Agile, productive, powerful, and ready for anything.

Need a compact loader to get big results? Choose the 304J. This versatile 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.
Unique stereo steering makes this compact loader even more productive, for tight turns and extra agility in close quarters.

Comes with standard items others call options — return to dig, quick-coupler, high travel-speed range, and 1.4-cubic-yard bucket.

Extended service intervals help maximize uptime.

100-percent manual differential lock helps you dig down deep for more power.

Tier 3 emissions-certified five-cylinder turbocharged John Deere diesel delivers power without compromise.

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**304J Loader key specifications**

- Operating Weight: 13,404 lb.
- Net Horsepower: 73 hp
- Full Turn Tip Load: 9,315 lb.
- Bucket Size: 1.4 cu. yd.
- Bucket Breakout Force: 12,364 lb.
1. Boom float allows easy backdragging for finish grading and cleaning up jobsites.

2. The 304J’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. 304J’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 304J.

Oscillating stereo steering combines machine articulation and rear-axle steering, giving the 304J the tightest turn radius in its class.

Twenty-inch tires are standard.
When the going gets rough, get your hands on a 304J and get going. Unlike other machines that are frequently forced into three-point turns (or worse), this nimble loader’s stereo steering allows a tight 148-inch turn radius for unsurpassed maneuverability. Delivers higher tipping load capacities, too. What’s more, the hydrostatic drivetrain’s infinitely variable range lets you precisely match travel speed to the work at hand. So you can inch ahead while maintaining full hydraulic power. Or max out at a fastest-in-class 19 mph. The 304J lets you move more materials, more quickly, and more efficiently. Without running you ragged.
Efficient interior provides plenty of room for productivity.

When operation is easy, maximum productivity becomes second nature. The 304J’s sound-suppressed spacious 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.
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 304J’s best-in-class 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.

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 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.
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 EPA Tier 3 non-road emissions regulations. So it can work where rigid sound- and air-quality regulations exist.

Remote test ports enable technicians to quickly troubleshoot problems.

1. 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 clean-out. 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.
The hard-working 304J limits downtime with its toughness and improves your bottom line with its long-term reliability. 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. The 304J 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 304J provides all you and your operator need to stay productive.

Built to handle the toughest jobs — yours.
Why invest in a bunch of specialized machines when the highly versatile 304J can do the job? With its standard pin-type hydraulic quick-coupler, the 304J lets you 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 304J will be the most versatile compact machine on your worksite.
Change hydraulic flow with a twist of your wrist.

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

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

1. If you change attachments often, you’ll appreciate the hydraulic-actuated skid-steer-style coupler that lets you attach and release attachments quickly, without tools or leaving the seat.

Attachments shown:
2. Utility/snow blade
3. Scrap grapple
4. Utility bucket
5. Pallet fork
6. Auger

Available attachments:
• Power rakes
• Utility/snow blades
• Augers
• Bale spears
• Construction or utility buckets
• Tooth buckets
• Pallet forks
• Scrap and brush-tined grapples
• Pick-up brooms
Fuel-efficient Tier 3 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 transverse-mounted engine provide convenient ground-level access to daily checkpoints.
Lower operating costs, raise expectations.

We spared no expense to help keep the 304J’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.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hydraulically driven fan runs only as needed for efficient cooling, reduced noise, and lower fuel consumption.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>Electronic control unit lets service technicians easily retrieve vital operating information and helps diagnose problems more quickly.</td>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
<td>Easy access vertical spin-on filters and environmental drains make fluid changes quicker and cleaner.</td>
<td>6.</td>
</tr>
</tbody>
</table>
## Specifications

### Engine

<table>
<thead>
<tr>
<th>Details</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer and Model</td>
<td>John Deere PowerTech™ 5030T</td>
</tr>
<tr>
<td>Non-Road Emission Standards</td>
<td>certified to EPA Tier 3 emissions</td>
</tr>
<tr>
<td>Cylinders</td>
<td>5</td>
</tr>
<tr>
<td>Valves per Cylinder</td>
<td>2</td>
</tr>
<tr>
<td>Displacement</td>
<td>184 cu. in. (2.9 L)</td>
</tr>
<tr>
<td>Net Rated Power @ 2,800 rpm, SAE</td>
<td>73 hp (54 kW)</td>
</tr>
<tr>
<td>Net Peak Power @ 2,800 rpm, SAE</td>
<td>75 hp (56 kW)</td>
</tr>
<tr>
<td>Maximum Net Torque @ 1,500 rpm, SAE</td>
<td>195 lb.-ft. (265 Nm)</td>
</tr>
<tr>
<td>Lubrication</td>
<td>pressure system with full-flow spin-on filter</td>
</tr>
<tr>
<td>Fuel System</td>
<td>electronically controlled unit injection pump</td>
</tr>
<tr>
<td>Aspiration</td>
<td>turbocharged</td>
</tr>
<tr>
<td>Air Cleaner</td>
<td>dual safety element dry type</td>
</tr>
</tbody>
</table>

### Cooling

- Hydraulically driven, proportionally controlled fan
- Engine Coolant Rating: ~34 deg. F (~37 deg. C)

### Powertrain

Hydrostatic (HST) with infinitely variable speed control over full range of operating speeds; two speed 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

Two Travel Speeds In Forward and Reverse

- Gear 1: 4.3 mph (6.9 km/h)
- Gear 2: 18.6 mph (29.9 km/h)

Axles: 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: 11 in. (290 mm)

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

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 @ 1,000 psi (6895 kPa): 25 gpm (95 L/m)

System Relief Pressure (loader and steering): 2,750 psi (18 961 kPa)

### Hydraulic Cycle Times

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise</td>
<td>5.3 sec.</td>
</tr>
<tr>
<td>Dump</td>
<td>1.6 sec.</td>
</tr>
<tr>
<td>Lower</td>
<td>4.5 sec.</td>
</tr>
<tr>
<td>Power Down</td>
<td>6.3 sec.</td>
</tr>
<tr>
<td>Total</td>
<td>13.2 sec.</td>
</tr>
</tbody>
</table>

### Maximum Lift Capacity

- with 3.4-cu. yd. (1.1 m³) stockpiling/general-purpose bucket with bolt-on cutting edge
- Lift at Ground Level: 12,136 lb. (5510 kg)
- Lift at Maximum Height: 7,868 lb. (3572 kg)

### Turning Radius

- Measured to Centerline of Outside Tire: 12 ft. 5 in. (3.78 m)

### 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
Electricity

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), turn signals, flashers, stop- and taillights

### Tires/Wheels

<table>
<thead>
<tr>
<th>Standard-Size, 405/70R20 Tires on Single-Piece Rims</th>
<th>Tread Width</th>
<th>Width Over Tires</th>
<th>Change In Vertical Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.4 in. (1661 mm)</td>
<td>81.7 in. (2075 mm)</td>
<td>0 in. (0 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Serviceability

Refill Capacities

- **Cooling System (engine and radiator)**: 12.7 qt. (12.0 L)
- **Differential and Planetary Axle**
  - Front: 7.7 qt. (17.3 L)
  - Rear: 7.1 qt. (17.7 L)
- **Engine Oil with Filter**: 11.9 qt. (31.0 L)
- **Fuel Tank**: 21.5 gal. (81.0 L)
- **Hydraulic/Hydrostatic Reservoir with Filter**: 21.1 gal. (80.0 L)
- **Hydrostatic Motor Gearbox**: 0.8 qt. (0.8 L)
- **Front/Rear Axle Planetary Hubs (each)**: 0.9 qt. (0.9 L)

### Operating Weights

With standard equipment, 405/70R20 tires, standard counterweight, cab, 175-lb. (79 kg) operator, and full fuel tank

- With Quick-Coupler and 1.4-cu.-yd.
  - (1.1 m³) Stockpiling/General-Purpose Bucket with Bolt-On Edge: 13,404 lb. (6080 kg)
  - With Quick-Coupler and Fork: 13,058 lb. (5923 kg)
- **Optional Components**
  - Bucket, 1.4 cu. yd. (1.1 m³), Stockpiling/General Purpose: 946 lb. (429 kg)

### Machine Dimensions

**DIMENSIONS WITH QUICK-COULER AND BUCKET**

- **A** Height to Top of Cab: 9 ft. 2 in. (2.79 m)
- **B** Height to Top of Exhaust: 8 ft. 9 in. (2.67 m)
- **C** Ground Clearance: 15.2 in. (386 mm)
- **D** Length from Centerline of Front Axle: 29.5 in. (749 mm)
- **E** Wheelbase: 7 ft. 7 in. (2.30 m)
- **F** Dump Clearance, 42-deg., Full Height: ▲ (see page 16)
- **G** Height to Hinge Pin, Fully Raised: 11 ft. 0 in. (3.35 m)
- **H** Dump Reach, 42-deg., 7-ft. (2.13 m)
  - Clearance: ▲▲ (see page 16)
- **I** Maximum Digging Depth: 2.7 in. (69 mm)
- **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.
### Machine Dimensions (continued) 304J

**DIMENSIONS WITH QUICK-COUPLER AND FORK**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Reach, Fully Raised</td>
<td>22.4 in. (569 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Fork Height, Fully Raised</td>
<td>10 ft. 6 in. (3.19 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Maximum Reach, Fork Level</td>
<td>5 ft. 0 in. (1.52 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Fork Height, Maximum Reach</td>
<td>4 ft. 6 in. (1.36 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Reach, Ground Level</td>
<td>29.5 in. (749 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Depth Below Ground</td>
<td>4 in. (102 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Tine Length</td>
<td>3 ft. 11 in. (1.19 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Overall Length</td>
<td>20 ft. 2 in. (6.14 m)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Measured with Fork Level, Load Centered

- **Tipping Load, Straight** 7,877 lb. (3573 kg)
- **Tipping Load, Full Turn** 7,165 lb. (3250 kg)

### Standard Z-Bar Pin-On Bucket

**Stockpiling/General Purpose w/Bolt-on Edge**

<table>
<thead>
<tr>
<th>Bucket Type/Size</th>
<th>Capacity, Heaped SAE</th>
<th>1.4 cu. yd. (1.1 m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capacity, Struck SAE</td>
<td>1.2 cu. yd. (0.9 m³)</td>
</tr>
<tr>
<td></td>
<td>Bucket Width</td>
<td>7 ft. 3 in. (2.20 m)</td>
</tr>
<tr>
<td></td>
<td>Breakout Force, SAE J732C</td>
<td>12,364 lb (5608 kg)</td>
</tr>
<tr>
<td></td>
<td>Tipping Load, Straight</td>
<td>10,241 lb (4645 kg)</td>
</tr>
<tr>
<td></td>
<td>Tipping Load, Full Turn, SAE</td>
<td>9,315 lb. (4225 kg)</td>
</tr>
</tbody>
</table>

**▲▲ Reach, 42-Deg. Dump, 7-ft. (2.13 m)**
- **Clearance** 4 ft. 3 in. (1.30 m)

**▲▲ Reach, 42-Deg. Dump, Full Height** 34.8 in. (884 mm)

**▲ Dump Clearance, 42 Deg., Full Height** 8 ft. 9 in. (2.67 m)

**▲▲▲ Overall Length, Bucket on Ground** 18 ft. 11 in. (5.76 m)

**Loader Clearance Circle, Bucket Carry Position** 27 ft. 3 in. (8.30 m)

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

LOOSE MATERIALS

<table>
<thead>
<tr>
<th>Material Description</th>
<th>lb./cu. yd</th>
<th>kg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chips, broken</td>
<td>466</td>
<td>268</td>
</tr>
<tr>
<td>Grinders (coal, ashes, clinkers)</td>
<td>1,134</td>
<td>673</td>
</tr>
<tr>
<td>Clay and gravel, dry</td>
<td>2,750</td>
<td>1,602</td>
</tr>
<tr>
<td>Clay, compact, solid</td>
<td>2,943</td>
<td>1,746</td>
</tr>
<tr>
<td>Clay, dry in lump loose</td>
<td>1,791</td>
<td>1,099</td>
</tr>
<tr>
<td>Clay, excavated in water</td>
<td>2,160</td>
<td>1,292</td>
</tr>
<tr>
<td>Coal, anthracite, broken, loose</td>
<td>1,458</td>
<td>866</td>
</tr>
<tr>
<td>Coal, bituminous, moderately wet</td>
<td>1,350</td>
<td>801</td>
</tr>
<tr>
<td>Earth, common basis, dry</td>
<td>2,052</td>
<td>1,216</td>
</tr>
<tr>
<td>Earth, mud, packed</td>
<td>3,105</td>
<td>1,843</td>
</tr>
<tr>
<td>Gravel, broken</td>
<td>2,882</td>
<td>1,638</td>
</tr>
<tr>
<td>Gypsum</td>
<td>3,824</td>
<td>2,275</td>
</tr>
<tr>
<td>Limestone, coarse, sized</td>
<td>2,646</td>
<td>1,570</td>
</tr>
<tr>
<td>Limestone, rough, sized</td>
<td>2,835</td>
<td>1,662</td>
</tr>
<tr>
<td>Limestone, pulverized or crushed</td>
<td>2,295</td>
<td>1,382</td>
</tr>
<tr>
<td>Sand, damp</td>
<td>3,510</td>
<td>2,083</td>
</tr>
<tr>
<td>Sand, dry</td>
<td>2,970</td>
<td>1,762</td>
</tr>
<tr>
<td>Sand, wet, full of water</td>
<td>3,510</td>
<td>2,083</td>
</tr>
<tr>
<td>Sandstone, quartz</td>
<td>2,214</td>
<td>1,314</td>
</tr>
<tr>
<td>Slates, broken and crushed</td>
<td>2,295</td>
<td>1,382</td>
</tr>
<tr>
<td>Slag, furnace granulated</td>
<td>3,294</td>
<td>1,955</td>
</tr>
<tr>
<td>Stone or gravel, 1-1/2” to 3-1/2” size</td>
<td>2,430</td>
<td>1,442</td>
</tr>
<tr>
<td>Stone or gravel, 3/4” size</td>
<td>2,700</td>
<td>1,602</td>
</tr>
</tbody>
</table>

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 considering 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, unlevel surfaces, or “maximum load” condition on this guide is sometimes utilized when operating on firm ground and level surfaces.
CONTROL OWNING AND OPERATING COSTS

Customer Personal Service (CPS) is part of John Deere’s proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

Fluid analysis program – tells you what’s going on inside all of your machine’s major components so you’ll know if there’s a problem before you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

Component life-cycle data – gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

Preventive Maintenance (PM) agreements – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

Extended coverage – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And an extended coverage contract also travels well because it’s backed by John Deere and is honored by all Deere construction dealers.

Customer Support Advisors (CSAs) – Deere believes the CSA program lends a personal quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that’s right for your business and take the burden of machine maintenance off your shoulders.