

NEW JCB 4DX | BACKHOE LOADER



Powered by

JCB ENGINE
ecOMAX



CEV IV
STAGE

POWERED TO SUCCEED



THE ICON THAT REVOLUTIONISED THE WORLD

In 1953, JCB introduced one of the most pioneering machine to ever enter the market. The MK I excavator had a loader mounted on the front and a hydraulic excavator fitted to the rear. It was the world's first backhoe loader; one machine that could perform a variety of jobs.

Today, 1 out of every 2 backhoes sold across the globe is a JCB.

Over the decades, the world's most iconic machine has constantly evolved to meet its customers' changing demands.



**BHARAT
KA JCB**

**AT JCB,
WE KEEP INDIA FIRST**
SALUTING THE TRUST OF 4 LAKH FAMILIES

As we celebrate a historic milestone of 4 00 000+ JCB Backhoe Loaders sold, JCB is proud and humbled to be the first choice of entrepreneurs in India. By enabling livelihoods, JCB Backhoe Loaders are not just helping build the new India of our dreams, but ensuring the vision of atmanirbhar truly rests in the hands of every Indian.

#ProudToBePartofJCBFamily



CELEBRATING
400000
JCB BACKHOE LOADERS
BHARAT KA BHAROSA

POWERED TO SUCCEED

Introducing the **NEW** CEV Stage IV JCB 4DX

Powered by

JCB ENGINE
eCOMAX



CEV IV
STAGE

The surest way to overcome the toughest challenges is to believe that you can. With a JCB Backhoe Loader that is built to deliver, the challenges get easier. Dream big, you've got a JCB Backhoe that you can depend on.

#SafaltaKaBharosa



Standard



Optional



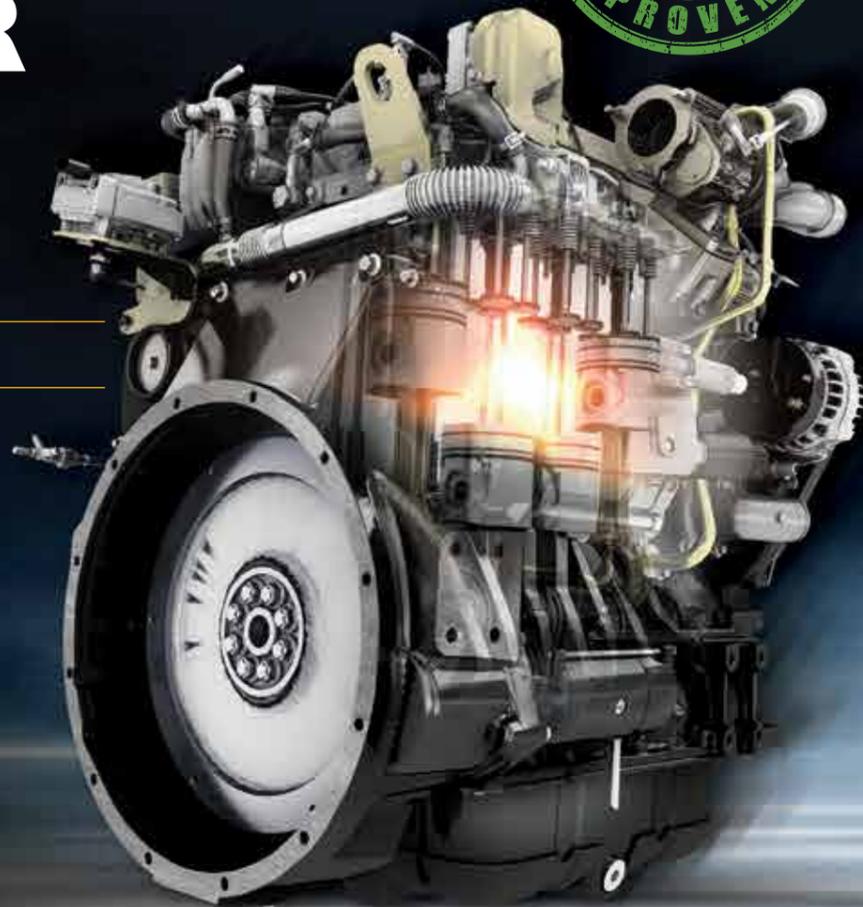
MADE IN INDIA, MADE FOR SUCCESS.

Introducing the **NEW**
CEV Stage IV ecoMax Engine.

Efficient | Reliable | Simple



Well tested 
1,00,000+
cumulative hours



16
Valves
Effort



CRDI



POWERFUL ENGINEERING

1 JCB ecoMAX 444 is one of the efficient & reliable engines in construction industry. The combination of CRDI technology with high pressure fuel line & swirl design in combustion chamber reduces the complicity & manages to achieve the CEV Stage IV norms value efficiently without after treatment.

2 A fuel efficient engine with CRDI Technology- low SFC, 16 valves effort and improved swirl for cleaner combustion.

3 Higher performance due to high torque at low speed. EGR with 2 stage cooling mechanism and turbocharger with Waste Gate Technology (WGT).

4 High swirl design for better combustion, no after treatment required.

5 Sturdy design of bedplate, robust fuel filtration system and IP69 connectors make the engine durable and reliable.

6 The engine is designed and tested rigorously to adapt to Indian conditions for more than 1,00,000 cumulative hours.

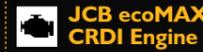
7 Common Rail Direct Injection (CRDI) technology saves fuel, gives more power and cleaner emission norms.

8 High performance and more power with turbocharger.

9 Highly effective sensors to continuously monitor engine health.



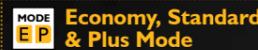
LOADED WITH INNOVATIVE FEATURES



JCB ecoMAX CRDI Engine
Common Rail Direct Injection (CRDI) technology saves fuel, gives more power and cleaner emission norms.



Well Tested 1,00,000+ Cumulative Hours
The engine is designed and tested rigorously to adapt to Indian conditions for more than 1,00,000 cumulative hours.



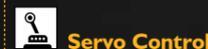
Economy, Standard & Plus Mode
Plus mode helps in achieving additional productivity.



12%* More Fuel Efficient
12%* Lower fuel consumption in mix duty cycle, saving.



15%* Maintenance Cost Reduction
Save every year with 15%* periodic maintenance cost reduction.



Servo Control
Servo operated excavator controls for hassle-free operations.



Auto Idle
Save fuel as the machine goes automatically into Auto Idle mode after 10 seconds of idling period.



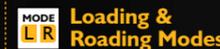
Digital Display
New Informative Digital Cluster Display for smooth operation.



Easy Shift
Better productivity and rested operator with effortless gear shift.



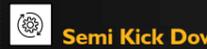
Digital Speedometre
Operation made easy with an advanced Digital Speedometre that displays speed with clarity.



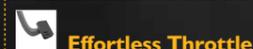
Loading & Rooding Modes
Loading & Rooding modes help in saving Fuel.



Trip Metre (Kilometre & Hours)
Keep track of the distance covered & hours clocked.



Semi Kick Down
Semi Automatic Kick Down for effortless gear shift.



Effortless Throttle
Electronic hand & foot throttle results in nearly zero or low effort, reducing operator fatigue.



Auto Stop
The Auto Stop feature saves fuel by automatically switching off the engine after 6 minutes of waiting period.



7% Lower Noise Level
Stay fatigue-free and work for longer hours with ease.



SRS
More operator comfort with better productivity, longer life of front axle and smooth travel achieved due to Smooth Ride System.



Redesigned Roof
New stylised roof for better rainwater management increasing uptime in rainy seasons.



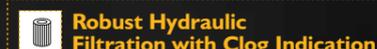
Feedpump
No priming required, no possibility of air in fuel system making engine more durable.



Internal Rear View Mirror
Provides assistance to operator to see rearwards.



LiveLink 4.0
Advanced LiveLink, an innovation that gives you the additional facility of data analytics about the operational behaviour of your machine.



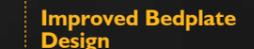
Robust Hydraulic Filtration with Clog Indication
Longer hydraulic components life.



LED Rear Work Lamp*
LED rear work lamps for improved visibility at night.



Intelli Diagnostics
A Smart App is connected to the machine via bluetooth which enables quick identification of concerns.



Improved Bedplate Design
Sturdy construction.



Crank Case Ventilation (CCV)
Crank Case Ventilation System - reduces oil wastage, lowering maintenance cost.



Robust Fuel Filtration System 2 & 5 Micron Filter
The pre-filter of 5 micron with water separator & main filter of 2 micron filter elements are specially engineered media technology with a proper mixture of glass fiber & synthetic media.



Forged Crankshaft
Better life of crankshaft.



*Available as an accessory at JCB authorized dealerships.
*Against the outgoing 4DX ecoXcellence tested under a controlled environment. T&C Apply.

POWERFUL EFFICIENCY

- 1 12%* lower fuel consumption in mix duty cycle, more saving.
- 2 The advanced CEV Stage IV JCB ecoMAX engine with CRDI technology is fuel efficient.
- 3 The two stage EGR cooler & 16 valves system allow better combustion & exhaust.
- 4 Variable Displacement Pump is programmed to control the flow depending on the load to minimise the hydraulic losses.
- 5 Better productivity due to higher flow of 148lpm.
- 6 Excavation modes to optimise the fuel consumption as per jobs.
- 7 Economy mode & variable pump manage the flow based on pressure, achieving lower fuel consumption and optimum productivity.
- 8 The Auto Stop feature saves fuel by automatically switching off the engine after 6 minutes of waiting period.
- 9 Save fuel as the machine goes automatically into Auto Idle mode after 10 seconds of idling period.

12%* MORE FUEL EFFICIENT

ECONOMY MODE

16 Valves Effort



AUTO STOP

Auto Idle

POWERFUL PRODUCTIVITY & PERFORMANCE

- 1 Maximum torque-400 Nm ensures quick engine response & gives ability to work in hard applications.
- 2 Higher Productivity with 0.40 cu.m bucket capacity with short dipper variant and 0.32 cu.m capacity with long dipper variant. Best suited for bulk digging.
- 3 Higher reach with 2.9m dump height.
- 4 Long dipper offers 5.36m maximum dig depth and short dipper offers 4.95m maximum dig depth, best suited for bulk digging.
- 5 Plus mode for productivity.
- 6 Standard Mode - In plus mode if the engine operates, the productivity will be higher than eco mode.
- 7 Loading & Roading modes help in saving fuel.
- 8 Loading mode for re-handling & Roading mode for travel.

TORQUE 400 Nm

2.9 METRE DUMP HEIGHT

0.40 cu.m BULK DIGGING BUCKET

0.32 cu.m BUCKET

*Optional.

5.36 METRE DIG DEPTH

4.95 METRE DIG DEPTH

STANDARD MODE

PLUS MODE

Graph of flow showing

Roading mode - 30lpm
Loading mode - Maximum flow-high productivity

LOADING MODE	Max. flow available
ROADING MODE	Save Fuel

Indicative graph of productivity in Eco, Standard & Plus modes.

LOADING MODE

ROADING MODE

*Against the outgoing 4DX ecoXcellence tested under a controlled environment. T&C Apply.

*Against the outgoing 4DX ecoXcellence tested under a controlled environment. T&C Apply.

POWERFUL & RELIABLE

10 Easy Shift: Ease of operation and rested operator for better productivity with effortless gear shift that has rotating knob on shuttle gear level.

11 Semi Automatic Kick Down: While doing loading in 2nd gear, operator can shift to 1st gear with push of a button and automatically shift to 2nd gear as soon as reverse gear is engaged during loading cycle.

12 Less transit time with higher max. speed of 40kmph

JCB EASYSHIFT 10

SEMI AUTOMATIC KICK DOWN 11

SMOOTH RIDE

Smooth Ride System: The loader arm connected to accumulator observes the bumps & thus, reduces oscillation of the machine. It allows operator to drive the machine at higher speed with greater comfort.

Better productivity, longer life of front axle and smooth travel achieved due to Smooth Ride System (optional).



The pictures used and facts given are graphic representations and approximate values. The actual color and numbers may vary.

IN EVERY TERRAIN 4WD* IS ENGINEERED TO PERFORM UPHILL TASKS EFFICIENTLY AND EFFECTIVELY ESPECIALLY IN HILLY TERRAIN.

All Terrain Ability
Best suited for high terrain

More Fuel Efficiency

More Tractive Effort

More Bucket Filling Factor

Lesser Cycle Time

4X4



*In comparison with 2WD Backhoe Loader

POWERFUL & RELIABLE

1 The boom and dipper is designed to perform heavy-duty work in arduous region.

2 Loader arm is designed in D Shape, the side plate is inside & channels are outside. It resists the twisting while entering in pile making it ideal for tough applications.

3 JCB 'Q' brakes are quick and reliable. The hydraulically actuated, dual line and self adjusting (compensated) brakes pedal reduce operating force for effective braking. The multi-disc type brakes on rear axle are immersed in oil and require low maintenance as they are well protected from dirt, water, etc.

4 The "H" section has a bigger cross sectional area & more welding area, making it a sturdier & reliable loader arm joint section.

5 The chassis is engineered to be durable and robust making it fit for demanding situation.

6 2000 bar high pressure fuel injection for robust fuel system to work efficiently in any harsh operating environment and maintain emission limits.

7 Durable & waterproof IP69 certified connectors.

8 Perform heavy-duty work in any terrain with less vibration and no noise due to especially engineered engine bedplate. It also makes engine durable.

9 Better stability and durability with reliable JCB rear axle fitted with heavy-duty differential / planetary gears & final drive. The axle is manufactured at JCB plant & has undergone rigorous testing.

10 The 4-speed, fully synchromesh heavy-duty transmission, dual cone type synchroniser provides smooth shift gear box with integral heavy-duty torque converter.

11 Restrict material slippage, increase material retention and prevent bonnet from any damage with especially designed shovel.

12 More reliability and durability as the top end of the dipper is made wider with extra metal.

13 Robust engine designed and tested rigorously across India in every condition for 3 years and more than 1,00,000 cumulative hours.

14 New JCB ecoMAX engine has best fuel filtration system. The pre-filter of 5 micron with water separator & main filter of 2 micron filter elements are specially engineered media technology with a proper mixture of glass fiber & synthetic media.

15 Glass fiber is intact & won't lose fibers as compared to cellulose media.

16 Improved hydraulic filtration system.



1 Heavy-Duty Boom and Dipper



4 Heavy-Duty Loader Arm



4 H Section



6 Engine Hi-Pressure Injector

5 Heavy-Duty Chassis



5



COMFORTABLY POWERFUL

1 The new cabin has two door access with more space, liveable cabin and plenty of legroom. It is also fitted with a comfortable helper's seat.

2 Nearly zero effort to low effort hand throttle, lever has no wire for smooth operation. It is low on maintenance as zero adjustment is required and there is no wire for replacement.

3 Independent steering pump provides quick response to movement of steering wheel. The twin-cylinder gives equal turn on both sides making the operator confident and safe.

4 The tinted front windscreen keeps the cabin cooler & protected from sun glare.

5 The 6-duct air-conditioned cabin* keeps the operator productive and fatigue-free even in hot and harsh weather conditions.

6 The bluetooth stereo can be connected to mobile, now pick-up any call with ease and style.

7 Redesigned roof is more durable with better visibility during monsoon and rainwater management, the rainwater travels along the cabin pillars.

8 The ergonomically designed seats come with new improved cushions and stitches. Now, operator can work tirelessly for longer hours.

9 Ease of operation and rested operator for better productivity with effortless gear shift that has rotating knob on shuttle gear level.

10 Internal rearview mirror and excellent ventilation - Partial or full opening of both front and rear side windows.



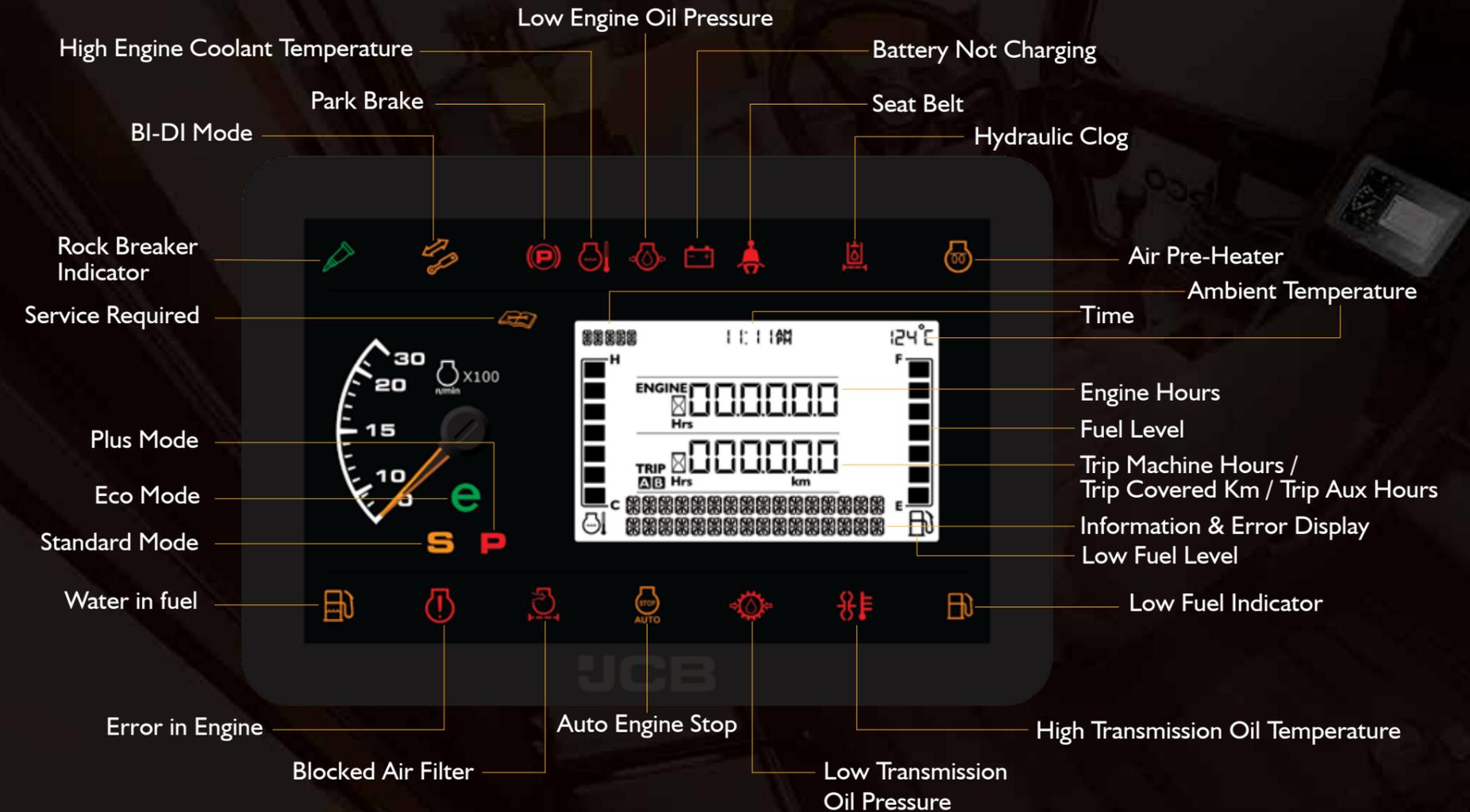
Servo control operation



Excavator end servo control for better productivity & smooth operation.

*Optional

New Informative Digital Cluster Display



POWERFUL LIVELINK

INTRODUCING THE NEXT GENERATION



LiveLink is an advanced telematics technology which helps you monitor and manage your machine fleet remotely from anywhere in the world via web or your smartphone.

Power of LiveLink: With LiveLink you can reduce fuel costs, optimise machine, operator performance, proactively manage service and maintenance to maximise uptime. Stay connected to your machines via remote monitoring, experience new levels of control and efficiency with LiveLink.

SERVICE

- Service reminder:** Reminds you when the service of your machine is due; the reminder helps you plan your work better.
- Machine data backup:** Helps to maintain the records of past services in an organised manner.
- Critical machine health alerts:** Lets you know the inside of your machine from a faraway location. Helps in taking proactive measures to avoid breakdown through alerts.

OPERATION

- Fuel level information:** View fuel usage of your machine, which helps in analysing your machine's fuel consumption, thus, helping you improve efficiency and saving on fuel. It also reports any sudden fuel level decrease.
- Machine utilisation reports:** Maintains machine usage record and helps you analyse & optimise utilisation of the machine.
- Engine status:** Informs you if your JCB machine's engine is switched ON or OFF.

SECURITY

- GPS tracking:** Tells you the exact location of your machine on a map.
- Tow away alerts:** Help you save your machine from intruders and possible towaways.
- Operating hours:** Lets you control the machine operation in permitted time frame.
- Geofencing:** Lets you keep your machine within the allocated area of work.



Excavation Modes
Know specific time spent in Economy, Power and Active modes. This helps in optimising modes according to job complexity.



Duty Cycle
Know specific attachment utilisation, loading excavation breakup and loading details for maximum productivity with minimum cost.



Machine Compass
Analyse operator behaviour with reports for the time spent in forward, reverse and neutral states.



Time Spent in Gear
Analyse operator behaviour with reports for the time spent in each gear.

EASILY POWERFUL

1 Save every year with 15%* periodic maintenance cost reduction.

2 JCB's innovative hydraulics system & filtration keep hydraulic oil very clean, extending its change period from 2000 hours to 4000* hours.

3 Digital visual warning system for any malfunction along with alerts & description, which can be specified to service engineer before his arrival on the site.

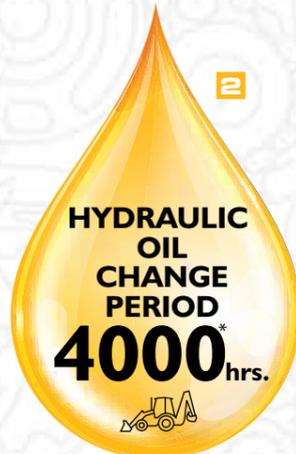
4 Improved hydraulic return filtration system.

5 Hydraulic Filter Clogging Indicator - Higher life of hydraulic components.

6 Feed Pump - No manual priming required, no chance of air intake in fuel feed pipe, make engine durable.

7 Crank Case Ventilation System - Reduce oil wastage, lowering maintenance cost.

8 Expansion Tank - Easy to check coolant level.



*Against the outgoing 4DX ecoXcellence tested under a controlled environment. T&C Apply.



POWERFUL SUPPORT SYSTEM

4000+ CEV STAGE IV SERVICE ENGINEERS

EXTENSIVE CUSTOMER SUPPORT NETWORK

With 700+ outlets, JCB has widely spread and prompt support system in the construction industry.

One Shop Solution-JCB manufactures all major parts of its machine which are readily available at its dealerships & outlets ensuring rapid customer service support.

4000+ service engineers are trained & certified for CEV Stage IV machines, thereby, quickly resolving any customer concern.

60+ Dealers

700+ Outlets

3000+ Mobile service engineers

18 Operator training centres

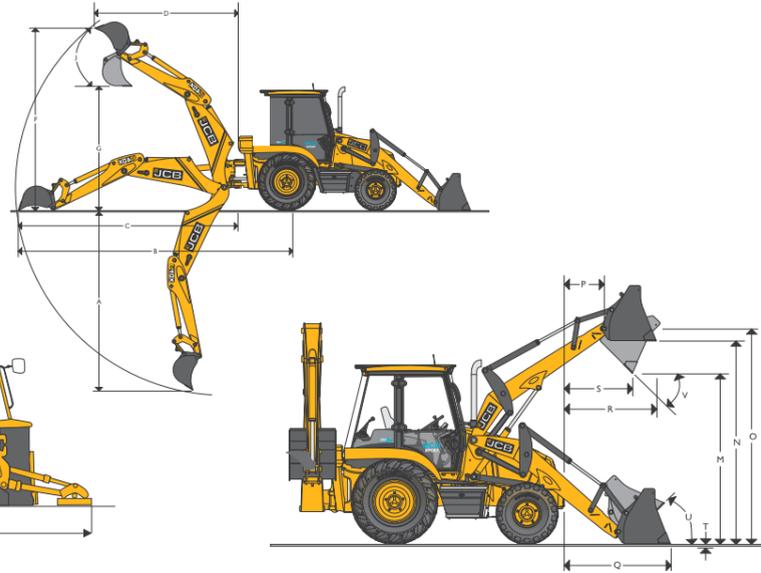
5 Parts warehouses

24x7 Support
12 Languages

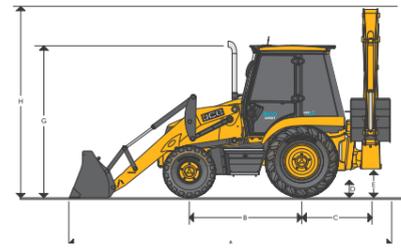
250+ Service vans



PERFORMANCE DIMENSIONS



STATIC DIMENSIONS



		Long/Short Dig Depth
A	Overall length	m 6.35 (20-1)
B	Wheelbase	m 2WD - 2.27 (7-5) 4 WD -2.34 (7-8)
C	Slew centre to rear axle centre	m 1.19 (3-11)
D	Minimum ground clearance	m 0.28 (0-11)
E	Slew ground clearance	m 0.33 (1-1)
G	Height to top of cab	m 2.87 (9-5)
H	Overall height	m 4.21(13-98) / 3.95(12-11)
J	Track width - Rear	m 1.73 (5-81)
K	Track width - Front	m 2 WD -1.86 (6-12) 4 WD -1.91 (6-32)
L	Width over bucket	m 2.44 (8-0)

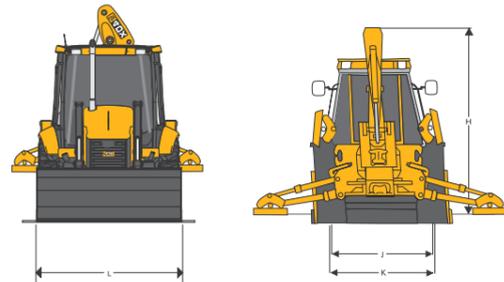


EXCAVATOR PERFORMANCE

		Long Dig Depth	Short Dig Depth
A	Max. dig depth	m 5.36 (17-7)	4.95 (16-23)
B	Reach-Ground level to rear wheel centre	m 7.57 (24-10)	7.11 (23-4)
C	Reach-Ground level to slew centre	m 6.38 (20-12)	5.92 (19-5)
D	Reach at full height to slew centre (SAE)	m 2.18 (7-2)	1.98 (6-6)
E	Stablizer Spread*	m 3.91 (12-10)	3.91 (12-10)
F	Max. working height	m 6.25 (20-6)	5.69 (18-8)
G	Max. load over height (SAE)*	m 3.96 (12-12)	3.66 (12-0)
H	Reach over the side from Stablizer	m 4.44 (14-68)	3.96 (12-12)
J	Bucket rotation - power	deg 185	185
	Bucket tear out force (SAE)	kgf 6,716	6,716
	Dipper tear out force (SAE)	kgf 4,551	4,345
	Lift capacity to bucket pivot at full reach (no bucket fitted) (SAE J31) (Data with standard dipper)	kg 2,547	2,412
	Standard bucket capacity	cu.m 0.32 (11.3)	0.40 (14.12)
	Standard bucket width	m 0.79 (2-7)	0.94 (3-1)

LOADER PERFORMANCE

		Long/Short Dig Depth
M	Dump height	m 2.93 (9-73)
N	Load over height	m 3.37 (11-1)
O	Pin height	m 3.64 (11-11)
Q	Reach at ground	m 1.60 (5-3)
R	Max. reach at full height	m 1.24 (4-1)
S	Reach at full height - Bucket dumped	m 0.93 (3-1)
T	Below ground level dig depth	m 0.13 (0-5)
U	Rollback at ground	deg 43
V	Dump angle	deg 41
	Shovel break out force	kgf 6,264
	Loader arm break-out force	kgf 5,516
	Lift capacity to full height	kg 3,050
	Pay load	kgf 1,800
	Standard shovel	cu.m G.P. Shovel 1.2(42.37)



ENGINE

JCB 444,CRDI 55kW CEV Stage IV Engine, 4 cylinder, water cooled, Turbocharged with EGR Diesel Engine.

Displacement : 4.4 L

Gross power : 55kW (74hp) @ 2200 rpm

Max torque : 400Nm @ 1200 rpm

TRANSMISSION

Easy Shift JCB synchroshuttle transmission provides effortless gear shifting with column mounted rotating switch. It consists of a 4-speed, fully synchromesh, smooth shift gear box with integral torque converter.

- Easy-to-use, column mounted electric reversing shuttle switch can change machine direction while allowing operator to keep hands on the steering wheel, leading to fast cycle time.
- JCB easy shift, easy to use column mounted rotating knob type gear shifting, adds to the overall ease of operation. On-the-move gear changes are possible
- Bigger and effortless foot throttle pedal.
- Torque converter stall ratio is 3.01:1.
- Electrical selection of 4WD (if provided) allows on the move changes.

AXLES

- **Rear** : Drive axle rigidly mounted, incorporates JCB Max-Trac torque proportioning differential, driven by short propshaft from gear box.
- **Front** : Steer axle, centrally pivoted, with oscillation angle of 16°.

BRAKES

- **Service** : JCB 'Q' brakes, hydraulically actuated, dual line, self adjusting (compensated), oil immersed, multi-disc type on the rear axle, well protected from dirt, water, requiring no maintenance. Through independent pedals linked together for normal use.
- Two independently operatable foot pedals enable machine to manoeuvre in tight spaces.
- **Parking** : Hand operated, disc brakes on rear axle input disc.

STEERING

Power track steering rod system provides equal turn steering & quick response with less operating force.

- Hydraulic supply from independent steering pump, passing pressure through suction strainer and return line filter.
- Working pressure 2320 p.s.i. (160 bar)

ELECTRICALS

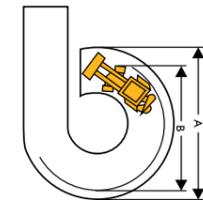
130 Ampere-hour 12 volts battery system with alternator and full road lighting.

TYRES

	2WD	4WD
Front	9 x16 -1 6PR	12.5 x 18 -12PR
Rear	16.9 x 28 -12PR (Industrial)	16.9 x 28 -12PR (Industrial)

TURNING CIRCLE

Inner wheels braked		2WD	4WD
A* Outside loader bucket	m	10.2 (33-55)	10.7 (35-12)
B Outside wheels	m	7.61 (24-11)	8.06 (26-53)
Inner wheels not braked		2WD	4WD
A* Outside loader bucket	m	11.7 (38-46)	12.45 (40-10)
B Outside wheels	m	9.11(29-11)	9.80 (32-18)



* Standard bucket in travel position

SPEED

Gear	2WD (km/hr)		4WD (km/hr)	
	Forward	Reverse	Forward	Reverse
1st	6.2	6.2	5.7	5.7
2nd	10.1	10.1	9.2	9.2
3rd	21.9	Not Recommended	19.8	Not Recommended
4th	40.0	Not Recommended	40.0	Not Recommended

(Standard tyres, with zero torque converter slip @2200 rpm)

SHIPPING WEIGHT

Long dig depth	Short dig depth
8470 kg	8400 kg

* All dimensions, weights and timings are variable within 1.5%, JCB reserves the right to change specifications without prior notice.

SERVICE

	System
Hydraulic system	: 115 L
Fuel tank	: 128 L
Engine coolant	: 20.5 L
Engine oil	: 15 L
Transmission	: 17.5 L
Rear axle	: 20 L
Front Axle	: 11 L

CABIN

- Tinted cab glasses provide excellent all round visibility & sun protection.
- Sunscreen on front windscreen enables operator to focus while working at full height e.g. truck loading.
- Servo operated excavator controls for hassle free operations.
- **Option** of air conditioning in cabin for rested operator in hot weather conditions.
- Auto idle and auto shut off for fuel saving.
- A fully adjustable suspension seat combined with ergonomically positioned controls and soft touch steering wheel & standard fit bluetooth enabled music system.
- Cab provides easy 'walk through' two door access. Other features include seat belt, large convex rearview mirror inside cabin, interior light, front screen wiper, cabin fan, front and rear horn, hazard warning system and tool box.
- Instrumentation panel is positioned on the right hand side and includes engine speed, engine hours, fuel level, water temperature and mobile charger, service reminders, date, time, ambient temperature, tripmetre (hours & kilometres) and error codes display for machine diagnostics. Easily visible while operating at both ends
- Audio and visual fault warning system for alternator charge, coolant temperature, engine oil pressure, blocked air filter, transmission oil pressure and temperature and hand-brake on.
- LED work lamp* on excavator end for better night time visibility and safety.
- New stylish roof with improved rainwater management system.

HYDRAULICS

- 3625 p.s.i. (250 bar) system, pump flow - 148 lpm @ 2200 rpm system.
- Filtration through suction strainer and return line 'JCB Filtromatic Filter'.
- Smooth Ride System (SRS)

LIVELINK

Advanced Telematics System that enables you to monitor and manage your machines remotely by providing information on:

- **Service** : Routine maintenance information and alerts.
- **Operation** : Health alerts and usage data.
- **Security** : Machine location & movement data

OPTIONS

- 4WD
- Heavy-duty tyres : 14x25
- 6-in-1 clam shovel bucket to doze, dig, grade, backfill, grab and load (1.0 cu.m)
- Excavator buckets (LDD) - 0.30 (cu.m)
- Excavator buckets (SDD) - 0.30 / 0.32 (cu.m)
- Ditch cleaning bucket - 0.22 cu.m & 0.32 cu.m
- Taper ditch bucket
- Ripper tooth
- Rock breaker
- Auger

Dealer's Stamp: