

# BACKHOE LOADERS

B100 D | B110 D | B115 D





## New D Series, comfort and productivity.

The new D series backhoe loaders from New Holland represent a huge step forward in operator comfort and productivity while delivering Stage V emission compliance without compromise. A new cab design featuring 10% more space, new rear side windows, vastly improved clearance when turning the seat for backhoe operation, and hugely improved in-cab storage capacity guarantees an enhanced operator experience and increased operator productivity.

Profitability is also enhanced thanks to several new standard engine economy features such as ECO mode, auto-idle and auto-shutdown modes. Serviceability has also been improved by placing all service points on one side of the engine. The new F36 engine features an increased displacement of 3.6L and employs a maintenance free after treatment system for Stage V emissions compliance, all this while maintaining the same low fuel economy and urea consumption of the previous generation.

Many business operations will have a need for a loader that offers the versatility to do a lot more than just move bulk material. Typical alternative applications will include grading and levelling, the ability to grab heavy items such as trunks and concrete pillars plus a tractor unit with the traction and power to push materials or items into place or out of the way.

With a 4 in 1 bucket, a new D series backhoe loader will deliver this exceptional performance with just the one attachment. Choose a 6 in 1 bucket and you have the option to flip down adjustable pallet forks, ideal for handling palletised loads without the need for a dedicated vehicle. The backhoe can be equipped with a wide choice of buckets to match excavation, water course clearance, trenching and other demands.

Post hole borers, hydraulic hammers and countless other tools can all be fitted. The long reach of both the standard and telescopic dipper, up to a massive 6965mm, allows long reach and digging depth comparable to many conventional dedicated excavators. Add to this the new revised cab featuring a new heated seat and up to ten LED lights and exterior side lights on the cab roof, there are no performance compromises with a New Holland D series backhoe loader.



Models	Engine power (hp)	Loader lift capacity Tool Carrier (kg)	Max. backhoe reach (mm)	Hydraulic flow (l/min)
B100 D	98	3450	6965	156/165
B110 D	111	3450	6965	156/165
B115 D	111	3380	6965	165

# In-built versatility.

New Holland backhoe loaders are your versatile choice for loading, grading, grabbing, lifting, excavating, digging, planting, post hole boring and, well the list goes on. Businesses from agriculture through to horticulture, landscaping through to drainage and irrigation need versatile and cost effective equipment. With a backhoe loader there are loader and backhoe specification choices. The all-wheel steer B115 D boasts powerful performance in challenging conditions with no compromise on agility. Entry level B100 D models are affordable but come with a high standard specification to suit a wide range of needs. Available through selected New Holland Agriculture dealers, the latest D series backhoe loader is one investment that will never be short of work.



Reduced cab noise levels  
by 3 decibels to 74dB(A)

Wider cab frame for increased  
visibility and leg room

Automatic engine  
protection system

Stage V F5 3.6L,  
four cylinder engine

ECO, auto-idle & auto-shutdown  
engine modes for increased economy

Improved servicibility with  
one sided service access

Tool Carrier front loader

Up to 3.5 tonnes  
lifting capacity



Excellent all-round visibility

Up x10 LED work lights

Backhoe craning capacity up to 1410kg

Heated seat

Spacious new cab with 10% increase in volume and added storage compartments

Fixed or extendable backhoe dipper

Mechanical or pilot-hydraulic backhoe control

Fixed or side-shift backhoe

Three steering modes on equal wheel B115 D

Four-wheel drive standard with selectable two-wheel drive

New in-cab cool box

Mechanical Powershuttle or Automatic PowerShift™ transmission

New F-N-R switch on the loader multi function lever

# Welcome aboard. Comfort guaranteed.

The all new class leading D series cab gives you more, more space, more storage, more glass area and more comfort, not to mention a host of new features. The cab is now wider so you can turn the seat easier when transitioning from front loader work to backhoe use. New rear side windows allow better visibility and less obstruction and a redesign of the right side console improves ergonomics and control layout, regardless of what direction you are working in. Storage capacity has been significantly increased with the addition of two lockable compartments, two bottle holders, four open trays and a ventilated cooling box. Operator convenience is increased thanks to the two USB ports to charge devices, Bluetooth radio and mobile phone holder and in-cab noise levels have been reduced by 3 dB(A). A high grip floor covering comes as standard to help prevent the operator slipping when entering with muddy footwear. A powerful lighting package featuring up to ten optional LED lights giving a true 360 degree light pattern thanks to the roof mounted side lights. Large retractable sunshades, cup holders, glove box and a deluxe pneumatic heated are included and to top it off, the engine exhaust pipe is located to the right side of the cab to provide a clear view of the loader arm.



- An abundance of in-cab storage
- New speedometer option on the steering wheel console



- Improved clearance and legroom when transitioning to operate the backhoe
- A choice of entry level mechanical and deluxe heated pneumatic suspension seats are available
- Low 74dB(A) in-cab noise level



- Good visibility is a key design priority, D series backhoe loaders benefit from extremely slim cab pillars, front and rear



- A pillar mounted exhaust for a clear view of the loader
- Key controls mounted on the side to allow operation from both forward and backhoe seat positions
- Uncluttered side console housing all necessary buttons
- The dashboard is easy to read with the seat in either its forward or reverse position
- Optional immobiliser system protects against theft and unauthorised use



- Single multifunction proportional control lever for all loader controls
- 4 in 1 or 6 in 1 bucket opening, diff lock and transmission de-clutch functions are also activated from the lever
- New F-N-R switch on the multifunction lever for easy direction changes
- Powerful heating and ventilation with standard air conditioning ensures operator comfort throughout the day
- Repositioned ventilation switches are easily accessible regardless of working position
- New ventilated cool box keeps drinks cool
- Up to ten LED work lights including roof mounted side lights are available



- Backhoe joystick towers adjust in all directions for the most comfortable position
- New rear side windows in addition to the slim cab pillars allow better visibility when using the backhoe
- Up and over rear window, light and easy to open and close
- 2 new USB ports
- Bluetooth radio and phone holder

# PowerShift™ or Powershuttle, you decide.

New Holland offers its backhoe loaders with switchable two or four wheel drive, a Powershuttle forward / reverse mechanical transmission or automatic PowerShift™ transmission. All PowerShift™ models now feature a convenient F-N-R switch on the front loader multifunction lever. The all-wheel steer B115 D has equal size front and rear wheels with selectable front, all-wheel and crab steer modes.



## The right front axle for the job

- The heavy duty front axle on B100 D and B110 D models has an open differential
- A tight turn radius can be maintained in all conditions

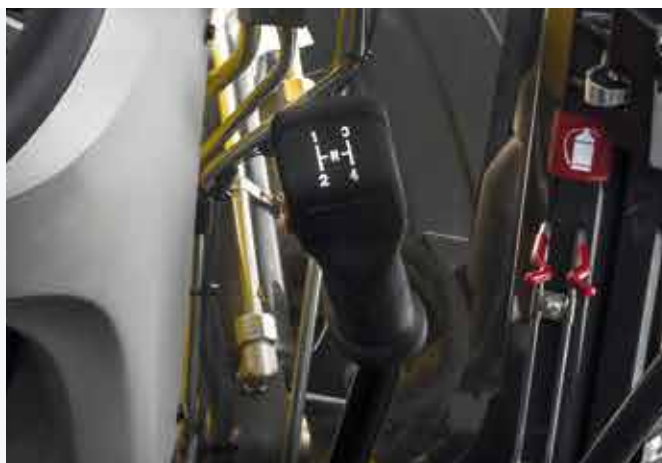


## The right rear axle for the job

- The rear axle on all two-wheel steer models is fitted with a fully locking rear differential, engaged via a button on the loader joystick







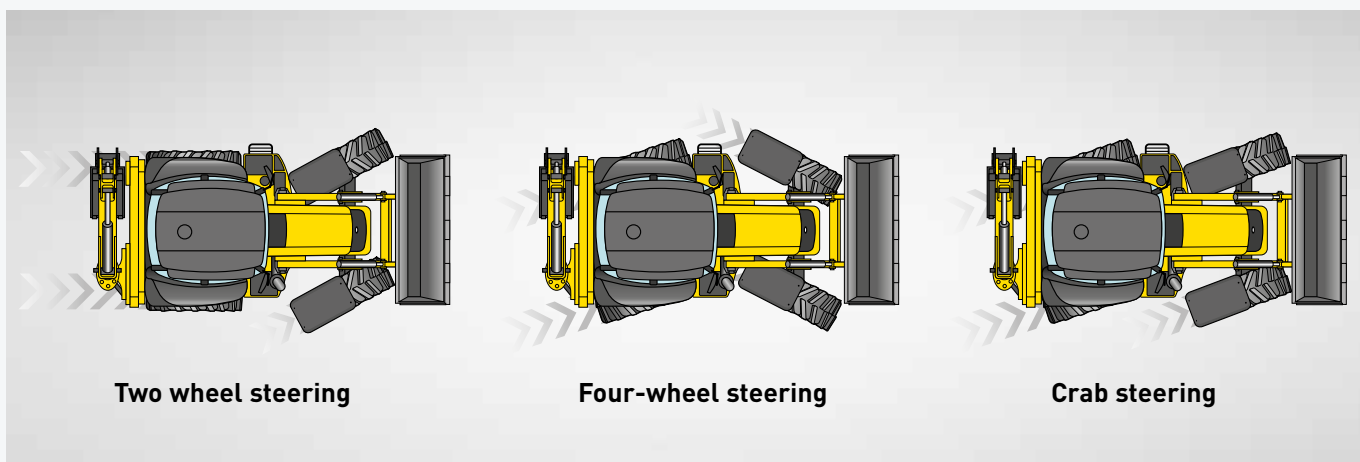
### Mechanical four-speed Powershuttle

- Floor mounted gear lever with steering column mounted electro-hydraulic forward / reverse shuttle
- Four gears with transmission de-clutch button incorporated in the gear lever
- Affordable, dependable and easy to use
- Ideal choice where the backhoe will see more use than front loader



### Automatic four-speed PowerShift™

- Steering column mounted lever for shuttle and speed selection
- Fully modulated gear shifting with speed matching F-N-R switch on the loader multifunction lever
- Ease of use matched to low maintenance requirements
- Ideal transmission choice for extensive front loader duties
- Loader joystick fitted with transmission de-clutch button to divert full power to hydraulics as required
- Selectable two or four-wheel drive



**Two wheel steering**

**Four-wheel steering**

**Crab steering**

### Four-wheel steer B115 D

New Holland B115 D models can be operated in one of three steering modes:

- Conventional front-wheel steering is ideal for normal loading and transport applications
- Four-wheel steer delivers excellent manoeuvrability with no impact upon stability
- Crab steer is ideal for working up close to a trench or obstacle and can be useful when working over sensitive terrain to reduce trafficking
- The four-wheel steer B115 D delivers excellent traction with limited slip differentials in both the front and rear axles. Power is automatically diverted to all wheels in adverse conditions with no need for any operator input
- Four-wheel steer mode offers a turning radius of 5.5m compared to 8.9m in front steering mode
- Self-adjusting, the oil immersed disc brakes are designed to offer dependable performance. Mounted within the reduction hubs, the brakes can be easily serviced with no need to strip the axle

# The figures tell you everything.

With a New Holland backhoe loader, there is no compromise in performance. Dependent upon model, the front loader can be fitted with a front bucket of either 1.0m<sup>3</sup> or 1.15m<sup>3</sup> capacity and raise loads of 3380kg - 3553kg to heights of up to 3498mm. The backhoe has a digging depth down to 4665mm increasing up to 5880mm with the telescopic dipper. The bucket breakout force is as high as 5970daN, the dipper breakout coming in at 3225daN or 2390daN if extended. With a New Holland backhoe loader there is absolutely no compromise in performance.

Models		B100 D B110 D TC	B115 D TC
<b>Loader specifications</b>		<b>Tool Carrier</b>	<b>Tool Carrier</b>
Lift capacity	(kg)	3450	3380
Hinge pin height	(mm)	3461	3478
Models		B100 D - B110 D - B115 D	
<b>Backhoe specifications</b>		<b>Long</b>	<b>Long Extended</b>
Digging depth	(mm)	4665	5880
Max. bucket breakout force	(daN)	5970	5970
Max. reach	(mm)	5830	6965



## Front loader - TC Tool Carrier loader designs

### TC Tool Carrier loader arm features:

- Mechanical parallel lift and lower
- Ideal for pallet and loading duties



## Common standard loader features

- Auto-glide loader suspension
  - automatically activates above/below 3 preset speeds
  - default speeds for activation/deactivation are 9.5kph/7.9kph
  - improves material retention over uneven terrain
  - enables faster load cycle times
  - higher travel speeds for reduced journey times
- Return to dig and float modes
- Choice of standard, 4 in 1 or 6 in 1 buckets
- All buckets have bolt-on teeth for easy renewal



## Versatile bucket options

- Versatile 4 in 1 bucket is suitable for work to include dozing and grading, bulk materials handling and can work as a grab
- The 6 in 1 design adds adjustable forks for pallet work, lifting open loads and working with a strop



## Backhoe

### Standard features include:

- Curved arm design for easier loading over trailer sides and obstacles
- Long life pivots with ground level greasing points
- Wide pad stabilisers with adjustable footing
- Powerful bucket and dipper breakout for optimum performance

### Key backhoe specification choices include:

- Fixed or extendable dipper arm option
  - fixed dipper offers 4665mm dig depth
  - telescopic dipper extends dig depth to 5880mm
- Fixed centre or hydraulic side shift option
- Direct fit or quick coupler bucket choice
- Object handling kit available. EU certified to allow handling of suspended items



## Mechanical controls

- Conventional mechanical controls for the backhoe provide good feedback and response from the hydraulics
- Stabilizer controls are now located right next to the backhoe control levers, improving ergonomics



## Pilot controls

- With full proportional control, pilot backhoe control joysticks are fully adjustable
- Selectable ISO or SAE operating patterns
- New joystick rocker switch to control the dipper extension



## Hydraulic side shift

- Hydraulic side shift allows precise backhoe positioning and enables the operator to optimise bucket visibility when excavating a trench or working alongside an obstacle
- Hydraulic side shift in combination with the rubber stabilizer pads is the ideal solution to reduce ground damage

# Hydraulics to meet every demand.

To exactly match end user needs, New Holland backhoe loaders are offered with a choice of hydraulic pump designs. In addition, an auxiliary hydraulic circuit is available to power attachments to include hydraulic breakers and soil augers. Two hydraulic pump designs are offered:

## Twin gear pump

- Simple
- Constant flow
- Fast warm up
- Straightforward service and maintenance
- For general use. Suits applications with limited roading
- Maximum flow 156l/min @ 2200rpm
- Maximum operating pressure 205bar

## Variable displacement pump

- Only active when there is a demand for oil
- Flow rate proportional to demand
- Reduces fuel consumption
- Reduced oil temperature due to flow on demand
- Ideal for intensive backhoe operation and frequent roading
- Variable flow from 6 to 165l/min
- Maximum operating pressure 205bar





- A variable displacement hydraulic pump only delivers flow on demand, saving fuel when roading and in applications such as dozing and grading
- An optional auxiliary hydraulic circuit delivers 0-135l/min
- Ideally suited to working soil augers, large grabs and hydraulic breakers



# Powerful economy.

Developing 98, 111hp dependent upon model, the new FPT Industrial F5 3.6 litre four-cylinder engine in backhoe loaders is the same unit proven in New Holland T5 tractors. Complaint with stringent Stage V emission regulations, the engines have an advanced throttle control system. This allows the operator to adjust how the engine responds to throttle inputs from smooth to fast. New D series models also feature three new fuel saving modes to increase economy, save fuel and reduce wear and tear on the machine.

## Powered by FPT Industrial

New Holland are not going it alone when it comes to Stage V technology, they can draw on the experience of their in-house engine development specialist: FPT Industrial.

**Pioneers:** Common Rail technology developed by FPT Industrial at their R&D excellence center in Arbon, Switzerland in the 1980s and brought it to the masses in 1997 on the Alfa Romeo 156. They were the very first to introduce it on agricultural machines on the TS-A tractor. Pioneering. Always.

**Cleaner:** For the ninth consecutive year, CNH Industrial has topped the Dow Jones Sustainability World and Europe Indexes for the Industrial Engineering sector. Cleaner. Everywhere.

**Proven:** FPT Industrial has pioneered SCR technology since 1995 and has already produced over 1 million SCR engines during the last eight years for the agricultural, construction and haulage industries. Reliability. Confirmed.





- Output choice of 98 and 111hp
- Side mounted exhaust stack for improved visibility
- Engine shut-down protection in the event of low oil pressure, high coolant or transmission oil temperatures
- 131 litres fuel and 13 litre AdBlue capacity
- Three throttle settings, soft, normal and fast are offered. The operator can select the throttle setting best suited to the application



### Compact HI-eSCR 2 after-treatment emission system

New Holland sister company FPT Industrial developed a specific after-treatment dedicated to compact equipment. Compact High Efficiency SCR 2 is designed for applications whose working cycle is characterized by low exhaust temperatures & frequent Stop and GOs. By combining proven Selective Catalytic Conversion with low-rate exhaust gas recirculation, an F5 engine can be operated at low loads. The new, optimized diesel particulate filter (DPF) technology ensures high Particulate Matter (PM) removal even at low operating temperatures. The efficient after-treatment system is totally maintenance-free and no downtime for filter replacement nor mechanical cleaning is needed during the whole machines life cycle.



### 3 new fuel saving features

- **ECO Mode:** automatically regulates the engine speed and hydraulic pressure depending on demand, enabling up to 10% fuel savings
- **Auto-idle:** can be set to activate after 5sec to up to 60sec of idle time
- **Auto-shutdown:** can be set to activate after up to 60mins of idle time



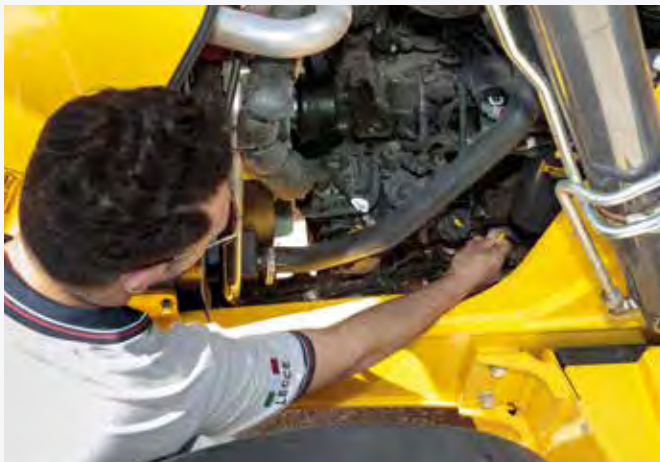
### Chassis

All backhoe models benefit from a full frame chassis, its exceptional strength diverting all stress through the robust frame with no load on the engine or transmission.

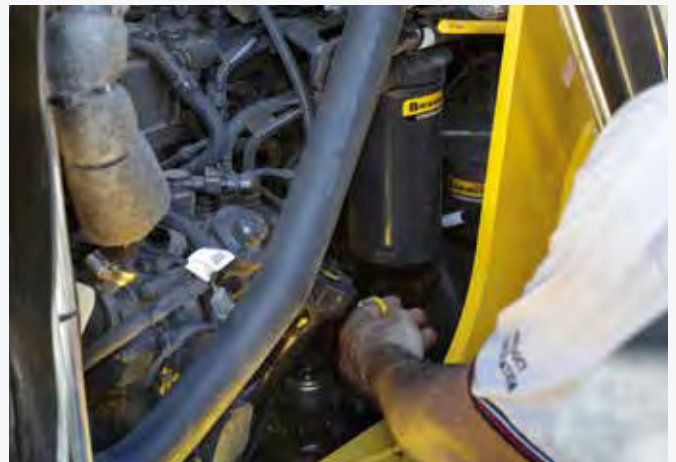
- Robot welded full length frame chassis
- No stress on engine or transmission
- Plate reinforced stress points
- Cast backhoe slider interface
- Open design to facilitate maintenance

## Spend time saving money.

A key to equipment performance and longevity is routine care. New Holland has designed the backhoe loader so it takes the minimum of time to carry out routine checks. Service intervals are also fixed at 500 and 1000 hours, with easy access to all key fuel, engine, transmission and hydraulic filters. All engine servicing can now be done from one side for added convenience. Extensive New Holland dealer network for full support gives you peace of mind.



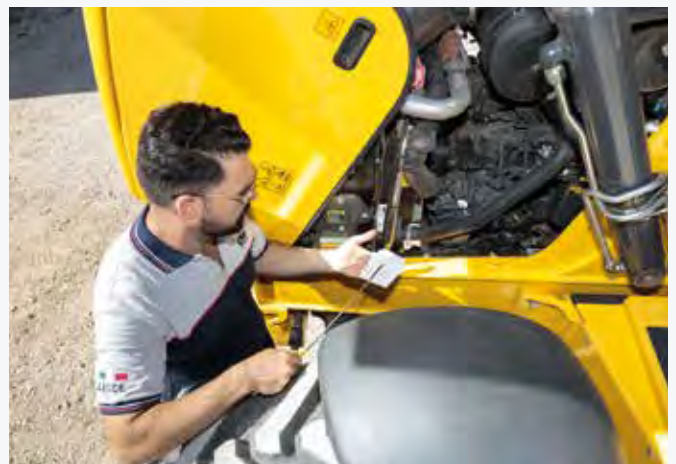
- One piece hood for full engine access



- All key daily checks grouped together on one side



- Battery disconnect and remote jump start terminals easily accessible



- All key lubrication points on the loader and backhoe have ground level access
- Making key service items accessible from ground level makes the job simpler, faster and safer
- Maintenance free disc brakes are standard
- Maintenance-free after-treatment system
- Low operating costs and no downtime for diesel particulate filter replacement
- No mechanical DPF cleaning is required



# New Holland Services.



## Finance tailored to your business

CNH Industrial Capital, the financial services company of New Holland, is well established and respected within the agricultural sector. Advice and finance packages tailored to your specific needs are available. With CNH Industrial Capital, you have the peace of mind that comes from dealing with a financing company that specialises in agriculture.



## Trained to give you the best support

Your dedicated New Holland dealer technicians receive regular training updates. These are carried out both through on-line courses as well as intensive classroom sessions. This advanced approach ensures your dealer will always have the skills needed to look after the latest and most advanced New Holland products.



MyNew Holland



Harvest Excellence



MyPLM<sup>®</sup>Connect Farm

## New Holland Apps

MyNew Holland - Harvest Excellence - Grain Loss Calculator - Product Apps - New Holland Weather - MyPLM<sup>®</sup>Connect Farm - PLM Solutions - PLM Calculator - PLM Academy

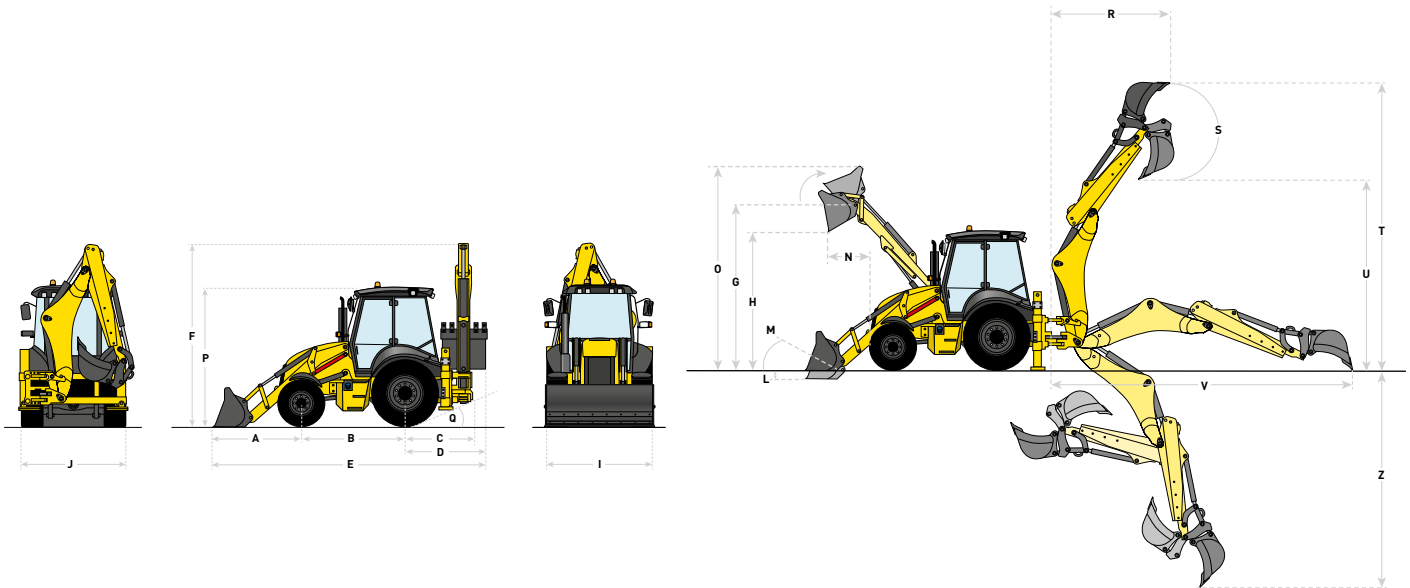


## New Holland Style

Want to make New Holland a part of your everyday life? Browse the comprehensive selection on [www.newhollandstyle.com](http://www.newhollandstyle.com). A whole range of items are available including hard wearing work clothing and a vast selection of scale models, together with so much more. New Holland. As individual as you.

Models	B100 D	B110 D	B115 D
<b>New Holland Engine*</b>	FPT Industrial F5	FPT Industrial F5	FPT Industrial F5
No. of cylinders / valves	4 / 4	4 / 4	4 / 4
Capacity (cm <sup>3</sup> )	3600	3600	3600
Aspiration	Turbocharged	Turbocharged	Turbocharged
Injection	Common rail	Common rail	Common rail
ECObLue™ Compact HI-eSCR system (selective catalytic reduction)	●	●	●
Compliant with engine emissions regulations	Stage V	Stage V	Stage V
Rated engine power ISO TR14396 - ECE R120 [kW/hp(CV)]	72/98	82/111	82/111
Rated engine speed (rpm)	2200	2200	2200
Maximum engine power ISO TR14396 - ECE R120 [kW/hp(CV)]	84/114	89/121	89/121
Maximum torque ISO TR14396 @ 1400rpm (Nm)	453	460	460
Fuel tank capacity (l)	131	131	131
<b>Electrical</b>			
12 Volt alternator (Amps)	120	120	120
Battery capacity (CCA / Ah)	Single: 95 Ah 900 A or Double: 60 Ah, 600 A (each)		
<b>Transmission</b>			
<b>Powershuttle transmission (40kph)</b>	●	●	-
Type (FxR)	4x4 mechanical	4x4 mechanical	-
Forward / Reverse maximum speed (kph)	39 / 47	39 / 47	-
<b>PowerShift™ transmission (40kph)</b>	○	○	●
Type (FxR)	4x3 electronic	4x3 electronic	4x3 electronic
Forward / Reverse maximum speed (kph)	40 / 26	40 / 26	42 / 29
<b>Axles</b>			
Front axle type	Open diff	Open diff	Open / Limited slip diff
Front axle oscillation Powershuttle (°)	+/- 8	+/- 8	-
Front axle oscillation PowerShift (°)	+/- 11	+/- 11	+/- 11
Rear axle	100% lockable	100% lockable	Open / Limited slip diff
<b>Turning radius - 2 wheel steer mode, 4WD engaged, without brakes</b>			
External tire (2WS / 4WS) (mm)	4800 / -	4800 / -	8180 / 4810
Bucket edge (2WS / 4WS) (mm)	6100 / -	6100 / -	8880 / 5520
<b>Hydraulic system</b>			
Type (with Powershuttle)	Load sensing closed center with twin gear pump		
Flow @ 2200rpm (with Powershuttle) (l/min)	156	156	156
Pressure (with Powershuttle) (l/min)	205	205	205
Type (with PowerShift)	Load sensing closed center with twin variable displacement pump		
Flow @ 2200rpm (with PowerShift) (l/min)	from 6 to 165	from 6 to 165	from 6 to 165
Pressure (with PowerShift) (bar)	205	205	205
<b>Brakes</b>			
Type	Power brakes	Power brakes	Power brakes
Brake disc, quantity x area (cm <sup>2</sup> )	4 x 309	4 x 309	6 x 182
<b>Cab</b>			
Cab with FOPS	●	●	●
Work light package: 10 halogen / 10 LED	●/○	●/○	●/○
Mechanical Comfort seat	●	●	●
Pneumatic suspension Deluxe seat	○	○	○
Air conditioning	○	○	○
Noise level - internal / external [dB(A)]	74 / 101	74 / 102	74 / 102
Vibration levels - upper limbs / abdomen (m/s <sup>2</sup> )	2.5 / 0.5	2.5 / 0.5	2.5 / 0.5
<b>Tyres</b>			
Front tyre diameter (inches)	18 or 20	18 or 20	28
Rear tyre diameter (inches)	28 or 30	28 or 30	28
<b>Operating weight</b>			
With Tool Carrier Arm and 6-in-1 bucket (kg)	9360	9360	9800

● Standard ○ Optional - Not available \* Developed by FPT Industrial



## Dimensions

Design		B100 D - B110 D TC		B115 D TC
		Tool Carrier		Tool Carrier
A - Ground distance over front axle	(mm)	2015		2052
B - Wheelbase	(mm)	2183		2201
C - Pivot distance over rear axle	(mm)	1325		1120
D - Max. distance over rear axle	(mm)	1672		1651
E - Overall length	(mm)	5870		5904
F - Height to top of boom	(mm)	3900		4013
Q - Back ramp angle	(°)	23		27
P - Cab height	(mm)	2859		2964
I - Loader bucket width	(mm)	2250 - 2400		2400
J - Overall width	(mm)	2445		2452

## Loader specifications

Design		B100 D - B110 D TC		B115 D TC
		Tool Carrier		Tool Carrier
Bucket size - general purpose type	(m <sup>3</sup> )	1.0 / 1.15		1.15
Maximum loader breakout force	(daN)	3565		3554
Maximum bucket breakout force	(daN)	6545		5410
Lifting capacity to maximum height	(kg)	3450		3380
Lifting capacity to ground level	(kg)	4830		4770
L - Digging depth	(mm)	139		127
M - Bucket roll back angle on ground	(°)	45		45
N - Reach at full height	(mm)	771		587
O - Maximum operating height	(mm)	4460		4500
G - Hinge pin height	(mm)	3461		3478
H - Maximum dump height under bucket at 45°	(mm)	2665		2619

## Backhoe specifications

Arm type		B100 D		B110 D		B115 D	
		Long	Long Extended	Long	Long Extended	Long	Long Extended
Bucket Breakout force	(daN)	5970	5970	5970	5970	5970	5970
Arm digging force	(daN)	3760	2573	3760	2573	3760	2573
R - Digging reach at max. height	(mm)	2795	3796	2795	3796	2795	3796
S - Bucket rotation	(°)	180	180	180	180	180	180
T - Digging height	(mm)	5615	6350	5615	6350	5615	6350
U - Dumping height	(mm)	3765	4500	3765	4500	3765	4500
V - Digging reach at ground level	(mm)	5830	6965	5830	6965	5830	6965
Z - Digging depth	(mm)	4665	5880	4665	5880	4665	5880

# New Holland Top Service: customer support and customer information.



### Top Availability

If you need information, or have an out of hours question, ring our toll-free number\*. All day, every day, we are just a call away.



### Top Speed

Express parts delivery: when you need it, where you need it!



### Top Priority

Fast-track solution during the season: because your harvest can't wait!



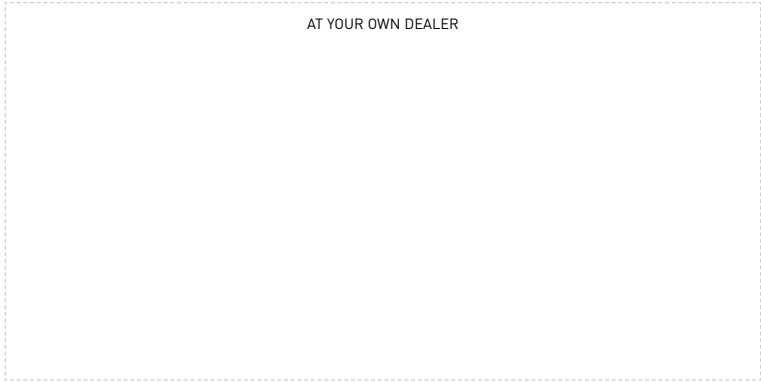
### Top Satisfaction

We drive and track the solution you need, keeping you informed: until you are 100% satisfied!



**For more details, ask your New Holland dealer!**

\* Calls to the Top Service team are free from landlines in the United Kingdom and Republic of Ireland. UK-based mobile calls are also free, but Republic of Ireland mobile users should call 01 2421881 and this will be charged at your standard network rate.



[www.newholland.com/uk](http://www.newholland.com/uk) - [www.newholland.com/ie](http://www.newholland.com/ie)

