



### WHY COMPROMISE?

JCB's new backhoe loaders are designed to offer productivity without compromise. The range has been developed using our 60 years of backhoe expertise and, crucially, our Efficient Design philosophy. As a result, our new backhoes are equipped with a host of performance, comfort, safety and efficiency innovations, including our new award winning EcoMAX Stage IIIB engine. EcoMAX meets Stage IIIB legislation without bulky DPF or SCR. Because installation is therefore compact, you can enjoy uncompromised visibility and manoeuvrability. In short, the world's best selling backhoe loaders once again redefine productivity.

**NEW SHOVEL STREET PADS** 

**PREVENTS GROUND DAMAGE** 

**NEW VARIABLE DISPLACEMENT PUMP** 

**GIVES 6% FUEL SAVINGS** 

**UP TO 6% MORE TORQUE** 

**IMPROVES TRACTIVE EFFORT** 

**NEW HIGHLY EFFICIENT ELECTRONIC ENGINES** 

**UP TO 5% FUEL SAVINGS** 







NEW HYDRAULIC QUICKHITCH OPTION FULLY AUTOMATIC, FAST AND SAFE

TORQUELOCK
STANDARD ON THE 3CX CONTRACTOR
GIVING UP TO 25% FUEL SAVINGS

NEW 55KW (74HP), 68KW (91HP)

AND 8IKW (109HP) ENGINE OPTION
TO SUIT PERFORMANCE AND EFFICIENCY REQUIREMENTS

ALL NEW ELECTRONIC ENGINE MANAGEMENT SYSTEM NO DAILY CHECKS INSTANT FUEL MANAGEMENT SYSTEM

NEW POWERSLIDE FAST, EASY REPOSITIONING

NEW LIVELINK FEATURES
REMOTE ENGINE MONITORING, REMOTE FUEL MANAGEMENT

# EcoMAX: designed without compromise.

### No exhaust aftertreatment

Removing exhaust aftertreatment means EcoMAX is extremely compact; there's no compromise to visibility or manoeuvrability, and only one fuel type is needed.

### Improved fuel economy

EcoMAX uses 5-10% less fuel than our Tier 3 engines, saving you money.

### Oil savings

Because EcoMAX doesn't need exhaust aftertreatment, it doesn't require costly heat-resistant lube oils.

### Simplified servicing

Most Tier 4i engines use a Diesel Particulate Filter (DPF), or SCR requiring additional AdBlue fluid level maintenance – EcoMAX doesn't.

### Versatile fuel mapping

Our innovative recalibration option allows EcoMAX to run on lower grade fuels. This means our latest backhoe loaders can be resold across different territories, which improves residuals.

### High torque at low speed

EcoMAX produces high levels of torque at engine speeds as low as 1200rpm for fuel-efficient matching of the transmission and hydraulics.

### **Perfect harmony**

EcoMAX is designed, tested and built by JCB to work perfectly with JCB axles and gearboxes. This optimises driveline and hydraulic performance.

### **Proven reliability**

JCB engines are tried and tested. We've built 200,000 DIESELMAX engines since 2004, and we've tested our latest units for 110,000 hours in 70 different machines across the toughest applications and environments.

### **Upgraded Filters**

An upgraded engine and fuel filter prevents engine wear and extends EcoMAX's working life.





### New features: why compromise?











- 1 Our new unique integral shovel street pads option prevents ground damage and, therefore, costly repairs.
- The new JCB hydraulic quickhitch makes attachment changing quick, safe and compliant with current and future legislation.
- Daily under bonnet checks are a thing of the past
   all engine checks are done automatically by the
   CANBUS electronics engine management system.
- 4 A new high output variable flow pump reduces cycle times, saves fuel and, on manual machines, lighter lever effort makes control easier.
- The new improved Powerslide features a larger hydraulic ram, which produces more power to quickly and effortlessly reposition the excavator.
- There's more tractive effort at the pile than ever, thanks to new variable flow pump power management and our new EcoMAX engine.
- For ultimate loading performance, productivity and roading efficiency, EcoMAX delivers 81kW (109hp) and 516Nm of torque.
- New rear light guards for extra protection on site.
- Quiet operation lowest noise levels on 55kW (74hp).

## Strength: why compromise?









- 1 JCB Axles and transmission are designed to withstand a 12,000 hour design life.
- Our backhoes' heavyweight axles are built to withstand serious shock loads. The rear axle alone has a static load rating of 25,000 kg, and a dynamic load rating of 12,500 kg.
- We use stress relieved fabrication for our booms; by heating materials to over 650°C for over 16 hours, we make sure the metal is evenly heated, doubling boom life.
- We test our materials to the limit by exposing them to extreme temperatures, chemicals, salt, oil and light. That way, we know they'll survive the most hostile conditions.
- Getting into a JCB backhoe is easy and safe

   there are large grab handles, a wide door opening,
  and open grid design steps that prevent dirt
  build-up.
- For rigidity and hose protection, there are flat plate D-pressing loader arms.
- Our plastic fuel tank is completely rustproof to prevent rust forming in the tank which protects the fuel injection system.
- The single-piece composite cab floor is also rustproof, and has moulded water channels.
- The robot welded single-piece chassis maximises strength and minimises weight.

### Specification: why compromise?



- 1 JCB's unique TorqueLock system is now standard on 81kW (109hp) powershift models.

  Combined with our optional 6-speed Autoshift transmission, it can help save up to 25% on fuel and 10% on road travel time.
- For more comfort and less material spillage, JCB's Smooth Ride System minimises bounce during travel.
- Quickly reset your shovel to the digging position with our return-to-dig feature.

- 4 A JCB backhoe's 4-ram self-levelling loader automatically adjusts the shovel on both the raise and lower cycle without any need for manual adjustment. It also provides unhindered front shovel visibility, especially when loading at height.
- For minimum compromise and optimum performance, our Vertical Integration Strategy makes sure that JCB backhoe engines, transmissions, hydraulic rams and cabs all work together in perfect harmony.
- **S** JCB power brakes offer progressive light braking for exceptional comfort.
- OPTION: combined hammer and bi-directional circuit: For greater attachment versatility and compatibility, you need optimum flow. This provides both low-flow and high-flow hydraulic power with low back pressure.
- © OPTION: handheld tool circuit: Increase versatility by using your backhoe as a power source for handheld tools, such as drills breakers, cutters and even water pumps.
- OPTION: limited slip differential: For greater traction and performance, as well as reduced tyre wear, we offer automatic limited slip differentials as an option.

### Comfort: why compromise?



		3CX	3CX SM	3CX SUPER	3CX SUPER SM	3CX CONTRACTOR
Operating weight	kg	7370	8070	7855	8258	8176
Gross engine power	kW (hp)	55 (74)	55 (74) or 68 (91)	68 (91)	68 (91)	81 (109)
Dig depth ret/ext	m	4.24	4.25 / 5.46	4.37	4.37 / 5.58	4.24 / 5.46
Steer mode		2WS	2WS	4WS	4WS	2WS
Loader shovel breakout	kgf	6170	6531	6227	6590	6531
Maximum loader shovel capacity	m³	1.0	1.0	1.0	1.0	1.0
Maximum dipper tearout	ret / ext kgf	3217	3225 / 2255	3217	3225 / 2255	3903 / 2729
Maximum bucket tearout	kgf	6324	6228	6324	6228	6228
Optimum pump flow	I/min	165	165	165	165	165

		4CX	4CX SM	4CX SUPER	4CX SUPER SM	4CN
Operating weight	kg	8152	8599	8130	8880	8660
Gross engine power	kW (hp)	81 (109)	81 (109)	81 (109)	81 (109)	81 (109)
Dig depth ret/ext	m	4.32	4.32 / 5.53	4.98	4.98 / 6.14	5.191
Steer mode		4WS	4WS	4WS	4WS	4WS
Loader shovel breakout	kgf	6227	6590	6590	6590	6590
Maximum loader shovel capacity	m <sup>3</sup>	1.3	1.3	1.3	1.3	1.3
Maximum dipper tearout	ret / ext kgf	3893	3903 / 2729	3713	3722 / 2675	3893
Maximum bucket tearout	kgf	6228	6228	6228	6228	6929
Optimum pump flow	l/min	165	165	165	165	165

### **LIVELINK, KNOWLEDGE IS POWER**

JCB LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MONITOR AND MANAGE YOUR MACHINES REMOTELY — ONLINE, BY EMAIL OR BY MOBILE PHONE.

**Productivity and cost benefits** – Idle time monitoring, remote engine monitoring and machine fuel consumption information boost fuel economy; location information improves fleet efficiency; improved machine security can reduce insurance.



**Maintenance benefits** – Accurate hours monitoring, maintenance history records, critical machine alerts and service alerts improve maintenance planning.

**Security benefits** – Real-time geofencing lets you set operating zones and curfew alerts that tell you when your machinery outside of pre-determined times. Location information helps you store machines safely.

### **VALUE ADDED**

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.





JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.



The global network of JCB Parts Centres is another model of efficiency; with 15 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.







### **3CX and 4CX ECO Backhoe Loader**

Your nearest JCB dealer