

## ENGINE

John Deere-engineered and manufactured diesel engine with high-efficiency turbocharger. Replaceable wet-type cylinder liners help ensure superior heat dissipation. High-strength-alloy cylinder heads include replaceable valve seat inserts. Cast aluminum pistons reduce rod bearing loads and provide vital heat transfer; pistons are sprayed with cooling oil to increase engine life.

### Engine: John Deere 6059T

Rated power at 2200 rpm.....	115 SAE net hp (86 kW)
	121 SAE gross hp (90 kW)
Cylinders .....	6
Displacement .....	359 cu. in. (5.884 L)
Fuel consumption, typical.....	2.2 to 3.5 gal./hr (8.3 to 13.3 L/h)
Max. net torque rise	
30% at at 1350 rpm .....	391 lb.-ft. (530 Nm)
Air cleaner.....	dual stage dry type with restriction indicator
Electrical system.....	12-volt with 95-amp alternator
Battery (one 12-volt)	
25 amps at 80°F (27°C) .....	reserve capacity 180 min.
BCI group 31 cold cranking capacity	
at 0°F (-18°C).....	950 amps

## TRANSMISSION

The direct-drive power shift transmission is engineered and manufactured by John Deere specifically for skidders, providing eight speeds in forward, four speeds in reverse. The transmission charge pump is externally mounted for easy servicing.

### TRAVEL SPEEDS

At 2200 engine rpm, no tire slip, with 28L-26 tires

	mph	(km/h)
Forward.....	1.5-16.6	2.4-26.7
Reverse .....	2.1-6.0	3.4-9.6

## AXLES

Heavy-duty, inboard-mounted planetary-type gears distribute shock loads evenly. Hydraulically-applied differential lock is standard equipment in both front and rear axles. Differential can either be locked for exceptional traction or unlocked for easy maneuvering with less tire wear.

## BRAKES

Hydraulic, annular-style wet-disk brakes are mounted inboard on both axles as standard equipment. Completely sealed and running in a cooling oil bath, they are self-adjusting, self-equalizing and need no periodic service. A spring-applied, hydraulically-released wet multi-disk parking brake is mounted on the transmission, and is automatically applied when the engine is off. This brake can be manually applied by placing the transmission control lever in the *park* position.

## STEERING

The load- and speed-sensing power steering system delivers quick response and power for easy maneuvering in the woods. 90 degrees of frame articulation (45 degrees each direction) provide exceptional maneuverability.

Outside clearance circle with blade .....33 ft. 4 in. (10.16 m)

## HYDRAULICS

The quick, responsive and powerful hydraulic system features an axial-piston, pressure-compensated pump and closed-center design. The hydraulic system is separate from the transmission, enhancing the overall reliability of both systems.

Pump flow at 2200 rpm.....27 gpm (102 L/min.)  
3000 psi (20 684 kPa)

## TIRES

23.1-26, 10 PR LS2  
28L-26, 12 PR LS2

## WINCH

The John Deere-engineered and manufactured direct-drive 4000 Winch includes wet multi-disk clutch and spring-applied, hydraulically-released brake. The adjustable free-spool feature and low-friction drum seals increase ease of operation. All winch functions are controlled by a single conveniently-located lever.

### Cable capacity – calculated – no allowance made for loose or uneven spooling

	8" Drum	10" Drum
.625 in. (15.8 mm) cable .....	254 ft. (77.4 m)	199 ft. (60.6 m)
.75 in. (19.1 mm) cable .....	179 ft. (54.6 m)	141 ft. (43 m)
.875 in. (22.2 mm) cable .....	129 ft. (39.3 m)	101 ft. (30.8 m)
1 in. (25.4 mm) cable .....	100 ft. (30.5 m)	78 ft. (23.8 m)

### Linepull at peak engine and .625 in. (15.8 mm) cable

	Bare Drum	Full Drum
8" Drum Standard Speed.....	34,308 lb. (152.6 kN)	20,584 lb. (91.6 kN)
8" Drum Slow Speed .....	38,126 lb. (171 kN)	22,875 lb. (103 kN)
10" Drum.....	31,974 lb. (142 kN)	23,441 lb. (104.3 kN)

### Line speed at 2200 rpm and .625 in. (15.8 mm) cable

	Bare Drum	Full Drum
8" Drum Standard Speed.....	146 fpm (44.5 m/min.)	242 fpm (73.8 m/min.)
8" Drum Slow Speed .....	131 fpm (40.0 m/min.)	218 fpm (66.4 m/min.)
10" Drum.....	157 fpm (47.9 m/min.)	208 fpm (63.4 m/min.)

## CAPACITIES

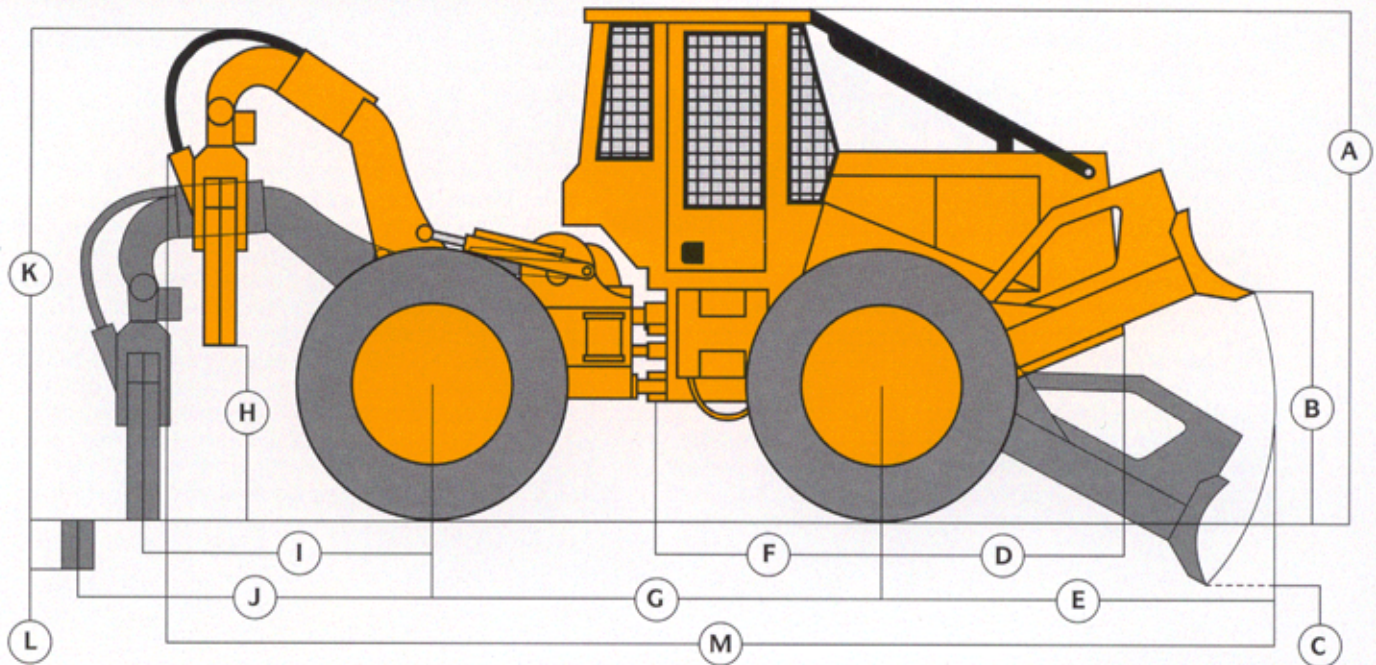
	U.S.
Fuel tank .....	41.5 gal. (157 L)
Cooling system .....	26 qt. (24.6 L)
Engine lubrication, including filter .....	20 qt. (18.9 L)
Transmission .....	7.75 gal. (29.3 L)
Front differential.....	4.5 gal. (17 L)
Rear differential.....	4.5 gal. (17 L)
Winch.....	9.3 gal. (35.2 L)
Hydraulic reservoir capacity .....	8 gal. (30.3 L)

## OPERATING WEIGHT

548E with standard equipment.....22,801 lb. (10 342 kg)

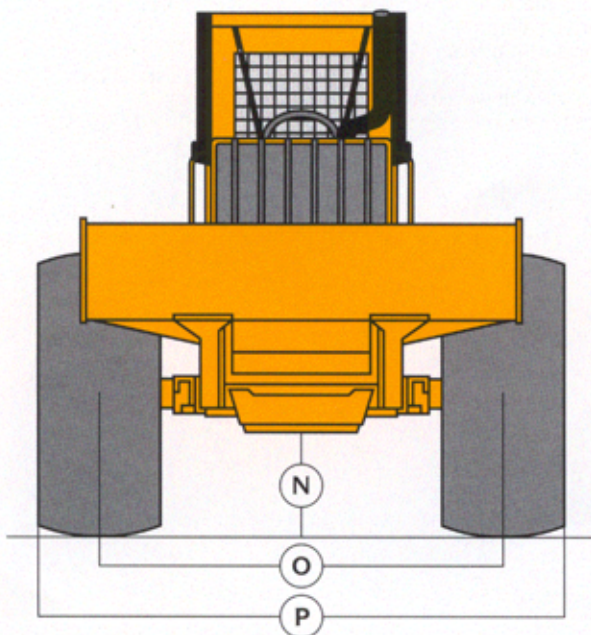
## DIMENSIONS

Sideview dimensions are for skidder equipped with 28L-26, 12 PR LS2 tires.



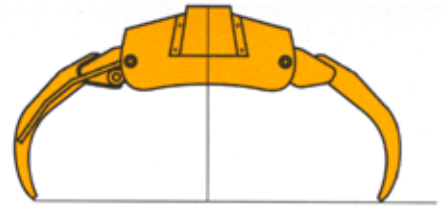
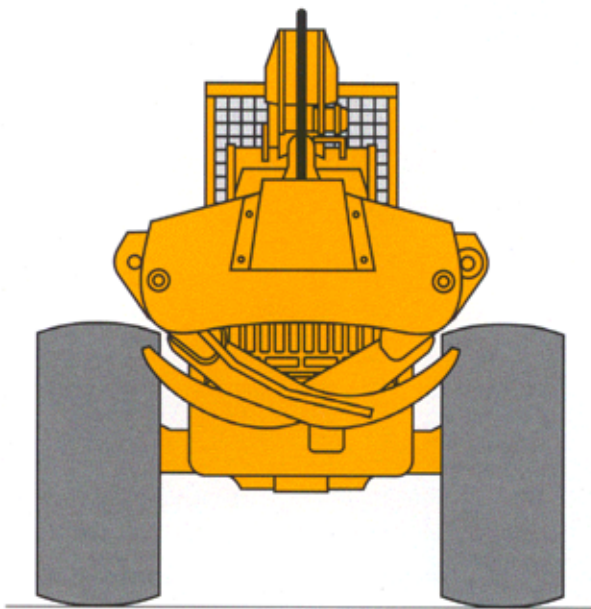
### Key:

A Overall height	9 ft. 10.5 in. (3.01 m)
B Maximum blade lift above ground	3 ft. 11.6 in. (1.21 m)
C Maximum blade dig below ground	11.3 in. (287 mm)
D Front axle to front of machine	59.3 in. (1507 mm)
E Front axle to blade cutting edge arc	83.2 in. (2113 mm)
F Front axle to articulation joint	62 in. (1575 mm)
G Wheelbase	115 in. (2920 mm)
H Height of grapple from ground level	2 ft. 10 in. (864 mm)
I Reach of grapple at ground level	6 ft. 5.6 in. (1.97 m)
J Reach of grapple at full reach	7 ft. 1 in. (2.16 m)
K Maximum height of boom	9 ft. 10 in. (3.0 m)
L Below ground reach of grapple at full reach	34 in. (864 mm)
M Overall length	20 ft. 9 in. (6.33 m)

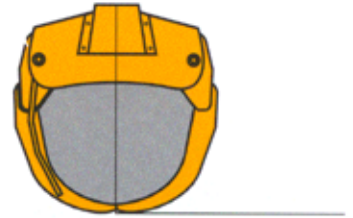


Tire Size	N Ground Clearance	O Wheel Tread	P Overall Width	Turning Radius (Over Tires)*
23.1-26	19.6 in. (498 mm)	7 ft. 3 in. (2.21 m)	9 ft. 2 in. (2.79 m)	17 ft. 11 in. (5.474 m)
28L-26	20.2 in. (514 mm)	7 ft. 6 in. (2.29 m)	9 ft. 10 in. (3.0 m)	18 ft. 1 in. (5.512 m)
23.1-26 (narrow gauge)	19.6 in. (498 mm)	6 ft. 8.9 in. (2.06 m)	8 ft. 8 in. (2.64 m)	17 ft. 6 in. (5.398 m)
28L-26 (narrow gauge)	20.2 in. (514 mm)	7 ft. 2 in. (2.18 m)	9 ft. 6 in. (2.90 m)	17 ft. 6 in. (5.460 m)

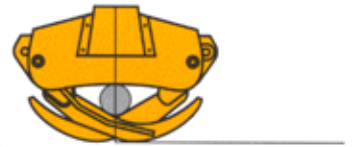
\* Not shown on diagram.



Tong opening at tips .....75 in. (1905 mm)



Enclosure area, tongs tip to tip .....8 sq. ft. (0.74 m<sup>2</sup>)



Minimum diameter of stem, tongs closed .....6 in. (153 mm)

### ADDITIONAL STANDARD EQUIPMENT

#### Power Train:

Differential lock in front and rear axles  
Direct-drive power shift transmission  
Heavy-duty axles  
Inboard-mounted wet-disk brakes in front and rear axles  
Wet multi-disk park brake

#### Engine:

95-amp alternator  
Battery with 925 cold cranking amps  
Heavy-duty starter  
High-capacity air cleaner with unloading valve  
Low restriction muffler

#### Operator's Station:

Canopy with ROPS with doors and full screen protection  
Electric hourmeter  
Engine coolant temperature gauge  
Fire extinguisher  
Foot throttle  
Fuel gauge  
Fuel water separator  
Full function monitor instrumentation with audible warning alarm for:  
Air filter restriction  
Alternator voltage  
Engine coolant temperature

Engine oil pressure  
Hydraulic filter restriction  
Hydraulic oil temperature  
Park brake  
Transmission oil pressure  
Transmission oil temperature  
Transmission filter restriction  
Rearview mirror  
Retractable seat belts with anti-cinching mechanism  
Reverse warning alarm  
Steering wheel with power steering  
Suspension seat with weight and backrest angle adjustment and two-position armrests

#### Frames:

Articulation locking bar, self-storing  
Frame clean-out and service access openings  
Lockable engine side shields  
Log arch with two-position adjustable roller  
Stacking blade, 86 in. (2184 mm) wide with replaceable cutting edge

#### Grapple:

Adjustable grapple oscillation damper  
Continuous pressure grapple tong close circuit

### OPTIONAL OR SPECIAL EQUIPMENT

135-amp alternator  
Blade extensions, 15 in. (381 mm) each side  
Cab with air conditioning, 40,000 Btu heater and pressurizer  
Cab with 40,000 Btu heater and pressurizer

Cab with polycarbonate windows and front windshield wiper and washers  
Delimiting grate  
Deluxe seat with fabric covering and adjustable lumbar support  
Ether starting aid

Hand throttle  
Heater, 40,000 Btu/hr (11.7 kW)  
John Deere 4000 Winch with 8-in. (203 mm) drum  
John Deere 4000 Slow Speed Winch with 8-in. (203 mm) drum

John Deere 4000 Winch with 10-in. (254 mm) drum  
Light package, quad  
Light package, duo-quad  
Narrow gauge wheels  
Secondary steering system  
Two batteries