

### WHEEL LOADER | 407/409

Max. Engine power: 48kW (64hp) / 54.5kW (74hp) Max. Operating weight: 5210kg / 6031kg



## PRODUCTIVE PERFORMANCE.

THE JCB 407 AND 409 ARE HIGHLY PRODUCTIVE WHEEL LOADERS WITH OPTIMAL POWER-TO-WEIGHT RATIO, MAKING THEM PERFECT TOOL CARRIERS. BOTH MACHINES ARE TIER 4 FINAL/STAGE 3B-COMPLIANT USING JUST A DIESEL OXIDATION CATALYST (DOC). THEY'RE ALSO MORE FRUGAL THAN OUTGOING TIER 3 MODELS.

#### JCB Diesel by Kohler.

- 1 JCB has worked in close collaboration with Kohler to produce the ultimate compact wheeled loader engine. No engine power is wasted on a DPF and, with peak power and torque produced at low revs, you get good fuel economy too. Our design also makes dimensions compact for small turning circles.
- 2 Our 407 and 409 machines are equipped with a variable speed engine crank-driven cooling fan that maintains optimum fan speed for all requirements without using any excess engine power.
- The JCB 407 and 409 have a high speed option this provides a top speed of 35km/h (407) and 40 km/h (409).



### Moving with the times.

- 4 JCB's articulated steering boasts an easy-to-use built-in sideshift – ideal for all handling tasks as well as changing attachments.
- 5 So that you can tailor your wheel loader to any application, we offer several axle options. Open diffs are ideal for hard ground, and limited slip diffs excel on soft muddy terrain. Our 100% switchable front axle diff lock on the 407 and 409, meanwhile, provides ultimate traction on muddy terrain and creates no shear forces, so won't damage the ground when it's not in use. It can also be engaged on the move and under load.
- Power from the driveline is transferred to the ground very efficiently through an innovative chassis, with perfect harmony between all components. This makes our machines the best possible wheeled loader solution.

### Versatility by the bucketload.

- Z Equip your wheeled loader with our new towing option and you'll get a hitch with rear electrics and hydraulics, allowing you to trailer loads of up to 3.5 tonnes.
- By splitting power between the transmission and the hydraulics, our inching pedal allows precise, efficient, stepless load handling.





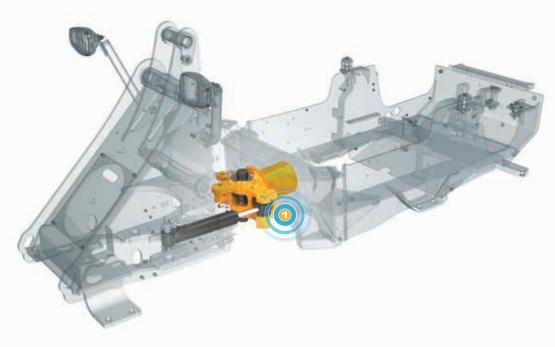






# QUALITY, RELIABILITY AND DURABILITY.

AT JCB, WE UNDERSTAND THAT A WHEEL LOADER IS A CRUCIAL PART OF MANY FARMS. THAT'S WHY THE 407 AND 409 ARE BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY, ENSURING THAT THEY'LL ALWAYS BE A KEY PART OF YOUR WORKING PROCESS.





#### Built to last.

We understand how tough materials handling can be, so our machines are developed to be highly durable. A case in point is our heavy-duty centre joint, which oscillates through  $\pm 10^{\circ}$ .

These machines benefit from a strong chassis and the best possible weight distribution; this allows for the best possible absorption of external forces.



### Quality design.

- The JCB 407 and 409 all have rear lights that are recessed within the solid counterweight casting for good impact protection.
- 4 Hydraulic hoses are always well protected; they're neatly routed, properly clamped, and positioned well away from potential pinching spots.
- We use state-of-the-art manufacturing processes like robot machining, precision paint technology and innovative assembly techniques to achieve the very highest levels of quality.
- Precision machining provides high tolerances and accurate location of pins and bushes.
- inite element analysis and rig testing ensure superior structural strength and durability. Cold cell testing guarantees starting performance at temperatures as low as -20°C.











## **COMFORT AND EASE OF USE.**

JCB COMPACT WHEEL LOADERS LIKE THE 407
AND 409 ARE DESIGNED TO MAKE WORK MORE
STRAIGHTFORWARD. THEY'RE EASY TO ACCESS,
INTUITIVE TO OPERATE, AND THEY'RE OPERATED
FROM THE CENTRE OF THE MACHINE FOR SUPERB
VISIBILITY. AFTER ALL, A COMFORTABLE, CONFIDENT
OPERATOR IS A MORE PRODUCTIVE ONE.

### A comfortable operator.

- 1 The JCB 407 and 409 benefit from a comfortable and spacious cab. The operating position is designed for optimum all-round visibility, unhindered by components like silencers.
- Our tilting telescopic steering column is easy to adjust for an ergonomic driving position.
- All the instruments needed to operate a JCB wheel loader are within easy reach of the seat, so there's no need to hunt around for information whilst working.
- With a fully opening right-hand window operators can enjoy increased ventilation whilst still being protected from dust.









### In complete control.

- A stylish, modern central dash display combines analogue dials and a colour LCD screen – this can display machine health details, service requirements, operating information and more.
- These compact wheel loaders are equipped with an ergonomically designed joystick control system for comfortable and intuitive operation.
- Choice of hydraulic locking Zettlemeyer or skid steer quickhitch opens the machine up to a wide range of attachments, further increasing the machine's versatility.









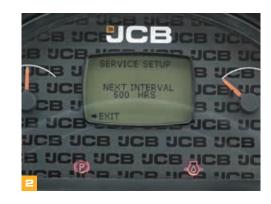
## SERVICEABILITY.

A WHEEL LOADER NEEDS TO SPEND AS MUCH TIME AS POSSIBLE HARD AT WORK. THAT'S WHY THE JCB 407 AND 409 BENEFIT FROM INNOVATIVE DESIGN AND QUALITY COMPONENTS, ALLOWING THEM TO OFFER MAXIMUM UPTIME WITH LONG SERVICE INTERVALS.

#### Access all areas.

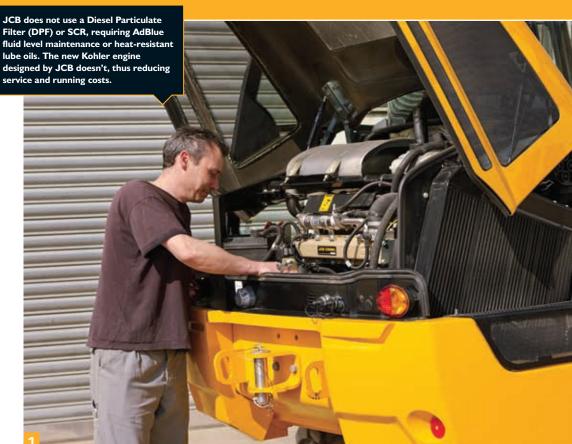
- Our large single piece bonnet ensures quick and convenient access to the engine bay and cooling pack areas of your wheel loader. All daily check points are easily accessed under the bonnet.
- Operators and managers alike can access vital information like machine running times, fuel consumption and error alerts it's all available at the touch of a button on the in-cab display or if needed via JCB's LiveLink telematics system.
- A cyclonic pre-filter maximises air filtration and extends filter element service intervals significantly.

2 Your local JCB dealer will be able to supply all parts for your 407 or 409, even JCB Diesel by Kohler engine components. Both machines also share parts with other JCB machinery, which makes everything even more readily available.









# **SAFETY AND SECURITY.**

BECAUSE SAFETY AND SECURITY ARE PARAMOUNT ON ANY FARM, THE JCB 407, AND 409 ARE DESIGNED TO PROTECT THEIR OPERATORS, THEMSELVES, AND ANY BYSTANDERS AT ALL TIMES. GREAT VISIBILITY, ANTI-THEFT FEATURES AND NON-SLIP SURFACES ARE JUST THE START.

### Safety first.

The 407 and 409 can be equipped with a new immobiliser option, which can help prevent thefts from your fleet.

- With no exhaust after treatment, our JCB Diesel by Kohler engines are extremely compact, so there's no compromise to visibility. The sloping rear bonnet provides an unimpeded view, with the exhaust silencer and air intake filter both packaged out of sight.
- We've fitted an in-cab electronic 2-stage quickhitch isolation system to prevent uncontrolled release of attachments.
- The access step is complemented by well positioned handles so that operators have three points of contact whenever they're entering or exiting the cab.







# **LIVELINK, WORK SMARTER.**

LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY — ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO FUEL REPORTS AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.

### **Productivity and cost benefits**

By providing information like idle time monitoring and machine fuel consumption, JCB LiveLink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.





#### **Maintenance benefits**

Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.





### **Security benefits**

LiveLink's real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage. Further benefits include real-time location information.



## **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.



- 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.
- The global network of JCB Parts Centres is another model of efficiency; with 16 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.



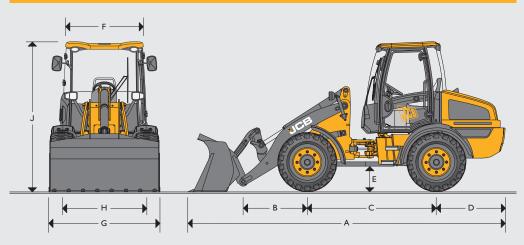
JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient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





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

#### STATIC DIMENSIONS



			407	409
Α	Overall length	mm	5133	5465
В	Axle to pivot pin	mm	906	1130
C	Wheelbase	mm	2100	2205
D	Axle to counterweight face	mm	1268	1295
Е	Minimum ground clearance	mm	313	346
F	Width over cab	mm	1468	1468
G	Width over tyres	mm	1727	1898
Н	Wheel track	mm	1390	1490
J	Height over cab	mm	2500	2643
	Front axle weight	kg	1395	1850
	Rear axle weight	kg	3668	4076
	Total weight	kg	5063	5926
	Inside turn radius	mm	2010	2079
	Max. turn radius over shovel	mm	4160	4432
	Articulation angle	deg	±40°	±40°
	Max. radius over tyre	mm	3800	3979
	Max. width across tyres	mm	1864	1900

<sup>407</sup> data based on machine equipped with quickhitch mounted 0.8m³ bucket with toe plates and Camso SLR4 12.5-18 tyres.

ENGINE			
		407	409
Туре		4 stroke, Electronic Common Rail	4 stroke, Electronic Common Rail
Model		JCB Diesel by Kohler - KDI 2504 TCR	JCB Diesel by Kohler KDI 2504 TCR
Capacity	litres	2.482	2.482
Aspiration		Turbocharged	Turbocharged
Cylinders		4	4
Max. gross power to SAE J1995/ISO 14396	kW (hp)	48 (64) @ 2200rpm	54.5 (74) @ 2200rpm
Max. torque	Nm @ 1500rpm	300	300
Emissions		Stage IIIB & T4F	Stage IIIB & T4F

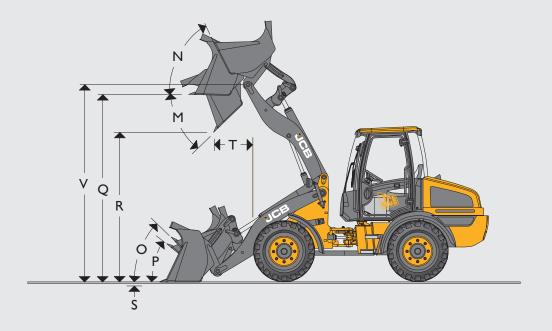
TRANSMISSION						
		407	409			
Туре		Hydrostatic	Hydrostatic			
Model		Rexroth A6VM – 2 speed	Rexroth A6VM – 2 speed			
Model (35kph / 40kph options)		Rexroth A6VM – 3 speed	Rexroth A6VM – 3 speed			
Low range	kph	6	6			
High range	kph	18	20			
High speed (optional)	kph	35	40			

AXLES			
		407	409
Туре		Straight beam	Straight beam
Make and model		Dana III	Dana III
Chassis angle oscillation	degrees	±10	±10

BRAKES	In board oil immersed brakes with combined handbrake; spring actuated hydraulic released park brake.	
	in board on infinite sed branes with combined hardstake, spring actuated in drawer released park branes	

<sup>409</sup> data based on machine equipped with quickhitch mounted 1.0m³ bucket with toe plates and Mitas MPT-04 16.0/70-20 tyres.

LOADER DIMENSIONS											
Model (assumes machine is fitted with Camso SLR4 (407 only) and Mitas MPT-04 16.0/70-20 tyres (405	,			407					409		
Shovel type		General purpose	General purpose	Light duty	Light duty	6 in 1 clam shovel	General purpose	General purpose	Light duty	Light duty	6 in 1 clam shovel
Shovel equipment		Teeth or	toeplate	Тоє	plate	Teeth or toeplate	Teeth or	toeplate	Toe	plate	Teeth or toeplate
Shovel capacity (SAE heaped)	m³	0.8	1	1.2	1.4	0.75	1	1.2	1.4	1.6	0.9
Shovel width	mm	1900	1900	1900	1900	1900	1950	1950	2100	2200	1950
Shovel weight	kg	287	322	353	384	435	332	358	399	434	436
Max. material density	kg/m³	2050	1620	1320	1120	2100	1957	1602	1346	1157	2090
Tipping load straight	kg	4323	4245	4149	4108	4127	4583	4503	4415	4337	3830
Tipping load full turn	kg	3326	3265	3193	3160	3174	3648	3584	3513	3452	3507
Payload	kg	1663	1633	1596	1580	1587	1824	1792	1756	1725	1754
Maximum breakout force	kN	41.9	36.5	32.2	29.7	41.9	53.8	46.6	43.1	41.6	50.8
M Dump angle max.	degrees	45	45	45	45	45	45	45	45	45	45
N Roll back angle full height	degrees	56	56	56	56	56	63.6	63.6	63.6	63.6	63.6
O Roll back at carry	degrees	54	54	54	54	54	53.1	53.1	53.1	53.1	53.1
P Roll back at ground level	degrees	42	42	42	42	42	41	41	41	41	41
Q Load over height	mm	2991	2991	2991	2991	2991	3189	3189	3189	3189	3189
R Dump height (45 deg dump)	mm	2489	2418	2348	2295	2489	2619	2552	2500	2446	2609
S Dig depth	mm	105	105	105	105	106	60	60	60	60	60
T Reach at dump height	mm	764	835	905	958.5	764	523	599	652	705	523
Reach max. (45 deg dump) – horizontal arm	mm	1494	1465	1635	1689	1494	523	599	652	705	523
Operating weight (includes 80kg operator and full fu	el tank kg	5063	5097	5128	5159	5210	5927	5953	5994	6029	6031
V Pin height	mm	3120	3120	3120	3120	3120	3340	3340	3340	3340	3340



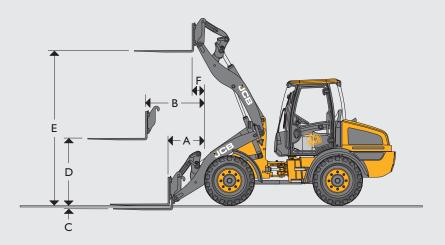
TYRE SIZE – 407						
				Dime	nsions	
Tyre size	Manufacturer	Туре	Op weight (kg)	Vertical (mm)	Width (mm)	
335/80 R18	Dunlop	SPT9 EM	+41.2	-4	0	
365/70 R18	Dunlop	SPT9 EM	+64.16	-14	+69	
405/70 R18	Dunlop	SPT9 EM	+94.00	+9	+113	
335/80 R20	Dunlop	SPT9 MPT	+77.44	+22	-22	
335/80 R18	Michelin	XZSL	+81.6	+9	+14	
340/80 R18	Michelin	XMCL	+71.6	-6	+25	
340/80 R18	Nokian	TRI 2	+55.6	+1	+12	
12.5-18	Camso	SLR4	0.00	0	0	
12.5/80-18	Camso	SLR4	0.00	-15	-15	

Loader dimensions quoted on 12.5-18 wheels and tyres.

TYRE SIZE – 409						
		Dimensions				
Tyre size	Manufacturer	Туре	Op weight (kg)	Vertical (mm)	Width (mm)	
405/70 R18	Dunlop	SPT9 EM	-56.36	-8	-8	
335/80 R20	Dunlop	SPT9 MPT	-72.96	-85	-85	
365/80 R20	Dunlop	SPT9 MPT	-55.20	-51	-51	
405/70 R20	Dunlop	SPT9 MPT	-13.67	-7	-7	
375/75 R20	Michelin	XZSL	-0.80	-13	-13	
380/75 R20	Michelin	XMCL	-12.80	-15	-15	
400/70 R20	Michelin	XMCL	0.00	+4	+4	
405/70 R20	Michelin	XZSL	+24.80	+10	+10	
420/75 R20	Michelin	XMCL	+38.00	+10	+10	
340/80 R18	Nokian	TRI 2	-82.40	-65	-65	
360/80 R20	Nokian	TRI 2	-56.80	-51	-51	

Loader dimensions quoted on Mitas MPT-04 16.0/70-20 wheels and tyres.

#### LOADER DIMENSIONS – FORK FRAME WITH FORKS



			Parallel fork		
			407	409	
Fork carriage wi	łth	mm	1345	1345	
Length of tines		mm	1200	1200	
A Reach at ground	level	mm	710	724	
B Reach at arms h	orizontal	mm	1232	1187	
C Below ground le	vel	mm	84	17	
D Arms, horizonta	height	mm	1426	1396	
E Arms, max. heig	ht	mm	3012	3231	
F Reach at max. h	eight	mm	506	231	
Payload*		kg	2142	2366	
Tipping load stra	ight	kg	3324	3787	
Tipping load full	turn (40°)	kg	2600	2907	
Attachment weig	ht	kg	191	191	

\* At the centre of gravity distance 500mm. Based on 80% of FTTL as defined in ISO 8313.

Manual fork spacings at 50mm increments. Fork section 100mm x 50mm.

ELECTRICAL SYSTEM		
		407/409
System voltage	Volt	12
Alternator output	Amp hour	80
Battery capacity	Amp hour	100

HYDRAULICS						
		407	409			
Pump type		Single Gear Pump	Single Gear Pump			
Pump type for High Flow Option		2 x Single Gear Pump	2 x Single Gear Pump			
Pump max. pressure	bar	230	250			
Auxiliary flow	l/min	60	83			
Hydraulic cycle times at full engine						
Arms raise (full bucket)	Seconds	4.9	4.9			
Bucket dump (full bucket)	Seconds	3.5	4.1			
Arms lower (empty bucket)	Seconds	3.1	3			
Total cycle	Seconds	11.5	12			
Hydraulics (High Flow)		plus 30I	plus 30l			
Pump max. flow	l/min	64	89			

SERVICE FILL CAPACITIES						
		407	409			
Hydraulic system	litres	70	70			
Fuel tank	litres	80	80			
Engine oil sump	litres	11.2	11.2			
Axle oil (front)	litres	4.4	4.4			
Axle oil (rear)	litres	6.05	6.05			

### WHEEL LOADER 407/409

ECI			

STANDARD EQUIPMENT					
	407	409			
GENERAL MACHINE FEATURES	Parallel lift geometry, JCB Hydraulic Quickhitch, articulated steering, front and rear fenders, one piece opening bonnet, recovery hitch, lifting lugs, temperature controlled engine cooling fan.				
TRANSMISSION					
BRAKES	In board oil immersed brakes with combined handbrake; cable operated parkbrake.	In board oil immersed brakes with combined handbrake; spring actuated hydraulic released parkbrake.			
ELECTRIC					
HYDRAULICS	Single lever manual control, gear pump with priority steer, emergency steer back up.	Single lever servo control, gear pump with priority steer, emergency steer back up, flow sharing.			
CAB	ROPS/FOPS safety structure, fully adjustable seat, interior light, adjustable tilt steering column, safety glass, LCD display, front and rear screen wash/wipe, 3 speed heater fan with replacable filters, radio aperture (high spec cab only), sun visor.				

OPTIONAL EQUIPMENT	
	407/409
GENERAL MACHINE FEATURES	HBCV, 4th Spool aux cicuit, LSD axles, locking differential front axle with on the fly operation (409 only), immobiliser, livelink, under bonnet battery isolator, worklights, bio oil, aircon, constant flow, high flow plus 30 l/min., SRS, Rockinger Tow hitch 3.5t, rear aux. hydraulics, rear electrical connection, creep speed, shovel level indicator, stowage box, fully opening RH window with locks.  See Dealer for full list.

NOISE AND VIBRATION								
		407	409	Uncertaincy	Measurement conditions.			
Noise at the operator station	LpA	78 dB	76 dB	+/- I dB	Determined in accordance with the test method defined in ISO 6396 and the dynamic test condition defined on 2000/14/EC.			
Noise emission from the machine L	LWA	101 dB	101 dB	+/- I dB	Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in $2000/14/EC$ .			
Whole body vibration	m/s²	0.59	0.59	+/- 0.11 dB	ISO 2631-1:1997 normalised to an 8h reference period and based upon a test cycle comprising of loader work (soil).			
Hand-arm vibration	m/s <sup>2</sup>	<2.5	< 2.5	N/A	ISO 5349-2:2001 dynamic test conditions.			



ONE COM ANT, OVER 300 MACHINES.

Your nearest JCB dealer

#### Wheel Loader 407/409

Max. Engine power: 48kW (64hp) / 54.5kW (74hp). Max. Operating weight: 5210kg / 6031kg

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