

New loadall advances boost productivity and ease of use

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JCB – the world's number one manufacturer of telescopic handlers – will unveil an array of new developments to its Loadall range at Agritechnica 2015, including its innovative Tier 4 Final engine strategy and improvements to two popular Agri models which will boost productivity and performance and make them easier to use.

The first JCB telehandlers for European markets with the new engine are the 531-70, 536-60, 536-70, 541-70 and high-lift 535-95; and the high productivity 550-80 and 560-80 bulk handling telescopes. Also at Agritechnica 2015 JCB will unveil a package of enhancements to the 526-56 and 527-58 Agri models.

JCB Agriculture MD Richard Fox-Marrs said: "Agritechnica is a key date in the industry calendar and we are delighted to be showing some of the innovative developments to our Loadall product, which is the world's biggest selling agricultural telescopic handler."

Innovative Tier 4 Final strategy (531-70, 536-60, 536-70, 541-70, 535-95, 550-80, 560-80)

The introduction of the new engine will build on the success of the highly efficient JCB EcoMAX T4i engine that is in use in many JCB machines. EcoMAX engines in Agri Loadalls will meet stringent Tier 4 Final/Stage IV emissions legislation using a compact, highly efficient SCR system for NOx reduction.

JCB's Tier 4 Final/Stage IV solution for Agri Loadall engines will offer:

- **Easy installation without affecting visibility or machine size**
- **A compact one can SCR exhaust solution**
- **The ability for JCB dealers to de-emissionise for the used equipment market outside regulated territories**

'One Can' SCR Solution

Agri Loadalls with 109hp, 125hp and 145hp (81kW, 93kW and 108kW) will feature a compact selective catalytic reduction (SCR) unit with a Urea-based additive, incorporated into a single exhaust muffler inside the bonnet, replacing the existing exhaust silencer which is outside the bonnet. This ensures that JCB Loadalls

retain their excellent all-round visibility and ease of serviceability.

Smart Hydraulics package

The Tier 4 Final machines will also be boosted by the new option of high flow auxiliary, improving performance and output of hydraulically demanding attachments such as straw spreaders and silage clamp defacers – max flow is increased to 105 l/min @ 190 bar pressure.

In addition, the Agri Super models will now come as standard with a seat-mounted servo joystick which moves up and down with the seat. This will also be an option on the Agri Plus models.

These new features enhance further the recently-introduced Smart Hydraulics package that brings improved productivity and fuel economy by allowing faster boom operation at lower engine speeds. JCB's unique regenerative hydraulics system improve cycle times by up to 20 %, while delivering a 15% reduction in the amount of fuel used to move the same amount of material.

Also part of the Smart Hydraulics package are end-of-stroke damping on boom lift and retraction, and a new 'auto' mode for the boom's Smooth Ride System (SRS). With 'auto' selected, SRS disengages when the handler is stationary and automatically re-engages when the machine moves off.

The Bucket Control System eliminates the need for an operator to make repeated joystick movements to shift sticky materials from a grab or bucket, to meter grain from a bucket with precision or to progressively shake grass or maize from a fork on a silage clamp. When engaged, it emulates the operator's manual shaking action, with sideways deflection of the joystick determining the intensity of movement of the attachment.

Changing attachments is also easier thanks to an auxiliary hydraulics venting valve, operated by a button in the cab.

Upgraded 526-56 and 527-58 Agri models

A package of enhancements introduced on the 526-56 Agri and 527-58 Agri will bring operators improved performance, productivity and ease of use.

The 526-56 now features as standard a four-speed powershift torque converter transmission with a top speed of 33kph (20kph in Germany), along with handy forward/reverse selection on the boom control joystick. The selectable two- and four-wheel drive, which improves efficiency and reduces tyre wear during road journeys, is also now standard specification. There is also a 40kph powershift option.

Transmission disconnect is another new feature on the 526-56. It disconnects the transmission when the foot brake is applied, enabling the operator to easily balance driving force and hydraulics for optimum breakout, material handling and hydraulic performance – ideal for getting a full forkful of manure when cleaning out a cow barn.

The two-range hydrostatic drive transmission in the 527-58 now features Vari-Speed as standard, which can be used by the operator to set engine revs and travel speed independently – especially useful when operating a sand or sawdust dispensing bucket and similar equipment requiring a generous and consistent flow of oil to a drive motor.

Both machines also feature new counterbalance valves – in the boom-retract and attachment-dump hydraulic functions – improving response, speed of service and efficiency of the re-handling cycle.

Added refinement, comfort, control

Other new upgrades improve the refinement of the 526-56 and 527-58 to give the operator a more comfortable and more enjoyable experience at the controls – after all, a comfortable, confident operator is a more productive operator.

End-of-stroke cylinder damping for boom retraction has the added benefit of minimising spillage of loose materials; changes to the braking system on the 526-56 improve pedal ‘feel’; and improvements to the hydraulic system of both machines result in sharper, more positive responses to control inputs using the single lever servo joystick.

As before, the joystick and the auxiliary switches operate the boom and front-end attachments proportionally to give the operator total control for precise, confident loading and placement. Now it has the added feature of JCB’s unique Bucket Control System, which can be used to shake the attachment without having to make repeated joystick movements – helpful when discharging sticky materials from a grab, progressively dropping grass or maize from a fork or emptying a grain bucket with precision. Bucket Control System emulates the operator’s manual shaking action, with the amount of shake determined by how far sideways the joystick is moved.

When it comes to changing attachments, the new venting valve for the auxiliary hydraulics – operated by a button under the step – makes this possible with the engine running, when it is safe to do so.

A new LED lighting option front and rear, plus worklights mounted on the boom give brighter illumination all around the machine.

Source: wyynot GmbH; JCB