

844K-III Aggregate Handler

299 kW (401 net hp)



JOHN DEERE

FEATURES

New 844K-III Aggregate Handler configuration features 7.1- and 7.5-m³ (9.3 and 9.8 cu. yd.) material-handling buckets designed to heap heavier loads of processed aggregates in fewer passes.

Increased hydraulic pressures, larger tilt cylinders, engine power, and torque make quicker work of tough aggregate piles. Hydraulic plumbing has been improved across the articulation-joint and bucket pins enlarged to help minimize downtime.

Aggregate Handler includes all standard Series-III updates to boost productivity and increase uptime.

Standard low-profile tires increase the traction, flotation, and stability of your 844K-III Aggregate Handler.



844K-III Z-BAR AGGREGATE HANDLER		
Engine	John Deere PowerTech PSS 6135	
Manufacturer and Model	EPA Final Tier 4/EU Stage IV	
Non-Road Emission Standard	6	
Cylinders	4	
Valves per Cylinder	13.5 L (824 cu. in.)	
Displacement	299 kW (401 hp) at 1,600 rpm	
Net Peak Power (ISO 9249)	1870 Nm (1,379 lb.-ft.) at 1,000 rpm	
Net Peak Torque (ISO 9249)	44%	
Net Torque Rise	Mechanically actuated electronic unit injectors	
Fuel System	Full-flow spin-on filter and integral cooler	
Lubrication	Series turbocharged, charge air cooled	
Aspiration	Dual-element dry type, restriction indicator in cab monitor for service; additional centrifugal engine pre-cleaner	
Air Cleaner		
Cooling	Hydraulically driven, proportionally controlled, fan aft of coolers; automatic reversing fan drive	
Fan Drive		
Electrical		
Electrical System	24 volt with 130-amp alternator	
Batteries (2 – 12 volt)	1,400 CCA (each)	
Transmission System		
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, dual phase with freewheeling stator	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever	
Shift Modes	Manual/auto (1st–5th or 2nd–5th); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and adaptive clutch cutoff	
	Standard 5-Speed with Lockup Torque Converter	
Maximum Travel Speeds (with 875/65R29 tires)	Forward	Reverse
Range 1	6.6 km/h (4.1 mph)	6.6 km/h (4.1 mph)
Range 2	13.0 km/h (8.1 mph)	13.0 km/h (8.1 mph)
Range 3	20.1 km/h (12.5 mph)	29.4 km/h (18.3 mph)
Range 4	29.4 km/h (18.3 mph)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A

Axles/Brakes		844K-III Z-BAR AGGREGATE HANDLER
Final Drives		Heavy-duty mid-board planetary
Differentials		Conventional rear and front axles
Rear Axle Oscillation, Stop to Stop (with 875/65R29 tires)		16 deg. (8 deg. each direction)
Service Brakes (conform to ISO 3450)		Outboard, forced oil cooled, multi disc
Parking Brakes (conform to ISO 3450)		Automatic spring applied, hydraulically released, sealed wet multi disc

Tires/Wheels *(see page 3 for complete tire adjustments)*

	Tread Width	Width Over Tires
Michelin 875/65R29, 1 Star L-3	2440 mm (96.1 in.)	3408 mm (134.2 in.)

Serviceability

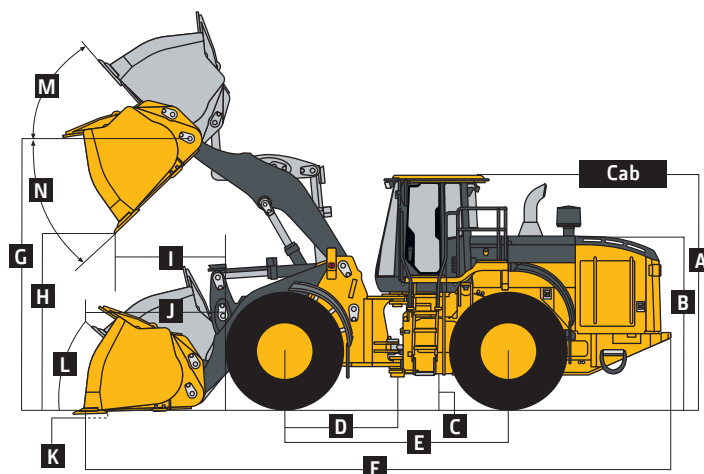
Refill Capacities

Fuel Tank (with ground-level fueling)	534 L (141 gal.)
Diesel Exhaust Fluid (DEF)	26.3 L (6.9 gal.)
Cooling System	78.75 L (83.2 qt.)
Engine Oil with Vertical Spin-On Filter	40 L (42.3 qt.)
Transmission Reservoir with Vertical Filter	28 L (29.5 qt.)
Axle Oil (front and rear, each)	68 L (72 qt.)
Hydraulic Reservoir and Filter	184.3 L (194.7 qt.)
Park Brake Oil (wet disc)	0.7 L (24 oz.)

Hydraulic System/Steering

Pump (loader and steering)	2 variable-displacement, load-sensing axial-piston pumps; closed-center system
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,000 rpm	548 L/m (145 gpm)
System Relief Pressure	
Loader	27 580 kPa (4,000 psi)
Steering	24 132 kPa (3,500 psi)
Loader Controls	2-function valve; single- or dual-lever controls; control lever lockout feature
Steering (conforms to ISO 5010)	
Type	Power, fully hydraulic; single-lever control and adjustable wristrest with conventional steering wheel override
Articulation Angle	80-deg. arc (40 deg. each direction)
Turning Radius (measured to centerline of outside tire)	6.30 m (20 ft. 8 in.)
Hydraulic Cycle Times	
Raise	6.1 sec.
Dump	1.9 sec.
Lower (float down)	3.6 sec.
Total	11.6 sec.

Dimensions and Specifications with Pin-On Bucket



844K-III Z-BAR AGGREGATE HANDLER LOADER WITH PIN-ON BUCKET

Dimensions with Bucket	7.1-m ³ (9.3 cu. yd.) material-handling with bolt-on edge	7.5-m ³ (9.8 cu. yd.) material-handling with bolt-on edge
A Height to Top of Cab	3.76 m (12 ft. 4 in.)	3.76 m (12 ft. 4 in.)
B Hood Height	2.74 m (9 ft. 0 in.)	2.74 m (9 ft. 0 in.)
C Ground Clearance	463 mm (18.2 in.)	463 mm (18.2 in.)
D Length from Centerline to Front Axle	1.85 m (6 ft. 1 in.)	1.85 m (6 ft. 1 in.)
E Wheelbase	3.70 m (12 ft. 2 in.)	3.70 m (12 ft. 2 in.)
F Overall Length, Bucket on Ground	10.06 m (33 ft. 0 in.)	10.13 m (33 ft. 3 in.)
G Height to Hinge Pin, Fully Raised	4.62 m (15 ft. 2 in.)	4.62 m (15 ft. 2 in.)
H Dump Clearance, 45 deg., Full Height	3.10 m (10 ft. 2 in.)	3.05 m (10 ft. 0 in.)
I Reach, 45-deg. Dump, Full Height	1.68 m (5 ft. 6 in.)	1.73 m (5 ft. 8 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	2.41 m (7 ft. 11 in.)	2.44 m (8 ft. 0 in.)
K Maximum Digging Depth	112 mm (4.4 in.)	118 mm (4.6 in.)
L Maximum Rollback at Ground Level	45.2 deg.	45.2 deg.
M Maximum Rollback, Boom Fully Raised	60.0 deg.	60.0 deg.
N Maximum Bucket Dump Angle, Fully Raised	41.2 deg.	41.2 deg.
Loader Clearance Circle, Bucket Carry Position	15.35 m (50 ft. 4 in.)	15.39 m (50 ft. 6 in.)

Dimensions and Specifications with Pin-On

Bucket (continued)

844K-III Z-BAR AGGREGATE HANDLER

Specifications with Bucket	7.1-m ³ (9.3 cu. yd.) material-handling with bolt-on edge	7.5-m ³ (9.8 cu. yd.) material-handling with bolt-on edge
Capacity, Heaped	7.1 m ³ (9.3 cu. yd.)	7.5 m ³ (9.8 cu. yd.)
Capacity, Struck	5.9 m ³ (7.7 cu. yd.)	6.2 m ³ (8.1 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	4096 kg (9,030 lb.)	4218 kg (9,300 lb.)
Bucket Width	3.54 m (11 ft. 7 in.)	3.54 m (11 ft. 7 in.)
Breakout Force	25 288 kg (55,750 lb.)	24 292 kg (53,555 lb.)
Tipping Load, Straight, No Tire Deflection	27 714 kg (61,099 lb.)	27 571 kg (60,784 lb.)
Tipping Load, Straight, with Tire Deflection	26 109 kg (57,560 lb.)	25 965 kg (57,243 lb.)
Tipping Load, 37-deg. Partial Turn	24 333 kg (53,645 lb.)	24 191 kg (53,332 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	23 786 kg (52,439 lb.)	23 644 kg (52,126 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	21 765 kg (47,984 lb.)	21 621 kg (47,666 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	10 883 kg (23,992 lb.)	10 811 kg (23,833 lb.)
Operating Weight	36 311 kg (80,052 lb.)	36 432 kg (80,318 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 6135 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Adjustments to Operating Weights and Tipping Loads with Buckets

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 7.1-m³ (9.3 cu. yd.) material-handling bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 37-deg.		Tipping Load, 40-deg.		Tread Width	Width Over Tires	Vertical Height
			Partial Turn	Full Turn	Partial Turn	Full Turn			
Michelin 875/65R29, 1 Star L-3 [§]	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 875/65R29, 1 Star L-3 [§]	+388 kg (+855 lb.)	+285 kg (+628 lb.)	+256 kg (+564 lb.)	+251 kg (+553 lb.)	+251 kg (+553 lb.)	+251 kg (+553 lb.)	0 mm (0 in.)	+12 mm (+0.47 in.)	+16 mm (+0.62 in.)

*May change based on vehicle configuration, weight, or tire-pressure adjustments.

[§]Requires 8-deg. rear axle stops.

