



3CX COMPACT HIGHWAYS MASTER

Gross power: 55kW (74hp) Maximum flow rate: 120 l/min Weight: 8200kg



A SOLUTION TO A PROBLEM DRIVEN BY INDUSTRY.

THE HIGHWAY CAN BE A CHALLENGING, CONGESTED AND DANGEROUS WORKING ENVIRONMENT ENCOMPASSED WITH A DEMAND FOR FAST AND HIGH QUALITY PROJECT DELIVERY AGAINST LEAN BUDGET TARGETS WITH GREATER PUBLIC SCRUTINY THAN EVER BEFORE...

After three years of close collaboration with a variety of local, national and global public and private sector highway maintenance operations from around the world, key trends emerged:

- Restricted space on road works
- More plant and people on site
- Increased and unpredictable reversing
- Greater risk of collision casualties and fatalities
- Labour intensive work methods and manual tools
- Increased dust and risks to health
- Reliance on seldom used specialist equipment
- Limited operational adaptability
- Lack of productivity and efficiency

A SOLUTION TO HIGHWAYS.

IN 2015, JCB LAUNCHED THE 3CX COMPACT TO THE MARKET. IT WAS DESIGNED WITH HIGHWAYS IN MIND AND DEVELOPED IN PARTNERSHIP WITH SPECIALIST CONTRACTORS AND COUNCILS. THE 3CX COMPACT HIGHWAYS MASTER IS A SINGLE MACHINE SOLUTION WHICH INCREASES PRODUCTIVITY, REDUCES COSTS AND IMPROVES SAFETY.

The 3CX Compact's size allows the machine to work in confined spaces that are inaccessible to standard backhoes.

1 Under 6m turning circle means it can work in a single carriageway allowing traffic flow to remain open.

2 The ability to do perfect preparation for a permanent pothole repair with a powerful patch planer and sweeper collector combination.

700% increase in productivity.

3 The 3CX Compact Highways Master is proven to provide a transformation in terms of operational delivery and performance to increase permanent repair rates significantly.

By reducing the use of hand held tools when repairing potholes, noise levels have been able to be reduced from 98dB to 72dB.

59% cost saving efficiency.

The 3CX Compact Highways Master has been pivotal in reducing operational overheads whilst improving service delivery, enabling highways contractors to provide better value for the customer.



THE NEW SOLUTION TO HIGHWAYS.

FOLLOWING THE SUCCESS OF THE CURRENT MACHINE IN THE POTHOLE REPAIR SECTOR, THE 3CX COMPACT HIGHWAYS MASTER HAS EVOLVED AGAIN TO MEET THE NEEDS OF CUSTOMER DEMANDS IN THIS CHALLENGING INDUSTRY. THE NEW 3CX COMPACT HIGHWAYS MASTER IS SET TO INCREASE PRODUCTIVITY TO THE NEXT LEVEL, REDUCE COSTS EVEN FURTHER, BE MORE VERSATILE AND TAKE SAFETY TO THE NEXT LEVEL.

With the correct tools fitted as standard, the new 3CX Compact Highways Master has everything an operator needs to complete the job with ease and in comfort.

- 1** Front attachment with constant high flow hydraulics providing 120lpm at 280 bar.
- 2** Skid Steer Loader front coupler gives a wide choice of attachments available to the market.
- 3** Integrated dust suppression tanks provide water to both loader and excavator when needed.
- 4** Hydraulic excavator powerslide allows precise repositioning of the attachment, reducing ground damage.
- 5** Vari Speed Pro gives the operator complete control over the speed of the machine when in certain applications such as planing, ensuring productivity is constantly maintained.





UNSURPASSED SAFETY.

REMOVE CONVENTIONAL SAFETY CHALLENGES ON BUSY SITES BY USING A ONE MACHINE SOLUTION WITH INDUSTRY FIRST FEATURES DESIGNED TO EMPOWER SAFER WORKING PRACTICES.

Stationary cross cut.

1 Powerslide enables the operator to carry out a squared off cross cut while the machine is stationary without any manual tools within a single carriageway. This reduces the need to reposition or reverse, improving safety on site and decreasing disruption for road users through less traffic management.

Integrated dust suppression.

2 A smart on-board dust suppression system engages automatically as attachments are activated on the front loader or rear boom. This eliminates dust and preserves life of costly consumables such as sweeper brushes or road planer picks to boost performance.

Visibly safer spatial awareness.

3 The 3CX Compact Highways Master provides total autonomy to undertake all applications from within the raised 360° high visibility cab. Front and rear cameras come as standard.



Complete in cab control.

4 Hydraulic depth control on the front and rear improves operator accuracy and performance whilst planing, without having to leave the raised high visibility position of the comfortable cab to increase safety.

Reversing movement risk.

5 Predictable four wheel steer with restricted reverse speed reduces risk whilst maneuvering with external emergency stop button for additional safety assurance. The unique 2-in-1 attachment set up limits the need to traverse on site to interchange attachments.

Safer entry and egress.

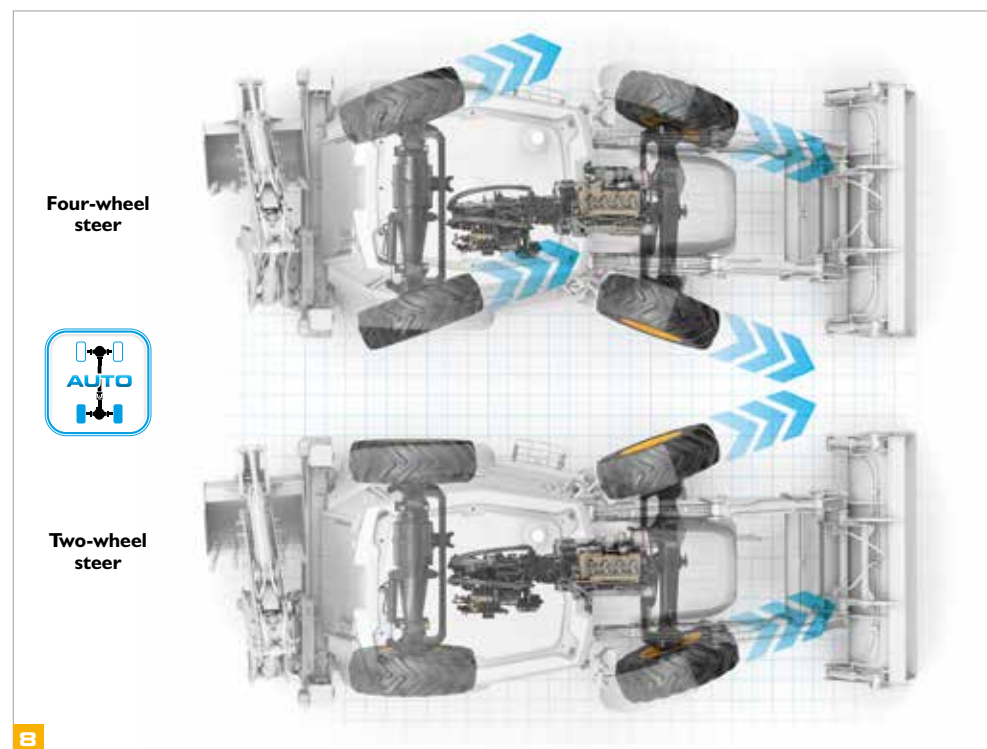
6 Twin steps and in-built light illuminates the steps to provide operators with a clear view when entering or exiting the cab.

LED lighting.

7 With 12 LED lights fitted as standard, the attachment and surrounding area are illuminated to provide clear working for the operator and workforce.

Automatic 2WS/4WS.

8 Allows the operator to switch between roading and site mode with ease.



UNMATCHED PRODUCTIVITY.

A VERSATILE AND SAFER 2-IN-1 ROAD PLANER CAPABLE OF TACKLING TWO DIFFERENT MILLING APPLICATIONS FROM ONE HOST MACHINE SIMULTANEOUSLY TO EFFICIENTLY SELF-DELIVER MORE WORK WITH LESS EQUIPMENT.

Perfect for pothole and patch repairs.

1 A rear boom mounted fully hydraulic 300mm road planer allows for accurate road milling against the kerb or around iron works as well as for smaller pothole, patching and pre-surface patching work where efficient precision planing is required.



Ready for road resurfacing.

2 The ability to attach a front mounted 600mm road planer provides a wide, consistent and continuous high output cut for larger reinstatement operations on hard asphalt surfaces.



Vari Speed PRO for performance.

3 A powerful independent and constant hydraulic flow optimises the performance of the front mounted planer, as well as maintaining a consistent forward speed to maximise productivity.





Precision planing.

4 Hydraulic sideshift, depth control and tilt on the front and rear allows for more precision planing for narrow pavement works, against kerbs or around iron works controlled from within the cab.

Powerful & consistent cut.

5 An intense 120 litres per minute at an unrivalled 280 bar provides 70% more power to front loader attachments with over 6 tonnes of weight pressing downward on the milling drum. This eliminates any resistance or bouncing as the machine progresses to create a flat finish.

ULTIMATE VERSATILITY.

YOUR ADAPTABLE ALLY ON THE HIGHWAY REPLACING SEVERAL PIECES OF PLANT AND EQUIPMENT ON SITE. A POWERFUL TOOL CARRIER ADDS VALUE ALL-YEAR-ROUND WITH UNRIVALLED ADAPTABILITY TO SELF-DRIVE, PLANE, SWEEP, DIG, DOZE, GRAB, GRADE, LIFT, LOAD, BACKFILL, TOW AND MUCH MORE...

Front & rear adaptability.

1 New skid steer loader quickhitch to the front loader allows for easy attachment compatibility with common skid steer attachments. An optional rear dipper quickhitch keeps attachment switchover quick, easy and safe.

Seamlessly plane & sweep.

2 The unique ability to attach two attachments at once on the front and rear allows the operator to perform patch planing and sweeping simultaneously within a single lane. Leftover asphalt can then be off-loaded by lifting the loader arms to offset costs against specialist sweepers.

Functional & familiar.

3 Operators can utilise one, easy to use joystick to control functionality of different front loader attachments for better performance and familiarisation. Servo controls on the rear are equally simple to master.



Self propel to site.

A top road speed of 40km/h enables the operator to drive to site fully equipped with attachments and trailer reducing additional transportation costs. This allows the machine to advance from one job to the next ahead of the reinstatement gang to increase operational efficiency and outputs.



OPTIONS & MORE.

TO ENHANCE THE 3CX COMPACT HIGHWAYS MASTER EVEN MORE, THERE ARE OPTIONAL FEATURES THAT CAN ADD TO THE SAFETY OR MAKE THE MACHINE EVEN MORE VERSATILE.

Internal & external storage.

1 Lockable internal & external toolboxes provide safe and secure storage for tools and belongings.

Fisheye mirror.

2 Provides full visibility to all rear blind spots and attachments.

Shovel holder.

3 Allows the operator to safely store a shovel with the machine.

Handheld tool circuit & hose reel.

4 The optional hose reel is integrated into the machines hydraulics and means there is no need for any hose connections to use handheld tools. The hose reel is easily extendable to 9 metres to provide power to handheld tools within a large working radius. It is just as easily put away after use with its auto retract system.



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.



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 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 18 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.

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

SPECIFICATION		
Power		55kW
Travel speed		40 kph
Transmission		HydroStatic + Vari Speed Pro
Loader lever		7-way multifunction
Front auxiliary flow		120 lpm + constant flow
Excavator		10'/12' extending
Shovel		
6 in 1		●
SSL quickhitch		●
Loader		
5/8 pipework		●
Constant flow		●
Excavator Auxiliary		
Hammer/BiDi		●
Cab		
7-way multi loader-lever		●
Transmission		
Vari speed Pro		●
Colour		
White with black loader		●
Tyres		
XMCL		○
Bibload		○
Dust suppression		●
Powerslide		●
Hi-viz decals		●
Auto 2WS/4WS		●
LED light package		●
Front and rear camera		●
E Stops		●
ENGINE		
Common rail diesel. Belt driven water pump. Cold start aid – territory dependent. Single-side servicing.		
Engine emissions		Stage IIIB/T4F
Manufacturer		JCB Diesel by Kohler Co.
Gross power	kW (hp)	55 (74) @ 2200rpm
Peak torque	Nm	300
Aspiration		Turbo charged
Displacement	CC	2482
No. of cylinders		4
Bore	mm	88
Stroke	mm	102
Rated engine	rpm	2350

Standard ● Optional ○ Not applicable –

TRANSMISSION		
Bosch Rexroth transmission with anti-stall and high speed roading switch.		
Type	Hydrostatic	
Model	Rexroth A6VM – 3 speed	
1st (low range)	kph (mph)	6 (3.7)
2nd (high range)	kph (mph)	10 (6.2)
3rd (high speed)	kph (mph)	40 (24.9)

HYDRAULIC SYSTEM		
Closed centre system (piston pump) offering variable flow hydraulics, providing best-in-class controllability and ISO control system.		
Pump flow at 2350rpm	l/min	120*
System relief pressure	bar	280

*100% efficiency

TYRES		
340/80 x R18 Michelin XMCL (Radial)		
340/80 x 18 Michelin Bibload (Radial)		

NOISE AND VIBRATION LEVELS		
Internal	dB(A)	71
External	dB(A)	101

AXLES		
	Front	Rear
Type	JCB Max-trac steer drive torque proportioning	
Axle ratings	kg	
Static load rating	7484	
Dynamic load rating	3765	
Oscillation angle	9.5°	–
Steering ram	Double acting	Double acting

STEERING		
Steering axles	Front and rear	
Steering turns – lock to lock	4	
Turning circle:	m	
Inner wheels braked	5.8	
Inner wheels not braked	6.7	

SERVICE CAPACITIES		
Cooling system	ltr	16
Fuel tank	ltr	80
Engine oil sump	ltr	11.2
Hydraulic system (including transmission)	ltr	104
Rear axle	ltr	9.0
Front drive axle	ltr	9.0

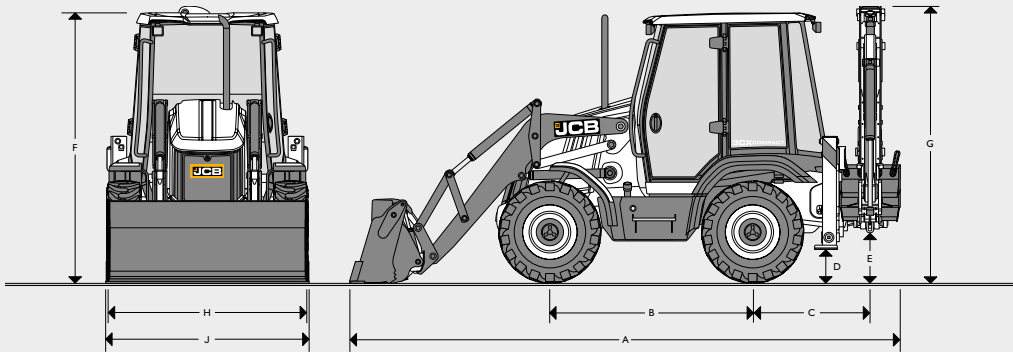
OPERATING WEIGHTS		
Weight	kg	8200

Operating weight includes machine with 600mm planer, 300mm planer, extended dipper, full fuel tank, full water tanks and operator.

Actual weight will vary depending on machine options.

STATIC DIMENSIONS

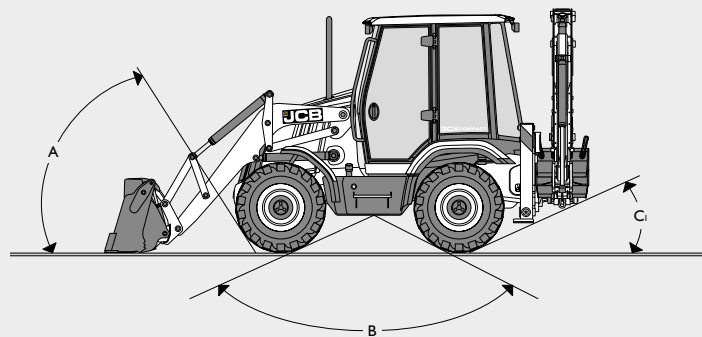
Max. Engine power: 55kW (74hp) max. tool carrier dig depth: 4.33m



		3CX COMPACT
A	Total travel length	m 5.52
B	Axle centreline distance	m 1.99
C	Slew centre to rear axle centre distance	m 1.16
D	Stabiliser feet clearance	m 0.33
E	Kingpost clearance	m 0.52
F	Cab roof height	m 2.65
G	Total travel clearance (10ft)	m 2.74
	Total travel clearance (12ft)	m 3.08
H	Rear frame width	m 1.89
J	Shovel width	m 2.01

JCB tool carriers feature heavy-duty one piece mainframe, hydrostatic driveline and fully enclosed engine compartment. All fluid and component compartments are lockable using the ignition key

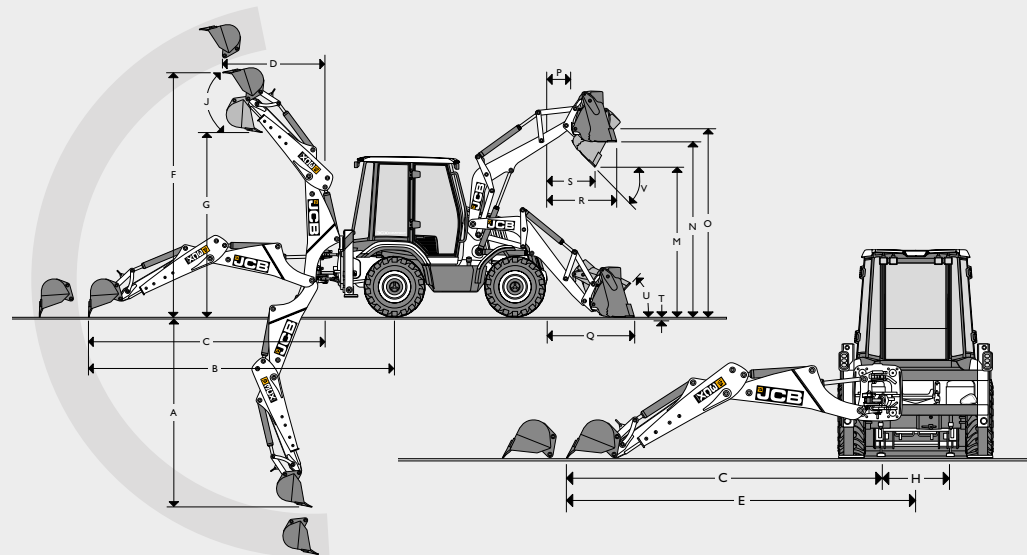
GROUND LINE ANGLES



A	Approach angle	degrees	45
B	Interference angle/ramp to ground plane	degrees	124.5
C	Departure angle	degrees	19

EXCAVATOR DIMENSIONS

			10ft Extradig m	12ft Extradig m
A	SAE max dig depth	m	Ext/Ret 3.75/3.07	4.36/3.38
	SAE 2ft flat bottom	m	Ext/Ret 3.72/ 5.05	4.27/3.38
B	Reach – ground level to rear wheel centre		Ext/Ret 5.79/5.18	6.43/5.81
C	Reach – ground level to slew centre	m	Ext/Ret 4.60/3.99	5.21/4.60
D	Reach – at full height to slew centre	m	Ext/Ret 1.92/1.46	3.17/2.71
E	Side reach – to centre line of machine	m	Ext/Ret 5.09/4.45	5.52/2.71
F	SAE operating height	m	Ext/Ret 4.45/4.05	4.97/4.57
G	Maximum loadover height	m	Ext/Ret 3.26/2.71	3.75/3.05
	SAE loadover height	m	Ext/Ret 3.20/2.47	3.69/3.29
H	Total kingpost travel	m	1.00	1.00
J	Bucket rotation	degrees	187	187



LOADER DIMENSIONS

		G.P. Shovel	6-in-1 shovel	Narrow G.P. shovel
		m	m	m
	Overall width with bucket	2.01	2.01	1.40
M	Dump height	2.17	2.35	2.38
N	Load over height	2.96	3.02	2.99
O	Loader hinge pin height	3.20	3.20	3.20
P	Pin forward reach	0.43	0.43	0.43
Q	Reach at ground (toe plate horizontal)	1.52	1.52	1.58
R	Max. reach at full height	1.16	1.16	1.22
S	Reach at full height fully dumped	0.64	0.79	0.82
T	Dig depth	0.15*	0.15*	0.15*
U	Roll back at ground	45°	45°	45°
V	Dump angle	45°	45°	45°
	Jaw opening width	-	0.7	-

*With quickhitch.



ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

BACKHOE LOADER 3CX COMPACT HIGHWAYS MASTER

Gross power: 55kW (74hp) Maximum flow rate: 120 l/min Weight: 8200kg

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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