

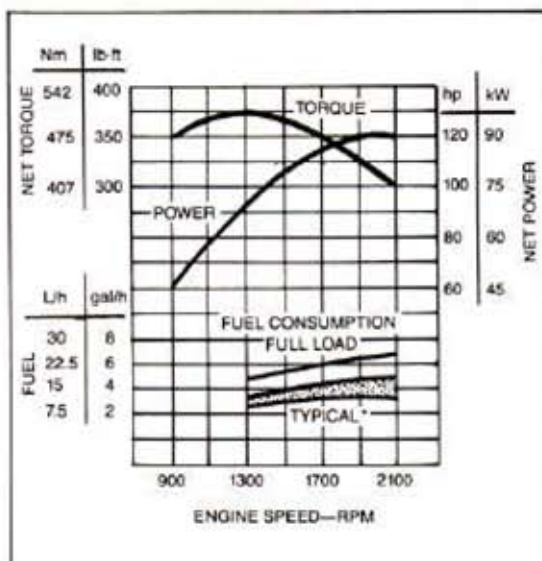


# 655B LOADER



Model shown may include options

## ENGINE PERFORMANCE



## FEATURES

120 SAE net hp (90 kW) turbocharged John Deere diesel engine

32,400 to 38,654 lb. (14 696 to 17 333 kg) standard track; 33,600 to 39,854 lb. (15 240 to 18 078 kg) wide track operating weight with typical options and special equipment

Dual-Path automatic hydrostatic drive with infinite speeds up to 6.5 mph (10.5 km/h)

Single lever for speed and direction control

Pedals for independent track control steering

Counterrotating tracks

No steering clutches or steering brake

Automatically engaged parking brakes

DURA-TRAX™ deep-heat-treated sealed track links and through-hardened sealed rollers

Sealed loader linkage

Single-lever loader control with float position and bucket return-to-dig

Dual-stage aspirated air cleaner

Perforated engine side shields

Designed for quietness

Roll-over protective structure (ROPS)

### ADD VERSATILITY WITH:

Winch

Ripper

Cable plow

Multipurpose bucket

Drawbar

\* Depending on operating variables

## 655B LOADER SPECIFICATIONS

Specifications and design are 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 2 cu. yd. (1.5 m<sup>3</sup>) bucket with teeth, roll-over protective canopy, four counterweights, full fuel tank, 175 lb. (80 kg) operator and standard equipment.

<b>Rated Power @ 2100 rpm:</b>	<b>SAE</b>	<b>DIN 6270B</b>
Net .....	120 hp (90 kW)	90 kW
Gross .....	128 hp (95 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 6270B using No. 2-D fuel @ 35 API gravity. No derating is required up to 10,000 feet (3050 m) altitude. Gross power is without cooling fan.

### Engine: John Deere 6414T

Type .....	4-stroke cycle, turbocharged diesel
Bore and stroke .....	4.19 x 5.00 in. (106.5 x 127 mm)
No. of cylinders .....	6
Displacement .....	414 cu. in. (6.785 L)
Maximum net torque @ 1300 rpm .....	375 lb-ft (509 Nm) (51.8 kg-m)
Cooling fan .....	Blower
Compression ratio .....	16.8 to 1
Main bearings .....	7
Lubrication .....	Pressure system w/full-flow filters
Air cleaner w/restriction indicator .....	Dry
Electrical system .....	24-volt w/alternator
Batteries (two 12-volt) cold cranking capacity at 0°F (-18°C) .....	625 amps
Reserve capacity .....	160 minutes each

### Transmission:

Cold weather starting .....	Optional disconnect clutch completely disengages splitter drive, hydrostatic drive and all hydraulics.
Splitter drive .....	Pressure-lubricated helical gears drive both hydrostatic transmissions, main hydraulic pump, winch drive shaft and auxiliary pump drive.
Drive .....	Dual-Path, fully automatic, infinitely variable hydrostatic transmissions.
Speeds .....	Infinite from 0 to 6.5 mph (0 to 10.5 km/h) forward or reverse.
Control .....	Single-lever, variable speed, forward and reverse.

### Steering:

Fully modulated, infinitely variable pedal steering for live power turns and counterrotation. No need for steering clutches or steering brakes.

### Brakes:

Service .....	Hydrostatic
Parking .....	Wet-disk brakes are automatically applied when engine is stopped, or manually applied with center foot pedal during normal operation.

### Hydraulic System: Open-center

Control .....	Single-lever bucket control with automatic bucket positioner and float position.
Valve .....	Three-function
Pump .....	Gear, 54 gpm (204 L/min) @ rated engine speed
Pressure .....	2250 psi (15 514 kPa) (158.2 kg/cm <sup>2</sup> )
Oil lines .....	Seamless steel tubing; double-wire-braid hose
Filter .....	10 micron filter in return line w/bypass

### Hydraulic Cylinders:

	<b>Bore</b>	<b>Stroke</b>
Boom (2) .....	5.50 in. (140 mm)	32 in. (813 mm)
Bucket (2) .....	4.50 in. (114 mm)	21.52 in. (547 mm)
Cylinder rods .....	Ground, heat-treated, chrome-plated, polished	
Boom cylinder rods .....	3.75 in. (95 mm) dia.	
Bucket cylinder rods .....	2.25 in. (57 mm) dia.	

**Tracks:** 6-roller track frame with front and rear track guides and sprocket guard. DURA-TRAX deep-heat-treated sealed track links and through-hardened sealed rollers provide maximum wear resistance.

### Standard track

Two bar grouser width .....	15 in. (381 mm)
Track shoes, each side .....	40
Ground contact area .....	2724 sq. in. (17 575 cm <sup>2</sup> )
Ground pressure .....	11.9 psi (82 kPa) (0.836 kg/cm <sup>2</sup> )
Length of track on ground .....	90.8 in. (2.31 m)
Track gauge .....	64 in. (1.63 m)
Carrier roller .....	1 each side
Adjustment .....	Hydraulic
Minimum ground clearance .....	14 in. (356 mm)

### Wide track

Two bar grouser width .....	21 in. (533 mm)
Track shoes, each side .....	40
Ground contact area .....	3814 sq. in. (24 608 cm <sup>2</sup> )
Ground pressure .....	8.8 psi (60.7 kPa) (0.62 kg/cm <sup>2</sup> )
Length of track on ground .....	90.8 in. (2.31 m)
Track gauge .....	70 in. (1.78 m)
Carrier roller .....	1 each side
Adjustment .....	Hydraulic
Minimum ground clearance .....	14 in. (356 mm)

### Capacities:

	<b>U.S.</b>	<b>Liters</b>
Fuel tank .....	73 gal.	276.3
Cooling system .....	7 gal.	26.5
Crankcase .....	18 qt.	17
Crankcase, including filter .....	20 qt.	18.9
Splitter drive .....	1.5 gal.	5.7
Final drive each: 1st reduction .....	5.375 gal.	20.3
2nd reduction .....	3.5 gal.	13.2
Loader hydraulic system .....	37 gal.	140
Hydrostatic drives .....	33 gal.	125

### Additional Standard Equipment:

Alternator, enclosed w/16 amp solid-state regulator
Air cleaner, dual-stage aspirated dry-type
Air cleaner restriction indicator
Boom safety lock pin
Bottom guards, heavy-duty
Electric hourmeter
Front idler shields
Hinged grille shield
Horn
Key switch
Master electrical disconnect switch
Muffler with collar, self draining, eliminating external rain cap
Pushbutton starting
ROPS canopy w/3 in. (76 mm) seat belt
Suspension seat w/armrests
Toolbox
Transmission neutral lock w/starter safety switch
Vandal protection
Winch drive

<b>SAE Operating Weight w/ROPS .....</b>	<b>32,400 lb. (14 696 kg)</b>
<b>SAE Operating Weight</b>	
<b>Wide Track w/ROPS .....</b>	<b>33,600 lb. (15 240 kg)</b>

## 655B LOADER OPERATING INFORMATION

Operating Information	BUCKET		
	General Purpose		Multipurpose
	Wide Track	Standard	
Capacity, heaped, SAE	2.0 cu. yd. (1.5 m <sup>3</sup> )	2.0 cu. yd. (1.5 m <sup>3</sup> )	2.0 cu. yd. (1.5 m <sup>3</sup> )
Capacity, struck, SAE	1.7 cu. yd. (1.3 m <sup>3</sup> )	1.7 cu. yd. (1.3 m <sup>3</sup> )	1.4 cu. yd. (1.1 m <sup>3</sup> )
Bucket width	96.6 in. (2.5 m)	84.7 in. (2.15 m)	88.5 in. (2.25 m)
Bucket weight	1700 lb. (771 kg)	1810 lb. (820 kg)	3520 lb. (1597 kg)
SAE breakout force	26,690 lb. (118 kN) (12 100 kg)	24,800 lb. (110 kN) (11 250 kg)	24,550 lb. (109 kN) (11 130 kg)
SAE tipping load (w/drawbar, four counterweights and ROPS)	19,925 lb. (9036 kg)	19,100 lb. (8660 kg)	17,400 lb. (7890 kg)
Raising time	5.86 sec.	5.86 sec.	5.86 sec.
Dumping time	1.27 sec.	1.27 sec.	1.27 sec.
Lowering time	3.23 sec.	3.23 sec.	3.23 sec.
SAE operating weight w/ROPS canopy	33,600 lb. (15 240 kg)	32,400 lb. (14 695 kg)	34,100 lb. (15 470 kg)
SAE operating weight w/ROPS cab	34,000 lb. (15 423 kg)	32,800 lb. (14 878 kg)	34,500 lb. (15 649 kg)

Adjustments to operating weights and tipping loads:			
Add (+) or deduct (-) lb. (kg) as indicated for loader equipped with:	Wide Track	Loader Operating Weight	Tipping Load
Cab	+ 400 lb. (181 kg)	+ 400 lb. (181 kg)	+ 440 lb. (200 kg)
Bucket teeth, bolt on	+ 338 lb. (153 kg)	+ 296 lb. (134 kg)	- 385 lb. (- 175 kg)
Air conditioning	+ 109 lb. (49 kg)	+ 109 lb. (49 kg)	+ 30 lb. (14 kg)
Ripper (w/o drawbar and four counterweights)	- 106 lb. (48 kg)	- 106 lb. (48 kg)	+ 200 lb. (91 kg)
Counterweight (each)	+ or - 500 lb. (227 kg)	+ or - 500 lb. (227 kg)	+ or - 865 lb. (392 kg)

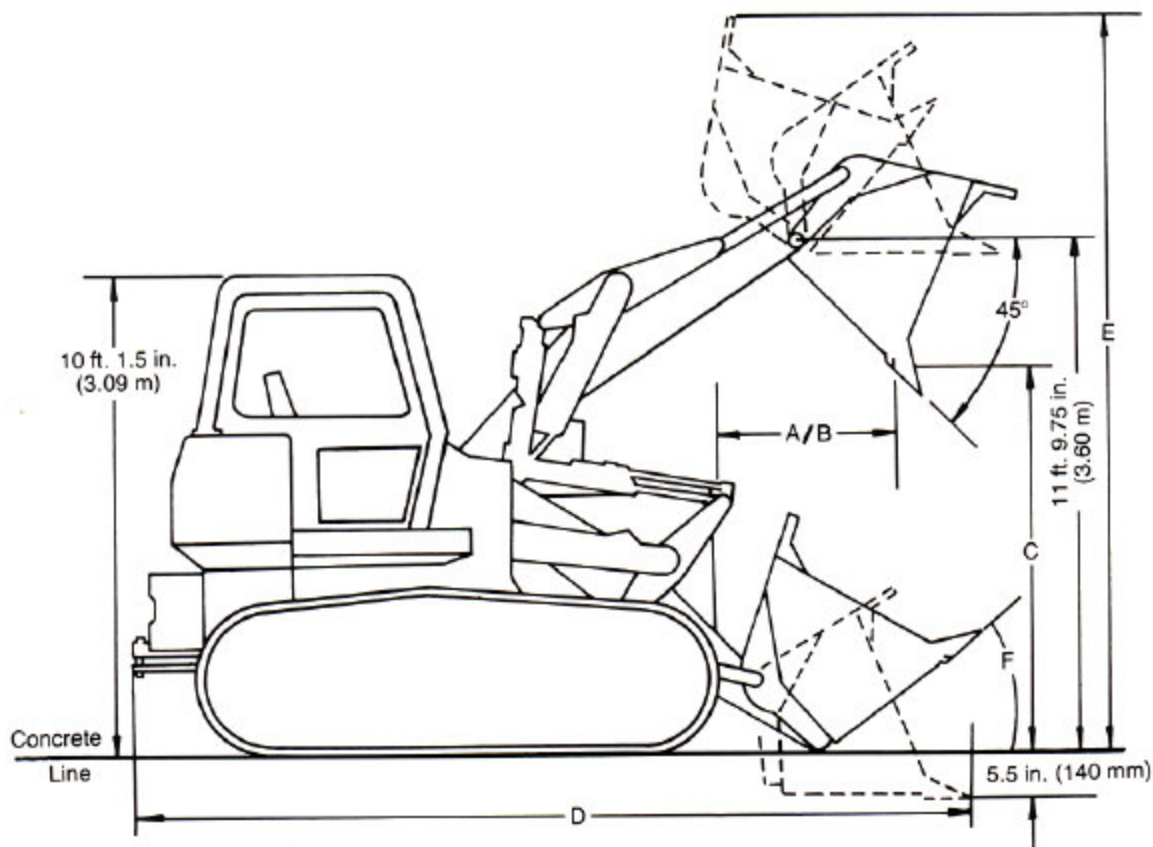
### Optional or Special Equipment with Weights:

(Add these weights to SAE Standard Equipment operating weights to obtain total operating weights.)

	lb.	kg
Batteries (two 12-volt) cold cranking capacity @ 0°F (-18 °C) 925 amps, reserve capacity 180 min. each	18	8
Bucket teeth, bolt-on	296	134
Cab with pressurizer, heater and 42-amp alternator	400	181
Air conditioner	109	49
Windshield washer	3	1
Cold weather starting aid	2	1
Disconnect clutch	20	9
Drawbar	198	90
Engine coolant heater	2	1
Fan, reversible	38	17
Fire extinguisher	6	3
Front pull hook	36	16

### Hydraulics:

	lb.	kg
Lines for front-mounted equipment	6	3
Lines for rear-mounted equipment	4	2
Selector valve and lines to rear for ripper and MP bucket	10	5
Lights, two front, one rear, halogen	7	3
Oil sampling test kit	2	1
Pedal extensions	12	5
Protection items:		
Brush screens, heavy-duty third-post type	130	59
Brush screens, regular-duty	72	33
Limb risers and overhead exhaust	300	136
Rear screen	50	23
Tank protection	650	295
Radiator sand shield	25	11
Reverse warning alarm	10	5
Ripper, parallelogram type	2400	1089
Rock guard, center-section	178	81
Tracks:		
Dura-Trax lubricated chain w/split master link and 15-in. (381 mm) two-bar grousers	0	0



BUCKET CAPACITIES	DIMENSIONS					Rollback Angle	
	A	B	C	D	E	F	
	Reach at Max. Height (45° Discharge)	Reach at 7 ft. (2.13 m) Clearance (45° Discharge)	Dump Clearance Max. Height (45° Discharge)	Overall Length	Maximum Height	Concrete Level	Carry Position
2 cu. yd. (1.5 m <sup>3</sup> )	48 in. (1.22 m)	66.5 in. (1.69 m)	110.5 in. (2.81 m)	222.5 in. (5.65 m)	194 in. (4.93 m)	38°	45°
2 cu. yd. (1.5 m <sup>3</sup> ) Multipurpose Bucket	47.4 in. (1.2 m)	65 in. (1.65 m)	111.6 in. (2.83 m)	223 in. (5.66 m)	190 in. (4.83 m)	36°	45°
2 cu. yd. (1.5 m <sup>3</sup> ) Wide-Track Bucket	45.3 in. (1.15 m)	63.8 in. (1.62 m)	113.2 in. (2.87 m)	218.7 in. (5.55 m)	191.2 in. (4.86 m)	36°	45°

