

# **BACKHOE LOADER** | 3DX

XTRA Gross Engine Power 84hp Standard GP Shovel Capacity 1.1 m<sup>3</sup> Travel speed – 36kph (23mph)
SUPER Gross Engine Power 92hp Standard GP Shovel Capacity 1.1 m<sup>3</sup> Travel speed – 40kph (25mph)



# **BUILDING THE ULTIMATE RANGE.**

Ever since JCB was founded by Joseph Cyril Bamford in a small garage in Staffordshire in 1945, innovation has driven our machines and our thinking. Of course we've grown since then – to employ over 10,000 people across 4 continents – but innovation remains at the heart of everything we do.

#### A history of innovation

We've been innovating since day one, and we've always cultivated a uniquely fearless approach to design. Indeed, we've invented whole new genres of machinery – the backhoe loader and the telehandler for example – and revolutionised others like the tractor or skid steer loader.

#### The best backup in the business

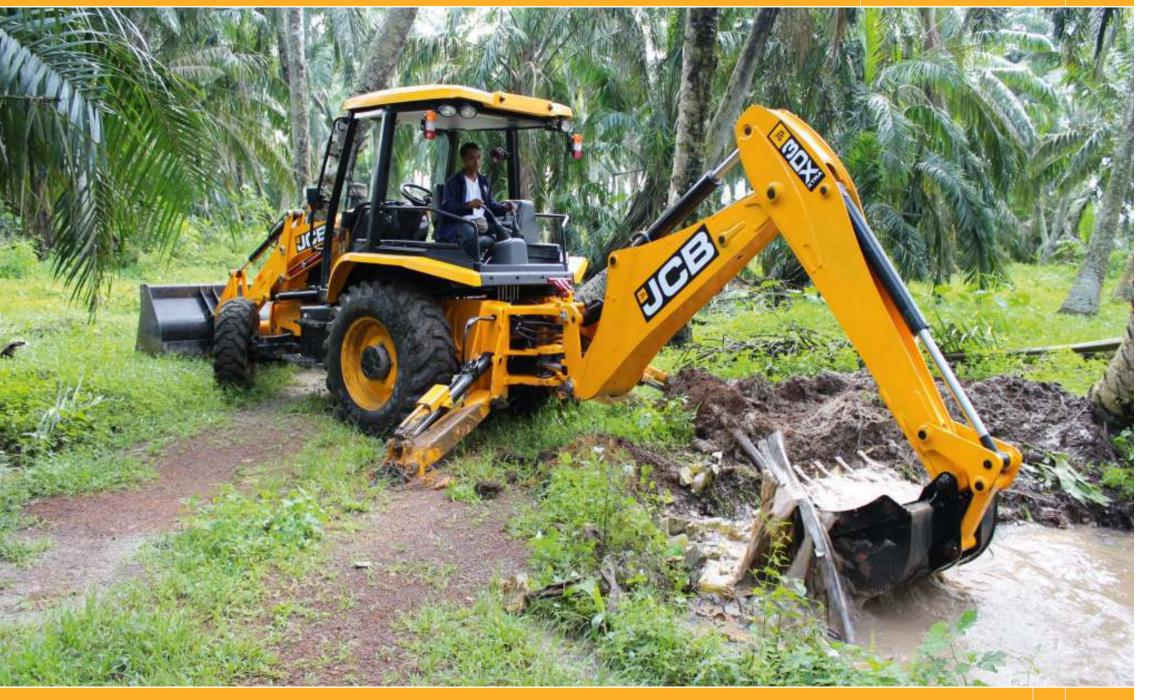
A key component of any JCB machine is peerless backup and support: our 2,000-strong global dealership and service network keeps the customer at the centre of everything we do, in over 150 countries worldwide. Our World Parts Centre, meanwhile, aims to deliver anywhere on earth within 24 hours.

#### Success by the million

Every JCB is designed and built to offer ultimate productivity, durability, efficiency, safety, comfort and reliability, so it's perhaps not surprising that we've just built our millionth machine. As you'd expect from such an innovative company though, we won't be resting on our laurels.



#### BUILDING THE **ULTIMATE RANGE**



# **OVER SIXTY YEARS AND COUNTING.**

AT MORE THAN SIXTY YEARS OF AGE,
JCB'S ICONIC BACKHOE LOADER IS JUST
AS FRESH AND INNOVATIVE TODAY AS IT
WAS WHEN IT WAS FIRST CONCEIVED.
BACK THEN, COMPANY FOUNDER JOSEPH
CYRIL BAMFORD INVENTED THE ENTIRE
BACKHOE LOADER CONCEPT WHEN HE
COMBINED A LIGHTWEIGHT BACKHOE
WITH A TRACTOR LOADER. FOR THE FIRST
TIME, A SINGLE MACHINE COMBINED A
FRONT SHOVEL AND REAR EXCAVATOR ARM.









**THE 50'S.** The JCB MK1 Major Loader.

THE 60'S. The JCB 1.

THE 70'S. The JCB 3CIII.

### The world's first... and still the best.

Throughout the intervening years, JCB has continued to improve on this basic concept by using innovative thinking and advanced engineering principles. In the process, many of our innovations have become industry-standard features. Like four-wheel drive, for example, as well as extending dippers, torque converter drive, powershift transmissions, all-wheel steer, sideshift chassis, powerslide, and skid steer.

As a direct result of our innovative thinking and pioneering spirit, our backhoe loader range has led the world in terms of both features and sales. Today, we're the biggest-selling backhoe manufacturer on the planet, and have been for decades.

### An innovative future.

We recognise that a large part of our success is down to the fact that we listen to what our customers want. And we'll be continuing this trend, always striving to build the most productive, dependable and efficient machines that technology will allow. In an increasingly tough market, we're already attaching particular importance to versatility, residuals and fuel efficiency, all of which you'll find in abundance on this latest range of backhoe loaders.











THE 80'S. The JCB 3CX.

THE 90'S. The JCB 3CX Sitemaster.

THE 00'S. The JCB 3CX Eco.

THE FUTURE?

# 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 NEW 3DX CONTINUES THIS TRADITION, DELIVERING CLASS-LEADING PRODUCTIVITY, COMFORT AND FUEL SAVINGS.





### **Ultimate versatility**

- 1 As the market leader, JCB sells around half of all the world's backhoe loaders.
- 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.
- A JCB backhoe is designed to drive around sites, drive between sites, and then drive home at the end of the day.





# **BUILT TO LAST.**

THE NEW 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 The new 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.
- 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.

We've stress tested the new 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.

We check every 3DX cab for leaks so you can be sure of a dry, dust free cab.





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

### **Excavating performance**

AND CONTROL.

- 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.
- With a 5700 kgf bucket tearout, the new 3DX is supremely productive, even in the hardest applications.
- 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.









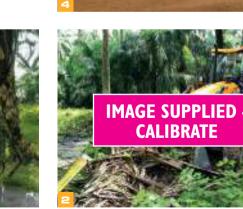
# **PRODUCTIVITY AND PERFORMANCE: LOADER.**

THE FRONT END OF THE NEW 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.



- 1 JCB's cutting edge DIESELMAX engine was designed from scratch to produce superb performance, high torque levels and ultimate productivity.
- With tens of thousands of units in service around the world, carrying out many applications, the DIESELMAX engine is renowned for its reliability.
- 4-ram parallel lift loader geometry means clear visibility, excellent load retention, superb dump height, long reach, and fast truck loading.
- To make visibility even better, the new 3DX has a sloping bonnet line, which provides an unhindered view of the shovel for loading and site clearance.









# **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 NEW JCB 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 new 3DX to provide a combination of increased productivity and reduced fuel consumption, saving you money.
- We've used only proven, reliable components on the new 3DX to maximise uptime and ensure that your machine spends as much time as possible earning you money.
- 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 NEW 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.

- The new 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.
- To protect the engine and optimise performance on the new 3DX, we've fitted large **fuel pre-filters** and a water separator; this setup helps keep contaminates out of the fuel system. We also have an air filter which is regularly cleaned by the engines 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 500 hours
Engine oil filter	Every 500 hours
Hydraulic filter	Every 500 hours
Hydraulic oil	Every 2000 hours
Transmission filter	Every 500 hours
Transmission oil	Every 500 hours
Axle oil	Every 1000 hours











# ATTACHMENTS.

JCB ATTACHMENTS ARE DESIGNED TO MEET
THE EXACT REQUIREMENTS OF OUR MACHINERY
FOR OPTIMUM PRODUCTIVITY. FROM BUCKETS
TO SHOVELS, HANDHELD HYDRAULIC TOOLS,
COMPACTION EQUIPMENT AND PATCH PLANERS,
WE'VE GOT THE RIGHT ATTACHMENTS FOR
ANY JCB BACKHOE LOADER YOU CHOOSE.

For added versatility, you can use your backhoe loader as a power source for a whole range of handheld tools.











		HAMMERMASTER HM386Q	EARTH DRILL
Weight	kg	329	105 + Flight
Carrier weight	t	4.5 - 9.0	2.0 - 8.0
Impact energy (published)	J	600	3500 - 6000 Nm Torque
Blow rate min - max	bpm	600 - 1380	N/A

		SWEEPER COLLECTOR	PATCH PLANER	KERBMASTER	COMPACTOR	FORKS/FRAMES
Width	mm	1500 - 2400	400	N/A	305	75-125
Capacity	m³	0.37 - 0.4	N/A	180 kg	N/A	I - 4 t per fork
Weight	kg	700 - 850	500	65 - 98	178	115

		GENERAL PURPOSE BUCKET	DITCH MAINTENANCE BUCKET	GENERAL PURPOSE SHOVEL	6-IN-I SHOVEL
Width	mm	230 - 900	1200 - 1520	1850 - 2440	1850 - 2440
Capacity	m³	0.028 - 0.2	0.12 - 0.18	0.45 - 1.1	0.16 - 1.3
Weight	kg	52 - 179	116 - 172	153 - 527	190 - 457

		RIBBED BUCKET	TAPER DITCH BUCKET	JAW BUCKET	TILTING GRADING BUCKET	SNOWBLADE
Width	mm	250 - 900	305 - 1676	24	1525	2290
Capacity	m <sup>3</sup>	0.04 - 0.12	0.06 - 0.1	0.2	0.16	N/A
Weight	kg	105 - 210	111 - 185	280	340	490

<sup>\*</sup>Attachments suitability varies by machine model and specification.









# THE PERFECT PLACE TO WORK.

A COMFORTABLE OPERATOR IS A PRODUCTIVE OPERATOR. WITH THAT IN MIND, WE'VE DESIGNED THE NEW 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 new 3DX has ergonomically-placed controls and a comfy seat. The result? A comfortable, alert, productive operator.

- The braking system provides high performance with minimum effort for fatigue free operation and excellent control.
- The cab of the new 3DX is well ventilated via partial or full opening on both front and rear side windows. A high power face fan increases comfort in hot environments. Canopy option available with centremount variant.
- We've made the electrical system dust-andwaterproof for trouble-free long-life performance.
- Our dedicated in-cab storage is safe and convenient.







# LIVELINK, WORK SMARTER.

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.

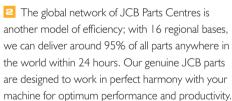
**Security benefits** – Real-time geofencing lets you set operating zones and curfew alerts that tell you when your machinery outside of pre-determined times. Location information helps you store machines safely.

## **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.





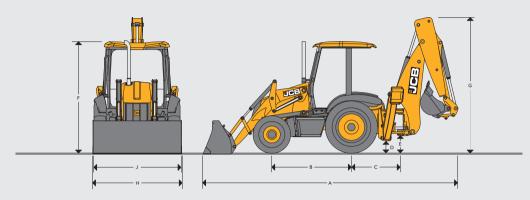




JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient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

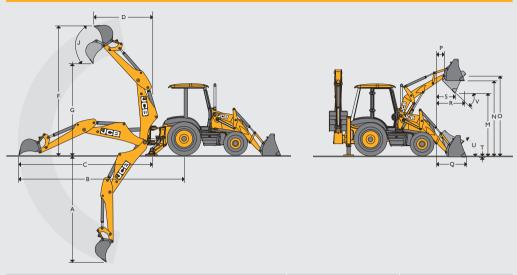
Note: JCB ASSETCARE may not be available in your region, so please check with your local dealer.

STATIC DIMENSIONS			
		3DX XTRA	3DX SUPER
Loader end maximum payload	kg	1800	1850
Maximum lift height	m	3.23	3.23



			3DX XTRA	3DX SUPER
Α	Total travel length	m	7.19	7.19
В	Wheelbase	m	2.27	2.34
С	Slew centre to rear axle centre	m	1.32	1.32
D	Minimum ground clearance (stabiliser foot clearance)	m	0.31	0.31
Е	Slew ground clearance	m	0.33	0.33
F	Cab and canopy roof height	m	2.87	2.87
G	Total travel clearance	m	3.57	3.57
Н	Shovel width	m	2.23 (6-in-1 Shovel)	) / 2.35 (GP Shovel)
J	Rear frame width	m	2.35	-

#### EXCAVATOR/LOADER PERFORMANCE



			3DX XTRA	3DX SUPER
Exc	cavator performance			
Α	Maximum dig depth	m	4.77	4.77
В	Reach-ground level to rear wheel centre	m	6.53	6.53
С	Reach-ground level to slew centre	m	5.44	5.44
D	Reach at full height to slew centre	m	2.74	2.74
Е	Side reach to centre line of machine	m	-	-
F	Maximum working height	m	5.95	5.45
G	Maximum load over height	m	3.75	3.75
Н	King post travel	m	-	-
J	Bucket rotation – power	degrees	185°	185°
	Bucket tearout force	kgf	6324	5700
	Dipper tearout force	kgf	3217	3010
	Lift capacity to bucket pivot	kg	1584	1490
Loa	ader performance			
Μ	Dump height	m	2.74	2.74
Ν	Load over height	m	3.23	3.23
0	Pin height	m	3.45	3.45
Р	Pin forward reach	m	0.36	0.36
Q	Reach at ground	m	1.42	1.42
R	Maximum reach at full height	m	1.20	1.20
S	Reach at full height – bucket dumped	m	0.83	0.83
Т	Below ground level dig depth	m	0.07	0.07
U	Rollback at ground	degrees	45°	45°
V	Dump angle	degrees	43°	43°
	Shovel breakout force	kgf	6170	6010
	Loader arm breakout force	kgf	5440	5300
	Shovel capacity		1.0m³ (6-in-1 shovel)	/ I.Im³ (GP shovel)

ENGINE			
	3DX XTRA	3DX SUPER	
Model	JCB DIESELMAX 444 turbocharged		
No. of cylinders	4	4	
Displacement	4.4 litres	4.4 litres	
Gross power @ 2200rpm	63 kW (84hp)	68.6 kW (92hp)	
Max torque @ 1200rpm	362Nm	408Nm	

SERVICE CAPACITIES					
		3DX XTRA	3DX SUPER		
Cooling system	ltr	16.5	16.5		
Fuel tank	ltr	128	128		
Engine oil with filter	ltr	14	14		
Gearbox with filter	ltr	16	16		
Rear axle	ltr	21	21		
Front axle	ltr	-	11		
Hydraulic system including tank	ltr	130	130		

#### 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.
- 2WD / 4WD: Electrical selection between 2WD / 4WD allows on-the-move changes.
- Torque convertor stall ratio is 2.52:1 (4WD)

	3DX XTRA	3DX SUPER
Manufacturer	JCB	JCB
Туре	Synchroshuttle	Synchroshuttle
Gears forward/reverse	4 forward / 2 reverse	4 forward / 2 reverse
Shuttle control – F/R	Power shuttle	Power shuttle
Travel speeds*	kph	kph
Gear I	6.7	7.3
Gear 2	10.8	11.7
Gear 3	20.2	22.0
Gear 4	36.0	40.0
*Speeds may vary dependant on tyre selection.		

WEIGHT			
		3DX XTRA	3DX SUPER
Shipping	kg	7150	7300
Operating	kg	7400	-

IRNING CIRCLE			
			3DX XTRA
	Inner wheels braked		
	A Outside loader bucket	m	9.75
	B Outside wheels	m	7.61
	Inner wheels not braked		
	A Outside loader bucket	m	11.25
	B Outside wheels	m	9.11
* Standard bucket in travel position			3DX SUPER
	Inner wheels braked		
	A Outside loader bucket	m	9.75
	B Outside wheels	m	7.61
	Inner wheels not braked		
	A Outside loader bucket	m	11.25
	B Outside wheels	m	9.11
EERING	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).		
RAKES	Service: Hydraulically actuated dual line, self adjusting, oil immersed, multi-disc type on the rear axle, well protected from dist, water etc. requiring no maintenance		

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	<b>Service</b> : 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.
	<b>Brake pedal:</b> 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 (3DX Xtra): 248bar • Main relief valve (3DX Super): 228bar • Unloader valve: 207bar • Pump type: 2 section displacement gear • Pump capacity: 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 / CANOPY	• 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	<b>Rear:</b> 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°.
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	<b>Front</b> : 12.5x18-12PR <b>Rear</b> : 16.9x28-12PR







Your nearest JCB dealer



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