



# SALES FLASH

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**TITLE: JCB's MOST EFFICIENT BACKHOE LOADER EVER**

**DATE: 16<sup>TH</sup> APRIL, 2010**

**REF NO. NEW/BHL/019**

## **JCB's MOST EFFICIENT BACKHOE LOADER EVER**



**JCB is pleased to announce the launch of the new generation of 3CX and 4CX backhoe loaders which will be unveiled for the first time at the Bauma show in Germany on the 19<sup>th</sup> April.**

**Designed to reset the standards for backhoe loaders globally, the new models will take cost of ownership, productivity, versatility and comfort to new levels.**

**The new generation JCB Backhoe loader is our most efficient backhoe loader ever, designed with fuel economy in mind offering the customer average fuel savings of upto 16% at typical daily work rates.**

## KEY SELLING POINTS:

- **More efficient - on average 16% less fuel**

- JCB Eco System
- Lower engine speed
- Power brakes
- Faster cycle time

- **More comfortable**

- Quieter
- New seat
- New style

- **Easier to use**

- 2 mode operation
- New visual display



## **BACKGROUND**

At its launch in 2002, the current product cemented JCB's position as the leading brand in backhoe loaders with a product offering that was significantly differentiated from competitive offerings. This has enabled JCB to maintain and strengthen its premium position over competitors while also growing market share from 23% to over 40%.

Now a new and further refined generation of 3CX and 4CX BHLs is being launched which incorporates major improvements in machine efficiencies with lower owning and operating costs, to re-emphasise JCB's pre-eminence in Backhoe Loaders and support JCB's future growth plans.

### **Striking new styling reflects inherent strength and durability**

The new machine adopts a striking new design, which exudes ruggedness and strength by the use of harder lines to reflect the inherent strength, durability and power built into the machine.

Ridges flow through the counterweight, grill and bonnet to provide much of the aggressive appearance and stronger presence. The sharper lines on the excavator and loader profiles contribute to the robust look whilst the new roof adopts the Fastrac style single skin roof building on the corporate look.

The styling also includes a number of improvements to delight customers which include the following:-

- Independently adjustable front and rear lights for improved visibility while roading, loading and excavating
- Large run off channels ensure fast drainage of water from the roof
- New improved easy raise bonnet gives finger tip opening reinforcing the premium image of the machine
- Secure under bonnet storage for the wheel brace and tommy bar freeing up more space in the tool box. See below image.



To clarify and reinforce the efficiency improvements delivered by this new machine three 'eco' sub-brands have been developed to package all the improvements into easy to sell benefits.



## EcoDig

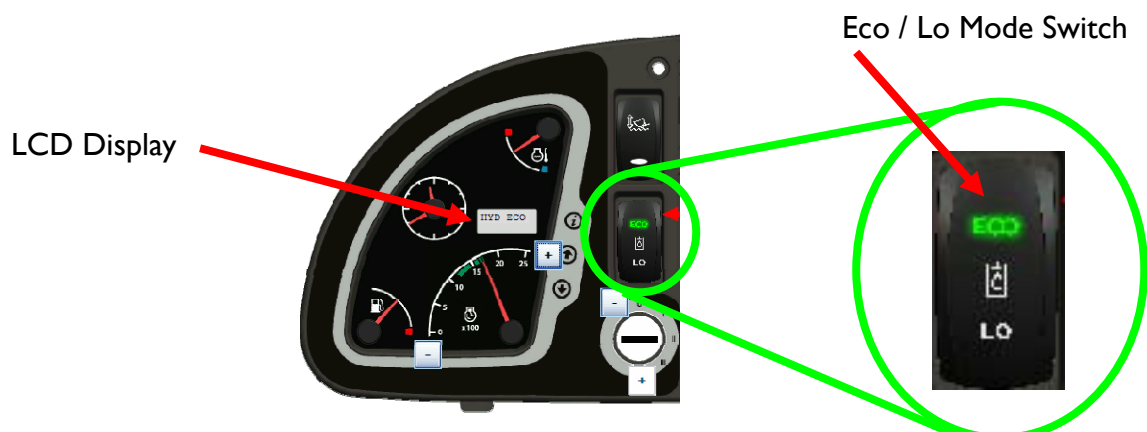
EcoDig is an 'industry first' that incorporates an innovative three hydraulic pump system allowing operators to work at lower engine speed without affecting productivity. This offers the following benefits:-

- Up to 15% improved fuel efficiency during excavating
- Longer periods between refuelling for increased productivity and extended working days.
- Improved extradig speed (without compromising other services) to increase productivity
- Lower internal and external noise for improved operator comfort due to significantly lower engine speeds
- Up to 15% reduction in carbon emissions to minimise environmental impact
- Two mode settings for maximising efficiency (**Eco**) or additional control (**Lo**)

EcoDig is only available on Manual and EasyControl machines. Machines with Advanced EasyControl already achieve the same level of fuel efficiency due to a variable displacement pump.

## 'Eco' Mode

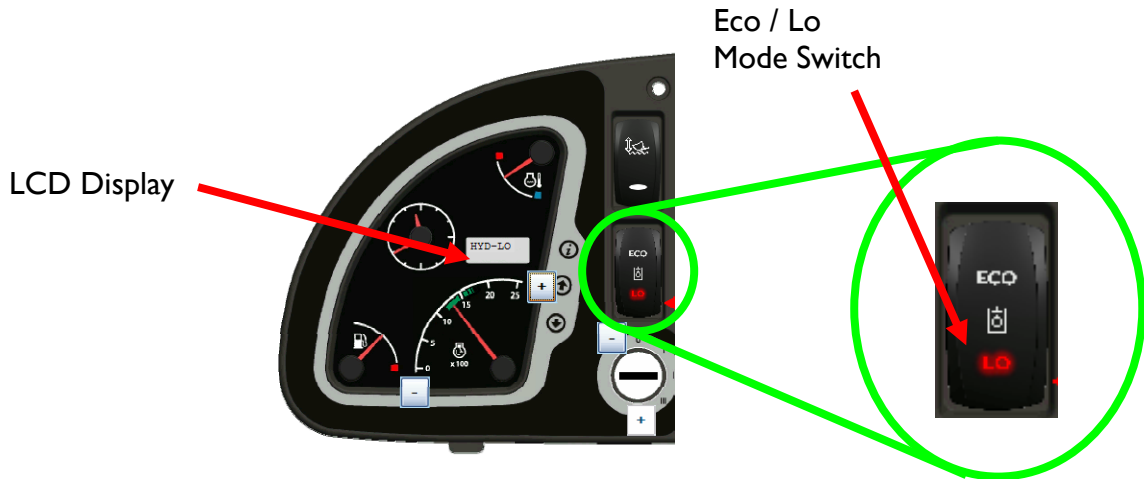
In order to maximise fuel efficiency operators need to select the 'eco' mode and operate between the green band on the Tacho (650 rpm and 1750 rpm). Operating outside these parameters drops the third pump and the machine reverts back to a standard two pump configuration. The LCD display on the side console indicates whether the machine is operating in '**Eco**' mode by displaying the message HYD-ECO or 'standard mode' by displaying the message HYD-STD (see illustration and table below for details).



Rpm range	Pump 1	Pump 2	Pump 3	LCD Display
< 650	✓	✓	✗	HYD - STD
650 – 1,700	✓	✓	✓	HYD - ECO
1750 – 1,850	Transition period			HYD - ECO
> 1,900	✓	✓	✗	HYD - STD

## 'Lo' Mode

The 'lo' mode (previously known as Hydraulic Speed Control - HSC) offers the operator additional control when grading or lifting. This mode is activated by moving the switch to 'Lo' and can also be used to disconnect the 2<sup>nd</sup> hydraulic pump for more tractive effort and fine control when loading. The pump configuration is displayed on the LCD display.



Operation	Pump 1	Pump 2	Pump 3	LCD Display
Excavating	✗	✓	✓	HYD - LO
Loading (forward/reverse selected)	✗	✓	✗	HOURS

For machines fitted with a hammer or combined hammer and bidirectional circuit, the **ECO/LO** mode switch enables operators to select between high or low flow to suit a wide range of attachments. The LCD display indicates whether the machine is operating in high or low flow by displaying the message **AUX-HIGH** or **AUX-LOW**.

## EcoLoad

The following features and options increase productivity and maximise efficiency as part of EcoLoad:

- Transmission disconnect diverts hydraulic power to the loader arms for faster lifting and productivity
- Hydraulic Speed Control (HSC) disconnects the 2<sup>nd</sup> hydraulic pump to give more tractive effort when loading
- Return To Dig (RTD) automatically resets the shovel to the dig position saving time and effort
- Limited Slip Differential (LSD) automatically provides additional traction in challenging conditions
- JCB Dieselmix engine provides maximum torque at low rpm to maximise traction and pushing power.

## EcoRoad

Continuing with the 'eco' theme, features and options which improve productivity and contribute to further efficiencies while roading are grouped under EcoRoad:

- TorqueLock reduces fuel consumption by up to 25% while also reducing travel time by up to 10% or alternatively extending the working radius by up to 10%.
- Smooth Ride System (SRS) maximises load retention and operator comfort at higher speeds around site and whilst on the road.
- Hydraulic Speed Control (HSC) automatically disconnects the 2<sup>nd</sup> hydraulic pump in 4<sup>th</sup> gear to provide further fuel efficiencies
- Power brakes gives full brake pad release to better maintain roading speeds and contributes to a 1% saving in fuel

## Power Brakes

JCB's braking performance is already class leading and in response to customer feedback JCB have reset the standard by redesigning the pedal box and introducing power brakes which offers:

- Proportional braking throughout the pedal travel improving braking effort and control.
- New automotive pedal position for improved ergonomics and operator comfort.
- Full brake pad release for maintaining road speed and improved fuel economy
- The design of power brakes also utilises the existing hydraulic supply removing the need for separate brake reservoirs, reducing operator costs and the number of daily service checks.

***The combination of EcoRoad, EcoLoad, EcoDIG and power brakes will provide customers with an average fuel saving of up to 16% when typical roading, loading, excavating and idle cycles are taken into account.***

The contents of eco packages may vary accordingly to machine specification

## New Branding

In line with other JCB products, the new corporate branding will cut in with the new generation of backhoe loaders, adding further distinction between current and new machines.

## Cab Refresh



Following extensive research within the construction and automotive industries, JCB has updated the cab with a new black interior to give a modern and stylish design. This provides:

- A more sumptuous, quality feel to the cab.
- New seat material for increased comfort and durability.
- Redesigned steering wheel with improved contour grips, material and spinner knob for better operator comfort and feel.
- New laser etched switches backlit for improved clarity and visibility.



## NEW FEATURES

In addition to the changes outlined above, JCB will also be introducing a number of new options

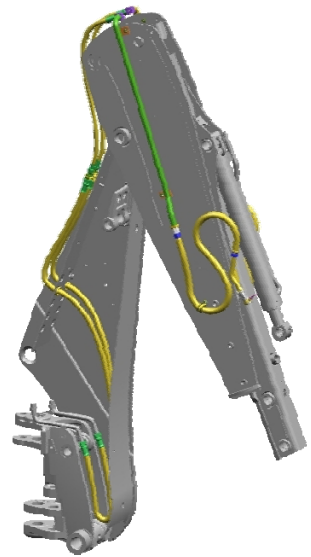
### Combined Hammer & Bi-Directional Circuit

Hammer and bidirectional circuits provide single and double acting circuits to operate an array of attachments and increase machine versatility. The new combined hammer / bi-directional circuit has been designed to provide low flow and high flow circuits across all 3CX and 4CX models including all fixed and extending dipper variants.

- Operates both low and high flow attachments
- Low back pressure maintains optimum flow to attachment
- Operates independent of extending dipper
- Compatible with the JCB hammer circuit
- Available on all 3CX and 4CX Manual and EasyControl variants\*

\*Advanced EasyControl versions will be available Q3 2010

A separate sales flash with further information will be released shortly.



### Auxiliary hydraulic Hose Reel

JCB already offers an industry exclusive Hand Held Tool Circuit (HHTC) which provides an independent hydraulic supply for operating hand held attachments. To compliment this option JCB will be introducing a 9m hose reel option on all 2CX, 3CX and 4CX machines which provide the following benefits:

- Reduced damage during storage
- Additional protection for the hose during storage.
- Simultaneous use of the excavator and hand held attachment improving productivity and versatility without the cost of a separate power pack
- A cost effective solution for the customer



## Trencher

In response to market feedback, JCB will be introducing a trencher option to work in conjunction with the existing hammer circuit on 3CX and 4CX backhoe loaders. The trencher gives the backhoe loader greater versatility enabling it to compete in new segments of the market and is the first time a trencher has been available as a factory fit option on a backhoe loader.

The trencher includes the following features:

- Up to a 1.5m dig depth
- Skid plate for ground support which also acts as a guide for optimising the cutting angle.
- Reversible function to release any blockage.
- Integrated auger which moves material to the side minimising backfilling of the trench



## Hot drinks machine

JCB has always looked at new ways of demonstrating its innovation and quality. In 1972 JCB bought out the option of a electric kettle on the 3D. Revisiting this innovation, JCB will be introducing an optional hot drinks machine capable of producing either tea or coffee, using the existing 12v circuit and has been designed to fit into the beacon storage position.

- Compatible with 3CX and 4CX Advanced EasyControl machines
- Replacement tea and coffee bags are widely available in most countries
- Designed to conform with international standards



## Heated Screen

Available in time for the winter, JCB will be introducing the option of an automatic heated front screen on all 3CX and 4CX models which will offer operators the following benefits:

- A more convenient easier and quicker way to clear windscreens in cold weather
- Automatic operation with an override function for use in extra cold conditions
- Industry exclusive



## TRAINING

A training event for all regions is planned to be held in June which will involve both classroom and hands-on activity. Further details will be communicated by your regional Sales Manager in due course.

## MARKETING

The following marketing materials will be available to support the launch and will be available for download from Monday 19<sup>th</sup> April at [www.jcbinnovations.com](http://www.jcbinnovations.com)

- Specification sheets (also available from [JCBstore.com](http://JCBstore.com))

**BACKHOE LOADER | 4CX/4CX STEPMASTER**

4CX: FULL POWER FRONT LOADING | FULL BACKHOE CAPACITY | 4.5 TONNEURS AL | FULL LOADER CAPACITY | 1.5 TONNEURS  
 4CX STEPMASTER: FULL POWER FRONT LOADING | FULL BACKHOE CAPACITY | 4.5 TONNEURS AL | FULL LOADER CAPACITY | 1.5 TONNEURS

**TECHNICAL SPECIFICATIONS**

4CX Stepmaster Loader Backhoe: 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity.

Model	4CX	4CX Stepmaster	Model	4CX	4CX Stepmaster
Full Power	22.0 kW	22.0 kW	Full Power	22.0 kW	22.0 kW
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs

**BACKHOE LOADER | 304CX/304CX STEPMASTER**

304CX: FULL POWER FRONT LOADING | FULL BACKHOE CAPACITY | 4.5 TONNEURS AL | FULL LOADER CAPACITY | 1.5 TONNEURS  
 304CX STEPMASTER: FULL POWER FRONT LOADING | FULL BACKHOE CAPACITY | 4.5 TONNEURS AL | FULL LOADER CAPACITY | 1.5 TONNEURS

**TECHNICAL SPECIFICATIONS**

304CX Stepmaster Loader Backhoe: 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity. 4.5 Tonneurs (10,000 lbs) maximum lift capacity.

Model	304CX	304CX Stepmaster	Model	304CX	304CX Stepmaster
Full Power	22.0 kW	22.0 kW	Full Power	22.0 kW	22.0 kW
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs
Full Power Range	12.0-22.0 kW	12.0-22.0 kW	Full Power Range	12.0-22.0 kW	12.0-22.0 kW
Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs	Full Power Capacity	1.5 Tonneurs	1.5 Tonneurs

- Launch / range brochure (also available from [JCBstore.com](http://JCBstore.com))



- Hero photography



- **Application photography**



- **Internet** – a separate microsite dedicated to the new backhoe loader will go live on JCB.com from 19<sup>th</sup> July 10.00GMT [www.jcbinnovations.com](http://www.jcbinnovations.com)



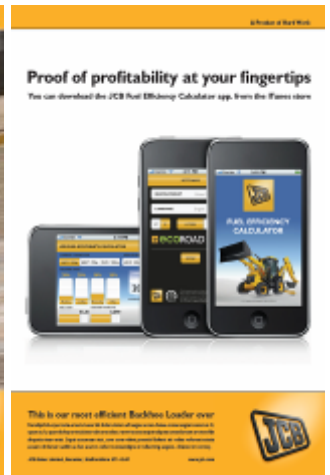
- **Computer Generated Images (CGI)**



- Launch advert examples



- Feature advert examples



- iPhone fuel saving 'app'



The iPhone application has been designed for customers and dealer sales to calculate the potential fuel saving with the new generation of backhoe loaders. This will be able to download from the iTunes Store from Monday 19<sup>th</sup> April.

- Reversible poster



- Screensaver



- Sales support material

**Quick Reference Guide**

**New 400 engine**

- New 400 engine (3.0 litre) offers 30% more power than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more torque than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more fuel economy than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more efficiency than previous 400 engine

**Key engine options**

- 400 engine (3.0 litre) offers 30% more power than previous 400 engine
- 400 engine (3.0 litre) offers 30% more torque than previous 400 engine
- 400 engine (3.0 litre) offers 30% more fuel economy than previous 400 engine
- 400 engine (3.0 litre) offers 30% more efficiency than previous 400 engine

**Best selling range in the world**

- 400 engine (3.0 litre) offers 30% more power than previous 400 engine
- 400 engine (3.0 litre) offers 30% more torque than previous 400 engine
- 400 engine (3.0 litre) offers 30% more fuel economy than previous 400 engine
- 400 engine (3.0 litre) offers 30% more efficiency than previous 400 engine

**Key features**

- 400 engine (3.0 litre) offers 30% more power than previous 400 engine
- 400 engine (3.0 litre) offers 30% more torque than previous 400 engine
- 400 engine (3.0 litre) offers 30% more fuel economy than previous 400 engine
- 400 engine (3.0 litre) offers 30% more efficiency than previous 400 engine

**JCB and 400**

**The world's No.1 Backhoe Loader has now got even better**

**Innovation to meet the needs of the customer**

**ECOLOAD**

- The new JCB EcoLoad backhoe loader is the most efficient backhoe loader in the world
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**What's new at standard**

- New 400 engine (3.0 litre) offers 30% more power than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more torque than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more fuel economy than previous 400 engine
- New 400 engine (3.0 litre) offers 30% more efficiency than previous 400 engine

## **Sales codes and cut-over of existing orders**

The production of the new model backhoe loader will start Thursday 22<sup>nd</sup> July. As the current order bank extends past this date there will be a number of orders required to be converted from the current backhoe loader to the new model.

To facilitate the cut in of the new model, a number of changes to the sales codes for primary builds and essential features/ options have been made, which will necessitate the creation of new standard builds within JDS if this function is currently utilised.

Codes that have changed are:

Primary builds – Cross reference chart between current and new primary builds is included in Sales Flash NEW/BHL/29

C codes – Cabs

F codes - Language options.

H codes – Excavator end option codes.

L codes – Hammer and bi-directional circuits.

W codes – Transmission options.

The new sales codes and prices will be visible on JDS from Tuesday 20<sup>th</sup> April, at which time current pricing will be removed. Any orders still to be built as current spec machines will retain the price information for the codes for reference and can be viewed by looking at that specific order number.

Conversion of orders will start once the backhoe loader allocation exercise is complete and visible, which will be by the end of April. This process will take some time, but when the change is made the usual automated update alert will be sent through JDS.

To ensure the smooth transition of orders a fixed build programme is being established during the run out of the current model, and no changes to orders will be accepted after Friday 18<sup>th</sup> June. In addition it will not be possible to spec change old models into new models or vice versa and any JDS requests to this effect will be rejected.

### **Primary Builds**

Details of the primary builds changes are outlined in sales flash NEW/BHL/020