

Small-Chassis D Series Loaders Feature Sealed Cab, More Powerful Engine, Available Intelligent Leveling System, and Advanced Display

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Four new D Series small-chassis models are the latest additions to the Cat® compact track loader (CTL) and skid-steer loader (SSL) ranges: SSL models 226D and 232D; and CTL models 239D and 249D—all incorporating the design innovations of larger D Series machines, including a sealed/pressurized cab, electro-hydraulic controls, redesigned lift arms, premium seat choices, and optional Advanced Display (available with rear-view camera). All use an electronic Cat C2.2 engine that meets Tier 4-Final/Stage IIIB emissions standards.

The 232D is designed with agricultural applications in mind, and the 239D and 249D are engineered as strong contenders in the general construction and rental markets. The 239D, with its suspended steel-embedded rubber track, replaces the 247B3 Multi-Terrain Loader (MTL) and delivers lower owning and operating costs for machine owners not requiring the capabilities of the rubber-wheeled, softer track system of the MTL. Further advantages of the new small-chassis SSL models include a two-speed drive system with a top speed of 11 mph (18 kph) for the 226D and 232D and for the CTLs operating weights of less than 8,000 pounds (3 630 kg) for the 239D and 249D, allowing transport without a Commercial Driver's License.

The radial-lift 226D and vertical-lift 232D have standard rated operating capacities (ROC) of 1,550 and 1,850 pounds (703 and 840 kg), respectively, increasing to 1,650 and 1,950 pounds (748 and 885 kg) with the optional counterweight. The radial-lift 239D and vertical-lift 249D have standard ROCs of 2,050 and 2,300 pounds (930 and 1 043 kg), which the optional counterweight increases to 2,250 and 2,500 pounds (1 020 and 1 134 kg).

The 67-horsepower (50 kW) C2.2 engine uses a high-pressure/common-rail fuel system, direct fuel injection, and a maintenance-free diesel oxidation catalyst as the only required exhaust aftertreatment. The new small-chassis models have 10 percent more horsepower, 10 percent more torque, and deliver a 14-percent increase in fuel efficiency, compared with predecessor models. A demand fan is standard, ensuring optimum cooling and reduced horsepower draw.

New cab

The D-Series cab (Cab One) is completely modular and self-sealing, leaving no part of the cab attached to the chassis when the cab is tilted. A redesigned HVAC system supplies 20 percent more airflow and an approximate 50-percent increase in heating and cooling rates.

The standard control monitor has a single-code security feature to deter theft and unauthorized operation. The Advanced Display monitor expands security (operator) codes to 50 and can store and recall operating preferences for each code, allowing individual operators to tailor the machine to experience level and application. Preferences include response rates for the hydrostatic drive and implement-hydraulic systems, as well as settings for ride-control, creep speed, and top-speed limit. A master code allows review of operator-specific machine information, including hours of operation, fuel burn, operating events, and diagnostic codes.

Intelligent self-leveling

The new small chassis D Series models feature the available Intelligent Leveling system that includes dual self-leveling, electronic snubbing, return-to-dig, and work tool positioning.

The dual self-leveling system electronically and automatically levels the loader linkage when raising and lowering the lift arms, assisting with optimum material retention when loading trucks or using forks.

Electronic snubbing automatically cushions the descent of the lift arms, slowing downward motion as the arms reach the stops.

The return-to-dig feature allows the operator to set the digging angle of the bucket and then to automatically recall the setting by depressing a trigger switch on the joystick as the lift arms lower. The work tool positioning feature allows the angle of the tool to be pre-set, as when positioning a trencher for the proper depth, and then to automatically recall the setting if the machine is repositioned. Both features contribute significantly to productivity.

Lift arms, coupler, track choices

Lift arms for all D Series machines are a tubular design that provides optimum lift characteristics and strength, while presenting a narrower profile. The lift-arm design enhances sight lines to the sides of the machine, tires, and to the work-tool/coupler interface.

The available automatic work-tool coupler is electrically actuated, replacing the previous hydraulically actuated coupler. The new coupler is simpler in design, eliminates hoses and connectors, and is easier to install in the field. An available high-flow auxiliary-hydraulic system provides flows to 26 gpm (97 L/min.) and

pressures to 3,336 psi (23 000 kPa). Both standard and high-flow auxiliary systems use connect-under-pressure quick disconnects.

The new CTL models are equipped with a suspended undercarriage and are available with standard, 12.6-inch-wide (320-mm), block-tread tracks or optional 15-inch-wide (400 mm) tracks with a wide-bar tread that provides low ground pressure, minimal ground disturbance, added flotation, and more traction in snow.

Serviceability

The new models feature ground-level access to all routine service points, including filters, battery, and engine-oil fill and check points. The air conditioner condenser is mounted to the inside of the engine compartment door and is easily accessible for cleaning or service.

The new models also feature an electric priming pump with automatic air bleed for the fuel system, easing the task of replacing and priming the fuel filter/water separator. For added safety, a dead-engine/boom-down actuator is repositioned for easier access, the boom arms incorporate a one-person safety brace, and a battery disconnect is optional.

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