

315 P

Backhoe Loader



JOHN DEERE





RUN ONE AND GET THINGS DONE

Why run two machines when one will do? Whether you're loading trucks, busting up blacktop, placing pipe, digging trenches, or moving materials, the John Deere 315 P-Tier Backhoe Loader is up to your tough tasks. Perfect your jobsite productivity with time-saving rear couplers to quickly switch between attachments. Master more with a multipurpose four-in-one loader bucket. Or opt for powered sideshift to take full advantage of the vertical stabilizers and their narrow footprint. Input from customers like you has helped us build one of our most versatile backhoe loaders ever. So put it to work wherever your work takes you.

315 P-TIER BACKHOE LOADER

FEATURES

Ready to go

Trust the 315 P-Tier's John Deere PowerTech 4.5L engine to provide the muscle needed to power through any workday. Field-proven wet-sleeve design with replaceable cylinder liners delivers uniform cooling and aids in reducing oil breakdown and ring wear.

Set it and go to work

When enabled on the sealed-switch module, AutoShift automatically shifts the PowerShift transmission to the appropriate gear. Simply set the control lever to the highest gear desired, and the transmission will optimally shift based on engine rpm and ground speed.

True four-wheel drive on command

Limited-slip front axle delivers 65 percent of available power to the tire with the best traction for all-wheel-drive pulling power. Engage momentary mechanical-front-wheel drive (MFWD) "on the fly" with the touch of a button on the loader control.

Cushion the ride

With optional ride control activated, front loader hydraulic cylinders act as a shock absorber, smoothing travel over rough terrain, helping full loads reach their destination, and reducing operator fatigue.

Shift things around

Powered sideshift option enables smooth side-to-side shifts in under six seconds, for precision backhoe repositioning. Design includes a series of two hydraulic cylinders to smoothly shift the backhoe, eliminating the need for a chain-drive or pulley system. It's easily unlocked and controlled via the combination in-cab switch on the main control panel.



**PROVEN POWERTECH ENGINE
PROVIDES EVERYDAY
POWER & MUSCLE**

The bucket list

John Deere multipurpose buckets have been enhanced to boost durability. Clamshell design features tilt-free dumping, a reinforced third cutting edge, and improved hinge profile for minimized material spillage compared to previous offerings.

Simple to service

Vertical spin-on engine, transmission, and hydraulic filters and quick-release fuel filters enable fast, clean changes. Standard maintenance-free batteries reduce periodic servicing, improve cold-starting reliability, and extend battery life.

The choice is yours

Choose from a variety of factory-installed tire options, for the traction, exceptional performance, and long wear life your specific application requires.

Comfort in the cab

The 315 P-Tier operator station is loaded with creature comforts including an efficient HVAC system and either an adjustable mechanical or air-suspension seat.

Take control

"Palm-on-top" loader-control grip is comfortable and easy to use. Control of clutch disconnect, transmission quick-shift, auxiliary proportional roller, and momentary mechanical front-wheel drive (MFWD) is at your fingertips.



315 P-TIER BACKHOE LOADER



ROUTINE MAINTENANCE
**IS EASY &
CONVENIENT**



Precision Construction

From product automation features to jobsite intelligence, this suite of construction technology delivers productivity solutions to help you get more done, more efficiently.

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. 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.





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		315 P-TIER			
Manufacturer and Model	John Deere PowerTech 4.5L turbocharged			John Deere PowerTech E 4.5L turbocharged	
Non-Road Emission Standard	EPA Tier 2/EU Stage II			EPA Tier 3/EU Stage IIIA	
Displacement	4.5 L			4.5 L	
Gross Peak Power	73 kW (98 hp) at 2,000 rpm			75 kW (100 hp) at 1,990 rpm	
Net Peak Power (ISO 9249)	69 kW (93 hp) at 1,970 rpm			71 kW (95 hp) at 1,900 rpm	
Net Peak Torque (ISO 9249)	386 Nm at 1,300 rpm			395 Nm at 1,500 rpm	
Net Torque Rise	46%			43%	
Lubrication	Pressure system with spin-on filter and cooler			Pressure system with spin-on filter and cooler	
Air Cleaner	Dual-stage dry type with safety element and evacuator valve				
Cooling					
Fan Type	Suction-type cooling fan				
Engine Coolant Rating	-40 deg. C				
Engine Oil Cooler	Oil to water				
Powertrain					
Transmission	5-speed, helical-cut gears, full PowerShift transmission with hydraulic reverser standard; electric clutch cutoff on loader lever; AutoShift transmission standard				
Torque Converter	Single stage, dual phase with 2.63:1 stall ratio, 280 mm			Single stage, dual phase with 2.63:1 stall ratio, 280 mm	
PowerShift Standard Transmission					
Maximum Travel Speeds With 16.9-28 Rear Tires	<i>Forward</i>	<i>Reverse</i>	<i>Forward</i>	<i>Reverse</i>	
Gear 1	5.8 km/h	7.3 km/h	5.8 km/h	7.3 km/h	
Gear 2	10.6 km/h	13.4 km/h	10.7 km/h	13.5 km/h	
Gear 3	22.0 km/h	21.6 km/h	22.1 km/h	21.8 km/h	
Gear 4	40.0 km/h	—	40.0 km/h	—	
Gear 5	40.0 km/h	—	40.0 km/h	—	
Axles					
Axle Oscillation, Stop to Stop, Front Axle	22 deg.			22 deg.	
Axle Ratings	<i>Front</i>	<i>Rear</i>	<i>Front</i>	<i>Rear</i>	
SAE J43	5500 kg	7500 kg	5500 kg	7500 kg	
Dynamic	9000 kg	10 000 kg	9000 kg	10 000 kg	
Static	26 500 kg	26 500 kg	26 500 kg	26 500 kg	
Ultimate	43 500 kg	43 500 kg	43 500 kg	43 500 kg	
Differentials					
Mechanical-Front-Wheel-Drive (MFWD) Axle	Limited-slip traction control				
Rear Axle	Foot actuated, hydraulically engaged 100% mechanical lock				
Steering (ISO 5010)					
Axle	<i>MFWD</i>				<i>Non-Powered Front</i>
Curb-Turning Radius					
With Brakes	3.53 m				3.45 m
Without Brakes	4.02 m				3.90 m
Bucket-Clearance Circle					
With Brakes	10.10 m				10.04 m
Without Brakes	10.84 m				10.70 m
Steering Wheel Turns (lock to lock)	3.6				4.3
MFWD Axle	Heavy duty, outboard planetary final drives distribute shock loads over 3 gears				
Rear Axle	Heavy duty, outboard planetary final drives distribute shock loads over 4 gears				
Brakes (ISO 3450)					
Service	Power assisted, hydraulic wet disc, mounted inboard, self-adjusting and self-equalizing				
Parking	Spring applied, hydraulically released, wet, multi-disc, independent of service brakes with electric switch control				

315 P-TIER BACKHOE LOADER SPECIFICATIONS

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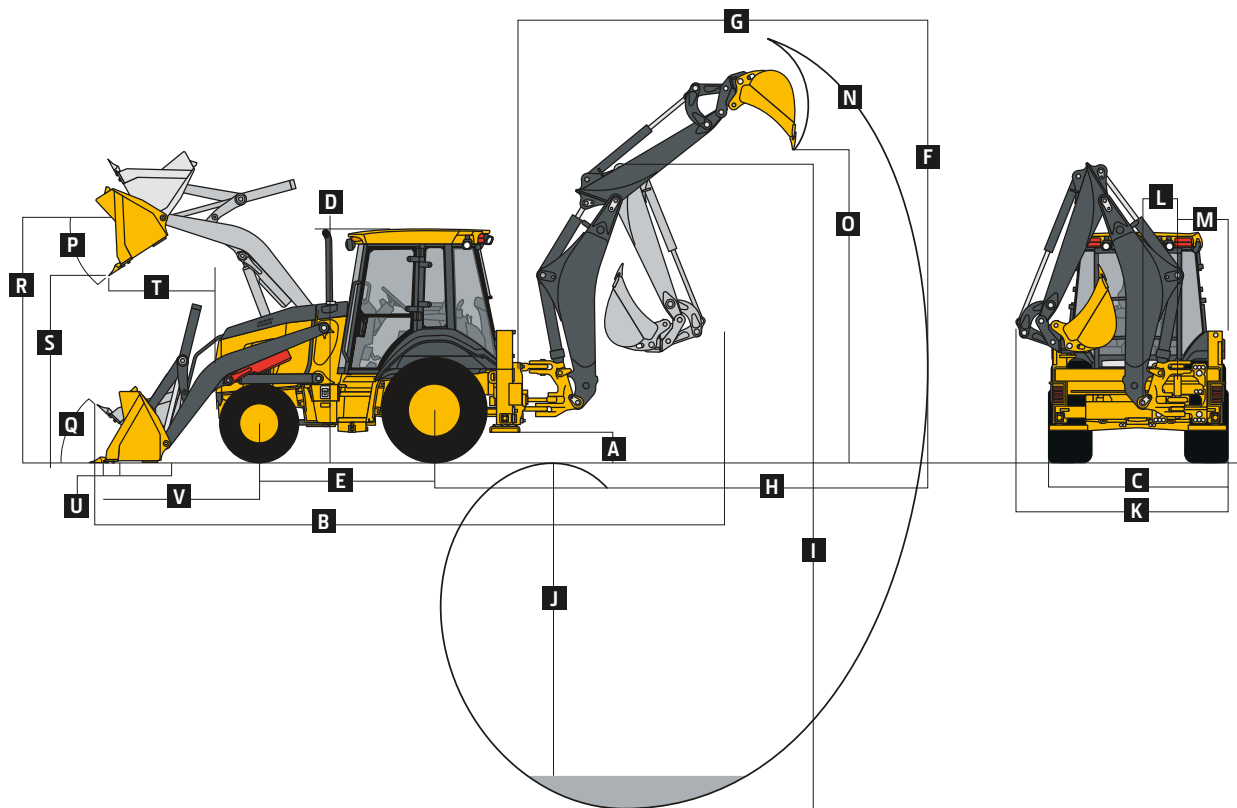
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Hydraulics		315 P-TIER	
Main Pump	Open-center system, tandem gear pump with unloader		
Pump Flow at 2,200 rpm			
Backhoe	136 L/m		
Loader	106 L/m		
System Relief Pressure, Backhoe and Loader	24 993 kPa		
Controls			
Backhoe	2-lever mechanical standard, pilot controls with pattern select and manual and/or electric auxiliary functions optional		
Loader	Single-lever control with electric clutch cutoff switch standard; manual auxiliary function (2nd lever), single-lever control with electric clutch cutoff switch, electrohydraulic (EH) proportional auxiliary roller, MWFD (momentary), and transmission quick-shift optional		
Cylinders			
Heat-treated, chrome-plated, polished rods; hardened steel (replaceable bushings) pivot pins			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Loader Boom (2)	80 mm	50 mm	790 mm
Loader Bucket (1)	90 mm	50 mm	744 mm
Backhoe Boom (1)	120 mm	56 mm	795 mm
Backhoe Crowd (1)	115 mm	63 mm	622 mm
Backhoe Bucket (1)	90 mm	56 mm	810 mm
Backhoe Bucket, Heavy-Duty Option (1)	100 mm	63 mm	810 mm
Backhoe Swing (2)	90 mm	50 mm	278 mm
Backhoe Extendable Dipperstick (1)	70 mm	40 mm	1062 mm
Backhoe Stabilizer, Standard (2)	70 mm	45 mm	716 mm
Non-Powered Axle (1)	70 mm	42 mm	210 mm
MFWD (1)	65 mm	40 mm	210 mm
Electrical			
Voltage	12 volt		
Alternator Rating	145 amp		
Lights	10 halogen: 4 front, 4 rear, and 2 side docking (32,500 candlepower each); turn signals and flashers: 2 front and 2 rear; stop and taillights; and 2 rear reflectors; front drive lamps with 55/60-watt halogen, plate lamp, reverse lamp, and front marker lamps; factory-installed option for 2 LED spotlights and 8 LED floodlights in lieu of the standard halogen light package		
Operator Station			
Type (ISO 3471)	Fully enclosed cab, isolation mounted, ROPS/FOPS, left/right access, with molded roof; optional canopy		
Tires/Wheels			
	<i>Front</i>	<i>Rear</i>	
Non-Powered Front Axle	12.5/80-18 F3 (12)	16.9L-28 R4 (12)	
With MFWD	12.5/80-18 R4 (10)	16.9L-28 R4 (12)	
Serviceability			
Refill Capacities		Refill Capacities (continued)	
Cooling System		Fuel Tank (with ground-level fueling)	128.7 L
Cab	27.5 L	Hydraulic System	126.8 L
Canopy	25.7 L	Hydraulic Reservoir	45.0 L
Rear Axle	18.0 L	MFWD Housing	
Engine Oil (including vertical spin-on filter)	13.0 L	Axle	6.5 L
Torque Converter and Transmission	15.1 L	Planetary (each)	0.9 L
Operating Weights			
With Full Fuel Tank, 75-kg Operator, and Standard Equipment	8022 kg	Optional Components (weight difference between base equipment and option)	
Typical With Extendable Dipperstick and 204-kg Counterweight	8518 kg	Cab	284 kg
		Extendable Dipperstick	292 kg
		Powered Side-Shift	121 kg

315 P-TIER

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Overall Dimensions	315 P-TIER
A Ground Clearance, Minimum	351 mm
B Overall Length, Transport	5.96 m
C Stabilizer Spread	2.26 m
D Height to Top of ROPS/Cab	2.84 m
E Length From Axle to Axle	
Non-Powered Front Axle	2.16 m
MFWD Axle	2.19 m



Backhoe Dimensions and Performance	
Backhoe specifications are with 610-mm x 0.21-m³ bucket; dipper lift specs are with a boom angle of 65 deg.	
Bucket Range	305–762 mm
Digging Force	
Bucket Cylinder	55.0 kN
With Heavy-Duty Cylinder Option	67.9 kN
Crowd Cylinder	36.6 kN
Swing Arc	180 deg.
Operator Control	2 levers

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Backhoe Dimensions and Performance (continued) 315 P-TIER

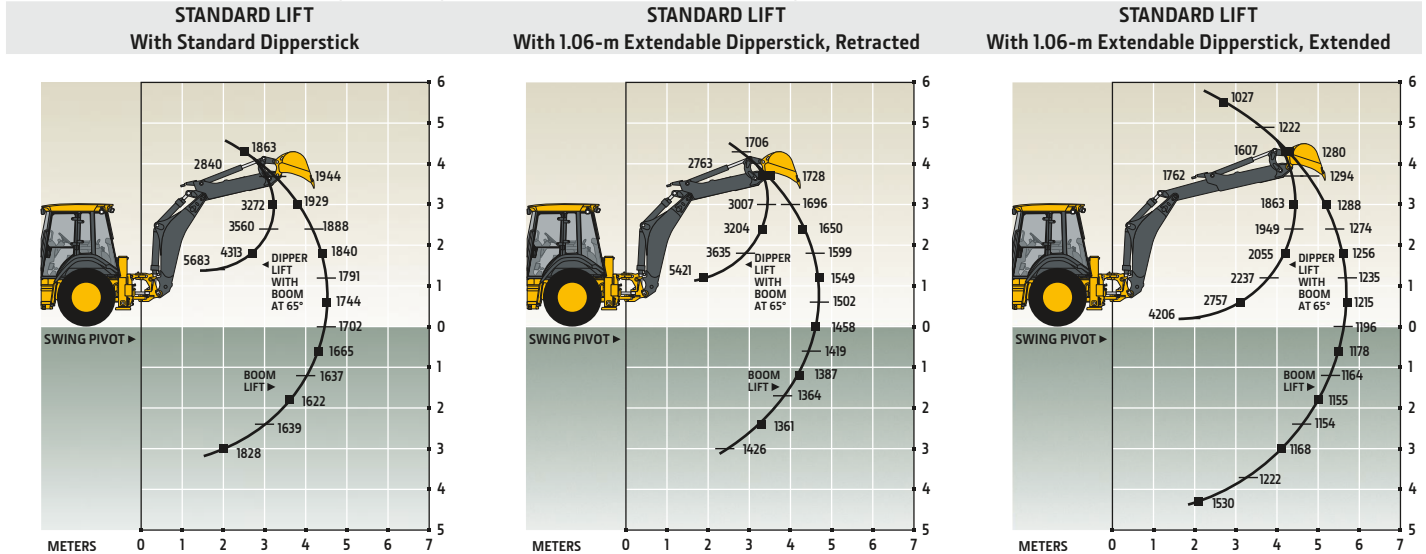
	With Optional Extendable Dipperstick		
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.65 m	3.77 m	4.39 m
G Reach From Center of Swing Pivot	5.44 m	5.61 m	6.62 m
H Reach From Center of Rear Axle	6.80 m	6.98 m	7.98 m
I Digging Depth (SAE maximum)	4.08 m	4.24 m	5.29 m
J Digging Depth (SAE)			
610-mm Flat Bottom	4.03 m	4.20 m	5.26 m
2440-mm Flat Bottom	3.68 m	3.87 m	5.00 m
K Overall Width (less loader bucket)	2.43 m	2.41 m	—
L Side-Shift From Tractor Centerline	537 mm	537 mm	537 mm
M Wall to Swing Centerline	604 mm	604 mm	604 mm
N Bucket Rotation	190 deg.	190 deg.	190 deg.
O Transport Height	3.71 m	3.72 m	3.72 m

Loader Dimensions and Performance

P Bucket Dump Angle, Maximum	45 deg.	
Q Rollback Angle at Ground Level	40 deg.	
	<i>Heavy-duty</i>	<i>Multipurpose</i>
Bucket Capacity	1.00 m ³	1.00 m ³
Width	2337 mm	2337 mm
Weight	521 kg	863 kg
Breakout Force	47.2 kN	43.5 kN
Lift Capacity, Full Height	3277 kg	2792 kg
R Height to Bucket Hinge Pin, Maximum	3.45 m	3.45 m
S Dump Clearance, Bucket at 45 deg.	2.69 m	2.65 m
T Reach at Full Height, Bucket at 45 deg.	726 mm	768 mm
U Digging Depth Below Ground, Bucket Level	146 mm	142 mm
V Length From Front Axle Centerline to Bucket Cutting Edge	2.05 m	2.10 m

Lift Capacity With Bucket

Dipper-lift specs are with a boom angle of 65 deg. Lift capacities are over-end values in kg of the maximum lift force available.



Lift capacities are over end with stabilizers down and tires tangent to ground.

Additional equipment

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

315 P Engine

- Coolant recovery tank with low-level indicator
- Serpentine belt with automatic belt tensioner
- Suction-type cooling fan
- ▲ Chrome exhaust extension
- ▲ 1,000-watt electric engine coolant heater

Powertrain

- PowerShift transmission: Torque converter with twist-grip TCL and neutral safety switch interlock (1st through 5th gears)
- 5th-gear overdrive
- AutoShift transmission
- Transmission oil cooler
- ▲ Transmission remote oil-sampling port
- Differential lock, electric foot actuated
- Auto shutdown
- Planetary final drives
- Power-assisted hydraulic service brakes (conform to ISO 3450): Inboard, wet multi-disc, self-adjusting and self-equalizing
- Parking/emergency brake with electric switch control (conforms to ISO 3450): Spring applied, hydraulically released wet multi-disc / Independent of service brakes
- Hydrostatic power steering with emergency manual mode
- ▲ Non-powered front axle
- Mechanical-front-wheel drive (MFWD) with traction-control limited-slip differential: Electric on/off control / Sealed axle
- Automatic MFWD braking (4th and 5th gear over-drive only)
- ▲ MFWD driveshaft guard

315 P Backhoe

- Standard dipperstick, 4.08-m digging depth
- ▲ Extendable dipperstick, 1.06-m extension
- ▲ Heavy-duty backhoe bucket cylinder
- ▲ SAE (excavator) 2-lever mechanical backhoe controls
- ▲ 2-lever pilot controls with pattern-selection feature
- Backhoe transport lock lever
- Swing lock pin stored in operator's station
- Stabilizers with 2-direction anti-drift valves
- ▲ Severe-duty backhoe bucket with lift loops
- ▲ Auxiliary backhoe valve for swingers, thumbs, etc. with auxiliary plumbing
- ▲ Auxiliary backhoe valve for hammers and compactors with auxiliary plumbing
- ▲ Controlled load-lowering device and object-handling kit

Loader[†]

- Loader bucket anti-spill (rollback)
- Return-to-dig feature
- Single-lever control with electric clutch disconnect
- Bucket-level indicator
- Loader boom service lock
- ▲ Auxiliary loader hydraulics with 2-lever control
- ▲ Hydraulic coupler for buckets, forks, etc.
- ▲ Ride control
- ▲ Controlled load-lowering device kit

[†]See dealer for range of heavy-duty, multipurpose, and coupler buckets and forks.

Hydraulic System

- 136-L/m tandem-gear pump, open-center system
- Auto idle
- Dedicated hydraulic reservoir

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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 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 16.9-28 In. 12 PR (R4) tubeless rear and 12.5/80-18 10 PR (R4) front tires and 1.00-m³ loader bucket.

Additional equipment *(continued)*

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

315 P Electrical System

- 12-volt system
- 145-amp alternator
- Single battery with 179-min. reserve capacity and 950 CCA
- ▲ Dual batteries with 358-min. reserve capacity and 1,900 CCA
- ▲ Remote jump posts and battery disconnect

Lights

- Halogen lights (10), 32,500 candlepower each (4 front driving/working, 4 rear working, and 2 side docking)
- Turn signal/flashing (2 front and 2 rear)
- Rear stop and tail (2)
- ▲ LED lights, 2 spot- and 8 floodlights

Operator's Station

- Modular-design ROPS/FOPS (Level 2) canopy with molded roof (meets ISO 3449 and ISO 3471/SAE J1040): Isolation mounted
- Molded floor mats (with pilot controls only)
- 12-volt outlet
- Lockable right-side storage
- ▲ Lockable left-hand storage with cup holders
- ▲ Interior front-view mirror
- ▲ Outside rearview mirrors
- Rotary-dial hand throttle
- Suspended foot throttle
- ▲ Air-suspension seat
- Tilt steering, infinitely adjustable
- Keyless start
- Machine security (enabled through monitor)
- Digital display of engine hours, engine rpm, and system voltage
- Sealed-switch module
- Multifunction lever: Turn signals / Windshield wipers / Some light functionality

315 P Operator's Station *(continued)*

- Monitor system with audible and visual warnings: Engine air restriction / Low alternator voltage / Engine oil pressure / Hydraulic filter restriction / Parking brake on/off / After-treatment temperature / Transmission fluid temperature / Fuel / Hour meter / Machine diagnostic information via 4-push-button/LCD operator interface
- **Cab with Dual Doors and A/C:** Mechanical-suspension deluxe fabric swivel seat with lumbar adjustment / Headliner, dome light, left and right cab doors, tinted safety glass, windshield wipers (1 rear and 1 front), front windshield washer, fresh-air intake, and heater/defroster/pressurizer (11.7-kW heater) / A/C (7.6-kW output and CFC-free R134a refrigerant)
- ▲ Premium radio package (includes additional 12-volt and USB outlets)

Overall Vehicle

- 1-piece unitized construction mainframe
- Vehicle tie-downs (2 front and 2 rear)
- Remote grease bank for front axle
- Heavy-duty front bumper
- ▲ Front counterweight, 204 kg
- ▲ Rubber grille bumpers
- Fuel tank, 128.7 L, ground-level fueling
- 2-position easy-tilt hood
- Extended grille frame
- Removable toolbox with padlock hasp
- Vandal protection for locking monitor, engine hood, toolbox, hydraulic reservoir, and fuel tank
- Reverse warning alarm
- Dent-resistant full-coverage rear fenders
- JDLink Ultimate wireless communication system (available in specific countries; see your dealer for details)

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