

FASTRAC



A Product of Hard Work





**Fastrac commitment.
Changing the face of agriculture**

UNIQUE INNOVATION, COMFORT AND PRODUCTIVITY



We start by listening to you. You tell us you need greater productivity and performance to increase your earning power. We bring you the new generation Fastrac.

Not content to update existing models or concepts, we develop new solutions that meet your needs, now and in the future. No other agricultural machinery manufacturer shows a greater

commitment to this than JCB Agriculture. The Fastrac models surpass every other machine on the market. But it doesn't stop there. By continually challenging accepted knowledge, we will keep on developing more effective machines to overcome even more of the obstacles you face every day.

The Fastrac concept

1991 - Production of 100 Series Fastracs begins

1995 - Production of smaller 50kph 1100 Series Fastracs begins

1996 - Quadtronic 4WS introduced

1998 - Fastrac 2000/3000 Series replace 1100/100

2000 - Smoothshift oil-immersed wet clutch introduced

2001 - ABS braking* available on all ranges

2005 - Fastrac 8250 launched with 8.3-litre Cummins engine and V-TRONIC transmission

2006 - Fastrac 3200 and 3230 launched with 6.7-litre Cummins engine

2007 - Fastrac 2155 and 2170 launched

2008 - Fastrac 7000 Series launched, redefining one of the world's outstanding high-performance tractors

2010 - Fastrac 3000 Series Xtra launched, incorporating the P-Tronic transmission



Since it started production in 1991, the JCB Fastrac has been continually evolving to meet new market demands. However, the original Fastrac principles remain firmly intact:

Full suspension – The JCB Fastrac is still the only draught tractor with full front and rear suspension. This system not only offers unparalleled ride comfort for both the operator and implement, but also improves traction without the need to add dead weight.

Disc brakes – Any vehicle capable of high speed needs to be able to stop. Fastrac is no exception. With truck standard braking on all models you can be confident that you're going to stop when you need to, time and time again. The external disc brakes offer excellent heat dissipation and dramatically outperform the oil-immersed systems found on conventional tractors. The ABS system* offers unrivalled control in all conditions.

Full chassis construction – Another feature unique to Fastrac, this means that unlike a conventional tractor the engine and transmission are not stressed, load-bearing components.

All of the above, combined with mechanical power-assisted steering on the 3000 Series, 8250 and 7000 Series, allow Fastracs to travel at high-speed, up to 80kph where laws permit. In fact, in many territories the Fastrac is still the only true agricultural tractor legally capable of such high speed.

** Depending on territory*





Suspension and chassis

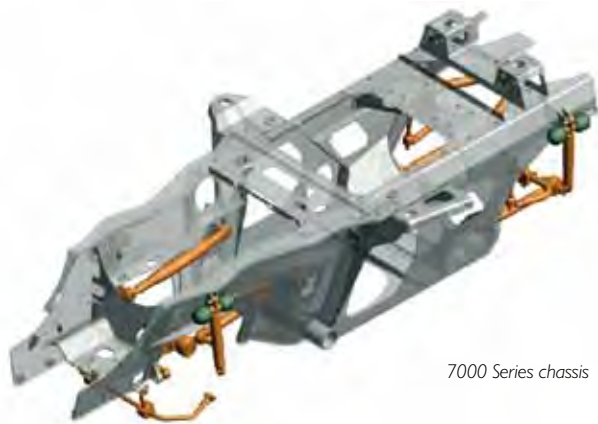
Full primary suspension system gives smoother ride increasing efficiency, eliminating power hop

'Z' section ladder-type chassis is extremely versatile, sculpted 7000 chassis gives tighter turning circles

Self-levelling rear (and front on 7000 Series) suspension maintains consistent ride height

Equal weight distribution provides reduced ground compaction and develops maximum traction

Side-to-side self-levelling and anti-roll bars improve handling, safety and stability



7000 Series chassis

The Fastrac's unique, vibration-free suspension system increases the efficiency of both operator and implements. Meanwhile, the dynamic axle mounting system ensures implements remain stable, isolated from jolts which can limit effectiveness. The result? Higher in-field operating speeds, greater productivity.

All Fastracs feature load-compensating, hydro-pneumatic, self-levelling rear suspension. First the chassis is lowered in relation to the rear axle as weight is applied. Then the ride height corrector valves allow oil flow in, pressurising the hydraulic cylinders and steadily restoring original ride height as well as increasing suspension stiffness to accommodate the extra weight on the deck.

As load is taken off the deck, ride height corrector valves are displaced in the opposite direction, restoring ride height to the pre-set level. So when water empties from a de-mount sprayer, for example, the suspension continually corrects itself, maintaining a constant height between spray nozzle and crop.

7000 Series machines also feature self-levelling front suspension, improving handling as front implements are raised and lowered. These machines maintain full suspension travel at all times, preventing nose-lowering when lifting heavy front implements.

The chassis design on the 7000 models supports this advanced suspension set-up, along with the large capacity rear axle with 9,100kg rear and optional 3,500kg front implement linkage systems. With a sculpted front profile, the new chassis also gives tighter in-field turning circles.

On all other Fastracs, you will find the fully welded, Z-section chassis is designed to cope with stress without excessive increase in weight. This makes it better suited to carrying implements on a number of mounting points than a more conventional, stressed heavy casting design.

Finally, heavy-duty front suspension (standard on 8250 and 3230, optional on 3200) incorporates the twin calliper braking system. On 3000 Series machines add to this optional heavy-duty rear suspension for an increase in gross vehicle weight of up to 12 tonnes depending on tyre equipment, whilst the 8250 has a standard GVW of 14 tonnes.





Braking system

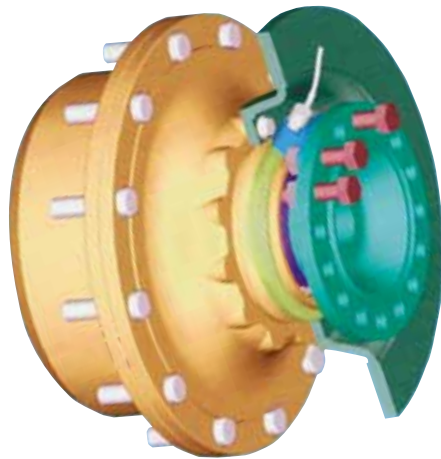
Full air-over-hydraulic brake actuation for precise, controlled braking

Anti-lock braking system (ABS)* gives superb safety, control and stability

Outboard disc brakes on all four wheels offer excellent cooling

Independent parking brake and full trailer equipment as standard

Split circuits result in additional safety for operator and machine



Hub and brake disc

EC truck braking standards are high, much higher than those for conventional tractors. But the Fastrac more than makes the grade.

Fastrac standard braking comes with large external disc brakes on each wheel and air trailer couplings. This safe, controlled, fade-free system benefits from excellent cooling offered by the large external disc brakes. Safety is further improved with air-over hydraulic systems split between front and rear axles. And as with a car, there's greater braking power on the front axle for full control even in an emergency stop.

Twin calliper brakes are fitted as standard to the 8250, 7000 Series and 3230 (optional on 3200). The extra performance offered by this system has been developed to provide even greater stopping power when working with increased loads.

To improve stability and control even further, and to comply with legislation*, JCB has overcome the problems of fitting ABS to an agricultural tractor, using proven technology from the truck world. However a slower reacting system has been utilised, in order to compensate for the larger diameter wheels.

Consequently, we now offer an anti-lock braking system for all Fastracs*, which uses a 4 sensor, 3-modulator system to provide constant monitoring of all wheels and independent control of the rear wheels. A high level of control is paramount as directional instability during braking is at its greatest on the rear wheels, but independent modulation gives confidence and control during braking.

All Fastracs fitted with ABS also feature a 12-volt trailer ABS supply socket, providing a power supply to a trailer ABS system that works independently of the tractor's system. Without a dedicated supply some agricultural trailers take the ABS power supply direct from the standard 7-pin trailer lighting socket; very often this can overload the wiring system.

Because ABS has evolved from cars and trucks, the perception is that it is only beneficial to the operator on the road and at high speeds. However, the Fastrac system also offers unprecedented control and stability in the field, giving you total piece of mind when working on grass or stubble as well as loose surfaces of dirt and gravel.

* Depending on territory





Engines

All Fastrac power units boast built-in fuel efficiency and reliability

500-hour service intervals and 5,000-hour top-end engine maintenance keep servicing to a minimum

Common rail and 4 valve per cylinder technology on 6.7 and 8.3-litre models gives you power when you need it

Non-stressed engine increases durability

All engines feature high torque rise to keep machines going in tough conditions



Cummins 8.3-litre engine

The first Fastrac to feature a Cummins engine was the 185 back in 1994. Over ten years later, all Fastracs are fitted with turbocharged Cummins engines utilising the latest technology to meet the ever-increasing demands of emission legislation, as well as offering improved fuel consumption.

All Fastracs feature Tier 3 compliant engines. The 8.3-litre unit on the 8250 features 4 valve per cylinder technology and air-to-air intercooling. This produces 248 DIN hp at 2,200rpm, with a maximum torque output of 1,179Nm right down at 1,200rpm, whilst producing over 1,100Nm of torque for over 65% of the engine's speed range.

The 2000 and 3000 Series machines feature a 6.7-litre engine, again utilising the 4 valve per cylinder technology and air-to-air intercooling. It also features over 95% of maximum torque at just 1,000rpm and a rear-driven geartrain which dramatically reduces external engine noise.

Both the 8.3-litre and 6.7-litre engines use a common rail fuel injection system that can operate at pressures of up to 1,600 bar and uses electronics to time the exact injection of the fuel. This very precise control not only improves the engines' performance but also their efficiency.

When it comes to servicing, Fastrac cooling systems are designed with cleaning access in mind. So cooling elements are laid out to allow access to each individual section, enabling removal of dirt and debris quickly and effectively.

All Fastracs also feature effective dust filtration of the engine's intake air. On the 2000 and 7000 machines, and the 8250, this is supplemented by a Donaldson Powercore system that uses centrifugal force to remove large dust particles before they enter the filter element, helping to reduce routine maintenance.

Finally, all Cummins electronic engines feature a management system that continuously monitors engine performance to help increase service life. Following an initial 100-hour service the engine oil and filters only need renewing every 500 hours, whilst top-end engine maintenance is only required every 5,000 hours.





2000 Series transmissions

Smoothshift clutch requires low driver effort and boasts excellent service life

Soft-engage differential locks provide true, 100% four-wheel drive traction

Selectronic allows pre-selection of required gear range and direction

Autoshuttle is an easy-to-use, effective alternative to the manual clutch pedal

Autoshift lets you make gear changes automatically, under any load conditions



Smoothshift clutch assembly

2000 Series machines all feature the Smoothshift transmission with Selectronic and Autoshift.

The Smoothshift system features a multi-plate, oil-immersed wet clutch. It requires exceptionally low driver effort, either with the clutch pedal or the Autoshuttle button.

Selectronic is another JCB first and, with its ability to combine range and direction changes, totally unique to us. In this technically simple system, speed range (High, Medium or Low) is pre-selected by twisting the steering column-mounted selector lever, while moving the lever forward or backwards selects machine direction. Actual engagement does not take place until the clutch pedal is fully depressed or the Autoshuttle button is pressed and travel speed has fallen to 3kph or less. This prevents inadvertent range or direction changes occurring at speed.

When compared to manual shifting, Selectronic and Autoshuttle both greatly improve operating efficiency, offering the ability, for example, to pre-select direction change when carrying out headland turns, leaving you free to concentrate on plough turnover or other implement adjustments.

The 6-speed gearbox on these machines features large torque capacity synchronisers, which make shifting through the gears easy, and priority flow lubrication for long-term reliability. The gearbox output is taken to a 3-speed range box, which also incorporates reverse and the four-wheel-drive clutch pack. An electronic control system helps to ensure smooth gear changes under load. Add in the Autoshift function and you can make these changes automatically under any load conditions.

Autoshift allows you to automatically select three different powershift ratios – snail, tortoise and hare – whilst on the move and under load. Autoshift also features 5 modes tailored to suit particular job types: trailer, ploughing, 540 PTO, 1000 PTO and user mode. The change points are directly linked to engine rpm and change the transmission ratios at different points on the rpm scale depending on specific requirements.





P-TRONIC transmission

24-speed, semi-powershift transmission achieves speeds up to 70kph and gives you the right gear for any application

6 powershift gears within 4 ranges ensure smooth, rapid up or down shifts under load

Super-finished gears minimise friction and maximise efficiency

Automatic modes allow the machine to select the most appropriate gear for the engine load and operation.

3 touchscreen-accessed transmission modes give you optimum machine performance



Designed and produced by JCB for the 3000 Series Xtra and 7000 Series machines, P-TRONIC is a 24-speed semi-powershift transmission which achieves speeds up to 70kph between fields. In the field the gearbox has the flexibility of a wide range of working gears no matter what the application.

The P-TRONIC gearbox makes use of the same multi-plate, oil-immersed wet clutch used in the JCB Smoothshift transmission. This gives smooth progressive engagement of drive, without use of the clutch pedal. Behind this sits the 6-speed powershift gears which offer a wide spread of shifts in each range enabling rapid up or down shifts under load. In addition an electro-hydraulic range selector provides swift access to the 4 ranges, allowing the operator to change through ranges with the press of a button or automatically on the road.

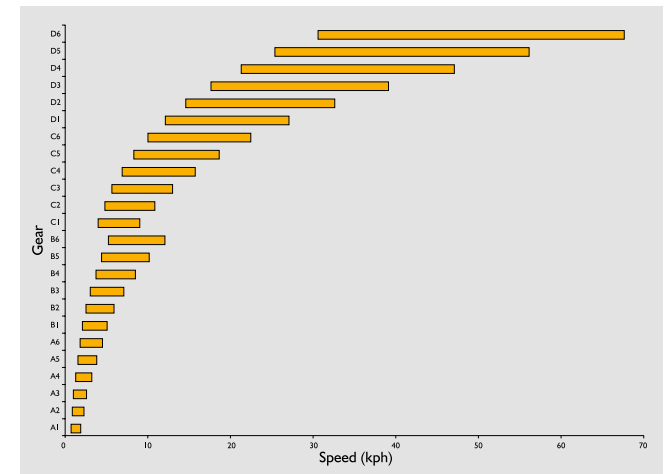
The short, compact design of the gearbox reduces weight and saves space, while super-finished gears minimise friction and maximise efficiency. P-TRONIC machines also feature CAN-BUS technology which communicates between the engine and transmission to allow the tractor to select the most appropriate gear for the engine load and operation.

There's no doubt that this is a powerful transmission designed to give you superb productivity and efficiency. But it's also extremely easy to operate, with a full-colour touchscreen mounted to the right of the operator giving access to the transmission modes. These three modes allow you to get optimum performance from the machine:

Powershift: gives the operator full control of transmission operation, using the seat-mounted joystick to shift up and down gears and ranges.

Autoshift: when working in the field the operator can set the required gears and the tractor will shift up or down the gears depending on conditions and engine load, whilst maximising fuel economy.

Drive: constantly assesses the engine load and speed, transmission status and position of the foot pedal and selects the appropriate gear. The intelligent transmission will automatically select the highest gear for optimum fuel economy, unless it senses the driver requires more power by the position of the throttle.



V-TRONIC transmission

Basic transmission operations are effortlessly controlled by joystick

Two transmission ranges tailor the machine to field operations and high-speed operations

Touchscreen allows you to easily tune the transmission to the task,

Four transmission modes give you optimum efficiency for each application

3 additional load-sensing modes help to refine machine operation for further efficiency



The V-TRONIC transmission has two ranges: one for field operations providing infinitely variable speeds from 0 to 40kph; and one for high-speed operations from 0 to 65kph. The range change is performed at the touch of a button. The V-TRONIC transmits mechanical power just like a normal transmission. But instead of lots of gears providing different speeds, the transmission uses a variable displacement hydraulic pump, two variable displacement hydraulic motors and epicyclic gear assembly to vary the speed infinitely. So you get the flexibility of a hydrostatic system with the power efficiency of a mechanical transmission.

The V-TRONIC transmission is controlled electronically, making it easy to operate using the joystick from the driver's seat. Plus, by allowing the transmission electronics to communicate with the engine electronics, the tractor can control both automatically if required. This helps achieve maximum performance or economy automatically. The transmission has a choice of four modes:

Drive: the transmission behaves like an automatic car, perfect for travelling between fields; just hit the foot throttle and go.

Manual: using the joystick controller the operator has full, extremely precise control of the transmission for maximum adjustability.

Powershift: the transmission emulates a traditional powershift with 15 forward/12 reverse 'gears' in low range and 10 forward/7 reverse in high range.

Flexi: the operator sets the engine speed and maximum forward speed that can be achieved. The foot throttle is then used to vary forward speed between zero and the maximum forward speed setting. Ideal for harvesting operations.

From these four modes it is possible to set one of the three load-sensing cruise controls:

Speed Hold Eco: maintains a consistent forward speed whilst continually trying to maximise fuel economy. The engine speed automatically varies between 1,600 and 2,000rpm depending on the load on the tractor. Developed for lighter-duty field applications where engine speed is not the priority.

Speed Hold Power: the same as above but this time the speed automatically



varies between 1,800 and 2,000rpm depending on the load. Developed for heavier-duty field applications again where engine speed is not the priority.

Revs Hold: maintains engine speed between the desired maximum and minimum engine speed to optimise productivity. If the engine speed drops below the desired setting the transmission automatically slows to allow it to recover. Once it has recovered the transmission accelerates up to the previously set speed. Developed for PTO and other applications where engine speed is critical.

Touchscreen control

Headland management makes even the most complicated operations simple

Joystick auxiliary control buttons are programmable via the touchscreen to suit your needs

Touchscreen design is easy to navigate for speed and clarity of use

Touchscreen allows you to select between transmission modes according to the application

Tractor functions can also be easily adjusted through the touchscreen



3000 Series Xtra, 7000 Series Fastracs and the 8250 all come with touchscreen control, putting you in complete charge of the P-TRONIC and V-TRONIC transmission features for the most efficient and productive machine operation.

The full-colour touchscreen features a simple, extremely easy-to-use layout which brings all of the controls into one location for added comfort and convenience.

Using the touchscreen you can also set up the following:

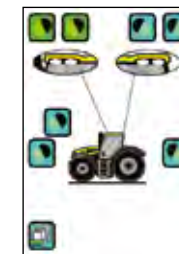
- PTO, four-wheel drive, differential locks and area meter cut-outs
- Joystick-controlled and auxiliary functions, including:
 - linkage raise/lower
 - spool valve operation
 - PTO engage/disengage
 - touchscreen configuration, language, brightness, etc
 - diagnostic information

- Worklights: simply select the required worklights on the screen and switch on and off with the master switch
- Hydraulic time and flow control: alters time and flow settings for each individual spool

Also accessible via the touchscreen is the headland turn assist, which allows the operator to program a sequence of up to 15 tractor operations to perform at the touch of a single button and includes the following:

- Ability to store up to five sequences for different operations
- Single-button activation, with a button on the joystick within easy reach
- Simple selection of functions: just press the function required on the touchscreen; there is no confusion with trying to record a number of functions
- Ability to insert, modify or delete functions during operation for maximum flexibility
- Ability to link functions together with a timing feature or to step through the process with a single button press
- Option to pause, restart and skip through sequence if necessary

So, with the simple touch of a screen, it's quick and easy to tailor the 8250, 3000 Series Xtra and 7000 Series Fastracs to whatever task you have to do.



Worklight set-up



Hydraulic flow and time set-up



Headland turn assist

Steering

JCB Quadtronic on the 2000 Series creates the only 4WS fully suspended draught tractor

Improved turning circle on 7000 Series enhances manoeuvrability

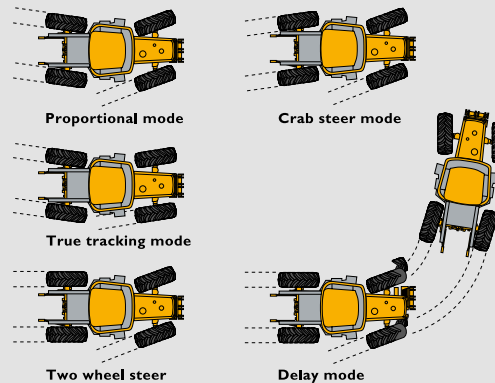
Power steering systems are responsive for precise control

Variable ratio steering on 8250 and 7000 Series gives both precise steering at speed and responsive headland turning

Compact dimensions allow you to manoeuvre in tight spaces



Five instantly selectable steering modes.



Modern farming is very demanding when it comes to machine manoeuvrability. You need more versatility and general efficiency, and thanks to Fastrac, that's exactly what you've got.

The Fastrac front suspension configuration has been designed to allow the tightest possible steer angle. You will be amazed at the turning performance you get from only two-wheel steer.

2000 Series Fastracs feature hydrostatic twin-ram steering to achieve maximum high-steer torque at the wheels with minimum driver effort. As for 3000 Series, 7000 Series and 8250 machines, because of the extra safety requirements of high-speed capability, they use a mechanical steering system with power assistance for superb driver feedback at any speed or on any ground conditions. To reduce driver effort further on the 7000 Series and 8250, an assistor ram complements the power steering.

Available on the 2155/2170, JCB Quadtronic has enabled this Fastrac model to become the world's only four-wheel-steer, fully suspended draught tractor. This unique, highly manoeuvrable system features the following steering modes, in addition to two wheel steer:

Proportional: the rear axle turns 1° for every 2° the front axle turns. This continues up to the maximum for each axle (20° for the rear, 40° for the front).

True tracking: the front and rear axles follow the same line for minimal ground marking and crop damage. Both turn simultaneously to 20° and because the front axle can then turn a further 20° (taking the axles out of true tracking but gaining a tighter turning circle).

Delay: featuring two stages of operation – four-wheel steer for tight turns and two-wheel steer whilst inter-row. The front wheels can be turned to 15° with the rear wheels remaining straight to ensure the back end, together with any trailed implement, doesn't swing into any parallel crop. Once 15° is exceeded, the rear axle begins to steer and reaches full lock simultaneously with the front axle.

Crab steer: useful on hillsides where inclines can cause the machine to slip sideways, and when spraying alongside a hedge where it is possible to move away without first swinging further into the hedge.

Hydraulics

High capacity (6,000 –10,000kg) rear linkages feature optional automatic stabilisers for added safety and control

High-output hydraulic systems are extremely responsive

Auxiliary services incorporate time and flow control (2000 Series Plus, 3000 Series Plus, 8250 and 7000 Series)

Proven Bosch Hitchtronic system helps maintain precise control

Optional electronic front linkage (3000 Series Xtra, 7000 Series and 8250) increases versatility

Power and precise control when you need them. Fastrac hydraulics ensure the operator always has the right option to hand, whatever the implements.

The 8250, 3000 Xtra and 7000 Series Fastracs feature a load-sensing variable displacement auxiliary hydraulic pump as standard, with class-leading optional* maximum flow of 210 litres/min. These machines boast big capacity, flow-on-demand hydraulics with 100- litre/min (or optional industry-leading 140-litre/min)* maximum outputs per valve.

The 2000 Series models feature fixed displacement auxiliary hydraulic pumps that develop at least 99 litres/min of flow. On all models, further hydraulic pumps provide oil for steering, suspension, PTOs and diffllocks.

All Fastracs can be fitted with three or four 4-position double-acting zero-leak spool valves, which feature a float position. Plus, a separate hydraulic system for auxiliary services means there is no danger of oil contamination. The 2000 Plus & 3000 Series Xtra, 7000 Series and 8250 also feature electronically controlled spool valves which let you adjust time and flow for automatic control of implements.

Optional on the 8250, 3000 Xtra and 7000 Series is the load-sensing power beyond connection, suitable for implements that use their own spool valve control blocks. This allows the valve block to automatically demand oil when required. When no oil is required the pump stops generating oil flow, saving fuel and wear, and preventing excessive heat generation in the hydraulic system.

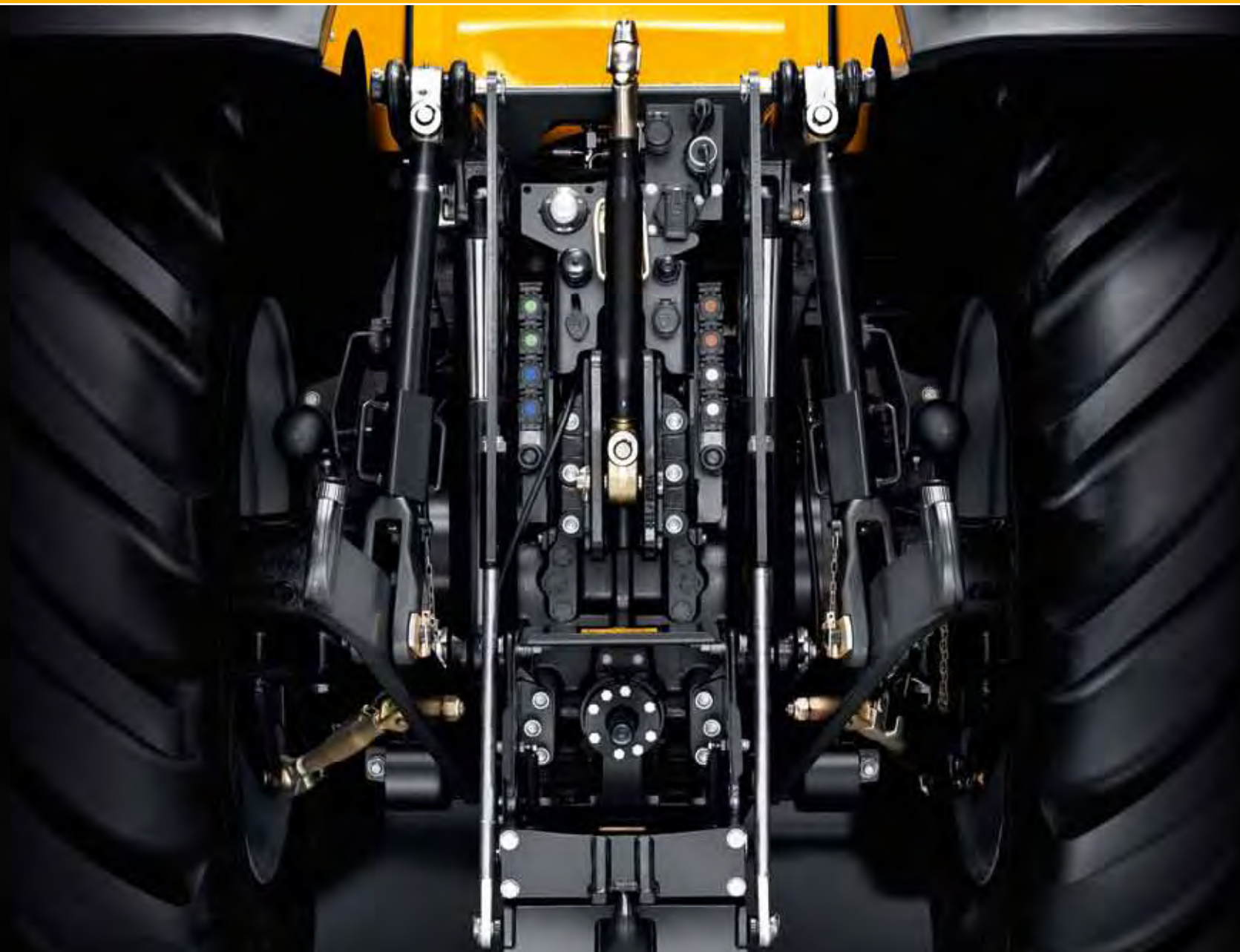
On the 2000 Series, there is also the option of a hydraulic flow divider. Ideal for powering the hydraulic motor on a drill or a sprayer, this gives an uninterrupted, accurate hydraulic feed to any implement of up to 90 litres/min.

The rear linkage on all Fastracs uses Bosch Hitchtronic digital sensing to help maintain precise control of implement height, depth, lowering speed and general response. Plus, wheel slip control is available with the optional performance monitor, allowing maximum progress to be achieved even in the toughest conditions.

All Fastrac models are now available with a category 2 front linkage, on the 3000 Series Xtra, 7000 and 8250 this also has the luxury of electronic controls, with both single and double actuation at the flick of a switch, as well as height, depth and linkage operating speed controls.

** 7000 Series and 8250 only*





3000 Series interior

Two full-size seats as standard, plus optional deluxe heated air suspension driver's seat, help minimise fatigue

Ergonomically designed controls are positioned for maximum convenience

Excellent all-round visibility improves operation and safety

Electronic foot and hand throttles reduce in-cab vibration

Air conditioning, excellent ventilation and powerful heating enhance operator comfort



Deluxe heated air suspension seat

When you put such a spacious, well-appointed cab onto a fully fledged suspension system, you not only get an extremely comfortable operator environment... you also get a genuine head start when it comes to productivity.

Thanks to our suspension system, conventional tractors simply cannot compete with the Fastrac on comfort and control. Every Fastrac cab comes with two full-size seats as standard; the optional deluxe heated suspension seat would be at home in a luxury saloon. Air conditioning fitted as standard, excellent ventilation and a powerful heater add to operator comfort. And even in dry environments, a full dust filter provides clean fresh air.

Sophisticated, informative and easy to use, the ergonomically designed controls are all positioned for maximum convenience. On all machines, the JCB Electronic Monitoring System (EMS) provides an easy-to-understand performance assessment of numerous machine functions to keep the operator up to date with machine productivity. In addition, an optional performance monitor displays fuel consumption, wheel slip and area covered, allowing the operator to maximise fuel economy and minimise tyre wear.

For enhanced operator comfort, the cab is isolated from the chassis by four flexible mountings to reduce noise (to as low as 72dBa) and transmission vibration. Doors are fitted at both sides, and well-positioned steps and rails make entry and exit easy and safe.

Visibility is also excellent. The main area of the front screen is laminated glass, with toughened glass lower screens giving a view of the front wheels and front-mounted implements.





7000 and 8000 Series interior

Industry-leading cab with superb legroom and storage

Air-suspension seat (with optional heating) and fully automatic, programmable climate control keep the operator comfortable

Seat-mounted control panel, touchscreen and slimline instrument panel are all positioned for maximum convenience

Options including headland management and performance monitor let you obtain optimum performance

Four-post design, large glass doors and larger windows give unsurpassed visibility

The industry's finest cab, designed, engineered and manufactured by JCB. That's what you will now find on 7000 Series machines and the 8250, encouraging maximum productivity by keeping fatigue well and truly at bay.

This all-new cab is the largest and most comfortable available. Bar none. It provides incredible legroom and more space for storing all the tools and equipment you need for a day's ploughing, cultivation or sowing. For the operator, there is an incredibly comfortable air-suspension seat with a seat-mounted control panel and touchscreen monitor keeping all operations conveniently close to hand. Fully automatic climate control allows you to set the desired temperature which the system then works to maintain. Plus there is Fastrac's unique full-size passenger seat.

Ahead of the operator sits a new slimline instrument panel with a combination of digital and quick-glance-analogue readings of key machine status information, plus an array of essential warning lights. Back on the armrest, operators can enjoy some of those little essentials of modern life, such as an MP3 player connection and mobile phone charge point.

Option packs also give customers the chance to personalise their machine and further enhance performance, by adding, for example, a performance monitor, headland management system, additional work lights, heated front and rear windscreens, driver's seat and electric mirrors, and a refrigerator for a little refreshment during long working days.

This advanced new cab also maximises visibility, with a four-post instead of six-post design that eliminates side pillars, along with deeper doors and larger windows, giving a clear all-round view of implements, terrain and potential obstructions. At night, new optional Xenon worklights illuminate the surrounding area for longer potential working hours.

Visibility has also been optimised by positioning the exhaust stack alongside the right-hand cab pillar. Plus, mounting the stack on the tractor chassis alone, with no brackets or other supports, helps to reduce noise and vibration to exceptionally low levels.

Quite simply, no other cab helps minimise fatigue so effectively, giving the operator every chance to make full use of the immense potential at his fingertips.







Engine

Powerful Cummins 6.7 litre common-rail engine in 165hp (123kW) and 178hp (133kW) variants.

641Nm or torque on 2155 and 675Nm on 2170.

Easily serviceable cooling pack.

Single piece bonnet for service and maintenance access.

330 litre fuel tank enables long days without refilling.

Front linkage/PTO

Optional 2500kg front linkage.

Optional front single 540/1000rpm PTO.

Wheels and tyres

5 stud equal sized wheels.

High speed rated tyres.

*ABS braking system for highest safety.

Optional Pirelli 600/65R28 tyres.

Chassis

Unique front and rear axle suspension with hydro-pneumatic rear self-levelling.

Robust endurance-tested steel structure.

External disc brakes.

ABS braking system.*

High quality powder-coated paint finish.

Optional Quadtronic 4WS for tight headland turns.

Cab and controls

Large spacious cab.

Air conditioning as standard.

Air suspended drivers seat.

Full size passenger seat.

Large opening doors.

Excellent all round visibility.

LCD digital dash panel.

Left hand Autosuttle lever.

Adjustable steering column.

Hydraulics

99 l/min flow rate.

Electronic spool valve option with flow and time control.

Hydraulic oil separate from transmission.

4 hydraulic services available to the rear.

Rear linkage/PTO

6000kg rear lift capacity.

540 and 1000rpm rear PTO.

Transmission

54 forward 18 reverse-speed Smoothshift 60kph* transmission.

Gear changes in response to engine load with Autoshift.

Max trac and no-spin differential options.

* Depending on territory



Engine

6.7 litre Cummins Common-rail engine in 193hp (144kW) and 220hp (164.2kW) variants.

Easy to clean folding cooling pack.

Single piece bonnet for service and maintenance access.

350 litre fuel tank enables long days without refilling.

Powerboost feature for greater productivity in transport applications.

Front linkage/PTO

Optional 3500kg front linkage.

Optional front single 540/1000rpm PTO.

Wheels and tyres

High speed rated tyres.

*ABS braking system for highest safety.

Equal size tyres give low rolling resistance.

Chassis

Unique front and rear axle suspension with hydro-pneumatic rear self levelling.

Z section ladder chassis.

External disc brakes.

ABS braking system*.

High quality powder-coated paint finish.

Cab and controls

Mid-mounting of comfort provides unrivalled comfort.

Air suspended drivers seat with ergonomic armrest controls.

Full size passenger seat.

Adjustable steering column.

Air conditioning as standard.

Hydraulics

Oil flow up to 132 l/min

Hydraulic oil separate from transmission.

4 hydraulic services available to the rear.

Electric spool valves with on screen flow and time controls.

Rear linkage/PTO

Up to 8000kg rear lift capacity.

540 and 1000rpm rear PTO.

Transmission

P-TRONIC transmission for effortless, clutch-less gear shifts.

Full colour touch screen control.

Intuitive joystick control.

Automatic control for optimum performance.

80kph maximum speed*.

* Depending on territory



Engine

Light action, easy open bonnet provides excellent access for service and maintenance.

Powerful Cummins QSB6.7 common rail engines with exceptional torque back-up.

Front linkage/PTO

Optional 3500kg front linkage.

Optional single front PTO.

Wheels and tyres

Large rear tyres for maximum traction.

*ABS braking system for highest safety.

Wide range of tyre options.

Chassis

Improved weight distribution and reduced compaction from full chassis design.

Sculpted, laser profile cut design allows wheels to tuck in tight against chassis.

Self levelling front and rear suspension.

Cab and controls

Forward biased cab with slim line dash for optimal visibility and comfort.

Air suspended drivers seat with ergonomic armrest controls.

Full size passenger seat.

Fully automatic climate control as standard.

Optional heated front and rear screens and electrically adjustable and heated mirrors.

Touch screen control

Colour touch screen controlling hydraulic, transmission and electronic functions of the tractor.

Clear layout for ease of operation.

Headland management system for control of repetitive functions.

Hydraulics

Oil flow of up to 210 l/min.

Up to 9100kg rear lift capacity.

Electric spool valves with on screen flow and time controls.

Transmission

P-TRONIC transmission for effortless, clutch-less gear shifts.

Full colour touch screen control.

Intuitive joystick control.

Automatic control for optimum performance.

70kph maximum speed*

** Depending on territory*



Engine

Powerful 248 DIN hp (rated speed).

1100 Nm of torque across 65% of speed range.

Peak of 1179 Nm of torque.

600-litre fuel tank enables long days without refilling.

Wheels and tyres

Larger rear tyres for excellent rear axle load capacity.

Near 50/50 weight distribution maximises tyre performance.

ABS braking system for highest safety.

All tyres speed rated for 70kph.

Suspension

Unique full suspension system.

Front coil spring and damper suspension.

Rear hydro-pneumatic, self-levelling suspension with ride height control.

Suspension improves traction and offers class-leading comfort.

PTO

540/1000rpm or 540E/1000rpm rear PTO options.

1000rpm front PTO.

Cab

Mid-mounting of cab provides unrivalled comfort and visibility.

Air-suspended driver seat.

Full size passenger seat.

Low noise and vibration levels.

Air conditioning as standard.

Optional heated front and rear screens, and heated and electrically adjustable mirrors.

Touch-Screen Control

Colour touch-screen used to control transmission and auxiliary functions.

Allows tractor to be easily set up for specific tasks.

Intuitive operations are easy to learn.

Clear layout for ease of operation.

Hydraulics

Precise control of all functions.

Max oil flow of 210 l/min.

Hydraulic oil fully independent of transmission.

Ability to program joystick to control hydraulic functions.

Electronic spool valves with flow and time control.

10,000kg rear lift capacity.

JCB V-Tronic CVT transmission

2 range continuously variable transmission.

Operation modes include Drive, Manual, Powershift, Flexi, Revs and Speed Holds.

Easy-to-use directional control joystick.

Highly adaptable to specific operations via colour touch screen.

69kph maximum speed*

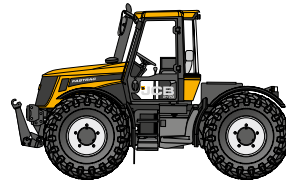
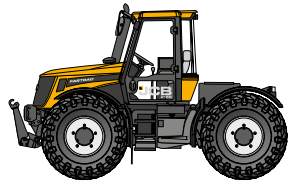
* Depending on territory

2155

2170

3200 XTRA

3230 XTRA



Engine type	Cummins QSB6.7	Cummins QSB6.7	Cummins QSB6.7	Cummins QSB6.7
Gross power @ rated speed (SAE J1995) hp (kW)	160 (119) @ 2200rpm	170 (127) @ 2200rpm	193 (144) @ 2200rpm 220hp** (for transport)	220 (164.2) @ 2200rpm 260hp** (for transport)
PTO hp (kW)	137 (102)	147 (110)	168 (125.3)	190 (141.7)
Weight kg (lb)	6,845 (15,091)	6,845 (15,091)	7,590 (16,733)	7,590 (16,733)
Max torque @ engine rpm Nm	641 @ 1500rpm	675 @ 1500rpm	931 @ 1500rpm	949 @ 1500rpm
Maximum rear lift capacity kg (lb)	6,000 (13,230)	6,000 (13,230)	8,000 (17,640)	8,000 (17,640)
Auxiliary hydraulics @ rated speed l/min	99	99	132	132
*Road speed kph (mph)	60 (37)	60 (37)	65/80 (40/50)	65/80 (40/50)
Brakes (territory dependant)	ABS	ABS	ABS	ABS
Fuel tank capacity litres	330	330	350	350
Hydraulic tank litres	120	120	120	120
Transmission	Smoothshift Selectronic	Smoothshift Selectronic	P-TRONIC	P-TRONIC

* Territory and tyre equipment dependant ** Only in gears D5/D6

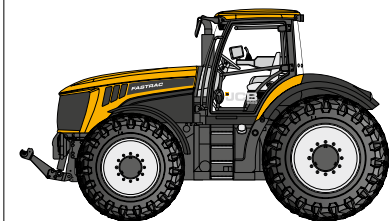
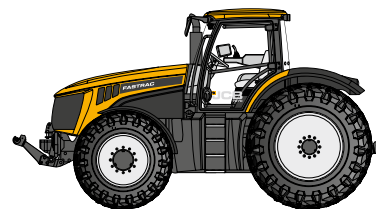
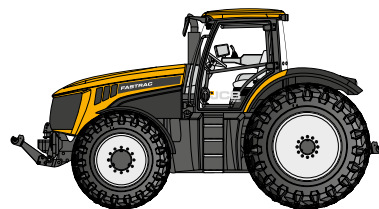
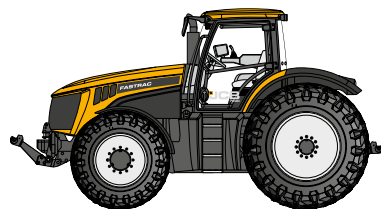
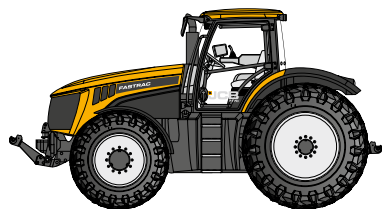
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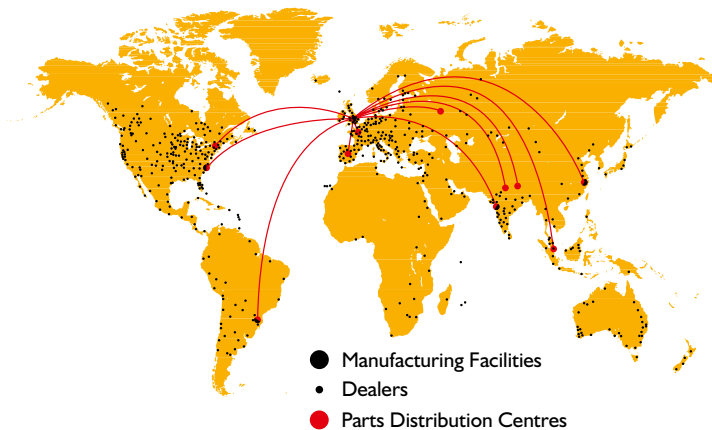
8250



Cummins QSB6.7	Cummins QSB6.7	Cummins QSB6.7	Cummins QSB6.7	Cummins QSC8.3
173 (129) @ 2200rpm	193 (144) @ 2200rpm	220 (164) @ 2200rpm	260 (194) @ 2200rpm	260 (194) @ 2200rpm
150 (112)	177 (132)	203 (151)	238 (177)	225 (168)
9,150 (20,172)	9,150 (20,172)	9,150 (20,172)	9,150 (20,172)	10,135 (22,345)
799 @ 1400rpm	931 @ 1400rpm	949 @ 1500rpm	990 @ 1500rpm	1179 @ 1200rpm
9,100 (20,062)	9,100 (20,062)	9,100 (20,062)	9,100 (20,062)	10,000 (22,045)
132 or 187	132 or 187	132 or 187	132 or 187	132 or 187
70 (44)	70 (44)	70 (44)	70 (44)	65/69 (40/43)
ABS	ABS	ABS	ABS	ABS
430	430	430	430	600
130	130	130	130	180
P-TRONIC	P-TRONIC	P-TRONIC	P-TRONIC	V-TRONIC

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 Dieselmox engine. Having grabbed the headlines when it smashed the world diesel 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.

At the heart of this is a dedication to minimising machine downtime. So our state-of-the-art World Parts Centre dispatches more than a million genuine parts and attachments every week, with an 'Anywhere in 24 hours' strategy. Our JCB-trained technicians provide excellent, expert customer care, whether it's routine servicing or something more urgent. And we are constantly looking at new, innovative ways to help you get the most out of your machine.





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Download the very latest information on this product range at: www.jcb.com

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