

ENGINE	540G-II	640G-II
Type.....	John Deere 6068T with altitude-compensating, spark-arresting turbocharger	John Deere 6068T with altitude-compensating, spark-arresting turbocharger
Rated power .....	119 SAE net hp (89 kW) / 127 SAE gross hp (95 kW) @ 2,200 rpm	153 SAE net hp (114 kW) / 160 SAE gross hp (119 kW) @ 2,200 rpm
Cylinders .....	6	6
Displacement .....	414 cu. in. (6.8 L)	414 cu. in. (6.8 L)
Maximum net torque.....	39% @ 1,400 rpm 398 lb.-ft. (537 Nm)	36% @ 1,350 rpm 497 lb.-ft. (670 Nm)
Fuel consumption, typical.....	3.7 to 5.5 gal./hr. (14 to 21 L/h)	4.6 to 6.9 gal./hr. (17 to 26 L/h)
Air cleaner .....	dual stage with safety element and dust unloader valve	dual stage with safety element and dust unloader valve
Cooling system .....	heavy-duty radiator with in-line core coolant recovery reservoir	heavy-duty radiator with in-line core coolant recovery reservoir
Cooling fan.....	blower	blower
Lubrication.....	pressure system with oil cooler	pressure system with oil cooler
Oil filter.....	vertically mounted spin on	vertically mounted spin on
Electrical system.....	12 volt with 65-amp alternator	12 volt with 65-amp alternator
Batteries (two 12 volt).....	reserve capacity: 360 min., 1,850 CCA	reserve capacity: 360 min., 1,850 CCA

TRANSMISSION		
Type.....	direct-drive power shift, planetary	direct-drive power shift, planetary
Oil filtration.....	10 micron pressure side with by-pass	10 micron pressure side with by-pass

AXLES		
Final drives.....	heavy-duty planetary, mounted inboard	heavy-duty planetary, mounted inboard
Differentials .....	hydraulic locking, operated on the go	hydraulic locking, operated on the go
Front axle oscillation .....	30 degrees, stop to stop	30 degrees, stop to stop

BRAKES		
Service brakes.....	long-life, inboard-mounted wet disk oil cooled, self-adjusting and equalizing front and rear axles	long-life, inboard-mounted wet disk oil cooled, self-adjusting and equalizing front and rear axles
Parking brake .....	automatically spring-applied, hydraulically released, sealed and lubricated, wet multi-disk, integrally mounted in transmission	automatically spring-applied, hydraulically released, sealed and lubricated, wet multi-disk, integrally mounted in transmission

POWER TRAIN PERFORMANCE	<i>with 23.1-26 tires</i>		<i>with 28L-26 tires</i>	
No tire slip .....	<i>maximum speed</i>	<i>maximum drawbar</i>	<i>maximum speed</i>	<i>maximum drawbar</i>
	<i>@ 2,200 rpm</i>	<i>@ peak torque</i>	<i>@ 2,200 rpm</i>	<i>@ peak torque</i>
Forward				
Gear 1 .....	1.4 mph (2.3 km/h)	39,107 lb. (175 kN)	1.5 mph (2.4 km/h)	46,232 lb. (207 kN)
Gear 2 .....	1.9 mph (3.1 km/h)	29,457 lb. (132 kN)	2.0 mph (3.2 km/h)	34,824 lb. (156 kN)
Gear 3 .....	2.5 mph (4.1 km/h)	22,134 lb. (99 kN)	2.6 mph (4.2 km/h)	26,166 lb. (117 kN)
Gear 4 .....	3.4 mph (5.4 km/h)	16,672 lb. (75 kN)	3.5 mph (5.6 km/h)	19,710 lb. (88 kN)
Gear 5 .....	4.5 mph (7.3 km/h)	12,480 lb. (56 kN)	4.6 mph (7.4 km/h)	14,754 lb. (66 kN)
Gear 6 .....	6.0 mph (9.6 km/h)	9,399 lb. (42 kN)	6.1 mph (9.9 km/h)	11,111 lb. (50 kN)
Gear 7 .....	8.9 mph (14.3 km/h)	6,323 lb. (28 kN)	9.1 mph (14.7 km/h)	7,475 lb. (33 kN)
Gear 8 .....	11.8 mph (19.0 km/h)	4,764 lb. (21 kN)	12.1 mph (19.5 km/h)	5,631 lb. (25 kN)
Reverse				
Gear 1 .....	1.4 mph (2.3 km/h)	39,107 lb. (175 kN)	1.5 mph (2.4 km/h)	46,232 lb. (207 kN)
Gear 2 .....	1.9 mph (3.1 km/h)	29,457 lb. (132 kN)	2.0 mph (3.2 km/h)	34,824 lb. (156 kN)
Gear 3 .....	2.5 mph (4.1 km/h)	22,134 lb. (99 kN)	2.6 mph (4.2 km/h)	26,166 lb. (117 kN)
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<b>STEERING</b>	<b>540G-II</b>	<b>640G-II</b>
Frame articulation.....	90 degrees total, stop to stop	90 degrees total, stop to stop
Steering wheel with Orbitrol™ valve		
<b>HYDRAULIC SYSTEM</b>		
Pump.....	variable-displacement axial piston	variable-displacement axial piston
Maximum rated flow .....	27 gpm (102 L/min.) @ 2,200 rpm	27 gpm (102 L/min.) @ 2,200 rpm
Pressure .....	3,000 psi (20 684 kPa)	3,000 psi (20 684 kPa)
Oil filtration.....	one 10 micron return oil with by-pass	one 10 micron return oil with by-pass
<b>WINCH</b>		
Type.....	sealed, wet multi-disk clutch and brake pressurized lubrication single lever control	sealed, wet multi-disk clutch and brake pressurized lubrication single lever control
Cable capacity.....	<i>4000 (8-in. drum)</i> <i>4000 (10-in. drum)</i>	<i>4000 (8-in. drum)</i> <i>4000 (10-in. drum)</i> <i>6000 (11-in. drum)</i>
0.625-in. (15.8 mm) cable.....	254 ft. (77.4 m)	254 ft. (77.4 m)    199 ft. (60.6 m)    373 ft. (114.0 m)
0.75-in. (19.1 mm) cable.....	179 ft. (54.6 m)	179 ft. (54.6 m)    141 ft. (43.0 m)    263 ft. (80.2 m)
0.875-in. (22.2 mm) cable.....	129 ft. (39.3 m)	129 ft. (39.3 m)    101 ft. (30.8 m)    189 ft. (58.0 m)
1-in. (25.4 mm) cable.....	100 ft. (30.5 m)	100 ft. (30.5 m)    78 ft. (23.8 m)    147 ft. (45.0 m)
Line pull @ peak engine and		
0.625-in. (15.8 mm) cable.....	<i>bare drum</i> <i>full drum</i>	<i>bare drum</i> <i>full drum</i>
4000 (8-in. drum high speed) .....	34,786 lb. (155 kN)	21,437 lb. (95 kN)
4000 (8-in. drum standard speed).....	40,525 lb. (180 kN)	41,860 lb. (186 kN)
4000 (10-in. drum high speed) .....	40,525 lb. (180 kN)	48,767 lb. (217 kN)
6000 .....	32,985 lb. (147 kN)	24,974 lb. (111 kN)
Line speed @ 2,200 rpm and 0.625-in. (15.8 mm) cable .....	<i>bare drum</i> <i>full drum</i>	<i>bare drum</i> <i>full drum</i>
4000 (8-in. drum high speed) .....	146 fpm (44.5 m/min.)	242 fpm (73.8 m/min.)
4000 (8-in. drum standard speed).....	131 fpm (40.0 m/min.)	146 fpm (44.5 m/min.)
4000 (10-in. drum high speed) .....	157 fpm (47.9 m/min.)	131 fpm (40.0 m/min.)
6000 .....	145 fpm (44.2 m/min.)	208 fpm (63.4 m/min.)
208 fpm (63.4 m/min.)	157 fpm (47.9 m/min.)	228 fpm (69.5 m/min.)
228 fpm (69.5 m/min.)		
<b>GROUND PRESSURE DATA</b>		
Tires		
23.1-26 .....	7.4 psi (50.7 kPa)	8.0 psi (55.3 kPa)
28L-26 .....	6.2 psi (42.5 kPa)	6.7 psi (46.2 kPa)
24.5-32 .....	6.7 psi (46.0 kPa)	7.2 psi (49.9 kPa)
30.5-32 .....	5.6 psi (38.4 kPa)	6.4 psi (44.0 kPa)
67-34-25 or 26.....	5.6 psi (38.3 kPa)	6.4 psi (43.9 kPa)
66-43-25 or 26.....	4.7 psi (32.3 kPa)	5.7 psi (39.1 kPa)
69-50-32 .....	3.8 psi (26.2 kPa)	4.5 psi (31.2 kPa)
<b>CAPACITIES (U.S.)</b>		
Fuel tank .....	42.0 gal. (159.0 L)	42.0 gal. (159.0 L)
Cooling system .....	30.0 qt. (24.6 L)	30.0 qt. (28.4 L)
Engine lubrication, including filter.....	20.0 qt. (18.9 L)	20.0 qt. (18.9 L)
Transmission.....	7.8 gal. (29.3 L)	7.8 gal. (29.3 L)
Differentials		
Front.....	4.5 gal. (17.0 L)	4.5 gal. (17.0 L)
Rear.....	4.5 gal. (17.0 L)	7.5 gal. (28.4 L)
Winch .....	9.3 gal. (35.2 L)	9.3 gal. (35.2 L)
Hydraulic reservoir.....	8.0 gal. (30.3 L)	11.0 gal. (41.6 L)
<b>OPERATING WEIGHTS</b>		
Standard equipment .....	21,990 lb. (9933 kg)	23,900 lb. (10 841 kg)

# DIMENSIONS

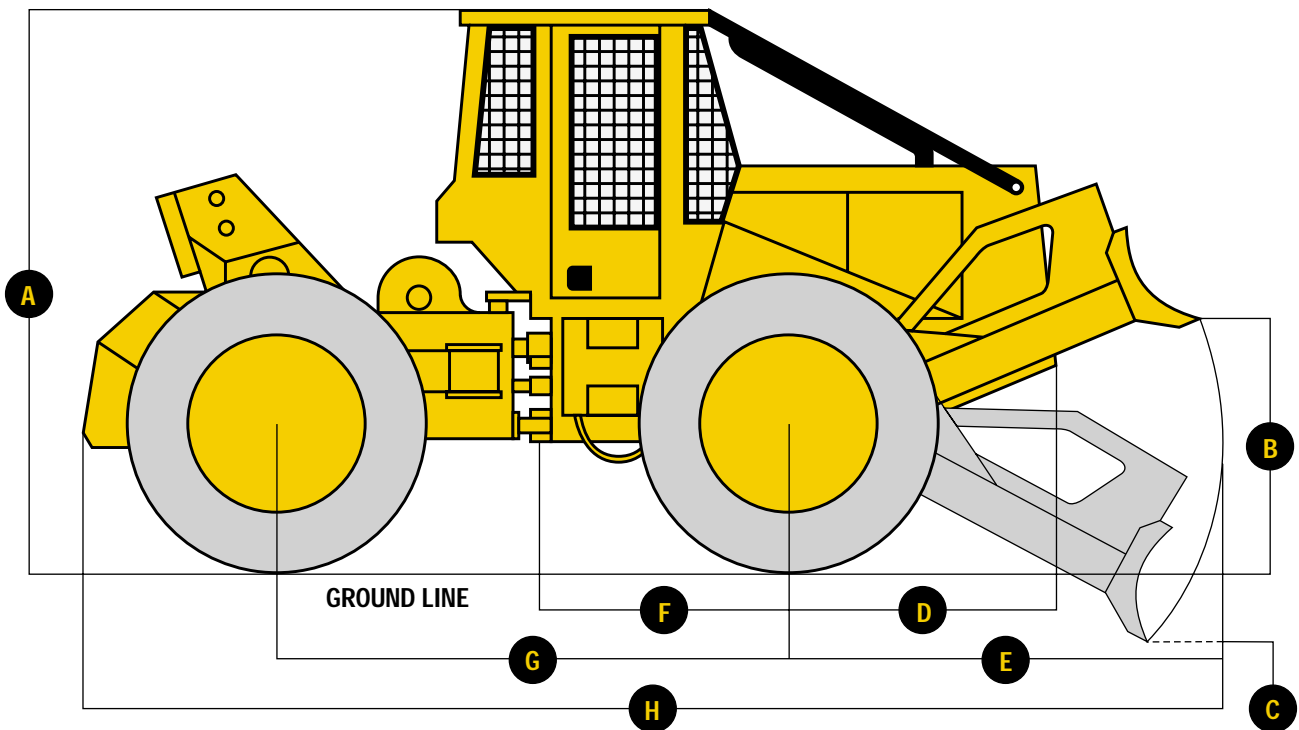
## DIMENSIONS

### 540G-II

### 640G-II

Tire size .....	28L-26	28L-26
<b>A</b> Overall height* .....	9 ft. 10.5 in. (30.11 m)	9 ft. 11.0 in. (30.27 m)
<b>B</b> Maximum blade lift above ground .....	3 ft. 11.6 in. (12.10 m)	4 ft. 3.5 in. (13.08 m)
<b>C</b> Maximum blade dig below ground .....	11.3 in. (288 mm)	14.5 in. (367 mm)
<b>D</b> Front axle to front of machine.....	59.3 in. (1507 mm)	66.3 in. (1685 mm)
<b>E</b> Front axle to blade cutting edge arc .....	83.2 in. (2112 mm)	
<b>F</b> Front axle to articulation joint.....	62.0 in. (1575 mm)	68.0 in. (1727 mm)
<b>G</b> Wheelbase.....	115.0 in. (2920 mm)	135.0 in. (3430 mm)
<b>H</b> Overall length.....	20 ft. 9.0 in. (6330 mm)	23 ft. 8.6 in. (7230 mm)

\*Add 8.6 in. (218 mm) when equipped with air conditioning.

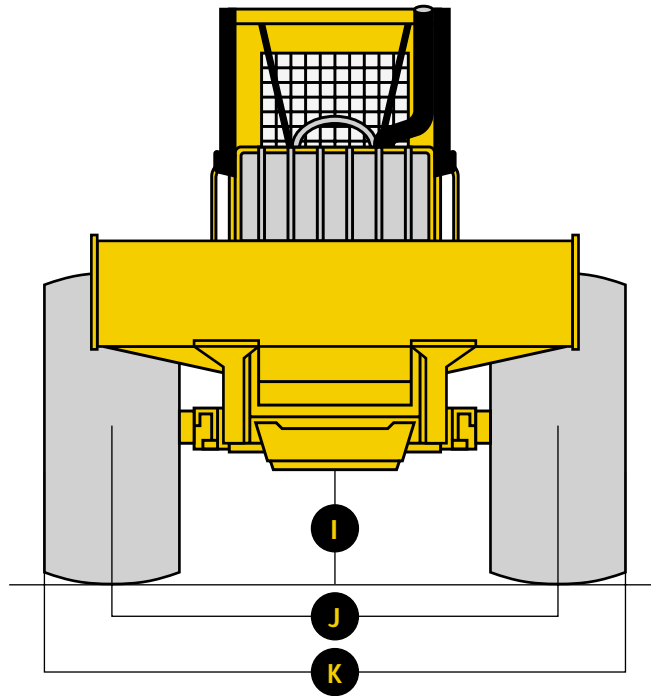


**540G-II DIMENSIONS WITH TIRES**

Tire Size	23.1-26	28L-26	24.5-32	30.5-32	23.1-26 (narrow gauge)	28L-26 (narrow gauge)	24.5-32 (narrow gauge)
<b>I</b> Ground clearance, in in. (mm).....	19.6 (498)	20.2 (514)	23.5 (598)		19.6 (498)	20.2 (514)	23.5 (598)
<b>J</b> Wheel tread, in ft.-in. (m) .....	7-3 (2.21)	7-6 (2.29)	7-9.5 (2.38)		6-9 (2.06)	7-2 (2.18)	7-0.5 (2.15)
<b>K</b> Overall width, in ft.-in. (m).....	9-2 (2.79)	9-10 (3.00)	9-10 (3.00)		8-8 (2.64)	9-6 (2.90)	9-1 (2.77)
Turning radius over tires, in ft.-in. (m) .....	17-11 (5.47)	18-1 (5.51)	18-0 (5.48)		17-6 (5.33)	17-11 (5.50)	17-7 (5.36)

**640G-II DIMENSIONS WITH TIRES**

Tire Size	23.1-26	28L-26	24.5-32	30.5-32	23.1-26 (narrow gauge)	28L-26 (narrow gauge)	24.5-32 (narrow gauge)
<b>I</b> Ground clearance, in in. (mm).....	19.6 (4.98)	20.2 (514)	23.5 (598)	24.2 (615)	19.6 (498)	20.2 (514)	23.5 (598)
<b>J</b> Wheel tread, in ft.-in. (m) .....	7-3 (2.21)	7-6 (2.28)	7-9.5 (2.38)	7-8.5 (2.35)	6-9 (2.06)	7-2 (2.18)	7-0.5 (2.15)
<b>K</b> Overall width, in ft.-in. (m).....	9-2 (2.79)	9-10 (3.00)	9-10 (3.00)	10-3 (3.12)	8-8 (2.64)	9-6 (2.90)	9-1 (2.77)
Turning radius over tires, in ft.-in. (m) .....	18-3 (5.50)	18-7 (5.60)	18-7 (5.60)	18-9 (5.70)	17-11 (5.40)	18-4 (5.60)	18-2 (5.50)



	540G-II	640G-II		540G-II	640G-II		540G-II	640G-II
<b>ENGINE</b>								
Antifreeze, -33°F (-36°C)	●	●	Self-contained differential	●	●	equipped machines include polycarbonate windows on all openings with screens on the door windows only / Lockable doors with start switch key / Mirror, rear-view, interior mounted / Headliner / Retractable seat belt		
Blower-type cooling fan, enclosed with guard	●	●	Lock hydraulic circuit with filter	●	●	Cab, fully enclosed, with (in addition to standard equipment)	■	■
Coolant recovery tank	●	●	Heavy-duty inboard planetary final drives	●	●	Windows, tinted polycarbonate / Windshield wiper and washer, front / Sliding windows, left and right door opening / Heater / Defroster fan, left front / Floormat		
Electric fuel shutoff with start switch key	●	●	Inboard sealed and lubricated wet-disk brakes, front and rear	●	●	Cab climate control module with	■	■
Fuel filter, vertically mounted, quick release	●	●	<b>BRAKES</b>			Air conditioner, (R134A refrigerant) / Heater, 40,000 Btu/hr. (11.8 kW) / Pressurizer		
Fuel/water separator, vertically mounted, quick release	●	●	Service			Tilt-for-service cab with hydraulic tilt	■	■
Isolation-mounted engine	●	●	Disk type, mounted inboard of axle final drives, sealed and lubricated, self adjusting and equalizing front and rear			<b>TIRES</b>		
Muffler, low restriction, externally mounted	●	●	Parking			23.1-26, 14 ply rating	●	●
Oil drain shutoff for spill-free oil changes	●	●	Spring applied, hydraulically released, wet multi-disk, integrally mounted in transmission			23.1-26, 14 ply rating, narrow gauge	■	■
Oil filter, spin on, vertical mount, full flow with by-pass	●	●	<b>OPERATOR'S STATION</b>			28L-26, 12 ply rating	■	■
Oil-to-coolant engine oil cooler	●	●	Gauges, electric, illuminated			28L-26, 12 ply rating, narrow gauge	■	■
Padlock-ready engine side shields	●	●	Engine coolant temperature / Fuel level			28L-26, 14 ply rating	■	■
Side-by-side mounted radiator, transmission, and hydraulic oil cooler	●	●	Fire extinguisher			24.5-32, 16 ply rating	■	■
Electric ether starting aid	■	■	Foot throttle			30.5-32, 16 ply rating	■	■
<b>ELECTRICAL</b>			Hand throttle			<b>HYDRAULIC SYSTEM</b>		
Alternator, 65 amp	●	●	Full function monitor instrumentation with audible warning alarm for			"Four wire" grapple hoses	●	●
Alternator, 95 amp	■	■	Air filter restriction indicator / Alternator voltage / Engine coolant temperature / Engine oil pressure / Hydraulic oil filter restriction / Hydraulic oil temperature / Park brake / Transmission oil pressure / Transmission oil filter restriction			Hydraulic oil cooler, side-by-side mounted to radiator	●	●
Alternator, 135 amp	■	■	Hourmeter			Single lever, blade control	●	●
Battery disconnect	●	●	Operator manual with storage compartment			Vertical, spin-on return oil filter, 10 micron with by-pass	●	●
Battery, dual, heavy duty, low maintenance	●	●	Steering wheel with full power steering			<b>WINCH</b>		
Load center electrical system with blade-type fuses	●	●	Vinyl suspension seat with			Model 4000 (8-in. drum high speed)	●	●
Work lights (halogen, 2 front, 2 rear)	■	■	Fore/aft adjustment / Height, weight adjustment / Adjustable backrest angle / Adjustable lumbar support / Armrests, two position			Model 4000 (8-in. drum standard speed)	■	■
Work lights (halogen, 4 front, 4 rear)	■	■	Fabric- or air-suspension seat with			Model 4000 (10-in. drum high speed)	■	■
<b>TRANSMISSION</b>			Fore/aft adjustment / Height, weight adjustment / Adjustable backrest angle / Lumbar support / Armrests, two position			Model 6000 (11-in drum)	■	■
Direct drive power shift with 8 forward and 7 reverse speeds	●	●	Operator protection with			<b>FRAMES</b>		
Isolation-mounted transmission	●	●	Integral ROPS, FOPS, OPS protective structure / Non cab-equipped machines include tinted polycarbonate front windows and screens on all other openings, cab-			Articulation locking bar, self storing	●	●
Oil filter, pressure side, 10 micron with by-pass, spin on, vertical mount	●	●				Frame clean-out and service doors	●	●
Park brake, wet multi-disk, spring applied, hydraulically released, sealed and lubricated	●	●				Stacking blade, 86-in. wide, with replaceable cutting edge	●	●
Transmission oil cooler, side-by-side mounted with radiator	●	●				Stacking blade extensions, 15 in. (381 mm) per side	■	■
Transmission disconnect, for cold weather starting	■	■						
<b>AXLES</b>								
Differential lock, hydraulically applied, engaged on the go, front and rear, with engagement indicator on dash	●	●						

KEY: ● Standard equipment ■ Optional or special equipment

See your John Deere dealer for further information.

## CONTROL OWNING AND OPERATING COSTS

Total Repair Cost Management (TRCM) is part of John Deere's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**OilScan® Plus program** - tells you what's going on inside *all* of your machine's major components so you'll see a decline in performance *before* the system fails. OilScan Plus oil analysis is included in most SECURE®-Extended warranty and preventive-maintenance contracts.

**MaintainIt™ program** - Flexible, easy-to-use MaintainIt software lets you start your own computerized maintenance program by putting complete machine histories at your fingertips. It features a library of John Deere equipment, a spare-parts inventory list, and a list of maintenance tasks. Compare costs; schedule maintenance procedures by hourmeter or date; or print, fax, or e-mail purchase and work orders with just a few quick keystrokes.

**Component life-cycle data** - gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission,

or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

**Preventive Maintenance (PM) contracts** - give you a fixed cost for maintaining a machine for a given period of time. It also helps you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**SECURE-Extended warranty** - gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And a SECURE-Extended contract also travels well because it's backed by John Deere and is honored by *all* Deere construction dealers.

**Customer Support Advisors (CSAs)** - Deere believes the CSA program lends a *personal* quality to Total Repair Cost Management. Certified Customer Support Advisors have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for *your* business and take the burden of machine maintenance off your shoulders.



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 at 35 API gravity. No derating is required up to 10,000 ft. (3050 m) altitude. Gross power is without cooling fan.

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 units with 23.1-26, 10 PR LS2 tires, full fuel tanks, 175-lb. (79 kg) operators, and standard equipment.

