

# Specifications

Engine	700J LT / 700J XLT / 700J LGP
Manufacturer and Model	John Deere PowerTech™ 6068H
Non-Road Emission Standards	certified to EPA Tier 3 emissions
Cylinders	6
Displacement	414 cu. in. (6.8 L)
SAE Net Rated Power @ 2,100 rpm	115 hp (86 kW)
Net Peak Torque @ 1,200 rpm	395 lb.-ft. (537 Nm)
Aspiration	turbocharged with charge air cooler
Air Cleaner	dual-stage dry type with safety element, precleaner, and dash-mounted restriction indicator

Cooling	
Blower-type cooling fan	
Engine Coolant Rating	-34 deg. F (-37 deg. C)

Powertrain	
Transmission	dual-path, electronic-controlled, hydrostatic drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individual track is powered by a variable-displacement piston pump and motor combination; decelerator controls speed from holding to 5.5 mph (8.9 km/h)
Travel Speeds, Forward and Reverse	0 to 5.5 mph (0 to 8.9 km/h)
Steering	single-lever steering, direction control, and counterrotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; hydrostatic steering eliminates steering clutches and brakes
Final Drives	heavy-duty triple-reduction final drives attach directly to the mainframes and are isolated from track frame and dozer frame loads
Brakes	hydrostatic (dynamic) braking stops the machine when the direction/steering control lever is moved to neutral or the decelerator is depressed to the detent
Service Brakes	hydrostatic (dynamic) braking stops the machine whenever the direction-control lever is moved to neutral or whenever the decelerator is depressed to the detent
Parking Brakes	exclusive park brake feature engages wet, multiple-disc brakes automatically whenever the engine stops, whenever the operator depresses the decelerator pedal to the brake position, whenever the unit is in neutral for three seconds (with detected motion), or whenever the park lock lever is in the park position; machine cannot be driven with brake applied, reducing wearout or need for adjustment

Hydraulics	
Open-center hydraulic system with gear pump, fixed displacement	
System Relief Pressure	3,200 psi (22 063 kPa)
Pump Flow @ 2,100 rpm	.25 gpm (95 L/m)
Filter, Return Oil	10 micron
Controls	three-function hydraulic valve with low-effort single-lever T-bar

Electrical	
Voltage	24 volt
Battery Capacity	950 CCA
Reserve Capacity	190 min.
Alternator Rating	55 amp
Standard Lights	3 total: grille-mounted (2) and rear-mounted (1); and rear reflectors (2)

Undercarriage	700J LT	700J XLT	700J LGP
Tracks	John Deere Dura-Trax™ features large deep-heat-treated components; pins and bushings are sealed for life; rollers and idlers are permanently sealed and lubricated; full-length track frame covers reduce material buildup and ease cleaning		
Track Gauge (standard)	70 in. (1778 mm)	70 in. (1778 mm)	78 in. (1981 mm)
Grouser Width	20 in. (508 mm)	22 in. (559 mm)	30 in. (762 mm)
Ground Clearance with Single-Bar Grouser (excluding grouser height)	15.4 in. (391 mm)	15.4 in. (391 mm)	15.4 in. (391 mm)
Chain	sealed and lubricated	sealed and lubricated	sealed and lubricated
Shoes (each side)	37	39	39
Track Rollers	6	7	7
Slope Operation (maximum angle)	45 deg.	45 deg.	45 deg.

Undercarriage (continued)	700J LT		700J XLT		700J LGP	
	<i>Standard</i>	<i>Maximum Life</i>	<i>Standard</i>	<i>Maximum Life</i>	<i>Standard</i>	<i>Maximum Life</i>
Undercarriage Track						
Track Length on Ground	95.4 in. (2423 mm)	95.4 in. (2423 mm)	103 in. (2616 mm)	103 in. (2616 mm)	103 in. (2616 mm)	103 in. (2616 mm)
Ground Contact Area	3,816 sq. in. (24 619 cm <sup>2</sup> )	3,816 sq. in. (24 619 cm <sup>2</sup> )	4,532 sq. in. (29 239 cm <sup>2</sup> )	4,532 sq. in. (29 239 cm <sup>2</sup> )	6,180 sq. in. (39 871 cm <sup>2</sup> )	6,180 sq. in. (39 871 cm <sup>2</sup> )
Ground Pressure	6.8 psi (46.9 kPa)	7.0 psi (48.3 kPa)	6.0 psi (41.4 kPa)	6.2 psi (42.7 kPa)	4.6 psi (31.7 kPa)	4.7 psi (32.4 kPa)
Track Pitch	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)

### Serviceability

700J LT / 700J XLT / 700J LGP

#### Refill Capacities

Fuel Tank with Lockable Cap	60 gal. (227 L)
Cooling System with Recovery Tank	5.6 gal. (21.2 L)
Engine Oil with Filter	20 qt. (19 L)
Transmission Reservoir with Filter	17.2 gal. (65.1 L)
Final Drive (each)	14 qt. (13 L)
Hydraulic Reservoir and Filter	13.5 gal. (51.1 L)
4000S John Deere Winch (if equipped)	10 gal. (38 L)

### Operating Weights

700J LT

700J XLT

700J LGP

With Standard Equipment, Rollover Protective

Structures, Full Fuel Tanks, and 175-lb.

(79 kg) Operators

120-in. (3048 mm) Blade and 20-in.

(510 mm) Track Shoes ..... 26,102 lb. (11 840 kg)

120-in. (3048 mm) Blade and 22-in.

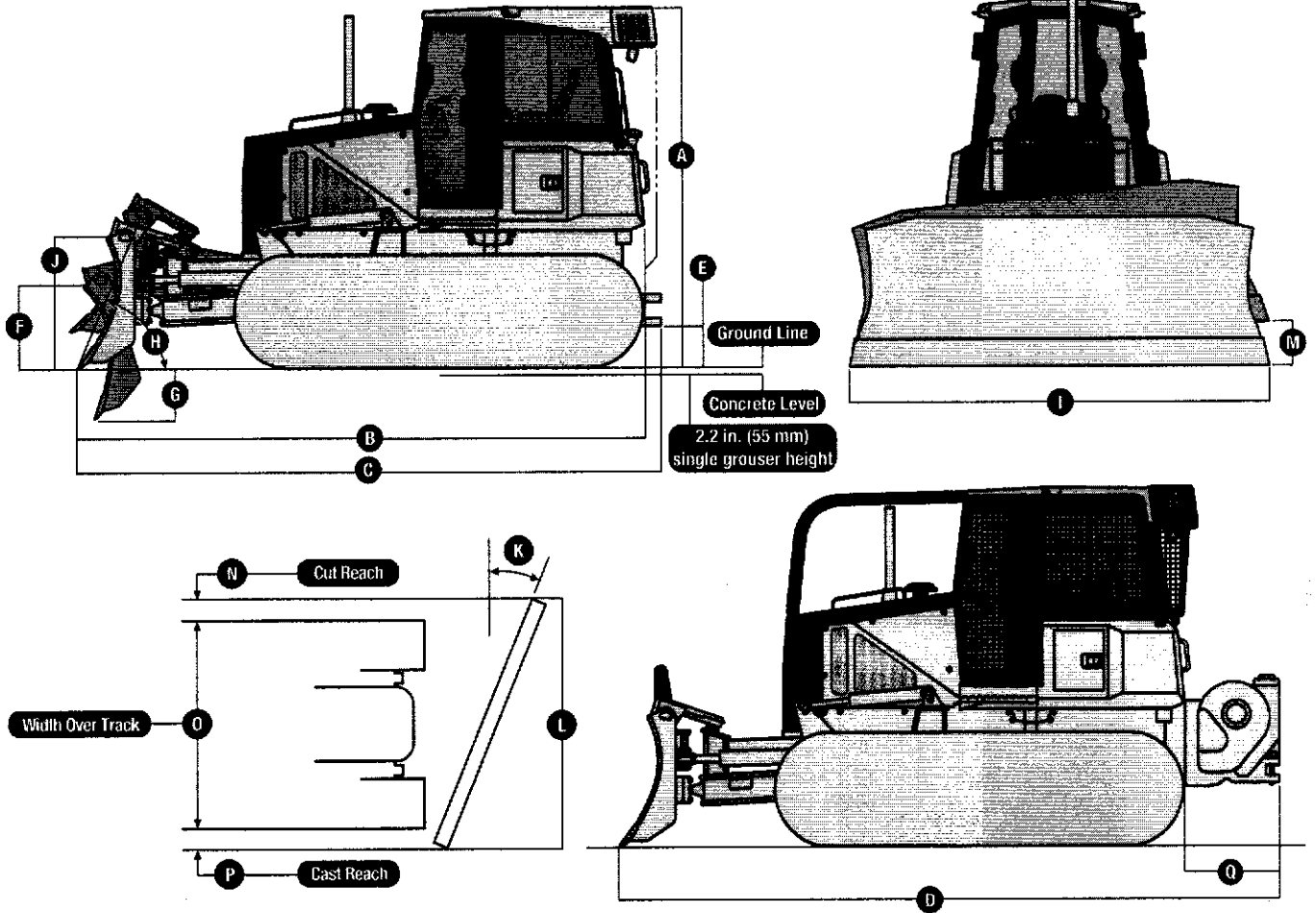
(560 mm) Track Shoes ..... 27,124 lb. (12 303 kg)

132-in. (3353 mm) Blade and 30-in.

(760 mm) Track Shoes ..... 28,290 lb. (12 832 kg)

#### Optional Components

Rock Guards (4)	287 lb. (130 kg)	287 lb. (130 kg)	N/A
Maximum Life Undercarriage	782 lb. (355 kg)	822 lb. (373 kg)	822 lb. (373 kg)
20-in. (510 mm) Track Shoes	in base	- 265 lb. (- 120 kg)	- 1,351 lb. (- 613 kg)
22-in. (560 mm) Track Shoes	252 lb. (114 kg)	in base	- 1,086 lb. (- 493 kg)
24-in. (610 mm) Track Shoes	N/A	N/A	- 818 lb. (- 371 kg)
30-in. (760 mm) Track Shoes	N/A	N/A	in base
30-in. (760 mm) Swamp Shoes	N/A	N/A	- 31 lb. (- 14 kg)
Cab with Heater and Air Conditioner	635 lb. (288 kg)	635 lb. (288 kg)	635 lb. (288 kg)
Counterweight, Front (each)	380 lb. (172 kg)	380 lb. (172 kg)	380 lb. (172 kg)
Front Tow Hook	17 lb. (8 kg)	17 lb. (8 kg)	17 lb. (8 kg)
Retrieval Hitch	68 lb. (31 kg)	68 lb. (31 kg)	68 lb. (31 kg)
Extended Drawbar	195 lb. (88 kg)	195 lb. (88 kg)	195 lb. (88 kg)
Limb Risers	341 lb. (155 kg)	341 lb. (155 kg)	341 lb. (155 kg)
Rear Screen			
Canopy	45 lb. (20 kg)	45 lb. (20 kg)	45 lb. (20 kg)
Cab	91 lb. (41 kg)	91 lb. (41 kg)	91 lb. (41 kg)
Screens			
Side	108 lb. (49 kg)	108 lb. (49 kg)	108 lb. (49 kg)
Front and Doors			
Canopy	120 lb. (54 kg)	120 lb. (54 kg)	120 lb. (54 kg)
Cab	151 lb. (68 kg)	151 lb. (68 kg)	151 lb. (68 kg)
4000S Winch	1,437 lb. (652 kg)	1,437 lb. (652 kg)	1,437 lb. (652 kg)
Fairlead, 4-Roller	187 lb. (85 kg)	187 lb. (85 kg)	187 lb. (85 kg)
Parallelogram Ripper	3,183 lb. (1444 kg)	3,183 lb. (1444 kg)	3,183 lb. (1444 kg)
132-in. (3353 mm) Blade for LT	140 lb. (64 kg)	140 lb. (64 kg)	in base
Heavy-Duty C Frame (less blade)	- 1,730 lb. (- 785 kg)	- 1,730 lb. (- 785 kg)	- 1,870 lb. (- 848 kg)
Fuel-Fired Coolant Heater	12 lb. (5 kg)	12 lb. (5 kg)	12 lb. (5 kg)
Grille, Extreme Service with Heavy-Duty			
Hose Guard	112 lb. (51 kg)	112 lb. (51 kg)	112 lb. (51 kg)
Extreme-Service Rear Tank Guard	225 lb. (102 kg)	225 lb. (102 kg)	225 lb. (102 kg)
Extreme-Service Air-Conditioning Module			
Guard	117 lb. (53 kg)	117 lb. (53 kg)	117 lb. (53 kg)
Log Arch	780 lb. (354 kg)	780 lb. (354 kg)	780 lb. (354 kg)



**Dimensions**

	<b>700J LT</b>	<b>700J XLT</b>	<b>700J LGP</b>
<b>A</b> Overall Height with ROPS or Cab	118.4 in. (3007 mm)	118.4 in. (3007 mm)	118.4 in. (3007 mm)
<b>B</b> Overall Length	180 in. (4572 mm)	188 in. (4775 mm)	188 in. (4775 mm)
<b>C</b> Overall Length with Extended Drawbar	193 in. (4902 mm)	200 in. (5080 mm)	200 in. (5080 mm)
<b>D</b> Overall Length with Winch	208 in. (5283 mm)	215.3 in. (5469 mm)	215.3 in. (5469 mm)
<b>E</b> Ground Clearance, Minimum Single-Bar Grouser	15.4 in. (391 mm)	15.4 in. (391 mm)	15.4 in. (391 mm)
<b>F</b> Blade Lift Height	36 in. (914 mm)	39 in. (991 mm)	39 in. (991 mm)
<b>G</b> Blade Digging Depth	20 in. (508 mm)	21 in. (533 mm)	21 in. (533 mm)
<b>H</b> Blade Cutting Edge Angle, Adjustable	7 deg.	7 deg.	7 deg.

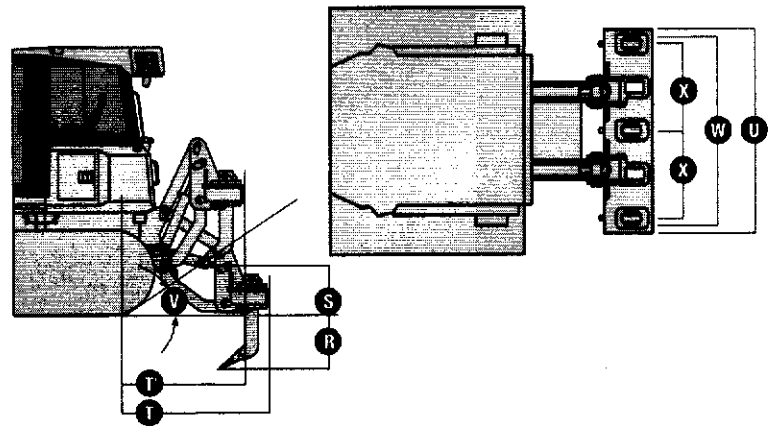
**Blade Specs**

	<b>700J LT</b>	<b>700J XLT</b>	<b>700J LGP</b>
<b>I</b> Width	120 in. (3048 mm)	120 in. (3048 mm)	132 in. (3353 mm)
<b>J</b> Height	39 in. (991 mm)	39 in. (991 mm)	39 in. (991 mm)
SAE Capacity	3.44 cu. yd. (2.63 m <sup>3</sup> )	3.44 cu. yd. (2.63 m <sup>3</sup> )	3.75 cu. yd. (2.87 m <sup>3</sup> )
<b>K</b> Blade Angle	25 deg.	25 deg.	25 deg.
<b>L</b> Angled Width	109 in. (2769 mm)	109 in. (2769 mm)	121 in. (3073 mm)
<b>M</b> Tilt	17 in. (432 mm)	17 in. (432 mm)	18 in. (457 mm)
<b>N</b> Cut Reach	2 in. (51 mm)	1 in. (25 mm)	- 1 in. (- 25 mm)
<b>O</b> Width Over Track	90 in. (2286 mm)	92 in. (2337 mm)	108 in. (2743 mm)
<b>P</b> Cast Reach	16 in. (406 mm)	15 in. (381 mm)	13 in. (330 mm)
<b>Q</b> 400S Winch Length	30.5 in. (775 mm)	30.5 in. (775 mm)	30.5 in. (775 mm)

**Rear Ripper**

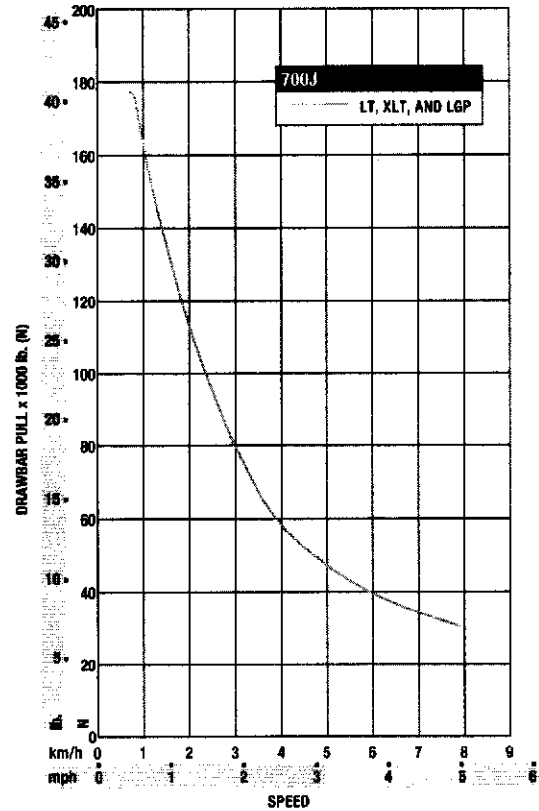
**700J LT / 700J XLT / 700J LGP**

Weight	3,183 lb. (1444 kg)
<b>R</b> Maximum Penetration	22.2 in. (563 mm)
<b>S</b> Maximum Clearance Under Tip	23 in. (584 mm)
<b>T</b> Overall Length (lowered position)	58.8 in. (1494 mm)
<b>T'</b> Overall Length (raised position)	47.6 in. (1210 mm)
<b>U</b> Overall Beam Width	76 in. (1930 mm)
<b>V</b> Slope Angle (full raise)	26 deg.
<b>W</b> Ripping Width	65.9 in. (1673 mm)
<b>X</b> Distance Between Shanks (3 installed)	31.7 in. (806 mm)
Distance Between Holes In Shank	4.1 in. (105 mm)



**Drawbar Pull**

Crawler Speed vs Ground Pull ..... usable pull will depend on traction and weight of tractor



## 700J CRAWLER DOZER

**Key:** ● Standard equipment ▲ Optional or special equipment

\*See your John Deere dealer for further information.

### 700J Engine

- Certified to EPA Tier 3 emissions
- Electronic control with automatic engine protection
- Dual safety element dry-type air cleaner, evacuator valve
- Muffler, self draining, under hood, with vertical stack
- Environmental service drains
- ▲ Ether start aid
- ▲ Engine coolant heater, 110 volts
- ▲ Engine coolant heater, fuel fired
- ▲ Chrome exhaust

### Cooling

- Cooling fan, blower type
- Engine coolant radiator (7 fins per in.)
- Hydrostatic cooler (oil/air - 8 fins per in.)
- Hydraulic cooler (oil/air - 8 fins per in.)
- Enclosed safety fan guard (conforms to SAE J1308 and ISO3457)
- Perforated engine side shields
- Heavy-duty grille
- ▲ Extreme-duty grille

### Transmission

- Diagnostic test ports
- Environmental service drains

### Hydraulic System

- Three-function hydraulics
- ▲ Four-function hydraulics with rear plumbing
- ▲ Drive-through hydraulic pump for use with winch
- ▲ Integrated Grade Control (IGC)

### Mainframe, Access Panels

- Front tow loop (bolt-on)
- Reinforced engine and mid-frame bottom guards
- Integral transmission guard
- Vandal protection: Engine access door / Side tank access doors / Fuel tank / Instrument panel / Transmission reservoir / Hydraulic reservoir

### Attachments

- ▲ Counterweight, front, 380 lb. (172 kg)
- ▲ Counterweight, rear\*
- ▲ Retrieval hitch with pin
- ▲ Extended rigid drawbar with pin for pull-type implements
- ▲ Drawbar, extended for winch (with or without fairlead)
- ▲ Ripper, parallelogram with five shank pockets and three teeth
- ▲ Winch, John Deere 4000S, power in/free spool out OR power out

### 700J Attachments (continued)

- ▲ Four-roller fairlead for winch
- ▲ Root-rake blade attachment
- ▲ Rear-mounted toolbox

### LT XLT LGP Undercarriage

- ● ● Full-length, smooth-surface track frame covers
- ● ● Bolt-on chain guides, front and rear
- ● ● Segmented sprockets
- ● ● Double-flange rollers
- ● ● 20-in. extreme-service shoes
- ▲ ▲ ▲ 22-in. extreme-service shoes
- ▲ ▲ ▲ 24-in. extreme-service shoes
- ▲ ▲ ▲ 30-in. extreme-service shoes
- ▲ ▲ ▲ Extended life undercarriage with SC-2™ bushings
- ▲ ▲ ▲ Maximum Life Undercarriage System
- ▲ ▲ ▲ Full-length rock guards

### Canopy Cab Operator's Station / Electrical

- ● Retractable seat belts, 3 in. (76 mm) (conforms to SAE J386)
- ● Convex interior rearview mirror, 4-in. (102 mm) tall, 8-in. (203 mm) wide (conforms to SAE J985)
- ● Power port, 12 volts
- ● Lockable side-seat storage compartment
- ● Air conditioner, 24,000 Btu
- Tinted glass
- Dome light
- Heater (roof mount)
- Front and door wipers
- Mechanical suspension vinyl seat
- Mechanical suspension fabric seat
- ▲ Air suspension vinyl seat
- ▲ Air suspension fabric seat
- ▲ Under-seat heater
- ▲ Rear wiper
- ▲ AM/FM, weather-band radio, clock
- ▲ External-mounted attachment mirror
- ● Sealed alternator, 55 amps
- ● Master electrical disconnect switch
- ● Lights, grille mounted (2), rear mounted (1)
- ▲ ▲ Work lights, roof mounted
- ▲ ▲ JDLink™ wireless communication system

## CONTROL OWNING AND OPERATING COSTS

Customer Personal Service (CPS) 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:

**Fluid analysis program** - tells you what's going on inside *all* of your machine's major components so you'll know if there's a problem *before* you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

**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) agreements** - give you a fixed cost for maintaining a machine for a given period of time. They also help 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.

**Extended coverage** - 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 an extended coverage 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 Customer Personal Service (CPS). Certified CSAs 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.



JOHN DEERE

DKA700J Litho in U.S.A. (09-04)

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO9249. No derating is required up to 10,000-ft. (3050 m) altitude.

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 all standard equipment, rollover protection structures, full fuel tanks, and 175-lb. (79 kg) operators: 700J LT unit with 120-in. (3048 mm) blade and 20-in. (510 mm) track shoes; 700J XLT unit with 120-in. (3048 mm) blade and 22-in. (560 mm) track shoes; and 700J LGP unit with 132-in. (3353 mm) blade and 30-in. (760 mm) track shoes.

