



WHEELED LOADING SHOVEL | 406/409

Max. engine power: 46kW (62hp)/56kW (75hp) Max. operating weight: 4934kg/5820kg



Power and strength

Powerful, efficient, turbocharged Tier 3 Deutz engine provides 75hp

All-wheel drive and limited slip differentials give total traction in difficult conditions

40kph option provides faster time between jobs and increased productivity

Compact dimensions and low height over cab allow access to tight spaces and within buildings

Parallel lift gives easy load handling with pallet forks or shovel



The 409 is powered by a Tier 3 compliant, 4-cylinder, turbocharged Deutz engine offering a powerful 75hp. Whilst the 406 is powered by a 4 cylinder naturally aspirated engine offering 62hp. They drive through a hydrostatic transmission to both axles, providing all-wheel drive for total traction in poor ground conditions, keeping the machine moving and reducing tyre wear and cost. Meanwhile the option on the 409 of 40kph road speed provides faster time between jobs and increased productivity.

Featuring a chassis design that utilises an oscillating central pivot to maintain ground contact with all four wheels, the 409 has an operating weight of 5.8 tonnes and the 406 is 5 tonnes. We have a large cab volume but despite this, the low cab roof height has been maintained to ensure maximum accessibility to low buildings. In fact, all-round compact dimensions mean the 406/409 can be used in a variety of applications, from tight sheds to house building developments.

As one of the major uses for the 406/409 is handling palletised loads, they boast sturdy, parallel-lift loader-arm geometry with excellent visibility to the front of the machine. With a standard 1cu.m³, the 409 machine offers a straight tipping load of 4,917kg and a full turn tipping load of 3,914kg. Fit the optional pallet forks and you can easily handle a 2.5-tonne load.





Controllable, manoeuvrable, versatile

A huge range of attachments plus compatibility with other ranges increases versatility

Quickhitch hydraulically controlled locking pins can be activated from within the cab

Pivot steer and articulated chassis give incredible manoeuvrability

Dual-speed hydrostatic transmission accurately matches speed to application and allows 'inching' using the brake pedal

Responsive, accurate hydraulic controls are simple and intuitive to use



From harsh waste environments to the farm and field, the potential industries and applications for the 406/409 are endless. The machine's lift height allows it to load into road trucks, but is still compact enough to fit into tight barns and under small bridges.

Add to this in-built versatility a large number of diverse attachments and you begin to realise the true potential of these machines. The operator doesn't even have to leave the cab to quickly change over attachments. Quickhitch hydraulically controlled locking pins – allowing change between shovel and pallet forks – and can be activated without leaving the seat.

A variety of tyre options allows you to tailor the 406/409 to specific applications in civil engineering, building, agriculture and heavy-duty stocking operations in builders merchant's yards. In addition the 406/409 is equipped with an industry standard quickhitch, allowing rapid fleet integration with your existing range of buckets and attachments.

With such versatility at your fingertips, you want to make the most of it. So it's good to know just how easy these machine are to control. The pivot steer design makes the 406/409 so simple to manoeuvre, while allowing easy and accurate placing of the load; something that is more difficult in rigid machines. The articulated chassis enhances manoeuvrability and allows you to use the steering to place loads. Dual-speed hydrostatic transmission provides accurate matching of speed to application and the ability to 'inch' using the brake pedal. Responsive, accurate hydraulic controls give fast cycle times and are simple and intuitive for even inexperienced operators to use.

Add the lowest height over cab in class, compact dimensions and a tight turning circle, and you get a machine that can work in applications other machines can't.



406/409 WHEELED LOADING SHOVEL | CONTROLLABLE, MANOEUVRABLE, VERSATILE



Cab comfort, safety and serviceability

Ergonomic layout places all controls easily within arms reach

Unobstructed 360° visibility allows accurate machine placing

Daily checks accessible from ground level means no hazardous climbing onto the machine for routine maintenance

Oil-immersed disc brakes give greater life and are virtually maintenance free

1000-hour service intervals (500-hour engine) reduce machine downtime increasing productivity

The 406/409 features a class-leading, low-noise operator environment that helps to keep the operator fatigue free, comfortable and productive. Wide door aperture and well-positioned steps make cab access easy and safer. Ergonomically laid out controls are simple and intuitive for the inexperienced operator to understand, and placed easily within arms reach.

Health and safety has also been of paramount importance in the design of the 406/409. Large cab with unobstructed visibility through 360° allows the operator to place the machine accurately and with confidence. Parallel loader-arm geometry gives excellent visibility to the attachment. Grouped daily checks are accessible from ground level meaning the operator does not have to climb onto the machine to perform routine maintenance. All engine service points are located on one side for convenience.

Also on the subject of serviceability: wide opening bonnet gives good access to the engine bay; 1000-hour service intervals (500 engine) reduce machine downtime; Oil-immersed disc brakes give greater life and are virtually maintenance free; hydraulics and electrical components are easily accessed from the side panel; all engine service points are located on one side for convenience; and a powerful, turbocharged engine with integrated cooling system means fewer parts and less to service.

When it comes to cost of ownership, a low purchase price and high rental rates make the 406/409 an appealing acquisition, especially when you consider versatility and performance. With the added benefits of long service intervals which are easy and safe to carry out, reduced tyre wear through limited slip differential axles and low fuel consumption... the result is a fantastic investment for any business.





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*

LIVELINK

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 is 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.



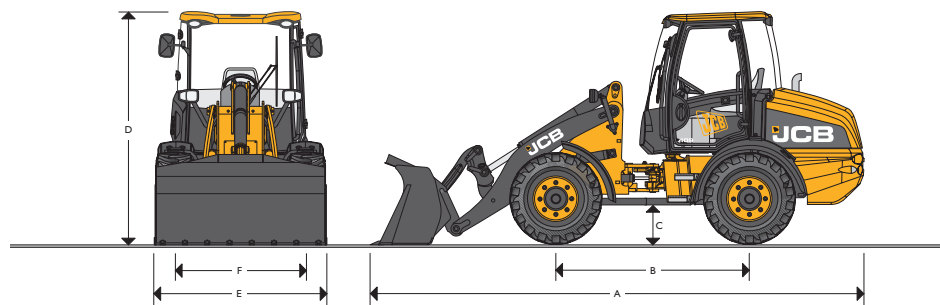
1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

JCB 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.



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



		406	409	
A	Overall length with standard shovel	mm	5133	5465
B	Wheel base	mm	2100	2205
C	Min. ground clearance	mm	330	472
D	Height over cab	mm	2500	2643
E	Max. shovel width	mm	1900	1950
F	Wheel track	mm	1390	1490
	Front axle weight*	kg	1434	1970
	Rear axle weight*	kg	3500	3850
	Operating weight (includes standard shovel)	kg	4934	5820
	Inside radius	mm	2010	2079
	Maximum radius over standard shovel	mm	4160	4432
	Maximum radius over tyres	mm	3800	3979
	Articulation angle	degrees	±40°	±40°
	Max. width across tyres	mm	1761	1900

Note: Dimensions for 409 assume fitment of standard Goodyear I6.0/70-20 SGL wheel and tyres, for 406 assume JCB 12.5 x 18 wheel and tyres. *Axle weights based on unloaded bucket in carry position.

TRANSMISSION

Type		Hydrostatic
Make		Rexroth
Model		A6VM
Low range	kph	6
High range	kph	20
High speed (optional, 409 only)	kph	40
Axle		DANA

ENGINE

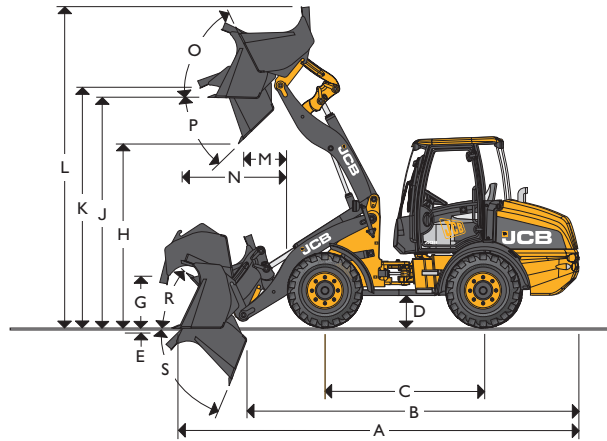
		406	409
Type		4 cylinder diesel	4 cylinder diesel
Make		Deutz	Deutz
Model		TD2011 L04i	TD2011 L04i
Capacity	ltr	3.62	3.62
Bore	mm	96	96
Stroke	mm	125	125
Aspiration		Naturally aspirated	Turbocharged
Cylinders		4	4
Power rating			
Gross power to SAE J1995/ISO 14396	kW (HP) @ 2500rpm	46 (62)	56 (75)
Nett power to J1349/EEC 80/1269	kW (HP) @ 2500rpm	43.5 (58)	53 (72)
Torque rating			
Gross torque	Nm (lbf ft) @ 1700rpm	190	250 (184)

ELECTRICAL SYSTEM

System voltage	Volt	12
Alternator output	Amp hour	80
Battery capacity	Amp hour	105

SERVICE FILL CAPACITIES

	litres (UK gal)
Hydraulic and transmission system	70
Fuel tank	80
Engine oil sump	12
Axle oil (front) including hubs	4.4
Axle oil (rear) including hubs and drop box	6.05



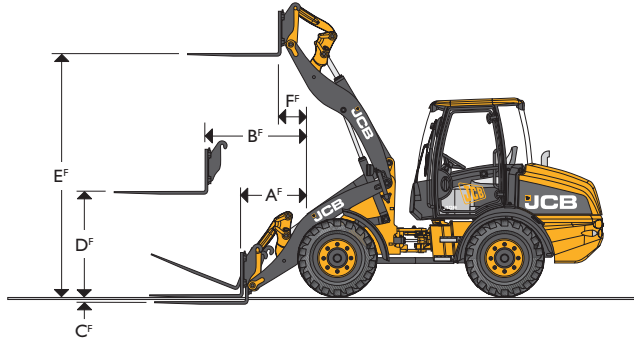
LOADER HYDRAULICS

		406	409	
B	Length to loader pin	mm	4369	4602
C	Wheelbase	mm	2100	2205
D	Minimum ground clearance	mm	330	472
F	Height over cab	mm	2500	2643
G	Dump height at maximum reach	mm	906	783
J	Load over height	mm	2991	3189
K	Hinge pin height	mm	3131	3371
O	Roll back at full height	degrees	56°	63.6°
P	Dump at full height	degrees	45°	45°
R	Rollback at carry	degrees	54°	53.1°
S	Dump at minimum height	degrees	67°	68.3°

LOADER DIMENSIONS

		406 General Purpose	406 General Purpose	406 Light Duty	406 Light Duty	406 6 in 1 Clam Shovel	409 General Purpose	409 General Purpose	409 Light Duty	409 Light Duty	409 6 in 1 Clam Shovel
Shovel											
Capacity heaped	m ³	0.8	1.0	1.2	1.4	0.75	1.0	1.2	1.4	1.6	0.9
Material density	kg/m ³	2050	1620	1320	1120	2100	1957	1602	1346	1157	2090
Empty shovel weight	kg	287	322	353	384	435	332	358	399	434	436
Bucket equipment		Teeth or Toeplate	Teeth or Toeplate	Toeplate	Toeplate	Teeth or Toeplate	Teeth or Toeplate	Teeth or Toeplate	Toeplate	Toeplate	Teeth or Toeplate
Static tipping load, straight (EN)	kg	4290	4212	4118	4076	4095	4917	4831	4736	4653	4109
Static tipping load, full turn 40° (ISO)	kg	3300	3240	3168	3136	3150	3914	3845	3769	3703	3762
Payload 50%	kg	1650	1620	1584	1568	1575	1957	1922	1884	1851	1881
Max. tearout force	kN	41.9	36.5	32.2	29.7	41.9	53.8	46.6	43.1	41.6	50.8
Bucket width	mm	1900	1900	1900	1900	1900	1950	1950	2100	2200	1950
Outside turning circle radius	mm	4160	4185	4210	4229	4160	4432	4460	4545	4610	4440
A Total length (shovel flat on ground)	mm	5133	5233	5333	5408	5133	5575	5628	5651	5726	5597
L Lift height max.	mm	4140	4246	4333	4438	4157	4427	4526	4576	4628	4315
E Digging depth	mm	105	105	105	105	105	60	60	60	60	60
H Dump height	mm	2489	2418	2348	2295	2489	2619	2552	2500	2446	2609
M Reach at max height @ 45° dump	mm	764	835	905	958.5	764	523	599	652	705	523
N Max. reach @ 45° dump	mm	1494	1465	1635	1689	1494	523	599	652	705	523
Operating weight	kg	4934	4969	5000	5031	5082	5820	5846	5887	5922	5924

PALLET FORK DIMENSIONS



PALLET FORK DIMENSIONS

Loader dimensions: assumes fitment of 16.0/7-20 tyres.

		406	409
Fork carriage width	mm	1345	1345
Length of tines	mm	1200	1200
A ^F Reach at ground level	mm	710	724
B ^F Max. reach arms horizontal	mm	1232	1187
C ^F Below ground level	mm	84	17
D ^F Height arms horizontal	mm	1426	1396
E ^F Max. height	mm	3012	3231
F ^F Reach at max. height	mm	506	231
Full turn tipping load (500mm load centres)	kg	2580	3119
Operating load (60%)	kg	1548	1871
Operating load (80%)	kg	2064	2495

LOADER DIMENSIONS

		406	409
Pump type		Gear	Gear
Pump max. flow	l/min	60	78
Pump max. pressure	bar	230	250
Hydraulic cycle times at full engine revs:	seconds	seconds	seconds
Arms raise (full bucket)		4.9	4.9
Bucket dump (full bucket)		3.5	4.1
Arms lower (empty bucket)		3.1	3.0
Total cycle		11.5	12.0

STANDARD EQUIPMENT

Loader: Single lever joystick control; parallel lift geometry; quickhitch (hydraulic pin locking).

Transmission: Two position electric switch; neutral start; disconnect on footbrake (inching capability); forward/reverse switch on joystick control lever.

Brakes: In board oil immersed brakes with combined handbrake; spring actuated hydraulic released park brake.

Electrical: Road lights front and rear; reverse lights; 80 Amp alternator; battery isolator switch.

Hydraulics: Gear pump with priority steer; emergency steer back up; 3 spool loader circuit.

Cab: ROPS/FOPS safety structure; fully adjustable seat; interior light; adjustable steering column; safety glass; electronic monitoring with warning panel; front and rear screen wash/wipe; 3 speed heater fan with replaceable filters; optional analogue gauges; LH opening door; radio aperture (high spec cab only); single lever joystick control; laminated screen; loader control isolator; door lock back system; storage tray; sun visor; interior mirror; storage box.

Bodywork: Front and rear fenders; side and rear access panels; fixed bottom steps; full width rear counterweight; recovery hitch; lifting lugs; engine sump kit.

OPTIONAL EQUIPMENT

Limited slip differential, smooth ride system, high spec cab, warning lights, radio installation kit, reverse alarm, rotating beacon. Please consult your dealer for more options.

TYRES

406 12.5/80 R18 SGL, 335/80 R18 XM27, 12.5 R18 SLR4, 335/80 R18 XZSL, 335/80 R18 SPT9, 365/70 R18 SPT9, 405/70 R18 SPT9, 400/70 R18 IT520.

409 335/80 R20 Dunlop SPT9; 365/80 R20 Dunlop SPT9; 405/70 R20 Dunlop SPT9, 405/70 R18 Dunlop SPT9; 400/70 R20 Goodyear IT520; 420/75 R20 Goodyear IT520; 12.5 20 Goodyear MPT; 16.0/70-20 Goodyear SGL; 12.00R20 Michelin XMINE; 375/75 R20 Michelin XMCL; 400/70 R20 Michelin XMCL; 375/75 R20 Michelin X2SL; 405/70 R20 Michelin X2SL.



ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

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JCB Sales Limited, Rokester, 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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