

## ENGINE

John Deere engineered and manufactured 5.9-liter 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 for longer 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 1400 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. 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 23.1-26 tires

	mph	(km/h)
Forward.....	1.5-16.0	2.4-25.8
Reverse .....	2.0-5.8	3.3-9.3

## 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 be locked for exceptional traction, and unlocked for easy maneuvering with less tire wear.

## BRAKES

Hydraulic, annular-style wet-disk brakes are mounted inboard as standard equipment on both axles. 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. Its 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

## CABLE ARCH

Horizontal roller .....6 in. (152 mm) dia.  
Vertical rollers (through hardened steel).....4.5 in. (114 mm) dia.

## 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

	8" Drum	10" Drum
Bare drum.....	34,308 lb. (152.6 kN)	31,974 lb. (142 kN)
Full drum .....	20,584 lb. (91.6 kN)	23,441 lb. (104.3 kN)

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

	8" Drum	10" Drum
Bare drum.....	146 fpm (44.5 m/min.)	157 fpm (47.9 m/min.)
Full drum.....	242 fpm (73.8 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)

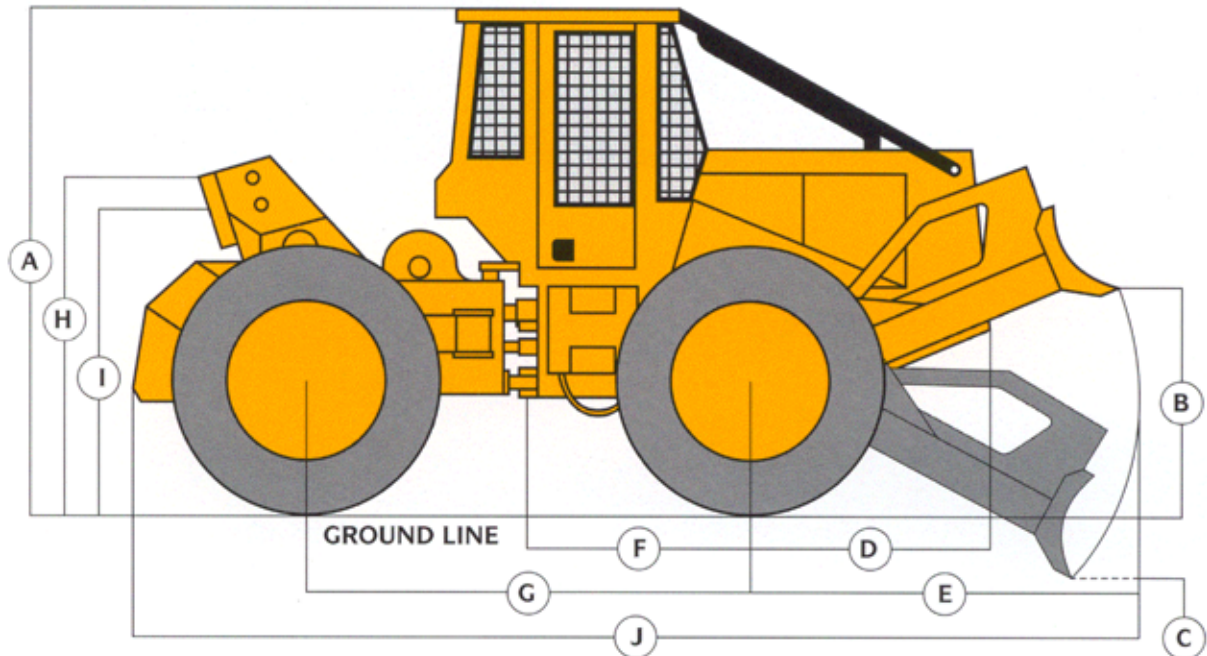
## OPERATING WEIGHT

540E with standard equipment.....21,900 lb. (9933 kg)



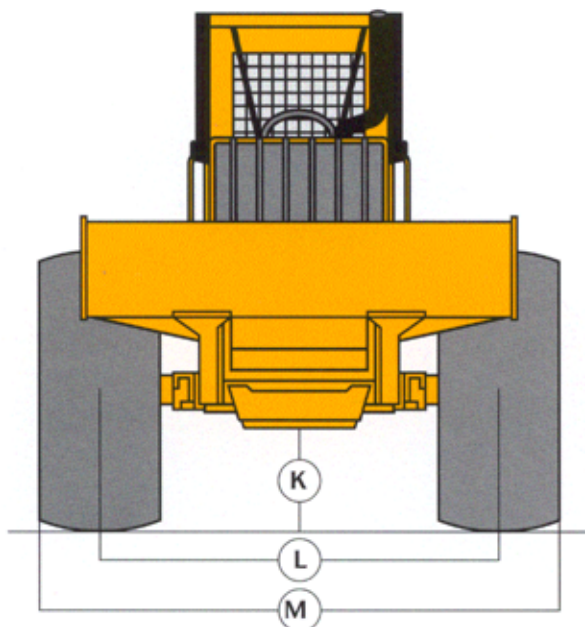
# DIMENSIONS

Sideview dimensions are for skidder equipped with 23.1-26, 10 PR LS2 tires and adjustable log arch.



**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 Main fairlead roller height ..... 6 ft. 11.1 in. (2.11 m)
- I Auxiliary position fairlead roller height ..... 6 ft. 3.8 in. (1.92 m)
- J Overall length ..... 19 ft. 11.5 in. (6.08 m)



Tire Size	K Ground Clearance	L Wheel Tread	M Overall Width
23.1-26	19.6 in. (498 mm)	7 ft. 3 in. (2.21 m)	9 ft. 1.8 in. (2.79 m)
28L-26	20.2 in. (514 mm)	7 ft. 6.2 in. (2.29 m)	9 ft. 10.1 in. (3.0 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)
28L-26 (narrow gauge)	20.2 in. (514 mm)	7 ft. 2 in. (2.18 m)	9 ft. 6 in. (2.90 m)