



NEW HOLLAND

B115_B



COMMON RAIL TIER 3A ENGINE

MECHANICAL OR PILOT "COMMAND CONTROLS"

HIGH FRONT LOADER PERFORMANCE



NEW HOLLAND

CONSTRUCTION

BUILT AROUND YOU

Courtesy of Machine.Market

B115B

CNH COMMON RAIL TIER 3 A ENGINE

- Increased torque
- Increased performance
- Increased productivity with lower pollution

BEST AVAILABLE HYDRAULIC SYSTEM

- Load sensing, closed centre
- Maximum power available where needed
- Simultaneous movements under every load

4 X 2 FULL POWERSHIFT TRANSMISSION

- Kick Down Function
- Large, equal size wheels for top traction power
- All wheel steer



EASY MAINTENANCE AND SERVICEABILITY

- New tiltable engine hood for wide, easier ground level access to main components
- Automatic belt tensioner
- Extended oil change intervals

COMFORT & SAFETY

- Outstanding spacious operator cab
- All-round cinemascope visibility
- Choice of backhoe: piloted or mechanical



TIER 3A COMMON RAIL ENGINE



This CNH **Common Rail** engine represents "state of the art" technology, designed to increase performance and production whilst reducing fuel consumption and pollution.

The Common Rail system guarantees that fuel is injected in the cylinders at very high pressure, thus optimising its nebulization and its mix with an increased quantity of turbocharged and after cooled air. Moreover, the quantity of fuel introduced in the cylinders is electronically controlled so that the "right quantity" is injected at the "right moment" and combined with extra fresh air to provide peak efficiency output from the engine, whilst reducing fuel consumption and emissions of dangerous pollutants. At the same time, noise is also considerably lowered.

FOR PRODUCTION



Increased performance, which means **increased torque and higher productivity**, combined with its environmentally friendly attitude, makes the B115B particularly suitable for work in urban or populated areas.

A new, durable, efficient, comfortable and economic engine which contributes to a reduction in operating costs, thereby increasing your profit.

B115B INTELLIG

LOAD SENSING - CLOSED CENTRE MAXIMUM POWER WHERE NEEDED

The B115B features an **integrated** Hydraulic and Steering System. It consists of two gear type pumps mounted in series with a total delivery of 170 l/min, Load Sensing regulated and working at a maximum pressure of 210 bars. When the machine is steering, the steering wheel first actuates the Orbitrol steering valve, then - via a priority valve - the increased flow required for faster steering effect is diverted from one of the two hydraulic gear pumps.



FRONT LOADER

If the operator is using the front attachment, when required, a special button on the new loader control lever disconnects the transmission so that total engine power is utilised as hydraulic power on the front loader for maximum productivity and efficiency.



The **handle on the loader control lever**, includes:

- a “rocker”, to proportionally control the additional hydraulic function. It allows, for example, use of the 4-in-1 bucket as a pincer, thus dramatically expanding the New Holland backhoe loader’s flexibility
- the horn button
- the transmission disconnect button to utilise the optimum available hydraulic power on the front attachment for maximum productivity and efficiency.

BACKHOE

If backhoe is in operation, thanks to its **Closed Centre** main control valve, the hydraulic system delivers its power when and where it is needed, while simultaneous movements are allowed independently from power required and engine r.p.m., for maximum performance, faster cycle times and maximum production.

ENT HYDRAULICS



HED (Hydraulic Extending Dipper)

A **HED** (Hydraulic Extending Dipper) is available as an option for maximum reach, digging depth and loading ability, whilst optimising the special New Holland design of the complete backhoe. The New Holland backhoe features a strong box section boom and a narrow dipper. So visibility is excellent down the length of the boom to the bucket at all digging depth. Finally, the externally mounted “in line” cylinder design contributes to visibility while providing the best utilization of hydraulic force for maximum efficiency.

Powershift provides smooth gear shifting and directional changes, even when fully loaded, for maximum operator comfort. It can operate in both manual and automatic mode. With manual mode selected, the operator simply twists the steering column-mounted selector to change through the gears. In “full automatic mode” the transmission will auto-shift either up or down depending on speed or load, improving cycle times and simplifying road travel.



ALL WHEEL STEERING OPTION

The B115B offers three selectable steering modes, which provide versatility for all operating situations.

- Front wheel steering ensures maximum safety for road and high speed transport applications;
- All wheel steering gives a tight turning radius of only 4.6 m, allowing excellent mobility in confined spaces when working around excavations and obstacles;
- Crab steering allows the machine to clean up easily alongside walls or buildings without any complicated manoeuvres.

The all-wheel steer / equal size wheel concept, gives the B115B the lifting and handling performances of a purpose-built loader.

ATE THE GROUND



TOP TRACTIVE POWER

The New Holland B115B is fitted with large, equal size wheels to provide maximum traction power for more effective loading, dozing, back filling or grading.

The machine converts all maximum available engine power into traction to fill the bucket faster and more easily for increased loader output.

In addition, the large front tyres give greater carrying capacity for bigger, heavier bucket loads and, with their increased surface area, reduce ground pressure and ensure excellent performance on soft or difficult terrain.

New Holland B115B: a machine built for faster loader cycles, heavy excavating performances, more cubic metres of material moved and superior flexibility to grant its customers outstanding performances, high productivity and profitability.



Enjoy the p



power



T DIAGNOSTIC PORT

To monitor and diagnose the main machine components, the service technician can easily and quickly use the electronic connector Port, located on the front right side of the cab interior. Then, by simply connecting a laptop, he can detect and correct any minor malfunctions or unexpected minor diagnostic problems which need to be solved directly on the specific component.



MAINTENANCE



EASY ACCESS TO ALL SERVICE POINTS

The B115B is designed for simple and easy maintenance and service procedures, thanks to its new tiltable engine hood which grants excellent ground level access to all the most important components.

Easy and regular maintenance of the machine, such as control of air filter status and engine oil levels, change of oil filter, check of the Electronic Engine Controller and so on, can only improve durability and reliability, already designed and built-in by New Holland engineers.



ONE LOCATION CHECK POINTS

On the machine's left side, just above the fuel tank, you can easily reach the pressure check points for main hydraulic system, steering circuit and pilot control, all grouped together for time and cost reduction whilst improving efficiency, durability and performance of your B115B.



PROTECTED BATTERY

The battery is both well protected and easy to reach for regular checks in the box located on the right side, underneath the cab. By simply removing a panel it is possible to reach it and the master switch.



Proactive maintenance assistance to improve machine durability, increase performance and to reduce operating costs.



SPACE CAB

The features and customer advantages of the B115B cab are so many that they cannot be summarised in a single sentence. "Space Cab" best describes it as it is incredibly roomy, with ample glass area to assure all-round cinemascopic visibility. Controls are ergonomically positioned, easy to reach and to read. Side windows can be fully or partially opened for good ventilation whilst, for the most severe climatic conditions, optional air conditioning is available. From his adjustable seat, the operator has his "world" under complete and comfortable control. For operator safety, the cab has an integral **ROPS** and **FOPS** structure and can be supplied with an optional electronic engine immobiliser.

FORT AND SAFETY



P.C.C. (PILOT COMMAND CONTROLS)*

Backhoe Pilot Command Controls, like those used on the latest generation excavators, are available on the B115B to provide operators with an extremely comfortable working environment.

They guarantee a personalised working position, as manipulators may be moved and adjusted longitudinally and laterally. In addition, two tiltable and vertically adjustable wrist rests offer perfect support to operate joysticks with surgical precision.

To suit operator requirements, command can be switched between backhoe and excavator pattern on demand, while the pilot control can be quickly disabled for safety reasons.

* In alternative simple and effective mechanical controls are available



DECELERATION BUTTON

The right manipulator is now equipped with a **new button** which, when pushed, returns the engine r.p.m. to idle. It contributes to reduced consumption and the operator can avoid continuous use of the hand throttle located on the instrument panel, for maximum economy and comfort.



INSTRUMENT PANEL

The B115B is equipped with a completely new, elegant car-style instrument panel which groups, on the cab right-hand side, the ignition key, the function buttons, high visibility analogic gauges, which monitor engine coolant and oil temperature, engine r.p.m., battery charge and fuel levels. In addition, there is a complete set of warning and signal lights, allowing the operator to constantly monitor the main machine parameters.

A further innovation is now offered as standard on the B115B: the engine r.p.m. can be electronically and independently controlled by the dial type throttle, located on the instrument panel, or by a foot pedal.

If the operator is using the front loader, the foot pedal is much more instinctive and practical whilst, when using the backhoe, he can set the required r.p.m. via the dial type throttle. When not digging, he can return the engine to idle, just by pushing the deceleration button on the right manipulator.

A simple but practical solution designed by New Holland engineers to help operators to perform better and more easily in the most comfortable and productive way.

A cab designed for maximum operator comfort and safety thus allowing him to fully concentrate on the job for higher productivity and for a quick return on investment.

B115B SPECIFICATIONS



ENGINE TIER 3A

Maximum power (ISO 14396/ECE R 120)	82 kW/110 hp
Rated engine speed	2200 rpm
Make and mode	CNH 445TA/EGH
Type	Diesel, 4 stoke, Common Rail, Direct injection, Turbo, Aftercooler
Displacement	4.5 l
Number of cylinders	4
Bore x stroke	104 x 132 mm
Maximum torque at 1400 rpm	52 daNm

Electronic engine control, dial type

Deceleration button: returns engine to minimum rpm when activated.

-23°C outside temperature start as standard equipment

The engine complies with 97/68/EC standards TIER 3A



ELECTRICAL SYSTEM

Voltage	12 V
Alternator	90 A
Starter motor	2.7 kW
Standard maintenance-free battery	1
Capacity	95 Ah



HYDRAULIC SYSTEM

Load sensing, closed centre hydraulic system to maximise power exploitation and outstanding digging performance, top lifting capacity and fast loading cycle

Pumps	2 gear type
Total maximum flow	170 l/min
Max working pressure	210 bar

BACKHOE CONTROL

Choice of:

Mechanical Controls to provide simple and precise movements
Pilot "Command Controls" to assure effortless and precise movements with extremely comfortable working conditions.

Pilot Command Controls and wrist rests are fully adjustable to guarantee the most ergonomic operator position for maximum productivity. For safety, Pilot Controls can be switched-off.

LOADER CONTROL

Multifunction lever with a new handle which includes proportional control for auxiliary hydraulic function (i.e. 4 in 1 bucket) and transmission disconnect button to maximise productivity and efficiency of front loader



CAB AND CONTROLS

High Space cab designed with the operator in mind to offer spacious and ergonomic environment and outstanding cinemascope, all-round visibility. Operator comfort is assured thanks to fully adjustable seat, mechanical or air suspension type and - fully or partially - opening side windows for good through-flow ventilation. New instrument panel to provide perfect visibility and control of all major machine parameters and a quick access to electronic engine diagnostic port.



TRANSMISSION

4 x 2 Full Power Shift transmission to provide very smooth under load gear shifting and direction change, resulting in maximum operator comfort and productivity.

Kick Down function for real wheel loader performances

Torque converter stall ratio	2.31:1
------------------------------------	--------

Forward speeds

	km/h
1	6.2
2	11.6
3	22.6
4	39.0

Reverse speeds

	km/h
1	7.3
2	13.7



BRAKES

Service brakesoil bath disc brakes, 3 per side on rear axle, mechanically operated by independent right and left pedals, which may be mechanically locked together. A three position switch in the cab, allows the operator to select:

- rear wheel drive brakes
- all wheel drive brakes
- rear wheel drive, all wheel brakes

Parking brakecaliper disc brake on transmission output shaft.



STEERING SYSTEM

Type

ORBITROL with priority valve on one gear pump of the hydraulic system

Three selectable steering modes:

- Front wheel steering
- All wheel steering
- Crab Steering

Turning radius*:

Outside tyres

4600 mm

Bucket corner

5400 mm

* Tyres size may effect turning radius.



TYRES

Front & Rear

16.9 x 24

16.9 x 28

440/80 x R28



CAPACITIES

	Litres
Fuel tank	125
Hydraulic tank	40
Hydraulic system	118
Engine cooling system	24
Engine oil	14
Transmission oil	14

STANDARD EQUIPMENT

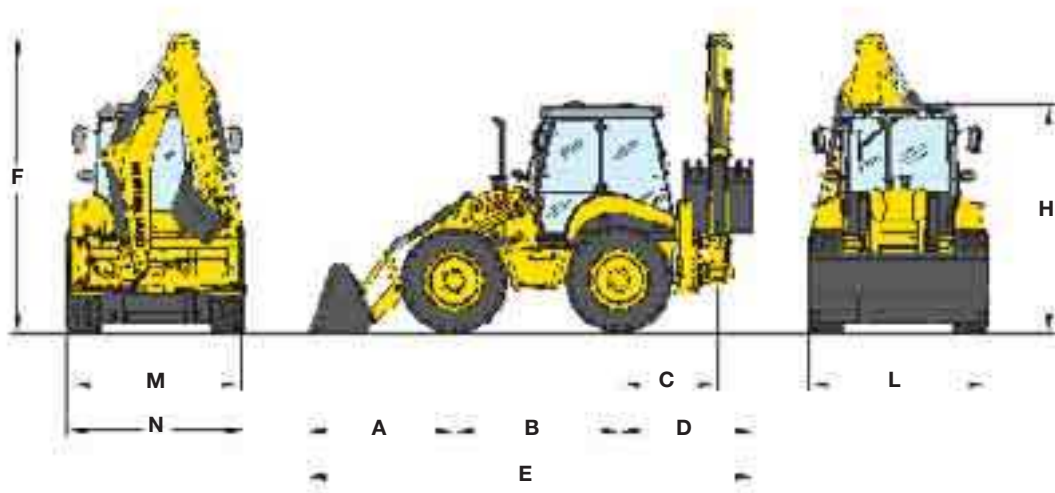
- 12V power socket
- 2+2 front and rear working lights
- 2-4 wheel drive mode selector
- 40km/h travel speed
- Adjustable opening windows
- All tinted glass
- All wheel steering
- Alternator 90A
- Backup alarm
- CNH Tier 3A Common Rail diesel engine
- Control lamps:
 - Master warning and stop alert
 - Low and high beams
 - Brake oil level and temperature
 - Engine oil pressure
 - Engine air filter clogging indicator
 - Parking brake
 - Transmission oil pressure
 - Hydraulic oil filter clogging indicator
 - Air conditioning operating and fault indicator
 - Low fuel
- Electronic throttle controls with hand potentiometer and fly-by-wire pedal
- Free maintenance battery, 95Ah
- Front and rear windshield wipers
- Front bucket with automatic return to dig
- Front counterweight
- Front loader arm with parallelogram linkage
- Fuel filter with water separator
- Gauges for:
 - Engine coolant temperature
 - Transmission oil temperature
 - Engine rpm
 - Battery charge
 - Fuel level
- Ground line fuel tank fill 125 litre capacity
- Horn
- Instrument panel with diagnostic port
- Kick down function
- Load sensing, closed centre hydraulic system
- Multidisc oil bath brakes
- Powershift 4 + 2 transmission
- Rear axle with differential lock
- Road travel lights
- ROPS/FOPS cab with heating system
- Side mirrors
- Side shift
- Stabilisers control
- Transmission disconnet button

OPTIONS

- 20km/h travel speed
- Heavier counterweight
- Additional working lights
- Air conditioning
- Anti-theft device
- Backhoe buckets
- Backhoe quick coupler
- Biological hydraulic oil
- Cyclonic air pre-filter
- Dual batteries
- Front wheel fenders
- Hammer circuit
- Industrial or agricultural tyres
- Limited slip axles
- Loader buckets
- Loader lock-out valves
- Loader quick coupler
- Mechanical or air suspension seat with belt
- Mechanical or pilot control
- Object handling kit with backhoe lifting hook and safety valves
- Road homologation
- Rotating beacon
- Stabiliser pads
- Standard and HED dipperstick
- Tool box

B115B

DIMENSIONS



DIMENSIONS			
A	Ground distance over front axle	mm	1965
B	Wheelbase	mm	2200
C	Pivot distance over rear axle	mm	1325
D	Max distance over rear axle (with 915mm backhoe bucket)	mm	1780
E	Overall length	mm	5945
F	Height to top of boom	mm	3930
G	Back ramp angle	°	22
H	Cab height	mm	2960
L	Loader bucket width	mm	2400
M	Stabiliser width	mm	2250
N	Overall width	mm	2325

OPERATING WEIGHT		STD DIPPER	HED DIPPER
Standard Bucket 1.15 m ³	kg	8370	8600
4x1 bucket 1.15 m ³	kg	8710	8940
6x1 bucket 1.15 m ³	kg	8870	9100

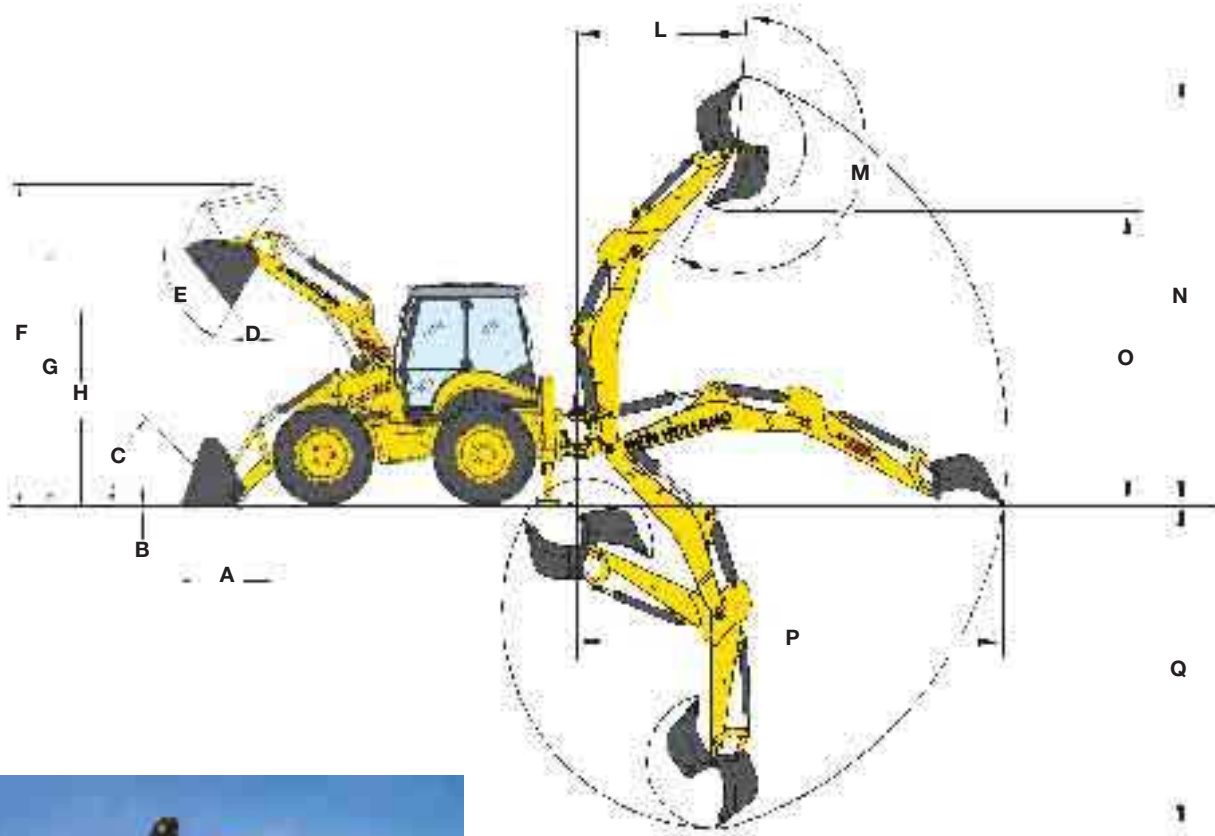
LOADER BUCKET		STANDARD BUCKET	STANDARD BUCKET W/FORKS	4x1 BUCKET	6x1 BUCKET
Sae Capacity	m ³	1.15	1.15	1.15	1.15
Weight	kg	435	600	770	930
Width	mm	2400	2400	2400	2400

BACKHOE BUCKET						
Sae Capacity	m ³	0.08	0.12	0.18	0.24	0.30
Weight	kg	120	140	160	185	210
Width	mm	305	460	610	760	915



B115B

WORKING RANGE



LOADER SPECIFICATIONS

A Reach at ground level	mm	1315
B Digging depth	mm	115
C Bucket roll back angle on ground	°	45
D Reach at full height	mm	825
E Bucket dump angle at full height	°	45
F Maximum operating height	mm	4480
G Hinge pin height	mm	3490
H Dump height	mm	2650

Maximum loader breakout force	daN	7400
Lifting capacity to maximum height	kg	3550

BACKHOE BREAKOUT FORCE

Bucket	daN	6400
Dipper breakout force (Std Dipper/HED retracted)	daN	4620
Dipper breakout force (HED extended)	daN	3200

BACKHOE SPECIFICATIONS

		STD DIPPER HED RETRACTED	HED EXTENDED
L Digging reach at max height	mm	2315	3130
M Bucket rotation	°	204	204
N Digging height	mm	5815	6475
O Dumping height	mm	4090	4750
P Digging reach at ground level	mm	5850	6810
Q Digging depth	mm	4565	5600

Machine equipped with: tyres 440/80
base counterweight; standard bucket 1.15 m³

NEW HOLLAND. THE POWER OF A GLOBAL BRAND

New Holland is a global brand with a key position in the Construction Equipment business. It supplies a **complete range of 13 product lines and 80 basic models** split into **Compact line** and **Heavy line**. It operates in all the main markets, such as **Europe, North and Latin America, Africa, Asia and Middle East** with the same technology and under the same logo and brand.

It manufactures **durable, safe and productive** machines aimed at supporting customers in developing their own business. **Dealers are company partners**. They play an important role to support the brand in their territories through intense professional relationship with Customers. New Holland is reinforced by its **global alliance with Kobelco**: world leader in hydraulic excavator technology.



AT YOUR OWN DEALERSHIP

The information contained in this brochure is intended to be a general nature only. The NEW HOLLAND KOBELCO CONSTRUCTION MACHINERY S.p.A. company may at any time and from time to time, for technical or other necessary reasons, modify any of the details or specifications of the product described in this brochure. Illustrations do not necessarily show products in standard conditions. The dimensions, weights and capacities shown herein, as well as any conversion data used, are approximate only and are subject to variations within normal manufacturing techniques.

Published by NEW HOLLAND KOBELCO CONSTRUCTION MACHINERY S.p.A.
Printed in Italy - LEADER Firenze - Cod. 73301 451GB - Printed 02/08

Printed on recycled paper
CoC-FSC 000010 CQ Mixed sources



ELEMENTAL
CHLORINE
FREE
GUARANTEED

FIAT
GROUP



www.newholland.com

Courtesy of Machine.Market