

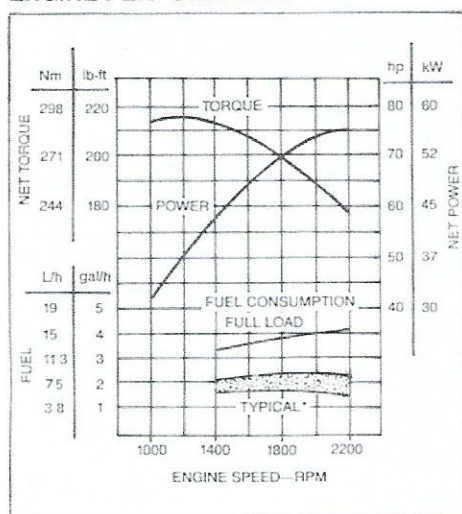


410C BACKHOE LOADER



Model shown may include options

ENGINE PERFORMANCE



*Depending on operating variables

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

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:	SAE	DIN 70 020
Net	75 hp (56 kW)	57 kW
Gross	80 hp (60 kW)	

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, using No. 2-D fuel @ 35 API gravity. No derating is required up to 5000 feet (1500 m) altitude. (With optional ACT*, 10,000 feet [3050 m] altitude.) Gross power is without cooling fan. *Altitude compensating turbocharger

Engine: John Deere 4276D

Type	4-stroke cycle, naturally aspirated diesel
Bore and stroke	4.19 x 5.00 in. (106.5 x 127 mm)
No. of cylinders	4
Displacement	276 cu. in. (4.524 L)
Maximum net torque @ 1200 rpm	215 lb-ft (292 Nm) (29.7 kg-m)
	20 percent torque rise

Cooling fan	Suction
Compression ratio	16.8 to 1
Lubrication	Pressure system w/full-flow filter and cooler
Main bearings	5
Air cleaner	Dry
Electrical system	12 volt
Alternator	65 amps

Torque Converter:

Single stage, dual phase, overrunning stator, 11-in. (280 mm) diameter, stall torque ratio 2.23:1.

Reverser:

Modulated, full-power shift with multiple wet-disk clutches. Reverser operating lever at left of steering wheel.

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:	Gear	Forward mph (km/h)	Reverse mph (km/h)
With standard 17.5L-24 rear and 11L-15 front tires	1	3.0 4.8	3.5 5.8
	2	5.1 8.2	5.9 9.5
	3	10.9 17.6	12.6 20.3
	4	19.0 30.6	22.0 35.4
With MFWD and 21L-24 (required) rear and 12.00-16.5 front tires	1	3.3 5.3	3.9 6.3
	2	5.7 9.2	6.6 10.6
	3	12.1 19.5	14.0 22.5
	4	22.1 35.6	25.6 41.2

Final Drives Planetary, inboard

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

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

Steering: Hydrostatic power

Non-powered axle

Curb turning radius—w/brakes	11 ft. 8 in. (3.55 m)
w/o brakes	13 ft. 3 in. (4.04 m)
Bucket clearance circle—w/brakes	31 ft. 8 in. (9.64 m)
w/o brakes	34 ft. 9 in. (10.60 m)
Steering wheel turns, left to right	2.2
right to left	2.9
Axle oscillation stop to stop	22 deg.
Mechanical Front-Wheel Drive	
Curb turning radius—w/brakes	11 ft. 5 in. (3.49 m)
w/o brakes	13 ft. 6 in. (4.11 m)
Bucket clearance circle—w/brakes	29 ft. 7 in. (9.02 m)
w/o brakes	33 ft. 8 in. (10.26 m)
Steering wheel turns, left to right	2.3
right to left	2.8
Axle oscillation stop to stop	22 deg.

Hydraulic System: Closed-center

(variable flow, constant pressure)

Pressure	2755 psi (19 000 kPa) (193.7 kg/cm ²)
Pump	8 radial pistons, variable flow
Flow @ 2500 psi (17 238 kPa) (175.8 kg/cm ²)	35 gpm (133 L/min)
Filter, return oil	10 micron, steel-enclosed replaceable element
Screen, pressure oil	50/in. (20 cm) mesh

Hydraulic Cylinders:

	Bore	Stroke	Rod
	In. (mm)	In. (mm)	In. (mm)
Loader boom (2)	3.15 80	29.8 757	1.77 45
Loader bucket (1)	3.54 90	28.2 716	1.77 45
Backhoe boom (1)	4.53 115	38.5 978	2.48 63
Backhoe crowd (1)	3.94 100	32.2 819	2.20 56
Backhoe bucket (1)	3.54 90	31.0 787	1.97 50
Backhoe swing (2)	4.0 102	9.5 241	2.0 51
Backhoe extendable dipper (1)	2.5 64	48.0 1220	1.25 32
Backhoe stabilizers (2)	3.94 100	20.3 516	1.97 50
Steering (1) regular axle	2.0 51	9.5 241	1.0 25
Steering (1) MFWD	2.0 51	12.6 320	1.0 25

Tires:

	11L-15, 10 PR, F3	17.5-24, 10 PR, R4
	11L-16, 12 PR, F3	19.5L-24, 10 PR, R4
MFWD	12.00-16.5, 8 PR, lug tread	21L-24, 10 PR, R4

Wheel Treads:

Front	69 in. (1750 mm)
Rear	64 in. (1625 mm)
MFWD—Front	68 in. (1730 mm)
—Rear	69 in. (1750 mm)

Wheelbase 82.7 in. (2100 mm)

Axle Ratings:

	Static Rating	Dynamic Rating	SAE J43
Front	56,000 lb. (25 500 kg)	56,500 lb. (25 500 kg)	11,950 lb. (5420 kg)
Rear	51,000 lb. (23 200 kg)	68,000 lb. (30 900 kg)	15,290 lb. (6930 kg)

Capacities:

	U.S.	Liters
Fuel tank	23 gal.	87
(Optional fuel tank)	38 gal.	144
Engine coolant	17 qt.	16
Engine oil including filter	9 qt.	8.5
Torque converter and reverser system	14 qt.	13
Transaxle and hydraulic system	21 gal.	80

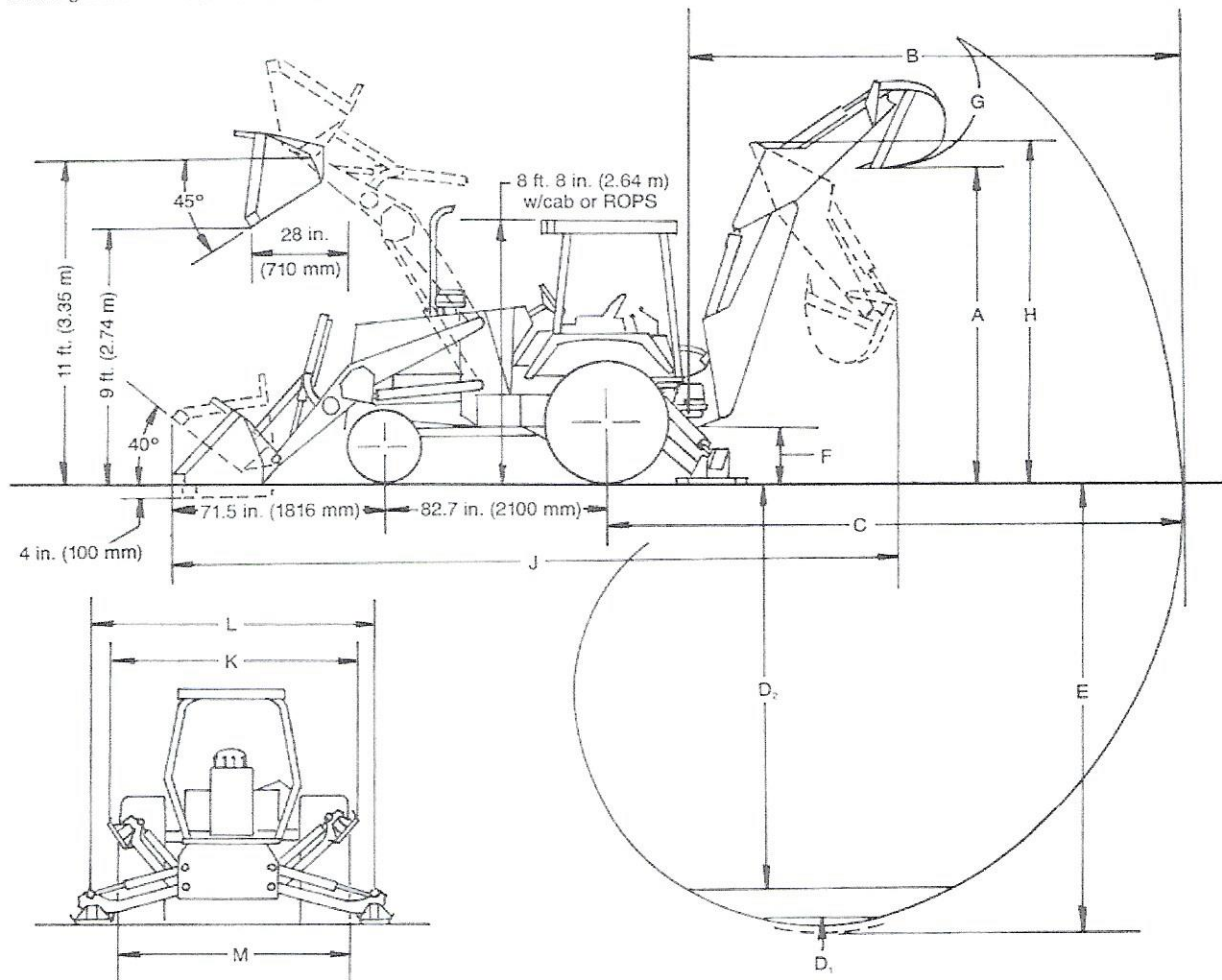
Additional Standard Equipment:

Air cleaner restriction indicator	Loader bucket level indicator
Air cleaner, dry type w/safety element and precleaner	Monitor for:
Alternator, w/transistorized voltage regulator	Alternator
Antifreeze to -34°F (-37°C)	Engine coolant temperature
Automatic return-to-dig	Engine oil pressure
Backhoe transport lock	Parking brake
Battery, 180-minute reserve capacity	Torque converter temperature
Differential lock	Muffler, under hood w/vertical exhaust
Electric automatic destroke for hydraulic pump	Multiple fuse protected electrical system—12 volt
Electric combination tachometer/hourmeter	Oil-to-air cooler for hydraulic system and transaxle
Electric fuel shutoff	Oil-to-air cooler for reverser/torque converter system
Emergency/parking brake	Rear fenders
Engine side shields w/built-in locks	Rear reflectors
Floor mat	ROPS/FOPS canopy, isolation mounted, with roof and seat belt
Foot and hand throttles	Steps and handholds
Fuel gauge	Swivel vinyl seat, fully adjustable
Fuel tank sump w/easy access drain	Vandal protection w/built-in lock for engine access door and fuel tank cap
Headliner	
Horn	
Hydraulic self-leveling loader	
Key start switch	
Lights:	
Flashing hazard lights	
Halogen driving lights	
Halogen work lights	
Tail and brake lights	
Turn signal lights	

SAE Operating Weight 14,400 lb. (6550 kg)

410C BACKHOE LOADER SPECIFICATIONS AND DIMENSIONS

Drawing based on machine with 17.5L-24 tires



Key:

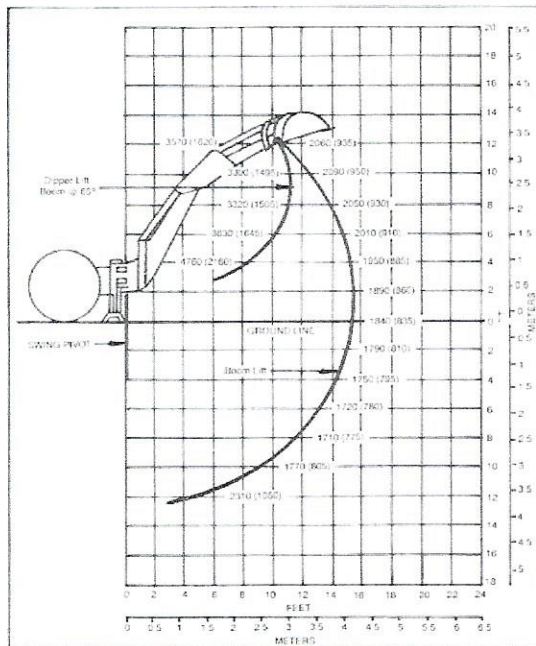
	Backhoe* w/Long Dipperstick	Backhoe* w/Short Dipperstick	Extendable Dipperstick Retracted	Extendable Dipperstick Extended
A. Loading height, truck loading position	11 ft. 10 in. (3.61 m)	11 ft. 1 in. (3.38 m)	11 ft. 6 in. (3.51 m)	13 ft. 11 in. (4.24 m)
B. Reach from center of swing mast	18 ft. 5 in. (5.61 m)	17 ft. 9 in. (5.42 m)	17 ft. 9 in. (5.42 m)	21 ft. 5 in. (6.53 m)
C. Reach from center of rear axle	22 ft. 2 in. (6.76 m)	21 ft. 6 in. (6.55 m)	21 ft. 6 in. (6.55 m)	25 ft. 2 in. (7.67 m)
D. Digging depth (SAE):				
(1) 2-ft. (610 mm) flat bottom	15 ft. 3 in. (4.65 m)	14 ft. 6 in. (4.42 m)	14 ft. 6 in. (4.42 m)	18 ft. 4 in. (5.59 m)
(2) 8-ft. (2440 mm) flat bottom	14 ft. 2 in. (4.32 m)	13 ft. 5 in. (4.09 m)	13 ft. 5 in. (4.09 m)	17 ft. 6 in. (5.34 m)
E. Maximum digging depth	15 ft. 4 in. (4.67 m)	14 ft. 8 in. (4.47 m)	14 ft. 8 in. (4.47 m)	18 ft. 5 in. (5.61 m)
F. Ground clearance, minimum	12 in. (305 mm)	12 in. (305 mm)	12 in. (305 mm)	12 in. (305 mm)
G. Bucket rotation	160 or 180 degrees	160 or 180 degrees	160 or 180 degrees	160 or 180 degrees
H. Transport height	11 ft. 5 in. (3.48 m)	11 ft. 5 in. (3.48 m)	11 ft. 8 in. (3.56 m)	11 ft. 8 in. (3.56 m)
J. Overall length, transport	23 ft. 5 in. (7.14 m)	22 ft. 11 in. (6.99 m)	23 ft. (7.01 m)	23 ft. (7.01 m)
K. Stabilizer width—transport	7 ft. 8 in. (2.34 m)	7 ft. 8 in. (2.34 m)	7 ft. 8 in. (2.34 m)	7 ft. 8 in. (2.34 m)
L. Stabilizer spread—operating	9 ft. 10 in. (3.00 m)	9 ft. 10 in. (3.00 m)	9 ft. 10 in. (3.00 m)	9 ft. 10 in. (3.00 m)
M. Overall width (less loader bucket)	82 in. (2080 mm)	82 in. (2080 mm)	82 in. (2080 mm)	82 in. (2080 mm)
Digging force, bucket cylinder (power dig position)	11,700 lb. (52.0 kN) (5310 kg)	11,700 lb. (52.0 kN) (5310 kg)	11,700 lb. (52.0 kN) (5310 kg)	11,700 lb. (52.0 kN) (5310 kg)
Digging force, crowd cylinder	6300 lb. (28.0 kN) (2860 kg)	6800 lb. (30.3 kN) (3085 kg)	6800 lb. (30.3 kN) (3085 kg)	4600 lb. (20.5 kN) (2085 kg)
Swing arc	180 degrees	180 degrees	180 degrees	180 degrees
Bucket positions	9 or 18 deg. rollback	12 or 21 deg. rollback	8 or 17 deg. rollback	12 or 22 deg. rollback
Operator control	Two levers	Two levers	Right foot treadle	Right foot treadle
Stabilizer angle rearward	14.5 degrees	14.5 degrees	14.5 degrees	14.5 degrees
Lifting capacity, maximum, boom @ 65°	4100 lb. (1860 kg)	4200 lb. (1910 kg)	4100 lb. (1860 kg)	2700 lb. (1220 kg)
Leveling angle	14 degrees	14 degrees	14 degrees	14 degrees

*Note: Backhoe specifications are with 24-in. (610 mm) standard bucket.

410C BACKHOE LOADER LIFTING CAPACITIES

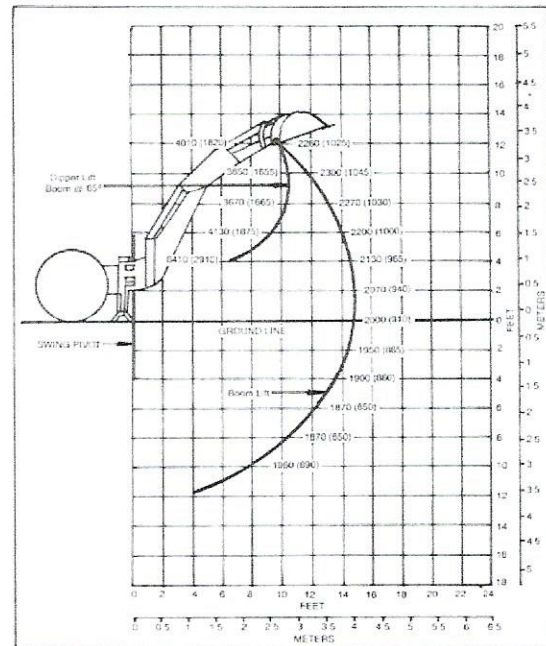
Lifting Capacity Ratings made from bucket hinge pin, loader bucket and stabilizer on firm, level ground. Lifting capacities are 87 percent of the maximum lift over any point on the swing arc and do not exceed 75 percent of the tipping load. Angle between boom and ground at 65 degrees. Machine equipped 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.



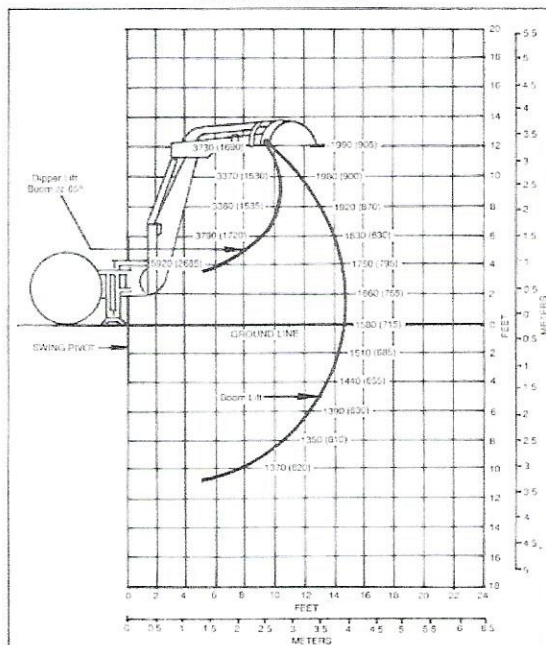
Rated lift capacities are in lb. (kg)
Lift capacities are hydraulically limited.

Lift Capacity
Backhoe with short dipperstick.
Based on SAE J31.



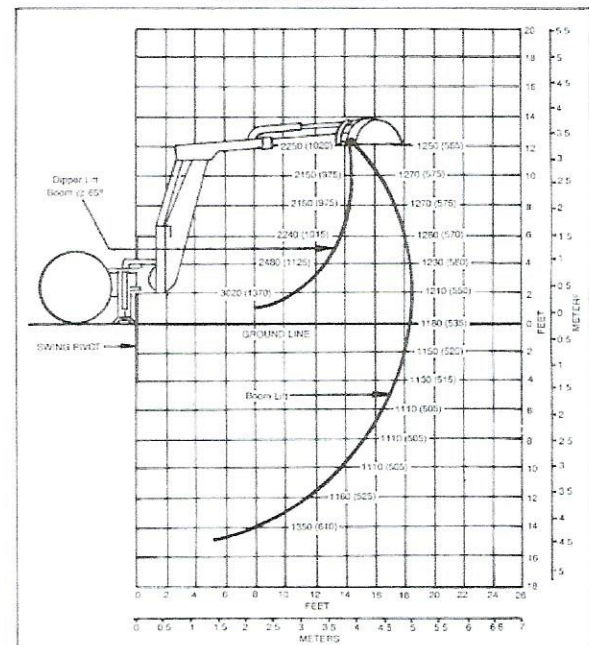
Rated lift capacities are in lb. (kg)
Lift capacities are hydraulically limited.

Lift Capacity
Backhoe with extendable dipperstick, retracted.
Based on SAE J31.



Rated lift capacities are in lb. (kg)
Lift capacities are hydraulically limited.

Lift Capacity
Backhoe with extendable dipperstick, extended.
Based on SAE J31.



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

Loader:	Width		Heaped Capacity	
	In.	(mm)	Cu. Yd.	(m ³)
General purpose	92	(2340)	1.0	(.76)
	92	(2340)	1.25	(.96)
Long lip	89.4	(2270)	1.25	(.96)
Backhoe:			Cu. Ft.	
			(m ³)	
Standard-duty	12	(305)	3.0	(.08)
	16	(406)	4.5	(.13)
	18	(457)	5.1	(.14)
	24	(610)	7.5	(.21)
	24	(610)	8.8	(.25)
	30	(762)	10.0	(.28)
	36	(914)	10.0	(.28)
Heavy-duty	36	(914)	14.5	(.41)
	18	(457)	5.1	(.14)
	24	(610)	7.5	(.21)
Ejector	30	(762)	10.0	(.28)
	24	(610)	5.7	(.16)

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
 Three- or four-lever, pedal-swing backhoe controls
 Toolbox

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)
 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 driveshaft guard
 Multipurpose loader buckets
 Radio or radio cassette
 Special paint

* See your John Deere dealer for further information