steering)
Two variable-displacement, load-sensing axial-piston pumps, closed-center system

Maximum Rated Flow
513 l/m @ 6 895 kPa and 2 350 rpm

System Relief Pressure (Loader and Steering)
25 166 kPa

Loader Controls
Two-function valve; single-dual-lever controls; control lockout feature; optional third- and fourth-function valve with auxiliary lever

Steering (conforms to SAE J1511)
Type
Power, fully hydraulic

Articulation Angle
80° arc (40° each direction)

Hydraulic Cycle Times Standard Z-Bar

Raise
5.9 sec

Dump
1.3 sec

Lower (float down)
2.5 sec

Total
9.7 sec

Turning Radius (measured to centerline of outside tyre)
5.92 m

STANDARD Z-BAR PIN-ON

Type Bucket Information
Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On, Segments and Teeth

Bucket Type/Size
Capacity, Heaped
4.7 m³

Capacity, Struck
4.0 m³

Bucket Weight
2 788 kg

Bucket Width
3.27 m

Breakout Force
18 718 kg

Tipping Load, Straight
20 369 kg

Tipping Load, 40° Full Turn
17 481 kg

Safe Operating Load
8 741 kg

Reach, 45° Dump, Clearance (2.13 m)
2.05 m

Reach, 45° Dump, Full Height
•• 1.28 m

Dump Clearance, 45°, Full Height
• 3.19 m

Overall Length, Bucket on Ground
••• 9.26 m

Loader Clearance Circle, Bucket Carry Position
14.14 m

Operating Weight
26 501 kg

Material

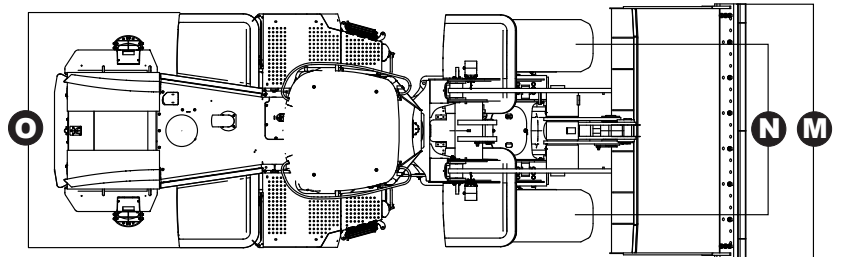
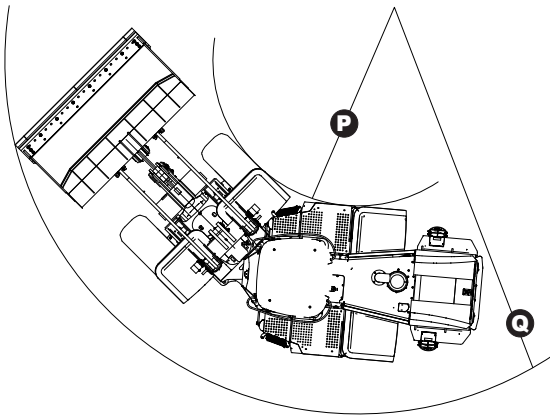
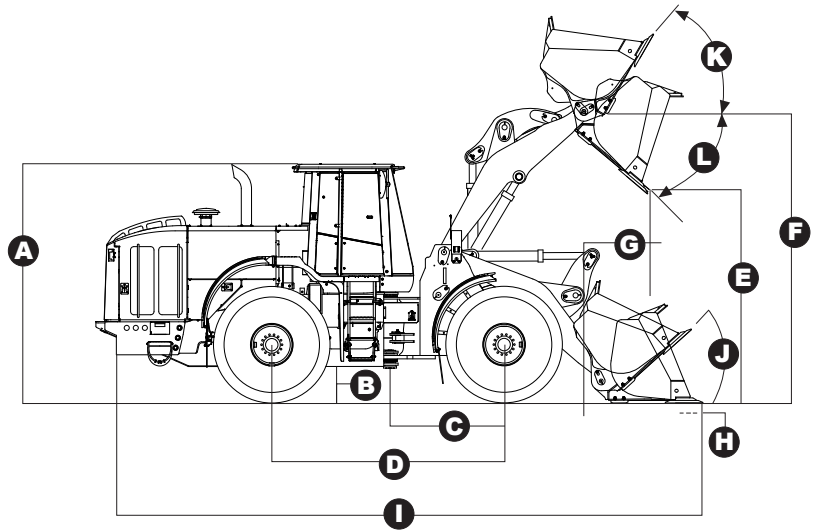
LOOSE MATERIAL

	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
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Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

Dimensions with Pin-On Bucket

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth

A	Height to Top of Cab and Canopy	3.55 m
B	Ground Clearance	0.462 m
C	Length from Centerline to Front Axle	1.70 m
D	Wheelbase	3.46 m
E	Dump Clearance •	3.19 m
F	Height to Hinge Pin, Fully Raised	4.48 m
G	Dump Reach ••	1.28 m
H	Maximum Digging Depth	0.115 m
I	Overall Length •••	9.26 m
J	Maximum Rollback at Ground Level	45.5°
K	Maximum Rollback, Boom Fully Raised	52°
L	Maximum Bucket Angle, Fully Raised	44.1°
M	Overall Bucket Width	3.274 m
N	Wheel Track	2.291 m
O	Outside Wheel Width	2.953 m
P	Full Turn Radius, Inside	5.743 m
Q	Full Turn Radius, Outside	7.300 m



Attachment Options

BUCKET OPTIONS

Size	Type	Blade/Lip	Teeth	Cutting Edge
4.7 m ³	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
4.7 m ³	GP	Straight	None	4 Piece Bolt-on
2.8 m ³	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
2.8 m ³	High Density	Straight	None	4 Piece Bolt-on
3 m ³	High Density	Spade	None	Weld-on Half Arrows
4 m ³	Rock	Spade	Bolt-on 2 strap, male adaptors	Segments
4 m ³	Rock	Spade	None	Weld-on Half Arrows
6.8 m ³	Coal	Straight	None	4 Piece Bolt-on

IMPLEMENTS

Cane grab

LOG GRABS

Large diameter log grab
Sorting grapple
Millyard grapple

Notes

[illegible]

Notes

[illegible]



Please note that all information supplied in this manual is intended to assist the customer in understanding the general applications of the Bell Equipment sugarcane handling range of machines.

Performance information is intended for estimating purposes only. Due to the many variables unique to individual operations such as weather, terrain, ground conditions, operator productivity, etc neither Bell Equipment Company nor its dealers warrant that the machines described will perform as estimated.

Due to Bell Equipment's policy of constant product improvement, specifications are subject to change without notice.

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