

## 3CX AND 4CX BACKHOE LOADER



A Product of Hard Work



**Our most efficient backhoe loader ever**





JCB is the world's number one backhoe loader manufacturer, with 57 years of experience and over 400,000 machines produced – more than anyone else.

But we never rest on our laurels. We're constantly speaking to our customers, asking what they want, looking for that next pioneering innovation that will keep us at the forefront.

You wanted better efficiency to reduce cost and environmental impact. You wanted improved productivity to enhance your earning power. You wanted even more comfort to keep you alert, fresh and safe. And you wanted striking design and aesthetics to maximise residual value.

Welcome to the new JCB 3CX and 4CX backhoe loaders.



## More efficient than ever

Quite simply, our new backhoes  
do even more for less



With an ever-more competitive market and rising fuel prices, improving efficiency has become a key factor to business success.

JCB's efficient design philosophy looks at every aspect of our machines, applying innovative technologies to squeeze the absolute maximum out of every drop of fuel. It is this attention to detail and efficient design innovation that makes the new 3CX and 4CX our most efficient backhoes ever.

One of the most significant innovations for 2010 is **EcoDig**; a three-pump hydraulic system that allows excavating at lower engine speeds for up to 15% improvement in fuel economy and reduced engine carbon emissions. It is standard on all Manual Control and EasyControl machines – Advanced EasyControl machines have a variable displacement pump which already provides superb digging efficiency.

Our **EcoRoad** technology further reduces fuel consumption. JCB's unique patented TorqueLock system delivers up to 25% better roading efficiency, along with up to 10% greater speed and 20% working area. 2WD mode and hydraulic disconnect in top gear provide additional improvements. And our new brakes, with full brake pad release, minimise drag to improve efficiency even further.

Finally, **EcoLoad** features a Hydraulic Speed Control switch which – combined with high torque at low engine speed from our DieselMax engine – gives more tractive effort, faster cycle times, excellent pushing power and hill climbing performance.

The result of these innovations is that in typical roading, loading, excavating and idle cycles our new backhoe loaders deliver an average fuel saving of up to 16%, plus lower emissions and noise levels. And with an extended period between fill ups you get a longer, more productive working day.







## Remarkable innovations

### Setting new, technologically advanced standards in backhoe performance

Redesigning and refocusing the world's number one backhoe loader was an opportunity to lead the way in machine innovation and reset the standard for diggers the world over; to improve productivity, versatility and comfort. Years of engineering research and investment throughout the economic downturn have yielded a host of innovations such as:

**Power braking.** JCB's class-leading braking is now even better. Power brakes provide proportional braking effort throughout pedal travel for increased feel and reduced effort. Comfort is enhanced thanks to a more ergonomic pedal position. Full brake pad release reduces drag to improve fuel economy and maintain maximum road speed for longer. And because there is no separate oil system to check, replace or top up, you benefit from reduced maintenance routines and service costs.

**Combined hammer and bi-directional circuit.** This new option provides both low-flow and high-flow hydraulic power, increasing attachment compatibility and versatility.

**Hose reel.** JCB already offers an industry exclusive independent hydraulic supply for operating hand-held tools. A new 9m hose reel option increases working radius, reduces potential damage during use, protects the hose during storage and does away with the need for a separate powerpack. Handheld tools and the excavator can operate at the same time, increasing productivity.







## NEW efficiencies improve profitability

### ecoDIG

In EcoDig mode, three hydraulic pumps enable working at lower engine speed to improve fuel economy and reduce engine carbon emissions by up to 15% on Manual Control and EasyControl machines.

New hydraulic design and increased pump flow improve Extradig speed for increased productivity.

Operation at lower engine speeds reduces engine wear and further lowers JCB's already class-leading noise levels, improving operator experience.

### ecoROAD

Exclusive EcoRoad technology TorqueLock reduces fuel consumption by up to 25% whilst increasing speed by up to 10%, and working area by up to 20%.

An automotive-inspired design features a lower brake pedal position with improved ergonomics to increase operator comfort.

Full brake pad release reduces drag to maintain road speed for longer and improve fuel economy.

Using the existing hydraulic circuit means there is no need for a separate brake reservoir, reducing operator costs and the number of daily service checks.

Power brakes provide proportional braking effort throughout pedal travel, increasing control and reducing effort.

2WD selection and hydraulic disengage in top gear to maximise on-road efficiency.

### ecoLOAD

The return to dig EcoLoad feature automatically resets the shovel to dig position.

Transmission disconnect diverts hydraulic power to the loader for faster lifting.

Hydraulic Speed Control (HSC) gives more tractive effort when loading.

4-ram parallel lift and Smooth Ride System (SRS) results in excellent load retention.

High engine torque at low revs provides excellent pushing and hill climbing performance.

Limited slip differentials (LSD) kick in for extra traction in challenging conditions.







### **NEW cab design gives even greater comfort and visibility**

A black interior in the lower section of the cab gives a sleek, sumptuous feel.

New seat and improved material enhance comfort and durability

New steering wheel design features strategically placed contour grooves and a more ergonomically designed spinner knob to improve comfort, feel and grip.

Updated switches include laser-etched images, backlit in bright white, for increased clarity.

Independent, adjustable lights – front and rear – extend forward and side visibility.

Automatic heated front screen option – the first time any manufacturer has offered this time-saving, convenient feature on a backhoe loader.

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

Improved roof run-off channels prevent water collection.

A more rigid and durable engine cover, with self-lifting supportive struts, makes it easier to access the engine and cooling system.

The striking roofline, bonnet, counterweight and grille enhance the aggressive, strong appearance.

### **NEW versatility enhancements increase productivity**

Combined hammer and bi-directional circuit provides low-flow and high-flow circuits for operating the full range of attachments.

9m hose reel option increases working radius of hand-held tools, reduces potential damage during use and protects the hose during storage.

Exclusive JCB trencher attachment – an industry first on backhoes – features up to a 1.5m dig depth and includes a skid plate for ground support.

The trencher also features an integrated auger which moves material to the side, preventing backfilling, and a reversible function to release any blockage.

### **Remarkable backhoe innovations and features**

Powerslide hydraulically sideshifts the backhoe for less effort and reduced site damage.

Extradig and equal length boom and dipper enable digging further away and closer to the machine for longer trenches without repositioning.

Smooth Ride System (SRS) cushions the load and maximises load retention for increased productivity and operator comfort.

Loader quickhitch speeds up attachment changeover for increased productivity.

Integrated quickhitch with forks increase lift capacity to 2,000kg and improves visibility.

## Comfortable and effortless control of machine and environment

It pays to invest in the operator



JCB backhoe loaders are designed around the operator to give fatigue-free, productive day-long working.

Take a look at our luxury heated suspension seat and you'll see why cab comfort, ergonomics and styling are best in class. As are noise and vibration levels, thanks to the rubber-mounted, isolated cab.

A cab pre-heating option can be set to warm the cab automatically without starting the engine, so you can benefit from extra time in bed! The optional heated windscreen speeds up defrosting too. In addition, and exclusive to JCB backhoe loaders, we have integrated a beverage machine option into the cab to provide you with a delicious cup of hot tea or coffee throughout the day; making a well-earned break even more relaxing!

We also enhance productivity by ensuring that any operator, novice or experienced, can jump in and start working straight away. This is made possible thanks to a choice of 3 control options (Manual Control, EasyControl and Advanced EasyControl) and 3 control patterns (ISO+, SAE+ and JCB X pattern (Manual Control only), ensuring that there is an option for every operator. Our seat-mounted servos are the only ones that let you operate the excavator while facing to the side, for better visibility of the working area.

Furthermore, the 360° view through the tinted windows is superb – enhancing on-site safety. In particular, the one-piece rear windscreen, with its innovative scoop design, lets you see right into the trench when excavating.









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Download the very latest information on this product range at: [www.jcbinnovations.com](http://www.jcbinnovations.com)

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