

FARM MASTER



A Product of Hard Work





12 models covering every agricultural application

JCB Farm Master Agri wheeled loading shovels are the only machines around with the power, specification and features to provide optimum performance and output in the most demanding agricultural applications.

The new, expanded range breaks down into three groups of machines. First, there's the 403, 406 and 409 Agri; compact performers that are quick and manoeuvrable around the yard

MAXIMUM PRODUCTIVITY FOR MAXIMUM PROFITABILITY



and in and out of farm buildings, giving you incredible versatility for general loading tasks. Then there's the 'S' Agri range – four models which formed our original core Farm Master range. Designed specifically for loading and pushing on gradients or in soft, slippery conditions, these machines now feature new, more powerful Tier 3 engines for livelier performance and increased torque and efficiency.

And finally, we have introduced five new models: the 411 Agri, the 416 Agri, 426 Agri and two heavyweights, the 436 Agri and 456 Agri. In contrast to the 'S' Agri models with engines tuned to give high power-to-weight ratios and 6-speed transmissions, these Agri models are equipped with 4-speed transmissions and are intended for high-output handling in commercial grain and fertiliser stores.

Farm Master 412S, 414S, 416S and 434S Agri

High power-to-weight ratio results in fast silage clamp operation

Tier 3 turbocharged engines supply superb power, torque, noise levels and fuel efficiency

Controllable torque converter transmission gives excellent low speed pushing power

6-speed automatic powershift transmission allows optimum flexibility in operation

Hydraulic systems designed for fast response and cycle times



When it comes to productivity, power is key. The combination of a high-output engine and excellent manoeuvrability ensure Farm Master 'S' models retain an excellent power-to-weight ratio, making them particularly effective on the silage clamp.

The 412S features a four-cylinder, 130hp (97kW) JCB Dieselmix engine with electronically managed common rail fuel injection. The 414S and 416S both use the 160hp (119kW), six-cylinder units while the 434S boasts 230hp (171kW). Plus, all 'S' range engines are electronically controlled and comply with Tier 3 legislation, providing lower emissions, reduced noise levels and increased efficiency.

Engine power and torque characteristics are precisely tailored to handle continuously varying loads. This means torque remains high throughout the rev range, ideal for muck handling and silage clamp work. In fact, we have actually increased torque levels at all speeds resulting in livelier handling and manoeuvring performance.

For optimum productivity and flexibility, as well as minimal downtime while travelling between jobs, these machines are also fitted with a Smoothshift automatic transmission with six forward and three reverse gears.

Moving onto the hydraulics, the 412S and 414S use high-output fixed displacement gear pumps for instantaneous response and power on demand. The two larger machines – 416S and 434S – use variable displacement piston pumps for greater overall efficiency, particularly when loading. Both systems ensure priority hydraulic flow is directed to steering and braking systems for safe, smooth operation in all conditions.

The result? Four machines specifically built for the higher power needs of agriculture. Machines that tackle gradients and soft or slippery conditions with ease, and make life a lot easier for the operator.





Farm Master 403 Agri

Compact dimensions allow the 403
to access restricted farm buildings and other sites

Hydrostatic transmission makes it easy for anyone to operate

27kW (36hp) engine gives lively performance

Individual wheel motors give excellent ground clearance and
eliminate vulnerable propshafts

Reliability, durability and low maintenance make the 403
an excellent investment



The JCB 403 is our first machine to compete in the under-50hp compact loading shovel sector. And as you would expect from a JCB machine, it raises the bar.

This compact, manoeuvrable and extremely useful little machine features a lively engine for fast performance, with a 15kph (9.3mph) maximum speed. The 0.3 cubic metre shovel and 2180mm (7ft 2in) dump height will have loads shifted in no time, while the 403's ability to nip in and out of restricted sheds makes it absolutely indispensable.

One of the key things customers look for in this size of machine is ease of operation. Thanks to the hydrostatic drive, anyone can get to grips with the 403 in a matter of minutes. With individual hydraulic motors on each wheel, there are no drive shafts, so the 403 gives you excellent ground clearance and protection against picking up baler twine or straw. Plus the 403 is reliable, durable (for good resale, if you can part with it), economical to run and requires very little maintenance.

All in all, an incredible all-rounder that can tackle numerous applications in diverse situations, getting the job done quickly, efficiently and economically.

In particular, the machine's ability to fit into the eaves of poultry sheds and access even the most restricted livestock sheds and farm buildings will be invaluable to agricultural users. Add a large selection of attachments – such as shovels, pallet forks or muck fork and grab – and you have a truly versatile machine you can really count on.





Farm Master 406 and 409 Agri

Pivot steering and tight 4.16m turning radius provide excellent manoeuvrability

Compact dimensions allow operation in confined yards and farm buildings

4-cylinder engine provides plenty of power for materials handling

Joystick-mounted forward/reverse switch achieves changes in direction quickly

One-piece bonnet allows easy maintenance and service access



The JCB 406 and 409 Agri have been specifically designed for agricultural applications. As such they boast plenty of power and torque, along with the manoeuvrability and reduced dimensions you need for tight yards.

Easy access to the cab gives way to superb all-round visibility, and a short distance from the rear of the cab to the back of the machine itself keeps the risk of machine damage to an absolute minimum. Inside the cab you'll find that comfort levels are surprisingly high for such a small machine and the instrument layout is ergonomic and intuitive.

A 62hp (46kW) - 75hp (56kW), four-cylinder engine generates plenty of power for general materials handling tasks. But where this machine really scores high is on manoeuvrability. Thanks to pivot steering and a turning radius (over shovel) of just 4.16m - 4.43m, these compact loaders are extremely nimble around the yard and in and out of farm buildings, allowing you access to even the trickiest spots.

The hydrostatic transmission features high and low ranges, while forward/reverse is selected via a switch on top of the joystick for easy change of direction. The loader and attachment controls are just as simple to use, while a quickhitch system allows you to change between pallet tines, shovel, grab and a host of other attachments in no time at all.

Add a one-piece bonnet for easy, ground-level daily maintenance access and servicing, and you have a great little performer that you'll come to rely on, day in, day out.



Farm Master 411, 416, 426, 436 and 456 Agri

Five new wheeled loaders designed specifically for bulk handling

Engines from 100hp (74.2kW) to 215hp (160kW)

Powerful hydraulics for fast cycle times

Lift capacities from 2.86 tonnes to 7.81 tonnes

Lift heights from 3.25m to 4.02m



The Farm Master Agri range now boasts five new wheeled loading shovels, all dedicated to agricultural-related industries and providing impressive bulk handling capabilities.

The JCB 411 Agri and 416 Agri are both powered by JCB Dieselmex engines, offering 100hp (74.2kW) and 130hp (97kW) respectively. Both feature 4-speed torque converter transmissions and four-wheel drive, making them ideal for general purpose loading applications.

The 411 Agri features twin gear pumps and has a lift capacity of 2.86 tonnes to a height of 3.25m, while the 416 Agri is fitted with a variable displacement piston pump and can lift 3.68 tonnes to 3.4m.

At the top end of the range come our three latest heavyweight loaders, the 426 Agri, 436 Agri and 456 Agri. These machines are designed for high-output handling in commercial grain and fertiliser stores, so you'll find they come with industrial-type tyres as standard. All models are powered by fuel-efficient six-cylinder Cummins engines with respective outputs of 160hp (119kW), 178hp (133kW) and 215hp (160kW).

Dual variable displacement piston pump hydraulics give abundant flow on demand for fast cycle times. Capacities for these highly productive machines are 5.0 tonnes to 3.72m (426 Agri), 5.0 tonnes to 3.83m (436 Agri) and 7.81 tonnes to 4.02m (456 Agri).

So as well as the compact performance you need in the form of a 403, 406 or 409 Agri, and the four high power-to-weight Agri S models for climbing the silage clamp and for soft, slippery conditions, you now have five powerful and bulk handling loaders to choose from. Together, this new Farm Master Agri range has every possible agricultural application covered.



Farm Master comfort, control and long-term reliability

Low-height cab enables access into farm buildings

State-of-the-art operating environment encourages fatigue-free, continuous operation

Ergonomic control layout enhances ease of operation

EMS provides at-a-glance performance assessment of essential machine functions

Heavyweight construction results in superb long-term durability and high residual value



All Farm Master machines are designed for the ultimate in comfort and ease of control, helping to release the full potential of the driver during intense, continuous periods of operation.

Low height cabs are built specifically for agricultural applications, enabling access and operation in farm buildings. The state-of-the-art operating environments with class-leading low noise levels incorporate: a fully adjustable suspension seat, adjustable steering column, two-speed and intermittent front windscreen wiper, heated rear windscreen, three-speed heater/demister with integral air conditioning, and much more.

Large steps, grab handles, a wide door and plenty of space inside mean that entry and exit are completely unrestricted. Plus, the control layout is specifically designed to be easy to use, with all switches and displays offset to the right of the cab or placed in the roof moulding, optimising visibility to the attachment and load.

A servo-operated, single-lever joystick allows precise control of the main hydraulic functions, while loader and bucket kick-out let you program a selected loading height and return-to-dig angle, enabling lifting and lowering of the arms at full speed.

The operator's control over these sophisticated machines is further enhanced by the JCB Electronic Management System (not 403, 406 or 409 Agri), which provides an easy-to-understand performance assessment of the machine functions on an LCD message display.

So the JCB Farm Master Agri gives you all the comfort and control you need added to superb all-round visibility. But these machines are also created to be an excellent long-term investment: heavyweight construction provides excellent durability; all hydraulic rams are manufactured in-house to our own exacting standards; loader arm pins are specially treated to improve wear resistance, feature through-pin greasing for effective lubrication, and are sealed to prevent dirt entering the bearing surfaces; and 100-hour greasing intervals result in minimal service downtime.







Transmission

Hydrostatic drive
Four-wheel drive
15kph travel speed
Individual wheel drive motors
– no propshafts

Wheels & Tyres

Ag 10.0/75-15.3 tyres

Service and Access

Side-opening engine cover for service and maintenance access
No propshafts that are vulnerable to string and straw

Engine/Hydraulics

37hp (27kW) engine
45-litre fuel tank
42ltr/min hydraulics

Controls

Joystick loader controls
Adjustable steering column
Forward/reverse control on top of joystick

Chassis

Robust endurance-tested steel structure
High quality powder-coated paint finish
Fold-down ROPS frame
Narrow machine width – 1015mm

Loader arm

Straight tipping load of 1200kg
Two loader arm options
Mechanical quickhitch system
Auxiliary service option



Loader arm

8300kg straight lifting capacity
3.6 meters lift height
Industrial Q-fit carriage
Self-levelling loader arm option
Smoothride option
Four-ram loader end geometry
Auto greasing system option

Wheels and tyres

19 stud wheels
Standard Michelin MEGAXBIB 620 Tyres
Optional MEGAXBIB 750 tyres

Chassis

Robust endurance-tested steel structure
Oscillating rear axle
Solid cast rear counter weight (920kg)
High quality powder-coated paint finish
Revised styling

Transmission

6-speed Powershift 40kph transmission
Heavy-duty limited slip differentials front and back as standard
Four-wheel drive

Cab and controls

Large spacious cab
Air conditioning (standard UK spec)
Air seat (standard UK spec)
Large opening door
Excellent visibility all round
LCD digital dash panel
Left hand shuttle lever with kickdown feature (S models only)
Adjustable steering column
Proportional joystick servo controls with kickdown and transmission dump feature
Reversing camera option

Service and access

Large opening engine side covers for service and maintenance access
Hose burst check valves as standard
Single-face cooling pack

Engine/hydraulics

Cummins Tier 3 common-rail engine 230hp (171kW)
230-litre fuel tank
264Ltr/min piston pump variable flow hydraulics
Hydraulic reverse fan option





412S AGRI

414S AGRI

416S AGRI






434S AGRI

403 AGRI



Engine type		4-cylinder	6-cylinder	6-cylinder	6-cylinder	3-cylinder
Engine aspiration		Turbo intercooled	Turbo intercooled	Turbo intercooled	Turbo intercooled	Naturally aspirated
Engine capacity	litres	4.4	6.7	6.7	6.7	1.7
Gross hp (kW)	hp (kW)	130 (97)	160 (119)	160 (119)	230 (171)	36 (27)
Max torque	Nm @ Engine rpm	532 @ 1300	540 @ 1400	540 @ 1400	949 @ 1600	104 @ 2000
Standard fuel tank capacity	litres	125	140	140	230	45
Tipping load straight	kg	4296	5247	6651	8983	1290
Tipping load full turn	kg	3644	4441	5680	7650	700
Payload*	kg	2665	2847	3320	5000	-
Max. lift height	mm	3429	3471	3403	3612	2670
Hydraulic pump type		Dual gear pumps	Dual gear pumps	Variable displacement pump	Dual variable displacement pumps	Gear pump
Max. hydraulic flow	l/min	131	154	220	264	42
Limited slip differentials		Front and rear	Front and rear	Front and rear	Front and rear	-
Operating weight	kg	7637	8901	9318	13120	1990

*Stated with fork frame and forks at the centre-of-gravity distance 500mm (1ft-5½in). Based on 80% of full turn tipping load defined by ISO 8313. Manual fork spacings at 50mm (2in) increments. Fork section 100mm x 50mm (4in x 2in).

406 AGRI	409 AGRI	411 AGRI	416 AGRI	426 AGRI	436 AGRI	456 AGRI
						
4-cylinder	4-cylinder	4-cylinder	4-cylinder	6-cylinder	6-cylinder	6-cylinder
Naturally aspirated	Naturally aspirated	Turbo intercooled	Turbo intercooled	Turbo intercooled	Turbo intercooled	Turbo intercooled
3.1	3.6	4.4	4.4	6.7	6.7	8.3
59 (44)	75 (56)	100 (74)	130 (97)	160 (119)	178 (133)	215 (160)
190 @ 1700	250 @ 1700	425 @ 1400	532 @ 1400	540 @ 1400	800 @ 1400	915 @ 1400
80	80	125	140	230	230	320
4118	4917	5889	7472	8983	10828	13746
3168	3914	5047	6299	7650	9009	11795
2580	1957	2868	3682	5000	5000	7808
3012	2643	3254	3404	3612	3755	4028
Gear pump	Gear pump	Dual gear pumps	Variable displacement pump	Dual variable displacement pumps	Dual variable displacement pumps	Dual variable displacement pumps
60	78	123	220	264	264	326
Optional	Front and rear	Optional	Optional	Optional	Optional	Optional
4934	5820	8453	9445	12700	14503	20371

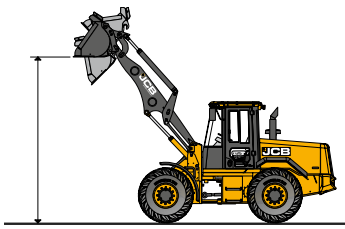
Farm Master Agri Wheeled Loader selection guide

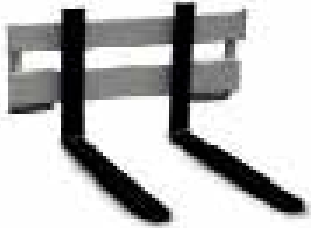
Material	Load over height	Model	*Load over height mm (ft-in)	*Dump height mm (ft-in)	Smallest standard bucket m ³ (yd ³)	Payload kg	Compost 400kg/m ³	Sugar Beet 530kg/m ³	Barley 600kg/m ³	Wheat 730kg/m ³	Earth (dry loose) 1150kg/m ³	Nitrate fertiliser 1250kg/m ³
Bulk Material (Cereals/Feed/Fertiliser)	Standard < 3650mm (12ft 0in)	403 Agri	2670 (8-9)	2180 (7-2)	–	–	–	–	–	–	–	–
		406 Agri	3131 (8-10)	2489 (8-2)	0.8 (1.0)	1650	4	3	2.5	2	1.25	1.25
		409 Agri	3189 (10-5)	2619 (8-7)	0.9 (1.2)	1957	4.9	3.7	3.2	2.7	1.7	1.5
		411 Agri	3259 (10-8)	2490 (10-3)	1.2 (1.6)	2523	6.25	4.78	4	3.25	2	2
		411 HL	3393 (11-1)	2658 (8-9)	1.2 (1.6)	2389	5.75	4.5	3.75	3.25	2	1.75
		412S Agri	3429 (11-3)	2700 (8-10)	1.0 (1.3)	1984	4	3	2.75	2.25	1.25	1.25
		416 Agri	3404 (11-2)	2588 (8-6)	1.4 (1.8)	2563	6	4.5	4	3.5	2.2	2
		414S Agri	3471 (11-4)	2789 (9-2)	1.4 (1.8)	2197	5.4	4	3.5	3	1.8	1.6
		416S Agri	3386 (11-1)	2588 (8-6)	1.4 (1.8)	2720	6.5	5	4.25	3.5	2.25	2
		426 Agri	3610 (11-10)	2831 (9-3)	1.8 (2.4)	3825	9.5	7	6.25	5	3.25	3
434S Agri	3610 (11-10)	2831 (9-3)	1.8 (2.4)	3825	9.5	7	6.25	5	3.25	3		
Bulk Material (Cereals/Feed/Fertiliser)	Hi-Lift & Super Hi-Lift > 3650mm (12ft 0in)	403HL	2918 (9-7)	2428 (8-0)	–	–	–	–	–	–	–	–
		426HL	4040 (13-3)	3261 (10-8)	1.8 (2.4)	3194	7.75	6	5.25	4.25	2.75	2.5
		434S HL	4040 (13-3)	3261 (10-8)	1.8 (2.4)	3194	7.75	6	5.25	4.25	2.75	2.5
		436 HL	4409 (14-6)	3479 (11-4)	2.3 (3.0)	3423	8.5	6.25	5.5	4.5	2.75	2.5
		416 SHL	4257 (14-0)	3436 (11-3)	1.4 (1.8)	1759	4.25	3.25	2.75	2.25	1.5	1.25
		416S SHL	4256 (14-0)	3402 (11-2)	1.4 (1.8)	1866	4.5	3.25	3	2.5	1.5	1.25
		436 Agri	3755 (12-3)	2825 (9-3)	2.3 (3.0)	4504	11.25	8.25	7.5	6	3.75	3.5
		436S HL	4976 (16-4)	4042 (13-2)	2.3 (3.0)	2788	6.75	5.25	4.5	3.75	2.25	2
		456 Agri	4028 (13-3)	2949 (9-8)	3.1 (4.1)	5897	14	11	9.75	8	5	4.5
		456 SHL	4994 (16-5)	3979 (13-1)	3.1 (4.1)	3804	9.5	7	6.25	5	3.25	3

Material	Forager size	Model	Attachment
Silage/Grass	< 400hp	412S	8ft – 10ft Fork
	400 – 600hp	414S	10ft – 12 ft Fork
	> 600hp	434S	12ft – 16ft Fork

Using quickhitch attachments rather than direct mount will decrease the dump height by 34mm on 411 – 416 machines, 85mm on 426 – 436 machines and 106mm on 456 machines and could reduce payload by an average of 150kg. Using a high tip bucket (1.5m³) can increase the dump height by an average of 1250mm but could reduce the payload by an average of 30%. *Load over and dump heights given apply to smallest standard bucket. Increasing the size of the bucket will reduce the load over and dump height. NB: These figures are provided as a rough guide only and are a basic approximation.

Typical average load over heights

	Trailer type	Load over height mm (ft-in)
	Grain bulker	3650 (12-0)
Waste ejector trailer	4600 (15-0)	
Agri dump trailer	2750 (9-0)	
Agri grain trailer	2750 (9-0)	
Agri silage trailer	3500 (11-5)	
Muck spreader	3000 (10-0)	



FORKS AND FRAMES

Enable the machine to be utilised for loading and stacking
 Various fork length options available to reduce pallet damage when stacking
 Supplied with certification (lift governed by machine capability)



SHOVEL

GP and grain / potato versions available
 Rolled back shell for easy material ejection
 Weld in toeplate to protect bucket shell
 Optional teeth available on GP version



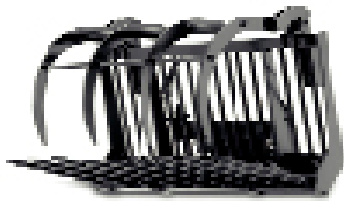
HIGH-CAPACITY GRASS FORK

High-capacity grass fork for handling large volumes of grass into the silage clamp
 Comes complete with two 300mm side extensions for extra capacity
 1370mm long tines for increased capacity



FOLDING GRASS FORK

High-capacity grass fork for maximum productivity
 Fold-up wings to reduce width to 3.1m for transport
 Hardox tines for extra durability



MUCK FORK AND GRAB

Choice of KV or Hardox tines to suit all applications
 Hoses fitted as standard – ready to go to work
 Wear plates on fork base extends operating life
 Side tines minimise spillage



GRAIN PUSHER

Box section construction for extra durability
 Used to aid the stockpiling of grain
 3.3m long

NB: Not all of the above attachments are suitable for all Farm Master machines. Check compatibility with your local dealer.

A few words about JCB

A groundbreaking, class-leading family business with a commitment to supporting our customers and protecting the environment



A family company on a global scale. JCB is no ordinary company. From the dreams of one man, Joseph Cyril Bamford, and our beginnings in agricultural machinery, we have grown into a major world brand. Since 1945, the same attention to detail, passion for progress and family spirit has taken us from strength to strength.

Nowadays JCB operates across all five continents, manufacturing at 17 factories in the UK, Brazil, Germany, China, North America and India. With 1,500 dealerships and depots selling and supporting our products in over 150 countries, we produce some of the most innovative and popular farm machinery, including the Fastrac and Loadall, at some of the finest engineering facilities in the world.

A history of world-class innovation. Our business has always been driven by innovation, using only the most advanced technology, components and processes, meticulous design and rigorous testing. Evidence of this doesn't come much more powerful than our revolutionary JCB Dieselmex engine. Having grabbed the headlines when it smashed the world land-speed record at 350.092mph, it is now providing our customers with tomorrow's performance today.



Sustainability in all we do. As a manufacturer of working machinery, operating in both established and emerging markets, we accept the challenge of helping to deliver economic and environmental sustainability.

Product innovations that provide the right solutions to our customers have been a vital part of our history and will be key to our sustainable future. But in addition to developing cleaner and more efficient machines, we have a commitment to ensuring our manufacturing facilities meet the highest environmental standards.

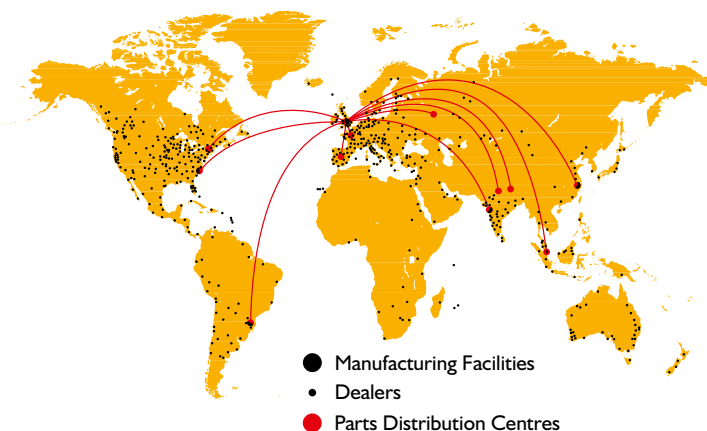
A commitment to our customers that goes on and on. That's a fact we remind ourselves of constantly, and it's the reason our customers are at the heart of everything we do. Whatever a customer needs, we make it our mission to provide world-class support and 100% satisfaction.

But legendary service is about more than just responsiveness. It's about anticipating new needs, offering solutions and exceeding expectations. With that in mind, we are always seeking out improvements that guarantee quality in everything from our products to our working practices.



The best back-up in the business

Whether we're providing you with support, parts or finance, we aim for 100% satisfaction. It's all part of our promise to put you, the customer, first



Wherever you are, we are. Our mission to provide world-class support and deliver 100% satisfaction reaches into more than 1,500 dealer depots, spanning 150 countries across five continents. The aim? To bring you global expertise at a local level. We truly believe no other manufacturer does more to understand the subtle differences between one region of the world and another. It's a degree of attention that we maintain at every level of the company and an assurance to our customers that wherever they are in the world, JCB will fulfil their needs.

Trust the genuine article. At the heart of the support network is our impressive World Parts Centre, a state-of-the-art facility operating 24/7 to dispatch more than a million genuine parts and attachments every week to our dealers and international distribution centres. Because we understand the need to minimise downtime, we utilise the latest logistics and warehouse management systems and have committed to an 'Anywhere in 24 hours' strategy.

Keeping you up and running. Just as important as genuine JCB parts are the people who fit and maintain them. Our JCB-trained technicians in all of those 1,500-plus dealer depots provide excellent, expert customer care, whether it's routine servicing or something more urgent. If there is an emergency breakdown situation, we need to act fast. This is why all our dealers operate their own fleets of support vehicles, enabling parts to be delivered quickly and fitted expertly, and fulfilling our promise to keep our customers working.

Advanced technology. At JCB, we are constantly looking at new, innovative ways to help you get the most out of your machine. Our latest development is JCB LiveLink, an advanced telematics system using satellite and cellular technology that enables you to better protect your machine and accurately monitor and improve its performance. Using JCB LiveLink

can benefit your business in many ways, from increasing the security of your machines to improving fleet utilisation. It can also enable your JCB dealer to view your machine and guarantee timely servicing of your fleet, improving uptime.



Maximising earning potential. We grow as our customers grow. That's why, at JCB, we are committed to offering expert financial advice and support to help customers maximise their earning potential.

Finance options* are available for new and used machinery, all part of our dedication to helping customers preserve their working capital while spreading costs in the most effective and tax-efficient way.

And as well as financial help, we are also happy to offer JCB Insurance.* We specialise in construction and industrial insurance and in offering Insurance Premium Finance facilities.

** Please check individual countries for available services.*





JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP. Tel: +44 (0)1889 590312 Email: salesinfo@jcb.com
Download the very latest information on this product range at: www.jcb.com

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