

290D



KEY ADVANTAGES



Six general-purpose and ditching buckets are available. They feature heavy-duty reinforced beams, T-1 steel sidecutters, two-piece moldboard, and heavy-duty wear strips.



The monitor panel keeps you constantly up-to-date on vital machine functions. Warning lights alert the operator to insufficient alternator charge, low engine-oil pressure, air filter restriction, high coolant temperature, and low fuel. A buzzer also alerts you if the coolant temperature gets too high or the engine oil pressure gets too low.

Radial-piston propel motors are tucked inside the track width for maximum protection. Planetary reduction gearing provides drawbar pull of 13,670 pounds (60.8 kN) and a top speed of 2.6 mph (4.1 km/h).



Two arms are available – 6-ft. 2-in. (2.52-m) and 7-ft. 11-in. (2.41-m). You get more reach and digging force with the longer arm, but more control with the shorter arm.



Fanggs® Teeth are featured on every bucket. Due to their unique profile, Fanggs teeth dig with 23 percent less effort. You get faster bucket fill and better bucket control.



The "bent" front window gives you excellent visibility to the trench. Dual rearview mirrors are standard.

The comfortable, cloth-covered seat is fully adjustable. For maximum ventilation, move the upper and lower windows to storage position, open the roof vent, secure the door in the open position, and slide open the right-side window.

The undercarriage has track links with center struts that are 40 percent stronger than the non-strutted type. Track chain is sealed for long life.



Mode selector switch lets you change engine speed to match the job. Use the economy mode for most applications.



Hydraulic system has an automatic load-sensing function that lets the 290D combine hydraulic functions simultaneously.



Large service doors on the top and both sides provide easy access to all components. Easy-to-read sight glasses let you quickly check hydraulic reservoir and fuel levels.



Low-effort, pilot operated controls give you precise metering and smooth operation. To save fuel, the auto-idle feature reduces speed to 1,200 rpm when a hydraulic function is not used for four seconds.

Lost in the comfort zone

Over time, many contractors settle into a "marketing comfort zone." Sewer work. Basements. Septic tanks. Same stuff day in, day out. It's a strategy that works fine until the market "tubes." Then, the Law of the Jungle takes over. (Same people. Fewer jobs. Lower profits.)

The answer is to diversify into profitable niche markets with hydraulic attachments.

Call your dealer today for the facts on how attachments can expand your Comfort Zone.



ASPHALT CUTTER



CLAMSHELL BUCKET



HYDRAULIC HAMMER



CLEARING GRAPPLE



DITCH CLEANING BUCKET



MUCK BUCKET



SIDE TILTING BUCKET



COMPACTOR WHEEL



RIPPER TOOTH



AUGER, BORER



BARREL HANDLER



SITE PREP RAKE

ENGINE		2900
Type	John Deere 4239D	
Rated power	65 SAE net hp (48.5 kW) 68 SAE gross hp (50.5 kW) @ 2,100 rpm	
Cylinders	4	
Displacement	239 cu. in. (3,917 L)	
Maximum net torque	343 lb.-ft. (465 Nm) @ 1,500 rpm	
Fuel consumption, typical	1.25 to 2.5 gal./hr. (4.7 to 9.5 L/h)	
Cooling fan	suction type	
Electrical system	24 volt with 42-amp alternator	
Batteries (two 12 volt)	reserve capacity: 160 min.	

HYDRAULIC SYSTEM	
Main pumps	2 variable-displacement radial-piston open center
Maximum rated flow	2 x 29.1 gpm (2 x 110 L/min.)
Pressure setting	3,980 psi (27 442 kPa)
Pilot pump	one gear
Maximum rated flow	6.0 gpm (22 L/min.)
Pressure setting	570 psi (3930 kPa)
System operating pressure	
Travel circuits	3,980 psi (27 442 kPa)
Front-end circuits	3,340 psi (23 029 kPa)
Circuit relief valves	
Boom circuits	3,700 psi (25 512 kPa)
Arm circuits	3,700 psi (25 512 kPa)
Bucket circuits	3,770 psi (25 995 kPa)
Cross-over relief valves	
Travel circuits	4,200 psi (28 960 kPa)
Swing circuits	3,340 psi (23 029 kPa)
Oil filtration	one 10-micron full-flow return filter with by-pass one suction filter

CYLINDERS	
Boom (2)	
Bore	3.7 in. (95 mm)
Rod diameter	2.6 in. (65 mm)
Stroke	43.3 in. (1100 mm)
Arm (1)	
Bore	4.1 in. (105 mm)
Rod diameter	2.8 in. (70 mm)
Stroke	44.9 in. (1140 mm)
Bucket (1)	
Bore	3.7 in. (95 mm)
Rod diameter	2.4 in. (60 mm)
Stroke	35.0 in. (890 mm)

SWING MECHANISM	
Swing speed	0-14.9 rpm

UNDERCARRIAGE	
Carrier rollers (per side)	1
Track rollers (per side)	6
Idlers (per side)	1
Shoes, triple semi-grouser (per side)	43
Track guides	front and center
Track adjustment	hydraulic
Travel speed, forward and reverse	0-2.6 mph (0-4.1 km/h)
Drawbar pull	13,670 lb. (60.8 kN)
Tractive gradability	88% (41 deg.)
Off-level operating limit for oil sump	100% (45 deg.)

GROUND PRESSURE DATA	
Average ground pressure	
20-in. (500 mm) triple semi-grouser shoes	4.83 psi (33.3 kPa); recommended for rocky terrain and stumps
28-in. (700 mm) triple semi-grouser shoes	3.46 psi (23.8 kPa); recommended for general/soft terrain

CAPACITIES	
Fuel tank	66 gal. (250 L)
Cooling system	16 qt. (15 L)
Engine lubrication, including filter	9 qt. (8.5 L)
Hydraulic system	29 gal. (110 L)
Hydraulic reservoir	16 gal. (60 L)
Planetary propel drive (each)	4.8 qt. (4.5 L)
Swing drive	3.4 qt. (3.2 L)

OPERATING WEIGHTS

2900

With full fuel tank, 175-lb. (79 kg) operator, 36-in. (915 mm) 0.5 cu. yd. (0.4 m³) bucket, 7 ft. 11 in. (2.41 m) arm, 2,870-lb. (1,300 kg) counterweight, and optional 28-in. (700 mm) triple semi-grouser shoes20,743 lb. (9,409 kg)

Undercarriage equipped with

20-in. (500 mm) triple semi-grouser shoes6,878 lb. (3,120 kg)

28-in. (700 mm) triple semi-grouser shoes7,474 lb. (3,390 kg)

COMPONENT WEIGHTS

Upperstructure with full fuel tank and counterweight (less all front attachments).....9,469 lb. (4,295 kg)

One-piece boom (with two boom cylinders and arm cylinder)1,962 lb. (890 kg)

Arm with bucket cylinder and linkage

6 ft. 2 in. (1.89 m)853 lb. (387 kg)

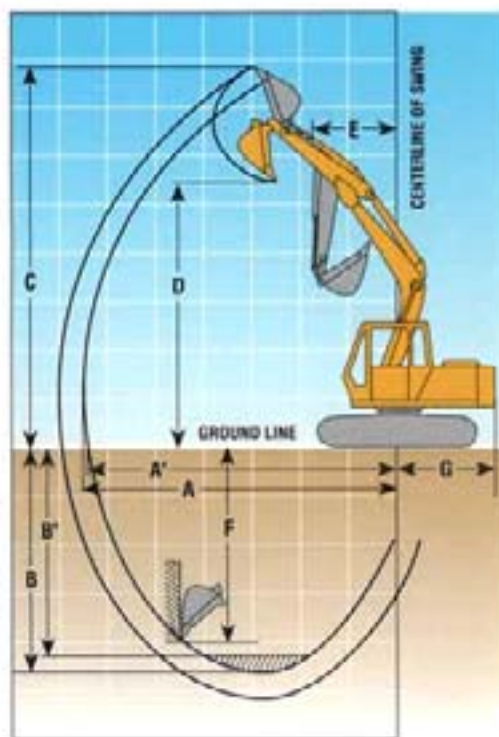
7 ft. 11 in. (2.41 m)1,001 lb. (454 kg)

Boom lift cylinders (2) total weight without pins362 lb. (164 kg)

Counterweight2,870 lb. (1,300 kg)

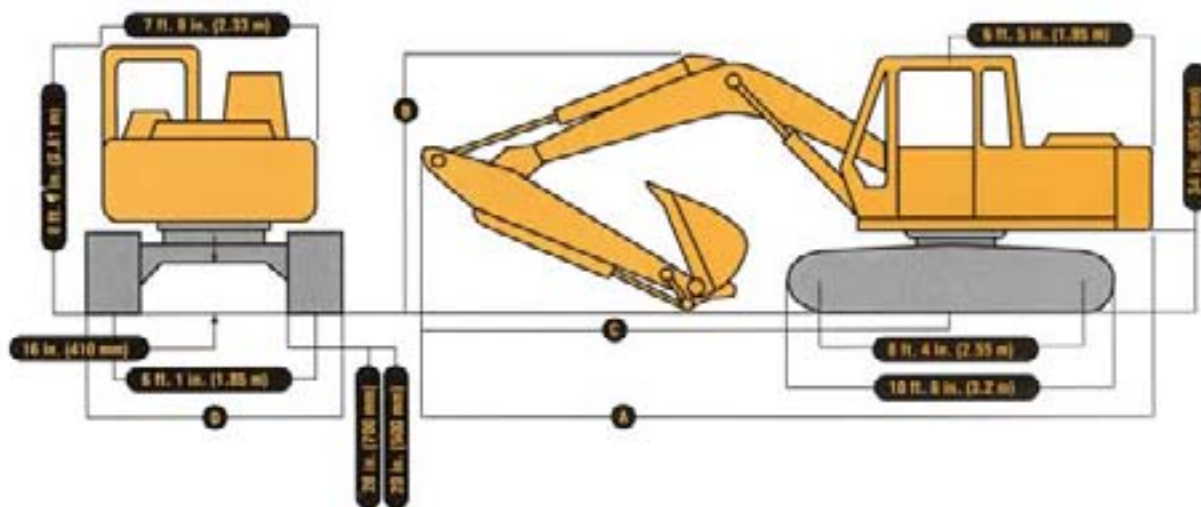
OPERATING INFORMATION

	Arm Length 6 ft. 2 in. (1.89 m)	Arm Length 7 ft. 11 in. (2.41 m)
Arm force with 36-in. (915 mm) general-purpose bucket	9,920 lb. (44 kN)	9,040 lb. (40 kN)
Bucket tangential force with 36-in. (915 mm) general-purpose bucket	12,600 lb. (56 kN)	12,600 lb. (56 kN)
Lifting capacity over front or rear @ ground level		
20-ft. (6.1 m) reach	3,070 lb. (1,390 kg)	3,226 lb. (1,460 kg)
A Maximum reach	23 ft. 2 in. (7.07 m)	24 ft. 6 in. (7.46 m)
B Maximum reach @ ground level	22 ft. 8 in. (6.92 m)	24 ft. 0 in. (7.32 m)
C Maximum digging depth	15 ft. 1 in. (4.60 m)	16 ft. 10 in. (5.12 m)
D Maximum digging depth @ 8-ft. (2.44 m) flat bottom	14 ft. 1 in. (4.30 m)	15 ft. 10 in. (4.83 m)
E Maximum cutting height	25 ft. 6 in. (7.78 m)	25 ft. 11 in. (7.91 m)
F Maximum dumping height	17 ft. 9 in. (5.40 m)	18 ft. 3 in. (5.56 m)
G Minimum swing radius	6 ft. 6 in. (1.98 m)	7 ft. 7 in. (2.32 m)
H Maximum vertical wall	13 ft. 0 in. (3.97 m)	14 ft. 2 in. (4.31 m)
I Tail swing radius	6 ft. 5 in. (1.95 m)	6 ft. 5 in. (1.95 m)



DIMENSIONS

A With 6 ft. 2 in. (1.89 m) arm	22 ft. 6 in. (6.86 m)
With 7 ft. 11 in. (2.41 m) arm	22 ft. 7 in. (6.88 m)
B With 6 ft. 2 in. (1.89 m) arm	8 ft. 1 in. (2.47 m)
With 7 ft. 11 in. (2.41 m) arm	8 ft. 4 in. (2.54 m)
C With 6 ft. 2 in. (1.89 m) arm	16 ft. 1 in. (4.91 m)
With 7 ft. 11 in. (2.41 m) arm	16 ft. 2 in. (4.93 m)
(arm cylinder pinned to arm transport position)	
D With 20-in. (500 mm) shoes	7 ft. 9 in. (2.35 m)
With 28-in. (700 mm) shoes	8 ft. 4 in. (2.55 m)



LIFT CAPACITIES

Boldface italic type indicates hydraulic-limited capacities; **lightface** type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 20-in. (500 mm) shoes; 0.375-cu. yd. (0.3 m³) 28-in. (700 mm) wide, 580-lb. (264 kg) bucket; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. Lift capacity is increased by approximately 4 percent if the machine is equipped with optional 28-in. (700 mm) triple semi-grouser shoes.

Load Point Height	5 ft. (1.52 m)		10 ft. (3.05 m)		15 ft. (4.57 m)		20 ft. (6.10 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 6 ft. 2 in. (1.89 m) arm and 2,870-lb. (1,300 kg) counterweight</i>								
15 ft. (4.57 m)					4,070 (1850)	4,070 (1850)		
10 ft. (3.05 m)			5,830 (2640)	5,830 (2640)	4,710 (2140)	4,020 (1820)		
5 ft. (1.52 m)					5,190 (2350)	3,690 (1670)	3,170 (1440)	2,260 (1025)
Ground Line			9,500 (4310)	6,380 (2890)	4,860 (2200)	3,430 (1560)	3,070 (1390)	2,160 (980)
-5 ft. (-1.52 m)	7,370 (3340)	7,370 (3340)	9,500 (4310)	6,380 (2890)	4,770 (2160)	3,340 (1520)		
-10 ft. (-3.05 m)			8,980 (4070)	6,590 (2990)				
<i>With 7 ft. 11 in. (2.41 m) arm and 2,870-lb. (1,300 kg) counterweight</i>								
15 ft. (4.57 m)					3,400 (1540)	3,400 (1540)		
10 ft. (3.05 m)			4,500 (2040)	4,500 (2040)	4,110 (1860)	4,110 (1860)	3,520 (1600)	2,570 (1170)
5 ft. (1.52 m)			8,430 (3820)	7,350 (3330)	5,450 (2470)	3,940 (1790)	3,380 (1530)	2,430 (1100)
Ground Line			9,840 (4460)	6,610 (3000)	5,080 (2300)	3,600 (1630)	3,226 (1460)	2,290 (1040)
-5 ft. (-1.52 m)	7,560 (3430)	7,560 (3430)	9,680 (4390)	6,470 (2930)	4,930 (2230)	3,450 (1560)	3,170 (1440)	2,230 (1010)
-10 ft. (-3.05 m)	11,860 (5380)	11,860 (5380)	9,860 (4470)	6,620 (3000)	4,980 (2260)	3,500 (1590)		

BUCKETS

A full line of buckets is offered to meet a wide variety of applications. The buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket. Tooth selection includes either the John Deere Fanggy® tooth or the ISCO Verticalok tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 4 inches (100 mm) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 6 ft. 2 in. (1.89 m)		Arm Dig Force 7 ft. 11 in. (2.41 m)		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	m ³	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
General Purpose	18	460	0.28	0.21	630	285	12,910	57.4	9,920	44.0	9,040	40.2	46.1	1170	4
	24	610	0.41	0.31	675	305	12,910	57.4	9,920	44.0	9,040	40.2	46.1	1170	4
	30	760	0.54	0.41	770	350	12,910	57.4	9,920	44.0	9,040	40.2	46.1	1170	5
	36	915	0.66	0.50	840	380	12,910	57.4	9,920	44.0	9,040	40.2	46.1	1170	6
Ditching	42	1067	0.53	0.40	472	215	11,690	52.0	9,520	42.4	8,730	38.8	50.9	1290	0
	60	1525	0.75	0.57	565	255	11,690	52.0	9,520	42.4	8,730	38.8	50.9	1290	0

*All capacities are SAE heaped ratings.

BUCKET SELECTION CHART

Recommended Bucket Size
General-Purpose Bucket*

Material (loose weight)	
Wood chips - 700 lb./cu. yd. (420 kg/m ³)	2.25 cu. yd. (1.70 m ³)
Peat, dry - 750 lb./cu. yd. (440 kg/m ³)	2.15 cu. yd. (1.60 m ³)
Cinders - 950 lb./cu. yd. (560 kg/m ³)	1.70 cu. yd. (1.30 m ³)
Peat, wet - 1,170 lb./cu. yd. (690 kg/m ³)	1.35 cu. yd. (1.00 m ³)
Topsoil - 1,600 lb./cu. yd. (950 kg/m ³)	1.00 cu. yd. (0.75 m ³)
Coal - 1,780 lb./cu. yd. (1050 kg/m ³)	0.88 cu. yd. (0.70 m ³)
Caliche - 2,100 lb./cu. yd. (1250 kg/m ³)	0.75 cu. yd. (0.60 m ³)
Earth, loam - 2,100 lb./cu. yd. (1250 kg/m ³)	0.75 cu. yd. (0.60 m ³)
Shale - 2,250 lb./cu. yd. (1330 kg/m ³)	0.70 cu. yd. (0.60 m ³)
Sand, dry - 2,400 lb./cu. yd. (1420 kg/m ³)	0.65 cu. yd. (0.50 m ³)
Clay, dry - 2,500 lb./cu. yd. (1480 kg/m ³)	0.65 cu. yd. (0.50 m ³)
Earth, dry - 2,550 lb./cu. yd. (1510 kg/m ³)	0.62 cu. yd. (0.50 m ³)
Limestone, broken or crushed - 2,600 lb./cu. yd. (1540 kg/m ³)	0.62 cu. yd. (0.50 m ³)
Earth, wet - 2,700 lb./cu. yd. (1600 kg/m ³)	0.62 cu. yd. (0.50 m ³)
Clay, wet - 2,800 lb./cu. yd. (1660 kg/m ³)	0.62 cu. yd. (0.50 m ³)
Rock, granite, blasted and broken - 2,800 lb./cu. yd. (1660 kg/m ³)	0.62 cu. yd. (0.50 m ³)
Sand, moist - 2,850 lb./cu. yd. (1690 kg/m ³)	0.55 cu. yd. (0.40 m ³)
Sand and gravel, dry - 2,900 lb./cu. yd. (1720 kg/m ³)	0.55 cu. yd. (0.40 m ³)
Sand, wet - 3,100 lb./cu. yd. (1840 kg/m ³)	0.50 cu. yd. (0.40 m ³)
Sand and gravel, wet - 3,400 lb./cu. yd. (2020 kg/m ³)	0.50 cu. yd. (0.40 m ³)

*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible when using light buckets, for flat and level operations, less compacted materials, and volume loading applications such as mass excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications and uneven surfaces. Bucket capacity indicated is SAE heaped.

	2900		2900	2900
ENGINE		Vandal locks with ignition key		Mode selectors (illuminated)
Auto-idle system	●	Cab door	●	Power modes - two
Batteries (two 12 volt), 160-min. (1,250 CCA) reserve capacity	●	Fuel cap	●	Monitor system with alarm features
Dual element dry-type air filter	●	Service doors	●	Auto-idle indicator light
Electric ether starting aid	●			Engine air cleaner restriction indicator light
Enclosed fan guard	●	FRONT ATTACHMENTS		Engine coolant level indicator light
Conforms to SAE J1308	●	Arm, 6 ft. 2 in. (1.89 m)	●	Engine coolant temperature indicator light with audible alarm
Engine coolant to -34°F (-37°C)	●	Arm, 7 ft. 11 in. (2.41 m)	●	Engine oil pressure indicator light with audible alarm
Full-flow oil filter	●	Bucket-to-arm clearance adjustable bushing (except ditching bucket)	●	Low alternator charge indicator light
Isolation mounted	●	Centralized lubrication system	●	Low fuel indicator light
John Deere quick release fuel filter	●	Dirt seals on all bucket pins	●	Work-lights-on indicator light
Oil cooler	●	Boom cylinder with plumbing to mainframe for no-boom-arm option	●	Motion alarm with cancel switch
Radiator trash screen	●	Buckets	●	Conforms to SAE J994
Underhood muffler with vertical curved end exhaust stack	●	General purpose	●	Positive-position hand throttle
		Ditching	●	Propel levers
HYDRAULIC SYSTEM		No-arm option	●	Roof hatch
Auxiliary hydraulic valve section	●	No-boom-arm option	●	Seat belt, 2 in. (51 mm)
Auxiliary pilot and electric controls	●			Slip-resistant steps and ergonomically-located handrails
Hydraulic filter restriction indicator kit	●	OPERATOR'S STATION		Conform to SAE J185
		Cigarette lighter	●	Tinted glass
UNDERCARRIAGE		Coat hook	●	Defroster fan
Planetary drive	●	Deluxe seat with adjustable armrests	●	24- to 12-volt D.C. convertor
Propel motor and hydraulic line shields	●	Floormat	●	ELECTRICAL
Single flange lower track rollers	●	Front windshield wiper	●	By-pass start safety cover on starter
Track guides, front idler	●	Constant speed	●	Positive terminal battery covers
Upper carrier roller	●	Gauges (illuminated)	●	
Triple semi-grouser shoes, 20 in. (500 mm)	●	Engine coolant	●	LIGHTS
Triple semi-grouser shoes, 28 in. (700 mm)	●	Fuel	●	Work lights
		Heater, 13,500 Btu/hr (4.1 kW) with blower fan	●	Halogen
UPPERSTRUCTURE		Horn, electric	●	One mounted on boom
Counterweight, 2,870 lb. (1,300 kg)	●	Hourmeter, electric	●	One mounted on frame
Fully-enclosed swing gears	●	Interior light	●	
Right- and left-hand mirrors	●			
Toolbox, lockable	●			

KEY: ● Standard equipment ■ Optional or special equipment

See your John Deere dealer for further information.

THE JDAdvantEDGE

JDAdvantEdge is a wealth of support programs, parts systems, and dealer resources, all designed to give you the edge. This package of special benefits is a major reason why John Deere offers the "best value" for your equipment dollar.

Best parts support - Twelve regional parts depots in North America and others around the world put parts support near your job no matter where in the world it is.

A computerized FLASH™ parts locating system linking these depots to dealerships can find out-of-stock parts in a hurry and get them into your hands fast. Usually within 24 hours, across North America.

Best service backup - Dealer service technicians are regularly schooled, at our modern facility in Davenport, Iowa, or by professionals in the field, to diagnose quickly and repair efficiently.

If they're stumped, a phone call to DTAC (Dealer Technical Assistance Center) puts them in touch with a staff of pros at the factory who help them find a solution quickly.

Best dealers - Your John Deere dealer is an important contributor to the JDAdvantEdge. He or she is committed to being the best equipment supplier you can work with.

This is a dollars-and-cents commitment in parts inventory, in service facilities, in field-service trucks. It's a sweat-and-blood commitment in dedicated, skilled, and highly trained and motivated personnel in each and every department at the dealership.

But what sets John Deere dealers apart from all the rest is something more, a factor somewhat difficult to measure ... a caring attitude, and a sincere desire to be the best at meeting the needs of each individual customer.

John Deere Finance Plans - Whether you rent, lease, or buy John Deere equipment, your dealer can explain the John Deere options available. One-stop options that let you free up operating capital, keep other lines of credit open. More solid benefits of the JDAdvantEdge.

Best protection - In addition to the new equipment warranty that meets or exceeds the competition, SECURE® extended coverage, an optional service product for John Deere equipment, is available for repair coverage after the warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Consult your dealer for availability and details.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1309 and DIN 62708, using No. 2-D fuel at 30 API gravity. No derating is required up to 5,000 ft. (1,520 m) altitude. Gross power is without cooling fan.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with PCSA and SAE standards. Except where otherwise noted, these specifications are based on a unit with 26-in. (615 mm) 0.5-cu. yd. (0.4 m³) bucket, 28-in. (700 mm) high semi-grouser shoes, 7 ft. 11 in. (2.41 m) arm, full fuel tank, and 175-lb. (79 kg) operator.

