

460 P

Articulated Dump Truck



JOHN DEERE





460 P-TIER ARTICULATED DUMP TRUCK

BUILT FOR THE WORK YOU DO

To design our P-Tier Articulated Dump Trucks (ADTs), we spoke with the experts — equipment owners and operators just like you. Through Customer Advocate Groups, you told us exactly what you need in an ADT. We listened and responded with the new JD14 engine. Quiet, pressurized cab with rear-camera display. Onboard diagnostics that help keep operators in the know and on the go. Ground-level serviceability. And options like Advanced Vision System, automatic temperature control (ATC) system, and onboard payload weighing. The 460 P-Tier ADT is purpose-built with the productivity of your operation in mind.



FEATURES

Body of work

Redesigned, wider dump body than previous models boosts material retention and lowers loading height and center of gravity, improving cycle times in quarry and aggregate applications. Bin rail with angled top lessens material spillage during travel. Reduced transport width of under 12 feet eases moving between jobsites.

Power performer

Designed for reliability and streamlined routine service, the fuel-efficient John Deere JD14 engine features a high-pressure, common-rail (HPCR) fuel system.

Rugged and reliable

Robust machine sensors and simplified routing of electrical harnesses and hydraulic hoses improve reliability. Reduction of hose length and number of connections — 10-percent fewer than E-Series models — minimizes system complexity.

Always aware of what's there

Optional John Deere Advanced Vision System (AVS) increases the operator's field of view to potential jobsite hazards, enhancing awareness and navigation of busy work areas. AVS includes digital cameras mounted in the front grille and on the mirror bows that display on a trio of dedicated in-cab monitors. Integrated with the ADT's articulation, mirror-bow cameras automatically pan to adjust the view.



OPTIONAL NEW
**ADVANCED
VISION SYSTEM**
BOOSTS JOBSITE VISIBILITY



FEATURES

Cab comforts

Quiet, pressurized cab features an easy-to-read monitor and rear-camera display plus optional automatic temperature control (ATC) system that allows operators to simply select a desired temperature to get and stay comfortable. Standard high-back air-suspension seat adjusts multiple ways for all-day support. Or opt for the premium heated/ventilated seat with heavy-duty air-suspension and adjustable seat pan.

Strong for the long haul

High-alloy-steel dump body and chassis deliver exceptional strength and rigidity without adding excess weight. Heavy-duty, purpose-built axles are lubricated, filtered, and cooled, for longer life.

See clearly now

Opt for the LED lighting package for extra illumination. LED drive lights deliver twice the lumen output of standard halogens and include additional worklights three times as bright as optional halogens. This option provides a total of 11 LED lights. Stairway lights are push-button operated from inside the cab and also at ground level.

The weight of the matter

Calibrated at the factory, optional onboard weighing system displays payload weight on the in-cab monitor during loading, with real-time load and tonnage data transmitted via JDLink™. Access to accurate payload values removes the guesswork from daily production levels, increasing uptime and efficiency.

Take a load off

When enabled through the monitor, the operator can limit the percentage the rear chassis is off-level when unloading. If the limit is exceeded, the dump body will not raise and a message will appear on the monitor instructing the operator to reposition the ADT.

Hit the ground running

A Deere exclusive, all daily checks and periodic service are accessible from ground level, including refills of fuel and diesel exhaust fluid (DEF). Optional factory-installed auto lube is electrically powered and integrated with machine diagnostics to help simplify daily maintenance.

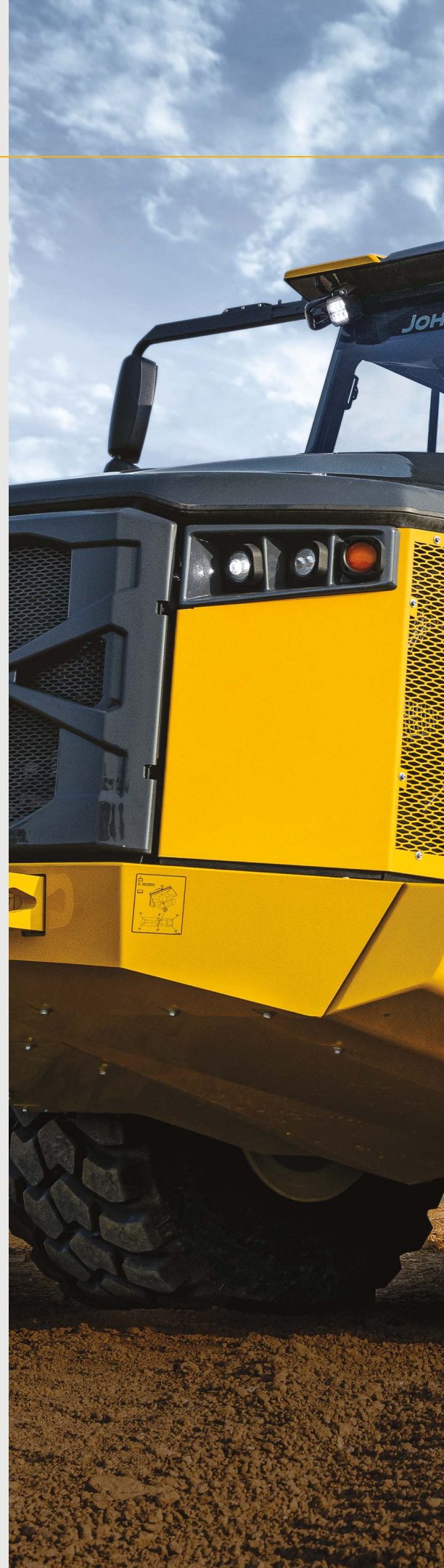
The safety factor

When the dump body is fully upright, the safety bar locks it to the main-frame and disengages the hydraulics, for secure servicing. Optional rear camera with choice of display enables operator visibility to obstacles in the path of the ADT while backing up. When activated, standard auto horn automatically sounds when the ADT is started, moves forward or in reverse, or changes direction, to comply with Mine Safety and Health Administration regulations.

Connected machines

John Deere construction equipment comes with in-base connectivity — free from subscriptions or annual renewals. Analyze critical machine data, track utilization, review diagnostic alerts, and more from **the John Deere Operations Center™**. The Operations Center also enables John Deere Connected Support™, which uses data from thousands of connected machines to proactively address issues before they arise. With your approval, your dealer can also remotely monitor machine health, diagnose problems, and even update machine software without a trip to the jobsite.*

* Availability varies by region and product. Options not available in every country.





460 P-TIER ARTICULATED DUMP TRUCK

GET ONBOARD

WITH OWNER AND OPERATOR SETTINGS

When enabled through the monitor, these standard onboard features help optimize operator focus and productivity:

- **Rollover protection** alerts operators to unsafe dump angles and stops the dump cycle.
- **Downhill dump protection** automatically calculates ADT position so the dump body doesn't move over-center when emptying downhill.
- With **brake with auto dump** enabled and driveline assist activated, the service brakes latch during unloading.
- With **hill hold**, the service brakes automatically apply when the ADT is stopped on an uphill slope and the operator's foot moves from brake pedal to throttle, preventing backward machine rolls.
- If dumping is stopped before the bin is fully empty, **dump body down protection** slowly lowers the bin to the frame.
- With **shuttle shifting**, the transmission may be shifted without the ADT coming to a stop, improving cycle times and eliminating operator abuse.
- **Descent control** helps regulate ADT speed when driving down a descent through automatic use of the transmission retarder.
- **Dump-body limits** can restrict maximum dump height when low overhead obstacles are encountered.
- **Transmission warmup** automatically begins at ADT startup, improving ride, shift quality, and daily productivity.
- Maximum **speed limit** can be set to match jobsite conditions or requirements, reducing operating complexity.

460 P-TIER ARTICULATED DUMP TRUCK SPECIFICATIONS

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Engine		460 P-TIER		
Manufacturer and Model	John Deere JD14		John Deere JD14	
Non-Road Emission Standards	EPA Final Tier 4 (FT4)/EU Stage IV		EPA Tier 3/EU Stage IIIA	
Valves per Cylinder	4		4	
Displacement	13.6 L (830 cu. in.)		13.6 L (830 cu. in.)	
Net Peak Power (ISO 9249)	371 kW (498 hp) at 1,700 rpm		371 kW (498 hp) at 1,700 rpm	
Net Peak Torque (ISO 9249)	2559 Nm (1,887 lb.-ft.) at 1,300 rpm		2559 Nm (1,887 lb.-ft.) at 1,200 rpm	
Aspiration	Dual-series turbocharger with fixed geometry first stage and wastegated second stage; air-to-air after-cooling and cooled exhaust gas recirculation (EGR)			
Fuel System	Electronically controlled high-pressure common-rail (HPCR) with 10- and 4-micron filtration and water separator			
Cold-Start Aid	Optional ether start, block heater, and diesel-fired coolant heater			
Cooling				
	EPA FT4/EU Stage IV / EPA Tier 3/EU Stage IIIA			
Engine Cooling	Coolant mixture air cooled with two single-pass radiators and a remote pressurized coolant tank; separate charge-air cooler used for air system			
Powertrain				
	EPA FT4/EU Stage IV		EPA Tier 3/EU Stage IIIA	
Transmission	8-speed forward, 4-speed reverse, countershaft/planetary type with integral retarder and torque-proportioning differential			
Retarder	Integral, gear dependent, hydrodynamic, oil-to-air cooled, variable, fully automatic			
Differential	Torque-proportioning, planetary-type, inter-axle differential lock (IDL) with PowerShift™ lockup clutch			
Output Torque Split	32% front / 68% rear			
Shift Controls	Fully automatic, electronically modulated PowerShift, load-speed adaptive with gear-skip and gear-hunting protection			
Operator Interface	Push-button F-N-R, selectable speed- and gear-range limits, selectable retarder aggressiveness, downhill-descent control, gear-hold, and drive modes		Push-button F-N-R, selectable speed- and gear-range limits, selectable retarder aggressiveness, downhill-descent control, and gear-hold	
Speeds	Forward	Reverse	Forward	Reverse
Gear 1	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)
Gear 2	8 km/h (5 mph)	8 km/h (5 mph)	8 km/h (5 mph)	8 km/h (5 mph)
Gear 3	11 km/h (7 mph)	11 km/h (7 mph)	11 km/h (7 mph)	11 km/h (7 mph)
Gear 4	16 km/h (10 mph)	16 km/h (10 mph)	16 km/h (10 mph)	16 km/h (10 mph)
Gear 5	23 km/h (14 mph)	—	23 km/h (14 mph)	—
Gear 6	32 km/h (20 mph)	—	32 km/h (20 mph)	—
Gear 7	45 km/h (28 mph)	—	45 km/h (28 mph)	—
Gear 8	55 km/h (34 mph)	—	55 km/h (34 mph)	—
Axles				
Differential	Helical transfer gears, spiral bevel, hydraulically actuated PowerShift cross-axle differential lock (CDL)			
Final Drive	Extreme-duty outboard-mounted planetary; cooled and filtered oil			

460 P-TIER ARTICULATED DUMP TRUCK SPECIFICATIONS

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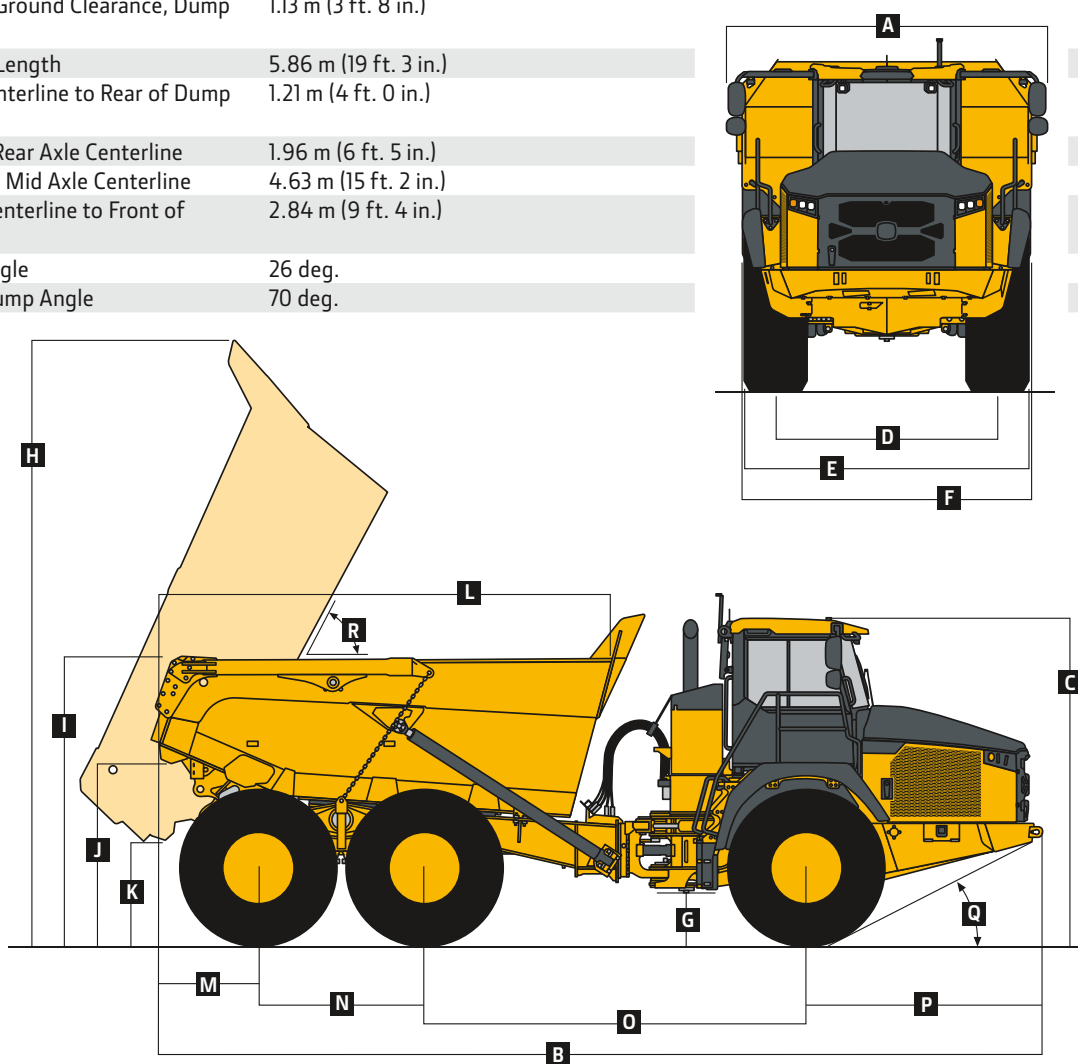
Powertrain <i>(continued)</i>	
	460 P-TIER
	EPA FT4/EU Stage IV / EPA Tier 3/EU Stage IIIA
Brake System	
Service	Dual-circuit, hydraulically actuated, wet multi-disc, force cooled, inboard mounted
Parking	Spring-applied hydraulically released, driveline-mounted, dry-disc with self-adjusting wear pad
Auxiliary	Fully automatic; transmission mounted, gear dependent; hydrodynamic retarder with selectable levels
Hydraulics	
Type	Closed-center, variable-displacement, load-sensing system
Main Pump	Variable-displacement, axial piston
Secondary Steering Pump	
Dump Cylinders	Dual-acting, single-stage with heat-treated, chrome-plated, and polished cylinder rods; hardened-steel replaceable bushings and pivot pins
Cycle Time	
Power Down	7 sec.
Raise Time	12 sec.
Electrical	
Voltage	24 volt
Number of Batteries	2 x 12 volt
Battery Capacity	1,400-CCA batteries
Alternator Rating	28 volt / 145 amp
Steering System	
Type	2 hydrostatically actuated, double-acting hydraulic cylinders; ground-driven secondary steering pump
Angle	45 deg. side to side
Lock-to-Lock Turns	4.0
Suspension	
Front	Semi-independent leading A-frame geometry with transverse link for lateral restraint and self-leveling oil-filled struts with integrated nitrogen-charged accumulators
Rear	Load-equalizing, pivoting walking beams with laminated suspension blocks, tri-link geometry, and transverse links for lateral restraint
Dump Body	
Type	High-strength steel
Capacity	
Struck	19.5 m ³ (25.5 cu. yd.)
Heaped at 2:1 ISO 6483 Ratio	25.2 m ³ (32.9 cu. yd.)
With Optional Tailgate	27.0 m ³ (35.4 cu. yd.)
Maximum Dump Angle	70 deg.
Heater	Body ducted to accept optional exhaust heating
Tires/Wheels	
Size and Type	29.5R25 radial earthmovers standard / 875/65R29 optional

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Serviceability		460 P-TIER			
		EPA Final Tier 4 (FT4)/EU Stage IV / EPA Tier 3/EU Stage IIIA			
Ground-Level Service					
Fluids and Filters		Ground-level engine, transmission, and axle oil-level check and filter replacement; ground-level fueling and fuel-filter replacement			
Coolers		Swing-out coolers for easy cleaning standard; reversing fans optional			
Fluid Sampling		Fluid-sampling ports standard; quick-service ports optional			
Refill Capacities					
Fuel Tank		609 L (161 gal.)			
Diesel Exhaust Fluid (DEF) Tank (EPA FT4/EU Stage IV only)		48 L (13 gal.)			
Engine Oil With Filter		61 L (16.1 gal.)			
Engine Coolant		90 L (23.8 gal.)			
Transmission Fluid		60 L (15.9 gal.)			
Hydraulic Reservoir		176 L (46.5 gal.)			
Axle Fluid With Filter					
Front		62 L (16.4 gal.)			
Mid		62 L (16.4 gal.)			
Rear		68 L (18.0 gal.)			
Operating Weights					
		EPA FT4/EU Stage IV		EPA Tier 3/EU Stage IIIA	
		With Standard		With Standard	
Operating Weights		Equipment	Loaded	Equipment	Loaded
Front		16 545 kg (36,475 lb.)	23 335 kg (51,445 lb.)	16 235 kg (35,792 lb.)	23 025 kg (50,761 lb.)
Middle		7465 kg (16,457 lb.)	24 980 kg (55,071 lb.)	7465 kg (16,457 lb.)	24 980 kg (55,071 lb.)
Rear		7465 kg (16,457 lb.)	24 980 kg (55,071 lb.)	7465 kg (16,457 lb.)	24 980 kg (55,071 lb.)
Total		31 475 kg (69,390 lb.)	73 295 kg (161,588 lb.)	31 165 kg (68,707 lb.)	72 985 kg (160,904 lb.)
Rated Payload		41 820 kg (92,197 lb.)		41 820 kg (92,197 lb.)	
Optional Components					
Dump-Body Liner (steel)		1389 kg (3,062 lb.)		1389 kg (3,062 lb.)	
Tailgate		958 kg (2,112 lb.)		958 kg (2,112 lb.)	
875/65R29 Tires		1286 kg (2,835 lb.)		1286 kg (2,835 lb.)	
Operating Dimensions					
		EPA FT4/EU Stage IV / EPA Tier 3/EU Stage IIIA			
Turning Circle Radius					
Inside		4.63 m (15 ft. 2 in.)			
Outside		8.90 m (29 ft. 2 in.)			

Machine Dimensions		460 P-TIER	
		EPA FT4/EU Stage IV / EPA Tier 3/EU Stage IIIA	
A	Width With Mirrors in Operating Position	3.85 m (12 ft. 8 in.)	
B	Length	10.64 m (34 ft. 11 in.)	
C	Height With Beacon in Stored Position	3.89 m (12 ft. 9 in.)	
	Tire Options	29.5R25	875/65R29
D	Tread Width	2.66 m (8 ft. 9 in.)	2.70 m (8 ft. 10 in.)
E	Width Over Tires	3.41 m (11 ft. 2 in.)	3.58 m (11 ft. 9 in.)
F	Width Over Fenders	3.44 m (11 ft. 3 in.)	3.65 m (12 ft. 0 in.)
G	Ground Clearance	0.54 m (21 in.)	0.54 m (21 in.)
H	Dump Body Height, Dump Position	7.20 m (23 ft. 7 in.)	
I	Dump Body Side Rail Height	3.33 m (10 ft. 11 in.)	
J	Dump Body Dump Lip Height, Transport Position	3.89 m (12 ft. 9 in.)	
K	Dump Body Ground Clearance, Dump Position	1.13 m (3 ft. 8 in.)	
L	Dump Body Length	5.86 m (19 ft. 3 in.)	
M	Rear Axle Centerline to Rear of Dump Body	1.21 m (4 ft. 0 in.)	
N	Mid Axle to Rear Axle Centerline	1.96 m (6 ft. 5 in.)	
O	Front Axle to Mid Axle Centerline	4.63 m (15 ft. 2 in.)	
P	Front Axle Centerline to Front of Machine	2.84 m (9 ft. 4 in.)	
Q	Approach Angle	26 deg.	
R	Maximum Dump Angle	70 deg.	



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Shipping Dimensions	460 P-TIER
	<i>EPA Final Tier 4 (FT4)/EU Stage IV / EPA Tier 3/EU Stage IIIA</i>
Overall Height (suspension lowered 75 mm [3 in.])	3.89 m (12 ft. 9 in.)
Overall Width	
Dump Body	3.46 m (11 ft. 4 in.)
Tailgate Installed	3.66 m (12 ft. 0 in.)

Additional equipment

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

460 P-TIER	Engine
●	Meets EPA Final Tier 4 (FT4)/EU Stage IV emissions
▲	Meets EPA Tier 3/EU Stage IIIA emissions
●	John Deere JD14 — 13.6 L (830 cu. in.)
●	External cooled exhaust gas recirculation (EGR)
●	Dual-element air cleaner
●	Precleaner
●	Fuel filters with water separator and automatic electronic priming
●	Diesel exhaust fluid (DEF) (FT4/Stage IV only) and ground-level fueling fill
●	In-line DEF filter (FT4/Stage IV only)
▲	Fast-fill fuel system
●	Serpentine drive belt with automatic tensioner
▲	Ether start aid (recommended below -1 deg. C [30 deg. F])
▲	Block heater (recommended below -18 deg. C [0 deg. F])

460 P-TIER	Engine (continued)
▲	Diesel-fired coolant heater (DFCH) (required below -25 deg. C [-13 deg. F])
●	Programmable auto-shutdown
●	Automatic turbo cool-down/shutdown timer
●	Flat-black exhaust stack
▲	Chrome exhaust stack
▲	Severe-duty fuel filter
▲	Severe-duty fuel filter with heater
●	Electronic control with automatic engine protection
Cooling	
●	Dual hydraulically driven, side-mounted fans
●	Side-mounted radiators (2), charge-air cooler, front and mid-axle coolers, transmission cooler, hydraulic cooler, and air-conditioner condenser
●	Integral engine oil cooler
●	Remote pressurized coolant reservoir

460 P-TIER	Cooling (continued)
●	John Deere Cool-Gard™ II long-life engine coolant
●	Engine cooling rated -37 deg. C (-34 deg. F)
▲	Automatic reversing cooling fans
Powertrain	
●	Transmission diagnostic ports
●	Transmission oil-temperature self-protection
●	Remote-mounted spin-on transmission oil filters
●	Remote-mounted replaceable-element axle-oil filters
●	Axle-oil temperature and lube-pressure sensing
●	Automatic engaging retarder with selectable aggressiveness
●	Normal, Traction, and Eco selectable drive modes
●	Automatic differential locks with manual override

Additional equipment *(cont.)*

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

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P-TIER	Electrical System
●	24-volt system voltage
●	145-amp alternator
●	Solid-state electrical distribution system
●	Battery disconnect
●	Batteries, 2 x 1,400 CCA
●	LED rear turn signals/brake lights
●	Lights, halogen drive, stair egress, and service lights
▲	Premium 11-light LED package (6 forward, 2 rear cab, 2 rear-facing rear frame, and 1 stair egress)
●	Electric horn
●	Reverse alarm
▲	Yellow beacon/strobe light
▲	Green seat-belt indicator beacon
▲	24-volt to 12-volt 15- or 25-amp converter
Hydraulic System	
●	Closed-center, load-sensing system
●	Axial-piston, variable-displacement main pump
●	Single-stage, dual-acting, dump-body tip cylinders
●	Electrohydraulic dump-body control
Steering System	
●	Ground-driven secondary steering pump
Operator Station	
●	ROPS/FOPS certification
●	Keyless start with multiple security codes
●	Tilt operator station for service access
●	Programmable dump-body control settings
●	Air conditioner
●	Heater
▲	Automatic temperature control (ATC) system

460	
P-TIER	Operator Station <i>(continued)</i>
●	AM/FM/Weather-Band (WB) radio
▲	Premium radio with AM/FM/WB/USB/Bluetooth® streaming and hands free
●	Rear window guard
●	Wiper/washer with intermittent control
▲	Rear windshield wiper
●	Tilt and telescoping steering wheel
●	Cloth seat with fore/aft isolation and heavy-duty suspension
▲	Premium leather/cloth, heated/ventilated seat with fore/aft isolation and heavy-duty suspension
●	Orange 76-mm (3 in.) retractable operator seat belt
●	Foldaway trainer seat with retractable seat belt
▲	Orange retractable 4-point harness
●	12-volt power outlets (2)
●	Cup holder
▲	Rear camera display with designated monitor
▲	Advanced Vision System
▲	Electric adjustable and heated mirrors
●	Deluxe 178-mm (7 in.) color LCD monitor: Speedometer / Fuel gauge / Transmission oil temperature gauge / Engine coolant temperature gauge / Gear indicator / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Trip counter / Trip timer / Trip distance / Metric/Imperial units / Service codes/diagnostics / LED indicator lights and audible alarm / Programmable dump body rollover protection / Onboard weighing display / Multi-language capability / Tire-pressure-monitoring system warning

460	
P-TIER	Operator Station <i>(continued)</i>
●	Backlit sealed-switch module functions: Keyless start/stop / F-N-R / Hazard light button / Park brake / Descent control / Gear-lock button / Gear up/down button / Inter-axle differential lock (IDL) / Retarder adjustment / Automatic dump-body control settings / Drive modes / Retarder control
●	Dump-body lever control
Dump Body	
●	Bin-lock pin
▲	Dump-body liner (steel)
▲	Tailgate
▲	Dump-body heater
▲	Less dump body and cylinders
Other	
●	29.5R25 radial earthmovers
▲	875/65R29 radial earthmovers
▲	Fluid quick-service bank
●	Point-of-use grease
▲	Banked manual grease
▲	Auto-lube system with ground-level refill
●	Articulation lock
●	Fluid-sampling ports
●	Engine compartment light with timer
▲	Onboard weighing system with external load lights
▲	Tire-pressure-monitoring system with temperature compensation
●	Fire extinguisher
▲	Wheel chocks
●	JDLINK™ wireless communication system (available in specific countries; see your dealer for details)
▲	JDLINK dual-mode cellular/satellite wireless communication system (available in specific countries; see your dealer for details)

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Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ISO standards. Except where otherwise noted, these specifications are based on a unit with standard equipment, ROPS cab, 29.5R25 radial earthmover tires, full fuel tank, and 79-kg (175 lb.) operator. Capacity and loaded weights are based on 1640-kg/m³ (2,759 lb./cu. yd.) material.



MT460PBU (25-04)



JOHN DEERE