410C BACKHOE LOADER

FEATURES
- 75 SAE net hp (56 kW)
- Backhoe digging depth (SAE)
  15 ft. 4 in. (4.67 m) - long dipperstick
  14 ft. 8 in. (4.47 m) - short dipperstick
- Unitized frame
- Isolated engine and operator's station
- Walk-in front entry
- Designed-in quietness
- Closed-center hydraulic system
- O-ring face seal hydraulic plumbing
- Weight distributed for working stability
- Self-adjusting hydraulic wet-disk brakes
- Inboard planetary final drives
- Transaxle 1st and 2nd collar shift, 3rd and 4th synchronized
- Full-power-shift reverser
- Torque converter
- Single-lever loader control
- Two-lever backhoe control
- Two-lever stabilizer control with anti-drift lockouts—raise and lower
- Multi-adjustable swivel seat w/high backrest and armrests
- Hydrostatic power steering
- Soundproofed cab w/integral ROPS/FOPS
- Vandal protection w/built-in locks

ADD VERSATILITY WITH:
- Mechanical front-wheel drive with:
  - Wet clutch—engage on the go
  - Offset driveshaft for better ground clearance
- Extendable dipperstick

ENGINE PERFORMANCE

NET TORQUE

<table>
<thead>
<tr>
<th>hp</th>
<th>kW</th>
<th>Nm</th>
<th>lb-ft</th>
</tr>
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<tbody>
<tr>
<td>60</td>
<td>60</td>
<td>488</td>
<td>360</td>
</tr>
<tr>
<td>70</td>
<td>52</td>
<td>388</td>
<td>290</td>
</tr>
<tr>
<td>80</td>
<td>56</td>
<td>344</td>
<td>253</td>
</tr>
<tr>
<td>90</td>
<td>44</td>
<td>271</td>
<td>201</td>
</tr>
<tr>
<td>100</td>
<td>40</td>
<td>220</td>
<td>163</td>
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</tbody>
</table>

FUEL CONSUMPTION

<table>
<thead>
<tr>
<th>L/h</th>
<th>gal/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>3.8</td>
</tr>
<tr>
<td>4.4</td>
<td>5.5</td>
</tr>
<tr>
<td>6.6</td>
<td>8.1</td>
</tr>
<tr>
<td>8.3</td>
<td>10.0</td>
</tr>
<tr>
<td>7.5</td>
<td>8.7</td>
</tr>
<tr>
<td>6.5</td>
<td>7.8</td>
</tr>
<tr>
<td>5.5</td>
<td>6.6</td>
</tr>
</tbody>
</table>

NET POWER

ENGINE SPEED—RPM

Model shown may include options

*Depending on operating variables
410C BACKHOE LOADER SPECIFICATIONS

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with 17.5L-24, 10 PR, R4 rear tires, 11L-15, 10 PR, F3 front tires, 1.0 cu. yd. (0.76 m³) loader bucket, 24-in. (610 mm) standard duty backhoe bucket, ROPS/FOPS, full fuel tank and 175 lb. (80 kg) operator.

RATED POWER @ 2200 RPM:
- Net: 75 hp (56 kW)
- Gross: 80 hp (60 kW)

Engine: John Deere 4276D
- Type: 4-stroke cycle, naturally aspirated diesel
- Bore and stroke: 4.19 x 5.00 in. (106.6 x 127 mm)
- No. of cylinders: 4
- Displacement: 4.524 L
- Maximum net torque @ 1200 rpm: 215 lb-ft (292 Nm)
- 20 percent torque rise

Transmission:
- Manual shift with first and second speeds having sliding collar engagement and third and fourth speeds engaged with cone-type synchronizers. Single shift lever, floor mounted.

Travel Speeds:
- With standard 17.5L-24:
  - Forward: 3.0, 4.8, 5.3, 5.8 mph (4.8, 7.8, 8.5, 9.3 km/h)
  - Reverse: 2.0, 5.1, 8.2, 10.9 mph (3.2, 13.0, 13.5, 17.5 km/h)
- With MFWD and 21L-24:
  - Forward: 3.3, 5.3, 6.3, 10.6 mph (5.3, 8.5, 10.2, 16.6 km/h)
  - Reverse: 2.1, 4.0, 22.1, 25.6 mph (3.4, 6.4, 36.5, 41.2 km/h)

Final Drives:
- Planetary, inboard

Service Brakes: Hydraulic, applied with separate pedals; hydraulically equalized when both pedals are depressed. Wet discs and facings are fully enclosed and self-adjusting.

Secondary Brake: Mechanical "V" groove band located on differential ring gear.

Steering: Hydrostatic power
- Non-boosted axle
  - Curb turning radius w/brakes: 11 ft. 8 in. (3.55 m)
  - Bucket clearance w/brakes: 13 ft. 3 in. (4.04 m)
  - Steering wheel turns, left to right: 2.2
- Axle oscillation stop to stop: 22 deg.

Axle Oscillation: Mechanical Front-Wheel Drive
- Curb turning radius w/brakes: 11 ft. 5 in. (3.49 m)
- Bucket clearance w/brakes: 13 ft. 6 in. (4.11 m)
- Steering wheel turns, left to right: 2.3
- Axle oscillation stop to stop: 22 deg.

Hydraulic System: Closed-center (variable flow, constant pressure)
- Pump: 100 gpm at 6155 psi (4230 kg/cm²)
- Screen, pressure oil: 50 micron, steel-enclosed replaceable element

Hydraulic Cylinders:
- Bore: 3.5 in. (89 mm), Stroke: 10 in. (254 mm)
- Loader boom (2)
- Loader bucket (1)
- Backhoe boom (1)
- Backhoe crowd (1)
- Backhoe swing (2)
- Backhoe extendable

Tires:
- Front: 11L-15, 10 PR, F3
- Rear: 11L-12, PR, F3

Wheelbase:
- 82.7 in. (2100 mm)

Axle Ratings:
- Static Rating: 15,750 lb (6.800 kg)
- Dynamic Rating: 19,520 lb (8.800 kg)

Additional Standard Equipment:
- Air cleaner restriction indicator
- Air cleaner, dry type w/safety element and precleaner
- Alternator, w/transistorized voltage regulator
- Antifreeze to -34°F (-37°C)
- Automatic return-to-dig
- Backhoe transport lock
- Battery, 180-minute capacity
- Differential lock
- Electric automatic de-stroke for hydraulic pump
- Electric combination tachometer/hourmeter
- Electric fuel shut-off
- Emergency/parking brake
- Engine side shields w/built-in locks
- Floor mat
- Foot and hand throttles
- Fuel gauge
- Fuel tank and brake lights
- Hydraulic self-leveling loader
- Key switch

SAE Operating Weight: 14,400 lb (6550 kg)
**410C BACKHOE LOADER SPECIFICATIONS AND DIMENSIONS**

Drawing based on machine with 17.5L-24 tires

**Backhoe**

<table>
<thead>
<tr>
<th>Key</th>
<th>Backhoe* w/Long Dipperstick</th>
<th>Backhoe* w/Short Dipperstick</th>
<th>Extendable Dipperstick Retracted</th>
<th>Extendable Dipperstick Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Loading height, truck loading position</td>
<td>11 ft. 10 in. (3.61 m)</td>
<td>11 ft. 6 in. (3.51 m)</td>
<td>13 ft. 11 in. (4.24 m)</td>
<td></td>
</tr>
<tr>
<td>B. Reach from center of swing mast</td>
<td>10 ft. 5 in. (3.16 m)</td>
<td>17 ft. 9 in. (5.42 m)</td>
<td>17 ft. 9 in. (5.42 m)</td>
<td></td>
</tr>
<tr>
<td>C. Reach from center of rear axle</td>
<td>21 ft. 6 in. (6.60 m)</td>
<td>21 ft. 6 in. (6.60 m)</td>
<td>25 ft. 2 in. (7.67 m)</td>
<td></td>
</tr>
<tr>
<td>D. Digging depth (SAE):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) 2-ft. (610 mm) flat bottom</td>
<td>14 ft. 6 in. (4.47 m)</td>
<td>14 ft. 6 in. (4.47 m)</td>
<td>18 ft. 4 in. (5.59 m)</td>
<td></td>
</tr>
<tr>
<td>(2) 8-ft. (2440 mm) flat bottom</td>
<td>14 ft. 5 in. (4.40 m)</td>
<td>14 ft. 5 in. (4.40 m)</td>
<td>18 ft. 4 in. (5.59 m)</td>
<td></td>
</tr>
<tr>
<td>E. Maximum digging depth</td>
<td>14 ft. 8 in. (4.47 m)</td>
<td>14 ft. 8 in. (4.47 m)</td>
<td>18 ft. 4 in. (5.59 m)</td>
<td></td>
</tr>
<tr>
<td>F. Ground clearance, minimum</td>
<td>12 in. (305 mm)</td>
<td>12 in. (305 mm)</td>
<td>12 in. (305 mm)</td>
<td></td>
</tr>
<tr>
<td>G. Bucket rotation</td>
<td>160 or 180 degrees</td>
<td>160 or 180 degrees</td>
<td>160 or 180 degrees</td>
<td></td>
</tr>
<tr>
<td>H. Transport height</td>
<td>11 ft. 5 in. (3.51 m)</td>
<td>11 ft. 5 in. (3.51 m)</td>
<td>11 ft. 5 in. (3.51 m)</td>
<td></td>
</tr>
<tr>
<td>J. Overall length, transport</td>
<td>23 ft. 5 in. (7.14 m)</td>
<td>23 ft. 5 in. (7.14 m)</td>
<td>23 ft. 5 in. (7.14 m)</td>
<td></td>
</tr>
<tr>
<td>K. Stabilizer width—transport</td>
<td>7 ft. 8 in. (2.34 m)</td>
<td>7 ft. 8 in. (2.34 m)</td>
<td>7 ft. 8 in. (2.34 m)</td>
<td></td>
</tr>
<tr>
<td>L. Stabilizer spread—operating</td>
<td>9 ft. 10 in. (3.00 m)</td>
<td>9 ft. 10 in. (3.00 m)</td>
<td>9 ft. 10 in. (3.00 m)</td>
<td></td>
</tr>
<tr>
<td>M. Overall width (less loader bucket)</td>
<td>82 in. (2080 mm)</td>
<td>82 in. (2080 mm)</td>
<td>82 in. (2080 mm)</td>
<td></td>
</tr>
<tr>
<td>Digging force, bucket cylinder (power dig position)</td>
<td>11,700 lb. (52.0 kN)</td>
<td>11,700 lb. (52.0 kN)</td>
<td>11,700 lb. (52.0 kN)</td>
<td></td>
</tr>
<tr>
<td>Digging force, crowd cylinder</td>
<td>6300 lb. (28.0 kN)</td>
<td>6300 lb. (28.0 kN)</td>
<td>6300 lb. (28.0 kN)</td>
<td></td>
</tr>
<tr>
<td>Swing arc</td>
<td>180 degrees</td>
<td>180 degrees</td>
<td>180 degrees</td>
<td></td>
</tr>
<tr>
<td>Bucket positions</td>
<td>9 or 16 deg. rollback</td>
<td>12 or 21 deg. rollback</td>
<td>8 or 17 deg. rollback</td>
<td></td>
</tr>
<tr>
<td>Operator control</td>
<td>Two levers</td>
<td>Two levers</td>
<td>Right foot treadle</td>
<td></td>
</tr>
<tr>
<td>Stabilizer angle rearward</td>
<td>14.5 degrees</td>
<td>14.5 degrees</td>
<td>14 degrees</td>
<td></td>
</tr>
<tr>
<td>Leveling angle</td>
<td>14 degrees</td>
<td>14 degrees</td>
<td>14 degrees</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Backhoe specifications are with 24-in. (610 mm) standard bucket.*
Lifting Capacity Ratings made from bucket hinge pin, loader bucket and stabilizer on firm, level ground. Lifting capacities are 87 percent of the maximum lift over any point on the swing arc and do not exceed 75 percent of the tipping load. Angle between boom and ground at 65 degrees.

Machine equipped with 24-in. (610 mm) trenching bucket, standard or optional dipperstick (as indicated below) and standard equipment.

### Lift Capacity

**Backhoe with long dipperstick.**

Based on SAE J31.

<table>
<thead>
<tr>
<th>FEET</th>
<th>Meters</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.6</td>
<td>3571</td>
<td>1620</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>3300</td>
<td>1495</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>3040</td>
<td>1370</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>2770</td>
<td>1255</td>
</tr>
<tr>
<td>10</td>
<td>3.0</td>
<td>2520</td>
<td>1135</td>
</tr>
<tr>
<td>12</td>
<td>3.6</td>
<td>2280</td>
<td>1015</td>
</tr>
<tr>
<td>14</td>
<td>4.3</td>
<td>2050</td>
<td>930</td>
</tr>
</tbody>
</table>

**Rated lift capacities are in lb. (kg).**

Lift capacities are hydraulically limited.

**Backhoe with extendable dipperstick, retracted.**

Based on SAE J31.

<table>
<thead>
<tr>
<th>FEET</th>
<th>Meters</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.6</td>
<td>1510</td>
<td>685</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1350</td>
<td>605</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>1210</td>
<td>545</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>1105</td>
<td>495</td>
</tr>
<tr>
<td>10</td>
<td>3.0</td>
<td>1005</td>
<td>450</td>
</tr>
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</table>

**Rated lift capacities are in lb. (kg).**

Lift capacities are hydraulically limited.

**Backhoe with short dipperstick.**

Based on SAE J31.

<table>
<thead>
<tr>
<th>FEET</th>
<th>Meters</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.6</td>
<td>2050</td>
<td>930</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>1870</td>
<td>850</td>
</tr>
<tr>
<td>6</td>
<td>1.8</td>
<td>1720</td>
<td>780</td>
</tr>
<tr>
<td>8</td>
<td>2.4</td>
<td>1550</td>
<td>705</td>
</tr>
<tr>
<td>10</td>
<td>3.0</td>
<td>1420</td>
<td>645</td>
</tr>
<tr>
<td>12</td>
<td>3.6</td>
<td>1290</td>
<td>585</td>
</tr>
<tr>
<td>14</td>
<td>4.3</td>
<td>1160</td>
<td>530</td>
</tr>
</tbody>
</table>

**Rated lift capacities are in lb. (kg).**

Lift capacities are hydraulically limited.
410C BACKHOE LOADER

LOADER:
Operator control: Single lever
Breakout force: 8800 lb. (39.1 kN) (3992 kg)
Lifting capacity, full height: 5700 lb. (2585 kg)
Raising time to full height: 4.4 sec.
Bucket dump time: 1.10 sec.
Bucket lowering time (power down): 3.0 sec.

BUCKETS

<table>
<thead>
<tr>
<th>Loader:</th>
<th>Width (In.)</th>
<th>Heaped Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General purpose</td>
<td>92 (2340)</td>
<td>1.0 (.76)</td>
</tr>
<tr>
<td>Long lip</td>
<td>89.4 (2270)</td>
<td>1.25 (.96)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Backhoe:</th>
<th>Width (In.)</th>
<th>Heaped Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard-duty</td>
<td>12 (305)</td>
<td>3.0 (.08)</td>
</tr>
<tr>
<td></td>
<td>16 (406)</td>
<td>4.5 (.13)</td>
</tr>
<tr>
<td></td>
<td>18 (457)</td>
<td>5.1 (.14)</td>
</tr>
<tr>
<td></td>
<td>24 (610)</td>
<td>7.5 (.21)</td>
</tr>
<tr>
<td></td>
<td>30 (762)</td>
<td>10.0 (.28)</td>
</tr>
<tr>
<td>Heavy-duty</td>
<td>36 (914)</td>
<td>10.0 (.28)</td>
</tr>
<tr>
<td>Ejector</td>
<td>30 (762)</td>
<td>10.0 (.28)</td>
</tr>
</tbody>
</table>

Optional or Special Equipment:
- Altitude-compensating engine turbocharger
- Auxiliary hydraulic valves and circuit for loader and backhoe
- Backup alarm
- Cab with:
  - Alternator, 51-amp
  - Fabric-covered swivel seat, suspension or non-suspension
  - Front defroster fan
  - Front and rear wipers
  - Integral ROPS/FOPS
  - Standard heater—19,000 Btu/hr (5.6 kW)
- Cab, quarter (front windshield and door)
- Cold-weather starting aid, remote mounted
- Economy seat, vinyl covered, suspension or rigid mounted
- Engine coolant heater
- Extendable dipperstick for backhoe
- Fan blast baffles
- Fire extinguisher
- Front counterweight
- Heavy-duty batteries
- Instrument panel vandal cover
- Mechanical front-wheel drive
- Rear defroster fan
- Rearview mirror, inside mounted, curved, heavy-duty
- Rear wheel spacers for tire chain clearance
- Reversible stabilizer pads
- Rotating beacon light
- SMV emblem
- 3-in. (76 mm) seat belt
- Additional Available Equipment:*
  - Auxiliary bolt-on cutting edge for loader buckets
  - Auxiliary fuel tank
  - Backhoe lift eye
  - Bolt-on teeth for loader bucket
  - Cab pressurizer
  - Deluxe heater w/ fresh air intake—40,000 Btu/hr (11.7 kW)
  - Deluxe heater w/ fresh air intake—40,000 Btu/hr (11.7 kW)
  - Air conditioner, 24,000 Btu/hr (7.0 kW)
  - Front windshield and door kit
  - Grille guard
  - Lateral slides for operator’s seat
  - Loader bucket chain hooks, outer
  - Longer dippersticks
  - Light materials/snow loader buckets
  - MFWD drivetrain guard
  - Multipurpose loader buckets
  - Radio or radio cassette
  - Special paint

*See your John Deere dealer for further information