



## BACKHOE LOADER | 3DX RANGE

3DX Super (4WD) Gross Engine Power: 92hp Standard GP Shovel Capacity: 1.1m<sup>3</sup> Travel speed: 40kph (25mph)

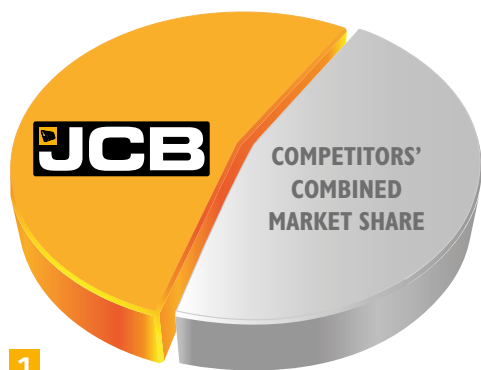
3DX (2WD) Gross Engine Power: 76hp Standard GP Shovel Capacity: 1.1m<sup>3</sup> Travel speed: 36kph (22mph)





# THE WORLD'S NUMBER ONE

JCB PIONEERED THE BACKHOE LOADER IN 1953. SINCE THEN, WE'VE REMAINED THE MARKET LEADER, INVENTING FEATURES LIKE 4WD AND THE SIDE-SHIFT CHASSIS. AS YOU'D EXPECT, THE 3DX CONTINUES THIS TRADITION, DELIVERING CLASS-LEADING PRODUCTIVITY, COMFORT AND FUEL SAVINGS.



1

## Ultimate versatility

- 1 As the market leader, JCB sells over half of all the world's backhoe loaders.
- 2 A JCB backhoe is the most versatile construction machine you can buy. Combining the key benefits of both loading shovels and excavators, it's effectively two machines in one package.
- 3 A JCB backhoe is designed to drive around sites, drive between sites, and then drive home at the end of the day.



2



3

# BUILT TO LAST

THE JCB 3DX IS THOROUGHLY STRESS TESTED AND CLIMATE TESTED. IT'S ALSO BUILT USING ONLY THE FINEST COMPONENTS, WHICH ENSURES THAT IT'S DURABLE ENOUGH TO CARRY OUT THE HARDEST TASKS.

## Ultimate performance

- 1 JCB 3DX uses JCB's own special backhoe loader driveline. This is a popular, trusted, well-proven unit that works in perfect harmony with our machines for ultimate uncompromised performance.
- 2 We check every 3DX cab for leaks so you can be sure of a dry, dust free cab.
- 3 Because the JCB 3DX is used by customers all over the world, we've tested it rigorously in climates ranging from -20°C to 50°C. Its JCB DIESELMAX engine has excellent fuel filtration to handle varying fuel quality.
- 4 We've stress tested the 3DX across 1.2 million cycles of the hardest digging and loading applications. As a result, every part of the machine can perform the very toughest duties.





# PRODUCTIVITY AND PERFORMANCE: EXCAVATOR

**POWERFUL HYDRAULICS, HUGE TEAROUT FORCES, COMMANDING VISIBILITY AND PERFECTLY MATCHED COMPONENTRY, THE JCB 3DX'S EXCAVATOR ARM IS DESIGNED TO PROVIDE UNSURPASSED PRODUCTIVITY, SPEED AND CONTROL.**

## Excavating performance

- 1** We use a high pressure efficient hydraulic system with large hydraulic cylinders. This provides the 3DX with big tearout forces – perfect for hard ground and arduous digging.
- 2** With a 5700 kgf bucket tearout, the 3DX is supremely productive, even in the hardest applications.
- 3** The boom and dipper are perfectly matched, meaning you can dig right up to the bottom of the boom reducing repositioning of the machine and providing better visibility.
- 4** A 128-litre fuel tank allows all-day working without refuelling.



The JCB 3DX has a narrow-profile boom and dipper for superb visibility when excavating.





## PRODUCTIVITY AND PERFORMANCE: LOADER

THE FRONT END OF THE JCB 3DX DELIVERS UNSURPASSED PRODUCTIVITY, SPEED AND CONTROL, COURTESY OF A HEAVY-DUTY LOADER ARM, SELF LEVELLING GEOMETRY AND GREAT VISIBILITY. ALSO UP FRONT IS OUR INNOVATIVE HIGH TORQUE JCB DIESELMAX ENGINE.

### Loading performance

- 1 JCB's cutting edge DIESELMAX engine was designed from scratch to produce superb performance, high torque levels and ultimate productivity.
- 2 With tens of thousands of units in service around the world, carrying out many applications, the DIESELMAX engine is renowned for its reliability.
- 3 4-ram parallel lift loader geometry means clear visibility, excellent load retention, superb dump height, long reach, and fast truck loading.
- 4 To make visibility even better, the 3DX has a sloping bonnet line, which provides an unhindered view of the shovel for loading and site clearance.
- 5 A D-shaped, durable, heavy-duty design means the 3DX's loader arms don't twist or flex. As a result, there's a formidable shovel breakout of 6500 kgf, as well as excellent lift capacity.





## COST OF OWNERSHIP

JCB'S LEGENDARY BUILD QUALITY AND GLOBAL BRAND HELP KEEP CUSTOMER DEMAND AND MACHINE RESIDUALS HIGH. AND THE BENEFITS OF OWNING A JCB 3DX DON'T STOP THERE.



The 3DX's JCB DIESELMAX engine delivers excellent fuel efficiency.



### Saving money

- 1 We understand that fuel is one of a backhoe loader's biggest costs. That's why we've designed the 3DX to provide a combination of increased productivity and reduced fuel consumption, saving you money.
- 2 We've used only proven, reliable components on the JCB 3DX to maximise uptime and ensure that your machine spends as much time as possible earning you money.
- 3 By extending service intervals for fluids and filters, we've brought down cost of ownership even more.



## EASE OF MAINTENANCE

OUR MACHINES MAY BE EXTREMELY DURABLE BUT EVEN A JCB NEEDS ROUTINE MAINTENANCE. HOWEVER WE'VE DESIGNED THE 3DX TO BE EASILY SERVICEABLE, BOTH TO MAXIMISE UPTIME AND TO MAKE LIFE EASIER.

### Routine maintenance

**1** A full opening gas-assisted bonnet provides easy engine access, and you can open it up with just one lever.

Every daily check can be done at ground level from one side of the machine.

**2** The 3DX's loader arm mounting pivots and excavator end are machined so they always align correctly. Meanwhile, our specially designed brass bushes provide a long wear-free life.

**3** To protect the engine and optimise performance on the 3DX, we've fitted large fuel pre-filters and a water separator; this setup helps keep contaminants out of the fuel system. We also have an air filter which is regularly cleaned by the engine's own exhaust system.

**4** Hydraulic oil level is clearly shown via a side mounted site gauge. You can fill the hydraulic and diesel tanks easily at ground level.

	SERVICE INTERVALS
Engine oil	Every <b>500</b> hours
Engine oil filter	Every <b>500</b> hours
Hydraulic filter	Every <b>500</b> hours
Hydraulic oil	Every <b>2000</b> hours
Transmission filter	Every <b>500</b> hours
Transmission oil	Every <b>1000</b> hours
Axle oil	Every <b>1000</b> hours





## THE PERFECT PLACE TO WORK

A COMFORTABLE OPERATOR IS A PRODUCTIVE OPERATOR. WITH THAT IN MIND, WE'VE DESIGNED THE JCB 3DX TO INCORPORATE HIGH COMFORT LEVELS INTO ITS ERGONOMIC WORKING ENVIRONMENT.



### Comfortable operation

**1** The 3DX's cab is large and easy to access, with plenty of leg room in every operating position.

The 3DX has ergonomically-placed controls and a comfy seat. The result? A comfortable, alert, productive operator.

**2** The braking system provides high performance with minimum effort for fatigue free operation and excellent control.

**3** A high-power face fan increases comfort in hot environments.

The 3DX is well-ventilated via partial or full opening on both front and rear side windows.

**4** We've made the electrical system dust-and-waterproof for trouble-free long-life performance.

**5** Our dedicated in-cab storage is safe and convenient.





# CUSTOMER SUPPORT

**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 –**

Machine location information can improve fleet efficiency and you may even enjoy reduced insurance costs courtesy of the added security that LiveLink brings.

*\* Note: Please consult your local dealer for LiveLink availability*



**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.

**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.**



1

1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

JCB Premiercover 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.



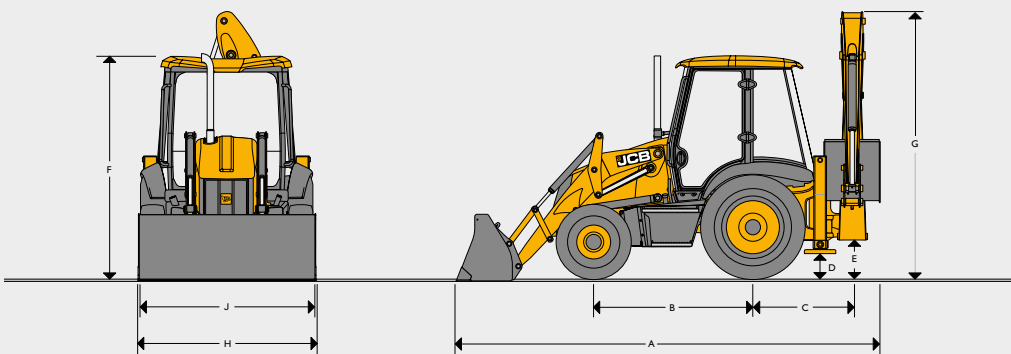
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2 The global network of JCB Parts Centres is another model of efficiency; with 15 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your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



STATIC DIMENSIONS

Loader end max. payload: 1850kg (4078lb) Max. lift height: 3.23metres (10.59ft)



A	Total travel length	m	5.96
B	Wheelbase	m	2.24
C	Slew centre to rear axle centre	m	1.32
D	Minimum ground clearance (stabiliser foot clearance)	m	0.36
E	Slew ground clearance	m	0.53
F	Cab roof height	m	2.87
G	Total travel clearance	m	3.61
H	Shovel width	m	2.23 (6-in-1 shovel) / 2.35 (GP shovel)
J	Rear frame width	m	2.24

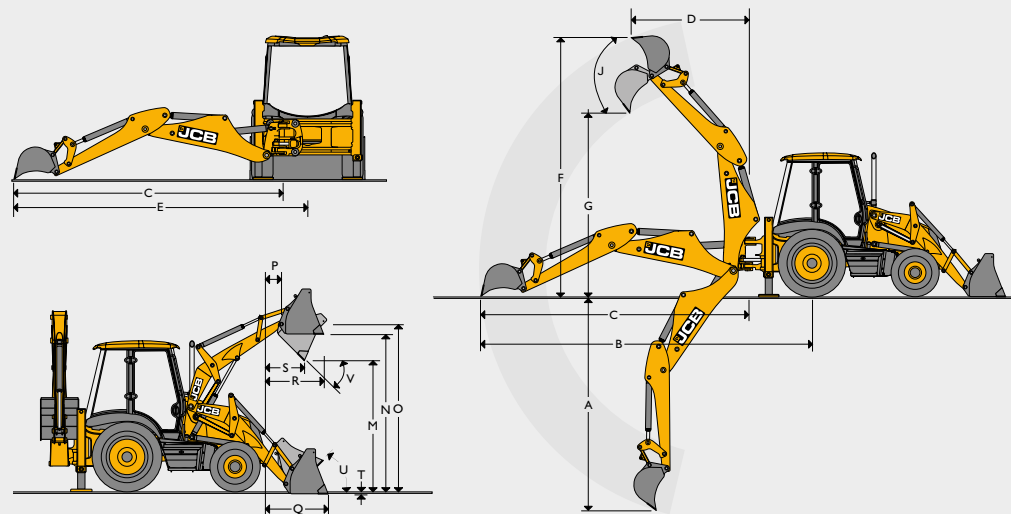
ENGINE

	3DX	3DX Super
Model	JCB 448, naturally aspirated, 4 cylinder, water cooled, diesel	JCB 444, turbocharged, 4 cylinder, water cooled, diesel
No. of cylinders	4	4
Displacement	4.8 litres	4.4 litres
Gross power	56kW (76hp) @ 2200rpm	68.6 kW (92hp) @ 2200rpm
Max torque	301 Nm (31.6 kgm) @ 1200rpm	408Nm (41.6 kgm) @ 1200rpm

SERVICE CAPACITIES

Cooling system	ltr	16.5
Fuel tank	ltr	128
Engine oil with filter	ltr	14
Gearbox with filter	ltr	16
Rear axle	ltr	21
Front axle (4WD only)	ltr	11
Hydraulic system incl. tank	ltr	130

EXCAVATOR/LOADER PERFORMANCE



Excavator performance

A	Max dig depth	m	4.77
B	Reach-ground level to rear wheel centre	m	6.72
C	Reach-ground level to slew centre	m	5.40
D	Reach at full height to slew centre	m	2.74
E	Side reach to centre line of machine	m	6.02
F	Max. working height	m	5.97
G	Max. load over height	m	4.18
H	King post travel	m	1.06
J	Bucket rotation – power	degrees	185°
	Bucket tearout force	kgf	5700
	Dipper tearout force	kgf	3010
	Lift capacity to bucket pivot	kg	1490

Loader performance

M	Dump height	m	2.72
N	Load over height	m	3.23
O	Pin height	m	3.45
P	Pin forward reach	m	0.36
Q	Reach at ground	m	1.40
R	Max. reach at full height	m	1.15
S	Reach at full height – bucket dumped	m	0.78
T	Below ground level dig depth	m	0.10
U	Rollback at ground	degrees	45°
V	Dump angle	degrees	43°
	Shovel breakout force	kgf	6500
	Loader arm breakout force	kgf	4850
	Shovel capacity		1.0m <sup>3</sup> (6-in-1 shovel) / 1.1m <sup>3</sup> (GP shovel)



**TRANSMISSION**

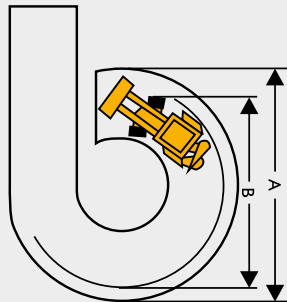
JCB Synchro-shuttle transmission: It provides superb drive power in all conditions. It consists of a 4-speed, full synchromesh gearbox with integral torque convertor and electrically operated reversing power shuttle.

- Easy-to-use, column mounted electric reversing shuttle which can change machine direction while allowing operator to keep hands on the steering wheel leading to fast cycle times.
- The pedal layout and conventional 4-pattern gear lever with transmission disconnect switch adds to the overall ease of operation. On-the-move gear changes are possible.
- Torque convertor stall ratio is 2.52:1 (4WD)

	3DX (2WD)	3DX Super (4WD)
Manufacturer	JCB	JCB
Type	Synchroshuttle	Synchroshuttle
Gears forward/reverse	4 forward / 4 reverse	4 forward / 4 reverse
Shuttle control – F/R	Power shuttle	Power shuttle
<b>Travel speeds*</b>	<b>kph</b>	<b>kph</b>
Gear 1	7.3	7.3
Gear 2	11.7	11.7
Gear 3	22.0	22.0
Gear 4	36.0	40.0

\*Speeds may vary dependant on tyre selection.

**TURNING CIRCLE**



**Inner wheels braked**

<b>A</b> Outside loader bucket	9.79m
<b>B</b> Outside wheels	7.21m
<b>Inner wheels not braked</b>	
<b>A</b> Outside loader bucket	10.91m
<b>B</b> Outside wheels	8.32m

\* Standard bucket in travel position

**STEERING**

Front wheel full power hydrostatic system utilising the main hydraulic pump via a steering priority valve. In the event of engine failure, emergency steering is maintained (all models).

**BRAKES**

**Service:** Hydraulically actuated dual line, self adjusting, oil immersed, multi-disc type on the rear axle, well protected from dirt, water etc. requiring no maintenance.

**Parking:** Hand operated, disc brake on rear axle input disc.

**Brake pedal:** Two independently operable foot pedals enable machine to manoeuvre in tight spaces. Pedals are linked together for normal use.

**2WD / 4WD:** Electrical selection between 2WD / 4WD allows on-the-move changes.

**HYDRAULIC SYSTEM**

• JCB vari-matic hydraulics • Main relief valve: 228bar • Unloader valve: 207bar • Pump type: 2 section displacement gear • Pump capacity: 3DX 118 lpm, 3DX Super 123 lpm • Filtration through suction strainer and return line JCB Filtermatic filter • During excavation the circuit automatically varies hydraulic power to match digging conditions for extra performance, control and power • Careful routing of hydraulic hoses and pipework guards against site damage and allows easy servicing

**CAB**

• Floormats • Fully adjustable seat and soft touch steering wheel • 'Walk through' two door access • Seat belt, large convex rear view mirror, interior light front screen wiper, horn, hazard warning system, tool box • Instrumentation panel includes engine speed, engine hours, fuel level, water temperature gauge and 12v connection • Audible 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.

**AXLES**

**Rear:** Drive axle rigidly mounted, incorporates JCB Max-Trac torque proportioning differential, driven by short propshaft from gear box.

**Front:** 4WD, Steer axle, centrally pivoted with oscillation angle of 16° (3DX Super only).

**ELECTRICAL AND INSTRUMENTATION**

12 volt negative ground, utilising wiring and connectors meeting IP69 water ingress test standard. Central fuse panel.

**Battery:** 130 A/hr **Alternator:** 90 amp standard. **Front working lights:** 2 fixed.

**Rear working lights:** 2 fixed and 2 adjustable.

**TYRES**

**Front:** 12.5x18-12PR (3DX Super), 9x16-16PR (3DX)

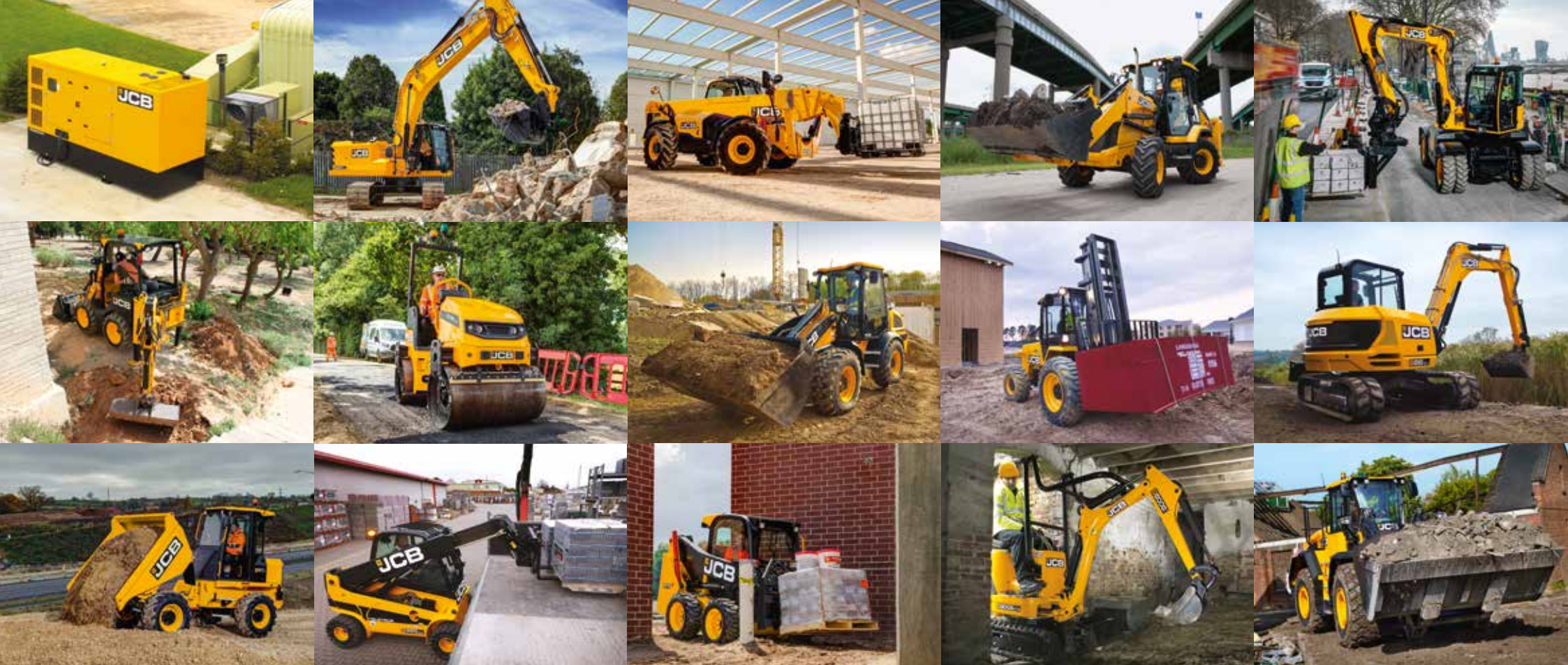
**Rear:** 16.9x28-12PR

**WEIGHT**

**Shipping:** 3DX: 7460kg 3DX Super: 7660kg

**Operating:** 3DX: 7600kg 3DX Super: 7800kg





**ONE COMPANY, OVER 300 MACHINES.**

Your nearest JCB dealer

**BACKHOE LOADER 3DX RANGE**

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**3DX (2WD)** Gross Engine Power: 76hp Standard GP Shovel Capacity: 1.1m<sup>3</sup> Travel speed: 36kph (22mph)

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

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