324J Loader

54 kW (73 SAE net hp)







Need a compact loader to get big results? Choose the 324J. This versatile 54-kW (73 hp) machine combines outstanding maneuverability, travel speed, breakout force, reach, and stability in an innovative package. Its oscillating stereo steering delivers a turning radius that's 20-percent tighter than comparable loaders for fast work cycles. Delivers smooth moves and better material retention over rough terrain, too. Add to that a redesigned, more spacious cab, and extra uptime from sealed electrical connections, more durable axles, and extended service intervals, and you've got a multi-purpose machine that's ready, able, and willing to take on your many tasks.













- Boom float allows easy backdragging for finish grading and cleaning up jobsites.
- 2. The 324J's unique design turns tight but articulates less, keeping the center of gravity and ballast in line to counteract load forces for superior full-turn tipping load capacity.
- **3.** An oscillating rear axle and elastic articulation at the pivot smoothes the ride for greater material retention and reduced operator fatigue.
- **4.** 324J's long reach lets it easily dump to the center of tandem-axle trucks for quicker and easier loading.
- 5. Manual low-speed differential lock delivers the traction needed to go deeper into the pile for bigger bucket loads.

Unlike comparable-size machines, return-to-dig is standard on the 324J.

Oscillating stereo steering combines machine articulation and rear-axle steering, giving the 324J the tightest turn radius in its class.

405/70R20 tires on one-piece rims deliver the traction and stability you need.







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Efficient interior provides plenty of room for productivity.

When operation is easy, maximum productivity becomes second nature. The 324J's spacious sound-suppressed cab provides ample leg- and headroom, best-in-class all-around visibility, and one smooth ride. A single lever with FNR switch controls all boom and bucket functions, and standard return-to-dig is just a flick-of-the-wrist away. Gauges in the forward console are clearly visible, intuitive, and easy to read. Tilt steering, multi-adjustable high-back suspension seat, electronic monitor, and many more productivity-boosting features also are standard.

- 1. Walk-through cab lets you enter or exit easily from either side.
- **2.** Boom and bucket control, FNR, and differential lock are on the same low-effort lever for convenient single-handed control.
- **3.** Easy-to-read monitor tracks rpm, time, hours, engine oil pressure, and more. Issues both visible and audible warnings.
- **4.** Low- and high-speed ranges provide infinitely variable travel speeds from standstill to a best-in-class 30 km/h (19 mph).
- 5. Oscillating axle/elastic articulation reduces cab tilt by as much as 50 percent for a smoother ride that's easier on both machine and operator.

Inching/brake pedal lets you slow travel speed while keeping engine rpm high for optimum hydraulic response and control.

Interior and exterior convex mirrors further enhance the 324J's best-inclass visibility.

Add a highly efficient HVAC system and make your operator even more productive. Automotive-type louvers help keep the view clear, the cab comfortable.













Built to handle the toughest jobs — yours.

The hard-working 324J increases uptime with its everyday toughness, and helps improve your bottom line with its never-say-die durability. Incorporating many of the same features found on our larger loaders, it's built to keep downtime down with sealed electrical connectors, flat-face O-ring seal hydraulic couplings, and self-adjusting wet-disc brakes. Helps keep your operator out of harm's way, too, with numerous safety features such as an automatic park brake, bypass-start protection, slip-resistant steps, and convenient handholds. If it's uptime you demand, the 324J provides all you and your operator need to stay productive.

Wet-disc brakes in the heavy-duty axles self-adjust and are sealed from moisture and contaminants for long, trouble-free life.

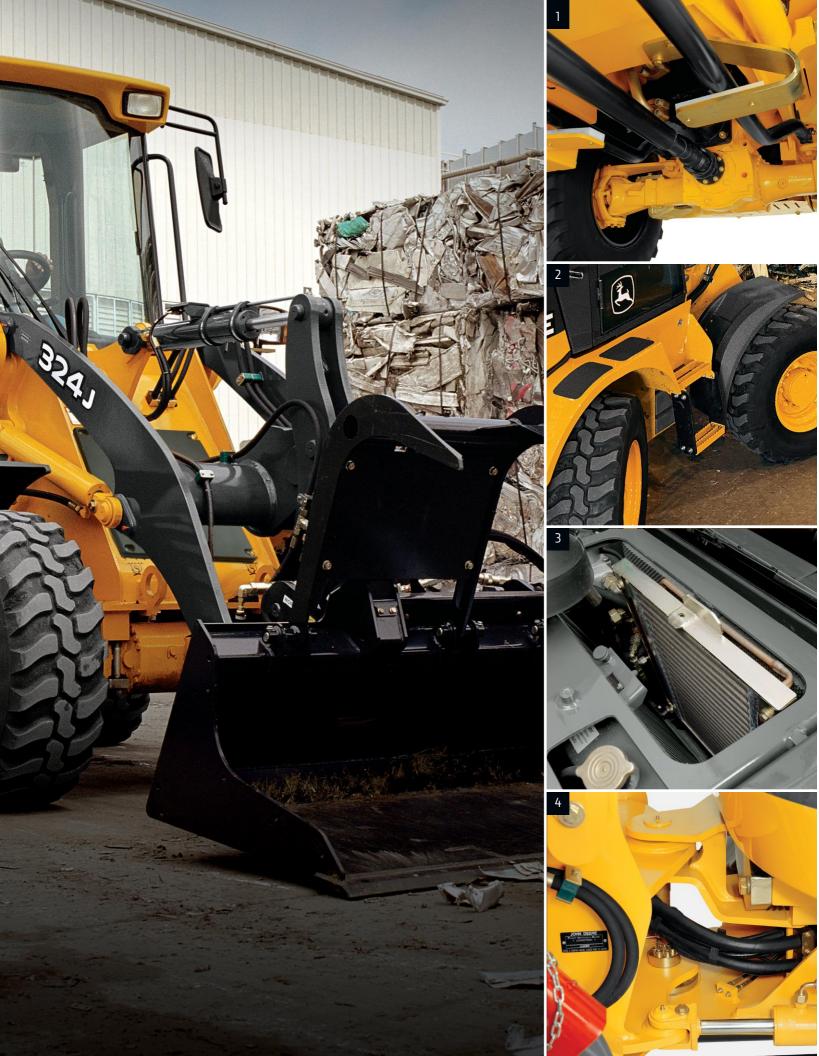
Proportional fan runs only as needed to provide optimal cooling for reduced wear-and-tear on cooling components, reduced noise, and lower fuel consumption.

Turbocharged Deere PowerTech™ diesel runs quiet and meets IT4/ Stage IIIB non-road emissions regulations. So it can work where rigid sound- and air-quality regulations exist.

Test ports enable technicians to quickly troubleshoot problems.

- Steering linkage is positioned where it's protected and supported by brackets with easily replaceable wear strips.
- **2.** Angled self-cleaning steps and ergonomically positioned grab bars make getting in and out of the cab easier.
- **3.** A/C condenser tilts out and away from the radiator for easier cleanout. Doesn't require draining fluids or disconnecting hoses.
- 4. Articulation joints and major structures are so strong and durable, they're covered by a three-year/10,000-hour StructurAll™ warranty.















If it's not one thing, it's another.

Why invest in a bunch of specialized machines when the highly versatile 324J can do the job? With its standard pin-type hydraulic quick-coupler, you can go from bucket to forks, quickly and easily. Or opt for the Worksite Pro™ skid-steer-style coupler that enables this jack-of-all-trades machine to utilize an even wider array of skid-steer-compatible Worksite Pro attachments. Operation is easy, with joystick and third- and fourth-function pilot controls conveniently located at your fingertips. Regardless of how you equip it, the 324J will be the most versatile compact machine on your worksite.

Unobstructed line of sight to attachments makes switchover quick and easy.

Change hydraulic flow with a twist of your wrist.

The optional fourth-function valve delivers plenty of flow for running hydraulic-driven attachments like power rakes and augers.

Available attachments:

- Utility/snow blades
- Augers
- Bale spears
- Construction or utility buckets
- Tooth buckets
- Pallet forks
- Scrap and brush-tined grapples
- Pick-up brooms







Lower operating costs, raise expectations.

We spared no expense to help keep the 324J's operating costs low. From the transverse-mounted John Deere diesel that provides convenient ground-level service access, to easy-to-change vertical spin-on filters, this versatile loader will require less of your time and attention. Extended service intervals, environmentally friendly drains, sight gauges — the list of J-Series features that help minimize maintenance go on and on. And so will the daily operating cost savings you'll enjoy.

Fuel-efficient IT4/Stage IIIB emission-certified John Deere diesel runs 500 hours between oil changes. Hydraulic valve lifters and serpentine belt never require adjustment.

Remote lube bank puts rear axle zerks within easy reach. Convenient maintenance chart helps ensure that nothing gets overlooked.

Locking fuel cap and electrical disconnect switch help prevent theft or vandalism.

Easily accessible maintenance-free batteries are connected in parallel for reliable electrical power.

Easy-lift hood and transversemounted engine provide convenient ground-level access to daily checkpoints.

Vertical spin-on filters and environmental drains make fluid changes quicker and cleaner.

Nobody backs you better than the 400-plus John Deere dealers throughout North America.

- Hydraulically driven fan runs only as needed for efficient cooling, reduced noise, and lower fuel consumption.
- **2.** Easy-access fuse panel accommodates quick checks and changes.
- Electronic control unit lets service technicians easily retrieve vital operating information and helps diagnose problems more quickly.
- 4. Hydraulic fluid sight gauge and see-through coolant reservoir let you check fluid levels at a glance.







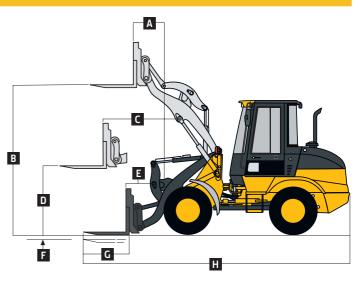






Engine	324J
Manufacturer and Model	John Deere PowerTech™ 5030T
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB
Cylinders	5
Valves per Cylinder	2
Displacement	2.9 L (184 cu. in.)
Net Rated Power at 2,800 rpm (ISO 9249)	54 kW (73 hp)
Net Peak Power at 2,800 rpm (ISO 9249)	56 kW (75 hp)
Maximum Net Torque at 1,500 rpm (ISO 9249)	265 Nm (195 lbft.)
Lubrication	Pressure system with full-flow spin-on filter
Fuel System	Electronically controlled unit injection pump
Aspiration	Turbocharged
Air Cleaner	Dual safety element dry type
Cooling	
Fan	Hydraulically driven, proportionally controlled
Engine Coolant Rating	–37 deg. C (–34 deg. F)
Powertrain	37 deg. e (3 deg. i)
Туре	Hydrostatic (HST) with infinitely variable speed control over full range of operating speeds; 2 speed
iype	ranges; joystick-mounted F-N-R; acceleration pedal; HST inching pedal, which allows infinitely reduced travel speeds while maintaining full engine rpm and hydraulic flow
2 Travel Speeds in Forward and Reverse (equipped with 405/70R20 tires)	
Gear 1	6.9 km/h (4.3 mph)
Gear 2	29.9 km/h (18.6 mph)
Axles	Rear center-pivot axle with 10-deg. rear axle oscillation and 10-deg. frame oscillation
Rear Axle Oscillation Versus Front Axle	20 deg. total, stop to stop
Differentials	Manual (push-button) locking front, conventional rear
Maximum Rise and Fall, Single Wheel	290 mm (11 in.)
Steering	Hydraulic power steering (SAE J1511); 26-deg. rear-wheel steering tied mechanically to articulation; equivalent of 97-deg. conventional steering system articulation
Articulation Angle	56-deg. arc (28 deg. each direction)
Final Drive	Heavy-duty outboard planetary
Brakes (SAE J1473 and ISO 3450)	
Service Brakes	Hydraulically actuated, self-adjusting internal wet-disc brake and driveline drum brake
Parking Brake	Automatically spring-applied, hydraulically released, internal wet disc
Hydraulics	
Main Pump (loader and steering)	Fixed-displacement gear pump; open-center system
Maximum Rated Flow at 6895 kPa (1,000 psi)	95 L/m (25 gpm)
System Relief Pressure (loader and steering) Hydraulic Cycle Times	18 961 kPa (2,750 psi)
Raise	5.3 sec.
Dump	1.6 sec.
Lower	1.0 Sec.
Float Down	4.5 sec.
Power Down	4.5 sec. 6.3 sec.
Total	13.2 sec. With 1.1 m ³ (1.4 second betacknilling (consequences bushed with hold on sutting odes
Maximum Lift Capacity	With 1.1-m³ (1.4 cu. yd.) stockpiling/general-purpose bucket with bolt-on cutting edge
Lift at Maximum Height	5510 kg (12,136 lb.)
Lift at Maximum Height	3572 kg (7,868 lb.)
Turning Radius	2.70 (12.4: F:-)
Measured to Centerline of Outside Tire	3.78 m (12 ft. 5 in.)
Controls	Pilot-operated, 3-function valve with single-lever control for boom and bucket, and auxiliary level for standard pin disconnect and auxiliary hydraulics, with control-lever lockout feature; optional additional 4-function valve with push-button control

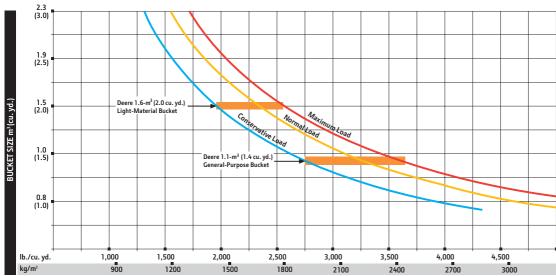
Machine Dimensions (continued)	324J
DIMENSIONS WITH QUICK-COUPLER AND FORK	
A Reach, Fully Raised	569 mm (22.4 in.)
B Fork Height, Fully Raised	3.19 m (10 ft. 6 in.)
C Maximum Reach, Fork Level	1.52 m (5 ft. 0 in.)
D Fork Height, Maximum Reach	1.36 m (4 ft. 6 in.)
E Reach, Ground Level	749 mm (29.5 in.)
F Depth Below Ground	36 mm (1.4 in.)
G Tine Length	1.20 m (3 ft. 11 in.)
H Overall Length	6.14 m (20 ft. 2 in.)
Tipping Load as Measured with Fork Level, Load Centered	
on Tine	
Straight	3573 kg (7,877 lb.)
Full Turn	3250 kg (7,165 lb.)



Quick-Coupler With Bucket Specifications	
Bucket Type/Size	Stockpiling/General Purpose w/ Bolt-On Edge
Capacity, Heaped SAE	1.1 m³ (1.4 cu. yd.)
Capacity, Struck SAE	0.9 m³ (1.2 cu. yd.)
Bucket Width	2.20 m (7 ft. 3 in.)
Breakout Force, SAE J732C	5608 kg (12,364 lb.)
Tipping Load, Straight	4645 kg (10,241 lb.)
Tipping Load, Full Turn, SAE	4225 kg (9,315 lb.)
▲▲ Reach, 42-Deg. Dump, 2.13-m (7 ft.) Clearance	1.30 m (4 ft. 3 in.)
▲▲ Reach, 42-Deg. Dump, Full Height	884 mm (34.8 in.)
▲ Dump Clearance, 42 Deg., Full Height	2.67 m (8 ft. 9 in.)
▲▲▲ Overall Length, Bucket on Ground	5.76 m (18 ft. 11 in.)
Loader Clearance Circle, Bucket Carry Position	8.30 m (27 ft. 3 in.)

Loader operating information is based on machine with standard equipment, 405/70R20 tires, standard counterweight, cab, 79-kg (175 lb.) operator, and full fuel tank. This information is affected by tire size, ballast, and different attachments.





LOOSE MATERIALS	kg/m³ lb	./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1.701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

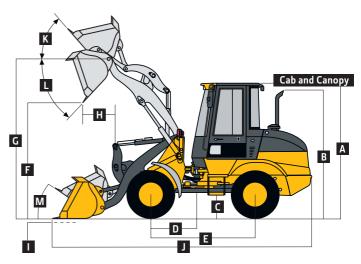
^{*}This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



Electrical	324J		
Туре	Electrical load center with blade-type multi-fused circuits		
Voltage	12 volt		
Battery Capacity	1,700 CCA		
Reserve Capacity	160 min.		
Alternator Rating	65 amp		
Lights (SAE 99)	Driving/front working lights (2), turning signals, flashers, stop- and taillights		
Tires/Wheels			
	Tread Width	Width Over Tires	Change In Vertical Height
Standard-Size, 405/70R20 Tires on Single-Piece Rims	1661 mm (65.4 in.)	2075 mm (81.7 in.)	0 mm (0 in.)
Serviceability			
Refill Capacities			
Cooling System (engine and radiator)	12.0 L (12.7 qt.)		
Differential and Planetary Axle			
Front	7.3 L (7.7 qt.)		
Rear	6.7 L (7.1 qt.)		
Engine Oil with Filter	11.0 L (11.9 qt.)		
Fuel Tank	81.0 L (21.5 gal.)		
Hydraulic/Hydrostatic Reservoir with Filter	80.0 L (21.1 gal.)		
Hydrostatic Motor Gearbox	0.8 L (0.8 qt.)		
Front/Rear Axle Planetary Hubs (each)	0.9 L (0.9 qt.)		
Operating Weights			
With Standard Equipment, 405/70R20 Tires, Standard Co.	unterweight, Cab, 79-kg (175 lb.) O	perator, and Full Fuel Tank	
With Quick-Coupler and 1.1-m³ (1.4 cu. yd.) Stock-	6080 kg (13,404 lb.)		
piling/General-Purpose Bucket with Bolt-On Edge			
With Quick-Coupler and Fork	5923 kg (13,058 lb.)		
Optional Components			
Bucket, 1.1 m³ (1.4 cu. yd.), Stockpiling/General	429 kg (946 lb.)		
Purpose			
Machine Dimensions			

DIMENSIONS WITH OHICK-COURLED AND BLICKET

ווט	DIMENSIONS WITH GOICK-COOPLER AND BOCKET				
Α	Height to Top of Cab	2.79 m (9 ft. 2 in.)			
В	Height to Top of Exhaust	2.67 m (8 ft. 9 in.)			
C	Ground Clearance	386 mm (15.2 in.)			
D	Length from Centerline of Front Axle	749 mm (29.5 in.)			
Ε	Wheelbase	2.30 m (7 ft. 7 in.)			
F	Dump Clearance, 42-deg. Full Height	▲ (see page 16)			
G	Height to Hinge Pin, Fully Raised	3.35 m (11 ft. 0 in.)			
Н	Dump Reach, 42-deg. 2.13-m (7 ft.) Clearance	▲▲ (see page 16)			
1	Maximum Digging Depth	69 mm (2.7 in.)			
J	Overall Length	▲ ▲ △ (see page 16)			
K	Maximum Rollback at Full Height	56 deg.			
L	Bucket Dump at Full Height	42 deg.			
M	Maximum Rollback at Ground Level	40 deg.			



d A Optional or special

*See your John Deere dealer for further information.

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ostic ports: Priority presp pressure / Control valve ure

324J Operator's Station

- Cab (conforms to SAE J1040, SAE J231, ISO 3471, and ISO 3449): ROPS/FOPS / Heater/ defroster / Rubber-plane isolation mounted for noise/vibration reduction / Intermittent front and rear windshield wipers and washers / Tinted safety glass / Full-width adjustable sun visor / Pre-wired for radio speakers / Deluxe high-back cloth seat with mechanical and 51-mm (2 in.) retractable seat belt / Left and right doors / 1 sliding window in each door
- ▲ AM/FM/weather-band radio
- AM/FM/weather-band radio with cassette player
- ▲ AM/FM/weather-band radio with CD player
- ▲ Air conditioning (factory or dealer installed)
- Storage compartment
- Rubber floormat
- Tilt steering column
- Rearview mirrors, outside (2) and inside (1) (conform to SAE J985)
- Handholds and steps, ergonomically located and slip resistant (conform to SAE J185)

Loader Linkage

- Z-bar loader linkage
- Loader boom service locking bar (conforms to SAE J38)

Buckets and Attachments

- ▲ Full line of buckets with selection of bolt-on cutting edges and teeth
- Standard quick-coupler, less bucket
- Morksite Pro™ skid-steer-style coupler
- Full line of construction utility forks, pallet forks, extendable boom with hook, and other attachments*

Tires

405/70R20 tires on single-piece rims

Other

- Fenders, front and rear
- Articulation locking bar (conforms to SAE J276)
- Vandal protection, includes lockable engine enclosure and fuel fill
- Counterweight, full
- Rear bottom guard
- Drawbar, with locking pin
- ▲ Material-weighing system*
- ▲ Ride control
- ▲ JDLink™ wireless communication system (available in specific countries; see your dealer for details)

324J Loader

54 kW (73 SAE net hp)



Additional equipment

Key: ● Standard ▲ Optional or special

*See your John Deere dealer for further information.

324J Engine

- Meets EPA Interim Tier 4/EU Stage IIIB emissions
- Antifreeze, –37 deq. C (–34 deq. F)
- Coolant recovery tank
- Fan safety guard
- Fan, suction type, hydraulically driven, proportional speed
- Muffler, under hood, with curved end exhaust stack
- Environmentally friendly engine oil drain
- Spin-on engine oil and fuel filter
- Engine oil cooler
- Quick-release fuel filter and water separator
- Under-hood dual-element air cleaner with restriction indicator
- Under-hood prescreened air intake with dust evacuator valve
- Serpentine drive belt with automatic tensioner
- ▲ Engine coolant heater, 1,000 watts, 110 volts
- ▲ Special application: Trash screens, etc.*

Electrical

- Starter switch with electric fuel cutoff
- 12-volt system
- Electrical load center with blade-type fuses
- Standard batteries (2), 12 volt with 1,700 CCA
- Master electrical disconnect switch
- Alternator, 12 volts, 65 amps
- Horn (conforms to SAE J994 and J1446)
- Lights (conform to SAE 99): Driving / Front working (2) / Turn signals / Flashers / Stop / Taillights
- Pre-wired for rear worklights
- ▲ Worklights, rear (2)
- Reverse warning alarm (conforms to SAE J994 and J1446)
- Multifunction monitor with audible and visual warnings: Low engine oil pressure / Engine coolant temperature / Hydrostatic (HST) transmission oil temperature / Parking brake indicator / Gauges and indicators: Engine coolant temperature, fuel level, speedometer, clock, and hour meter

324J Electrical (continued)

- Indicator lights: Engine air filter / Fasten seat belt / Parking brake actuated / Forward/reverse travel / 1st- or 2nd-speed range / Turn signal and hazard lights / High-beam indicator / Battery voltage
- Radio-ready cab, fused 12-volt radio electrical lead and speakers, power port
- By-pass starter safety cover on starter, positive terminal battery cover
- Pre-wired for roof beacon
- Sealed external electrical connectors

Powertrain/Brakes

- HST transmission: Electric shift control / Single-lever joystick F-N-R / Hydrostatic oil cooler / Inching pedal / 2 speeds forward and reverse / Infinitely variable speed control
- Service brakes, hydraulically actuated, selfadjusting internal wet-disc brake and driveline drum brake
- Parking brake, spring applied, hydraulically released, switch operated
- Axles, manual locking front and conventional rear differentials, heavy-duty outboard planotories

Hydraulic System

- Hydraulic system oil cooler
- Automatic bucket return-to-dig control
- Boom-float function
- Reservoir sight gauge for hydraulic/hydrostatic oil
- Fine-micron hydraulic filter, vertical mounting
- Hydraulic lever lockout
- Pilot-operated 3-function valve with single joystick lever control for boom and bucket, and auxiliary lever for standard pin disconnect and auxiliary hydraulics
- 4-function hydraulic valve with pilot joystick control and pilot auxiliary lever for 3rd function, and push buttons for 4th function
- ▲ Hydraulic conversion kits, 4-function valve
- Quick-coupler diagnostic ports: Priority pressure / Hydraulic pump pressure / Control valve pressure / HST pressure

324J Operator's Station

- Cab (conforms to SAE J1040, SAE J231, ISO 3471, and ISO 3449): ROPS/FOPS / Heater/ defroster / Rubber-plane isolation mounted for noise/vibration reduction / Intermittent front and rear windshield wipers and washers / Tinted safety glass / Full-width adjustable sun visor / Pre-wired for radio speakers / Deluxe high-back cloth seat with mechanical and 51-mm (2 in.) retractable seat belt / Left and right doors / 1 sliding window in each door
- ▲ AM/FM/weather-band radio
- ▲ AM/FM/weather-band radio with cassette player
- ▲ AM/FM/weather-band radio with CD player
- ▲ Air conditioning (factory or dealer installed)
- Storage compartment
- Rubber floormat
- Tilt steering column
- Rearview mirrors, outside (2) and inside (1) (conform to SAE J985)
- Handholds and steps, ergonomically located and slip resistant (conform to SAE J185)

Loader Linkage

- Z-bar loader linkage
- Loader boom service locking bar (conforms to SAE J38)

Buckets and Attachments

- Full line of buckets with selection of bolt-on cutting edges and teeth
- Standard quick-coupler, less bucket
- Worksite Pro™ skid-steer-style coupler
- ▲ Full line of construction utility forks, pallet forks, extendable boom with hook, and other attachments*

Tires

405/70R20 tires on single-piece rims

Other

- Fenders, front and rear
- Articulation locking bar (conforms to SAE J276)
- Vandal protection, includes lockable engine enclosure and fuel fill
- Counterweight, full
- Rear bottom guard
- Drawbar, with locking pin
- ▲ Material-weighing system*
- ▲ Ride control
- ▲ JDLink™ wireless communication system (available in specific countries; see your dealer for details)

