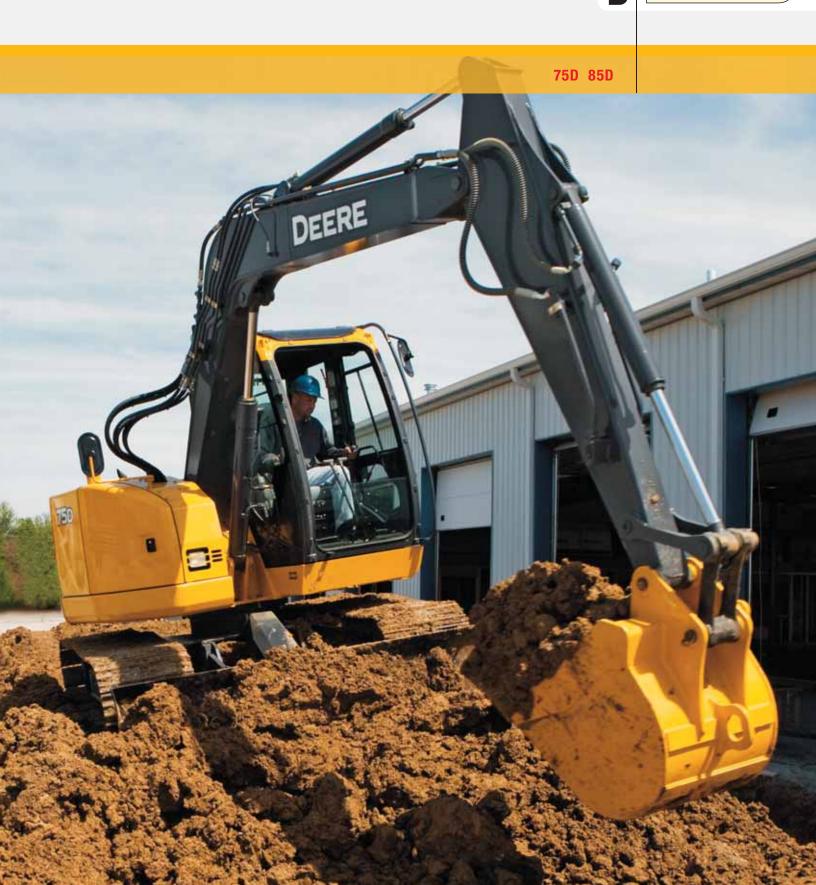


**EXCAVATORS** 





## Regular or swing boom. Steel or rubber tracks.

It's nice to have choices. Whether you're land-scaping or doing light residential excavating, site development, or underground work, the new conventional-boom 75D and swing-boom 85D will have an immediate impact on your bottom line. Neither too big nor too small, these right-size machines deliver all the power, smoothness, control, and ease of operation you've come to expect from larger John Deere excavators in an easy-to-maneuver package. Their compact size and reduced tail-swing design allow them to rotate freely within a small radius. So they're

more productive in confined spaces and around obstacles. With increased swing torque and drawbar pull, they produce like a big-time machine. And with a spacious, comfortable cab featuring an advanced LCD monitor, they operate like one, too. Rubber tracks are now optional on both models. Other enhancements including a high-efficiency cooling system; rugged, turbocharged, fuel-efficient Interim Tier 4 diesel; and improved serviceability ensure the uptime and long-lasting durability you've come to expect from Deere.



Reduced tail swing allows operators to get closer to objects on congested jobsites, for extra versatility and maneuverability in close quarters.

The 75D features a standard boom while the 85D features a versatile swing boom for digging parallel to walls and foundations. Rubber tracks are optional on both models.

Spacious operating station with generous legroom and more glass delivers the comfort and visibility you'd expect from a large excavator, within the footprint of a small machine.

Quiet-running Interim Tier 4 diesels deliver more torque with impressive fuel efficiency. Turbocharging lets them work at higher altitudes without sacrificing performance.

Extended engine and hydraulic oil-service intervals help maximize uptime and reduce daily operating costs.

Powerwise III™ engine/hydraulic management system maximizes power output, saves fuel, and delivers smooth multifunction hydraulic operation.

Specifications	75D	85D
Net Power	54 hp (40.5 kW)	54 hp (40.5 kW)
Operating Weight	17,743 lb. (8048 kg)	18,821 lb. (8537 kg)
Lift Capacity	4,248 lb. (1927 kg)	4,248 lb. (1927 kg)
Digging Depth	13 ft. 6 in. (4.11 m)	13 ft. 0 in. (3.97 m)
Arm Breakout Force	8,554 lb. (38.1 kN)	8,554 lb. (38.1 kN)

For work that requires extra finesse, best-in-class metering and superb multifunction operation deliver the precise control you need and that John Deere excavators are known for.

Optional, durable rubber tracks let you cross driveways and sidewalks without damage — perfect for landscaping jobs on existing properties.

The 75D and 85D are sized to transport easily between jobsites.

Generous hydraulic flow combined with increased swing torque help you load more trucks and open more trench.

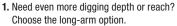
With their narrow width, reduced tail swing, and rubber track option, these excavators tackle tasks that used to be handwork.

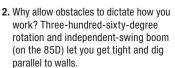
Choose from a variety of track widths, arm lengths, buckets, and other options to maximize your efforts.

Hydraulic recirculation system delivers more efficient flow to the boom and arm, speeding multifunction operation and cycle times.

Additional hydraulic capability a necessity? Optional high-pressure, high-flow auxiliary hydraulic packages meet the need.







- Standard integral blade helps to conveniently accomplish backfill tasks. New shape moves more dirt and improves visibility.
- High sideboards are no problem for these excavators. Plenty of lift height and reach make truck loading easy.







### These hard workers won't work their tails off. 750 Don't get us wrong. With outstanding digging force, areas soars. Control is smooth and effortless, with swing torque, drawbar pull, and lift capability, the the Powerwise III management system delivering 75D and 85D are highly productive, hard-working pinpoint metering. Highly maneuverable and easy machines. But with their tight tail swing, operators to transport, they're perfect for landscapers and can concentrate on the work in front of them small contractors. Who says you have to work your

PAGES

tail off to be more productive?

without worrying about damaging the machine or

surroundings behind them — productivity in confined





Noise levels — and operator fatigue — have been significantly reduced. Noise-reducing muffler and isochronous high-idle speed help quiet things down.

Ergonomic short-throw pilot levers provide smooth, predictable fingertip control with less effort.

Go from backhoe- to excavator-style controls with just a twist of the optional control-pattern selector valve.

Convenient 12-volt port powers cell phones and other electronic devices.

Redesigned cab isn't just roomier, it's also noticeably more comfortable. Silicone-filled cab mounts effectively isolate operators from noise and vibration.

The specially designed cab on the 85D accommodates the swing boom without sacrificing comfort and visibility.

Intuitive, multi-language monitor with four-color LCD screen provides a wealth of info and control. Displays operating, diagnostic, and maintenance data with easy-on-the-eyes clarity.

- A large expanse of glass on the right-hand side, narrow front cab posts, large tinted overhead hatch (window only on 85D), and numerous mirrors provide clear allaround visibility.
- Both the 75D and 85D cabs include a cup holder, and the 75D also has a storage box for a cell phone, keys, and other small items.
- 3. Automatic, high-velocity bi-level climatecontrol system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.
- 4. Deluxe-suspension multi-position seat features multiple adjustments to fit a variety of operators. It slides with, or independent of, the control console so it won't cramp the operator's style (75D shown).









Oil-impregnated bushings enhance durability and extend grease intervals to 500 hours (100 hours for the bucket joint). Reinforced resin plates increase boom-lube intervals to 500 hours.

Tungsten-carbide coating creates an extremely wear-resistant surface to protect the all-important bucket-to-arm joint.

Optional rubber tracks feature a unique steel core that resists cracking.

With large idlers, rollers, and strutted links, the sealed and lubricated undercarriage delivers long and reliable performance.

Wet-disk swing brake delivers long-term maintenance-free performance.

Heavy-duty shields deflect material and impacts, protecting the propel motors and boom and blade cylinders.

O-ring face-seal couplers virtually eliminate leaks.

Heavy-duty welded x-frame provides a solid, stable platform that resists material buildup.

A linear clutch continuously adjusts to fan speed to reduce noise and fuel consumption. You'll be amazed how quietly and efficiently these machines run.



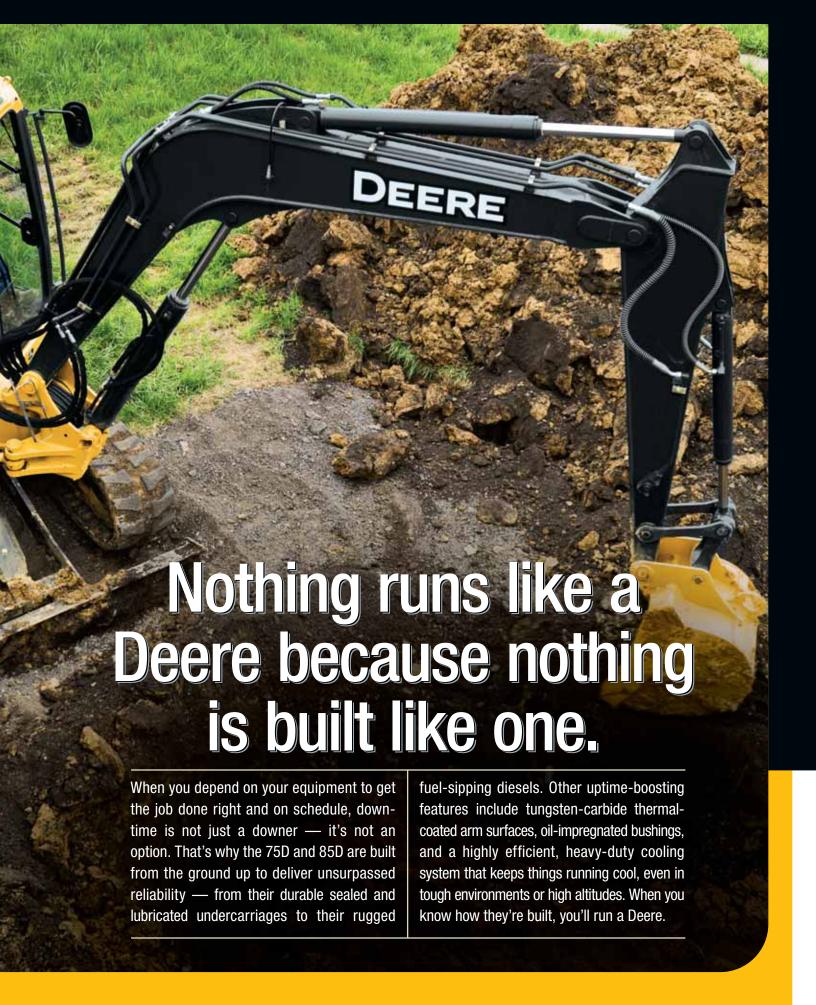


- **1.** Wear-resistant hoses are protected and secured to prevent excessive tension.
- **2.** Welded bulkheads within the boom resist torsional stress.
- Rigid, reinforced D-channel side frames resist impact, providing maximum cab and component protection.
- Box-section track frames, thick-plate single-sheet mainframe, and large swing bearing deliver rock-solid durability.









Large fuel tanks and 500and 5,000-hour engine and hydraulic oil-service intervals help increase uptime and lower daily operating costs. Remote fillers make fluid servicing fast and easy.

Large, easy-to-open doors provide quick access to service items. Lube banks, filters, and checkpoints are grouped for added convenience. Machine Information Center (MIC) captures and stores vital machine performance and utilization data to help improve uptime, productivity, and profit.

Using the easy-to-navigate LCD color monitor, you can easily keep tabs on up to 14 maintenance intervals and 32 machine operating parameters.



# We're open-minded when it comes to simplifying service.

We're always open to ideas that make our excavators simpler to service and lower cost to maintain. Like large, easy-to-open service doors that provide ample access to conveniently grouped service points. And extended service intervals and remote-mounted vertical oil and

fuel filters that speed periodic maintenance. So you can spend less time on machine upkeep, and more time doing the real work of increasing your bottom line. Industry-leading parts and service are easy to access, too, at more than 400 John Deere locations.

- **1.** Vertical spin-on fuel/water filters are positioned in the right rear compartment, simplifying service.
- The left-hand, rear compartment provides access to the battery, washer fluid, air filter, and side-by-side cooling cores.
- 2. Conveniently located sight gauges let you check coolant and hydraulic fluid levels at a glance.
- **4.** The 75D's fresh-air cab filter is quickly serviced at ground level where it's more likely to get done.











Nobody backs you better than the 400-plus John Deere dealers throughout North America.

Engine 75D

Manufacturer and Model . . . . . . . . . . Isuzu 4LE2X

 Displacement
 133 cu. in. (2.2 L)

 Off-Level Capacity
 70% (35 deg.)

Aspiration..... turbocharged with intercooler

### Cooling

Variable-speed fan directly driven by the engine through a linear clutch; nonreversible

### **Powertrain**

Two-speed propel with automatic shift

Travel Speed (maximum)

### **Hydraulics**

Open center, load sensing

Main Pumps . . . . . . . . . . . . 3 variable-displacement axial piston

 Pilot Pump
 one gear

 Maximum Rated Flow
 5.3 gpm (20 L/m)

 System Relief Pressure
 566 psi (3900 kPa)

**System Operating Pressure** 

 Implement Circuits
 3,771 psi (26 000 kPa)

 Travel Circuits
 4,554 psi (31 400 kPa)

 Swing Circuits
 3,626 psi (25 000 kPa)

Controls......pilot levers, short stroke, low effort; hydraulic pilot controls with shutoff lever

### **Cylinders**

Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins

 Boom (1)
 4.5 in. (115 mm)
 2.6 in. (65 mm)
 34.8 in. (885 mm)

 Arm (1)
 3.7 in. (95 mm)
 2.4 in. (60 mm)
 35.4 in. (900 mm)

 Bucket (1)
 3.3 in. (85 mm)
 2.2 in. (55 mm)
 28.7 in. (730 mm)

### **Electrical**

Batteries2 x 12 voltReserve Capacity100 min.Alternator Rating50 amp

Work Lights . . . . . . halogen (2), one mounted on boom and one on frame

### **Undercarriage**

Track

Adjustment.....hydraulic

Chain . . . . . . sealed and lubricated

Swing Mechanism	75D
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### **Ground Pressure**

 24-in. (600 mm) Triple Semi-Grouser Shoes
 3.7 psi (26 kPa)

 18-in. (450 mm) Rubber Crawler Pads
 4.9 psi (34 kPa)

 18-in. (450 mm) Rubber Crawler Belt
 4.9 psi (34 kPa)

### Serviceability

### **Refill Capacities**

 Fuel Tank.
 35.7 gal. (135 L)

 Cooling System
 2.7 gal. (10.3 L)

 Engine Oil with Filter
 3.2 gal. (12.1 L)

 Hydraulic Tank.
 15 gal. (56 L)

 Hydraulic System
 26 gal. (100 L)

 Propel Gearbox (each)
 1.3 qt. (1.2 L)

### **Operating Weights**

With Full Fuel Tank; 175-lb. (79 kg) Operator; 0.53-cu.-yd. (0.41 m³), 30-in. (762 mm), 735-lb. (333 kg) Bucket; 5-ft. 4-in. (1.62 m) Arm; 3,049-lb. (1383 kg) Counterweight; and 8-ft. 1-in. (2470 mm) Blade

24-in. (600 mm) Triple Semi-Grouser Shoes. . . . 17,743 lb. (8048 kg) 18-in. (450 mm) Rubber Crawler Pads . . . . . . 17,461 lb. (7920 kg) 18-in. (450 mm) Rubber Crawler Belt. . . . . . . 17,412 lb. (7898 kg)

### **Optional Components**

Undercarriage

24-in. (600 mm) Triple Semi-Grouser

 Shoes
 3,366 lb. (1527 kg)

 18-in. (450 mm) Rubber Crawler Pads
 3,036 lb. (1377 kg)

 One-Piece Boom (with arm cylinder)
 1,025 lb. (465 kg)

 Arm with Bucket Cylinder and Linkage
 5 ft. 4 in. (1.62 m)
 514 lb. (233 kg)

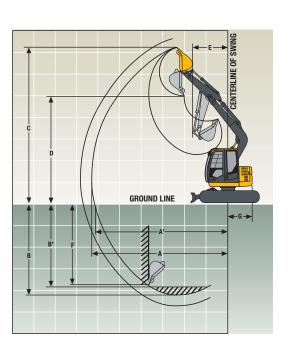
 6 ft. 11 in. (2.12 m)
 595 lb. (270 kg)

 Boom Lift Cylinder
 196 lb. (89 kg)

 Counterweight (standard)
 3,049 lb. (1383 kg)

**Operating Dimensions** 

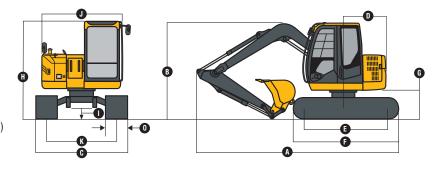
Arm Length	Arm Length
5 ft. 4 in. (1.62	? m) 6 ft. 11 in. (2.12 m)
Arm Force	
Bucket Digging Force	0 kN) 12,368 lb. (55.0 kN)
Lifting Capacity Over Front at Ground Level	
20-ft. (6.1 m) Reach 4,248 lb. (1927)	7 kg) 4,151 lb. (1883 kg)
<b>A</b> Maximum Reach	3 m) 22 ft. 8 in. (6.92 m)
A¹ Maximum Reach at Ground Level 20 ft. 6 in. (6.2	26 m) 22 ft. 2 in. (6.76 m)
<b>B</b> Maximum Digging Depth 13 ft. 6 in. (4.1	1 m) 15 ft. 1 in. (4.61 m)
<b>B'</b> Maximum Digging Depth at 8-ft. (2.44 m)	
Flat Bottom	'6 m) 14 ft. 2 in. (4.33 m)
<b>C</b> Maximum Cutting Height 23 ft. 8 in. (7.2	21 m) 25 ft. 0 in. (7.61 m)
<b>D</b> Maximum Dumping Height 16 ft. 10 in. (5.	.12 m) 18 ft. 1 in. (5.51 m)
<b>E</b> Minimum Swing Radius 5 ft. 11 in. (1.8	7 ft. 1 in. (2.16 m)
<b>F</b> Maximum Vertical Wall	i7 m) 13 ft. 10 in. (4.22 m)
<b>G</b> Tail Swing Radius 4 ft. 3 in. (1.29	m) 4 ft. 3 in. (1.29 m)

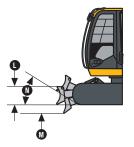


<b>Machine</b>	Dimensions	75

<u>ich</u>	ine Dimensions	75D
		Arm Length
		5 ft. 4 in. (1.62 m)
A	Overall Length	20 ft. 8 in. (6.30 m)
В	Overall Height	8 ft. 6 in. (2.60 m)
C	Undercarriage Width:	
	24-in. (600 mm) Triple Semi-Grouser	
	Shoes.	
	18-in. (450 mm) Rubber Crawler Pad 18-in. (450 mm) Continuous Rubber Belt	, ,
D	Rear-End Length/Swing Radius	, ,
E		
F	Distance Between Idler/Sprocket Centerline	, ,
G	Undercarriage Length	,
น H	Counterweight Clearance	, ,
	Cab Height	
ļ	Ground Clearance	,
J	Upperstructure Width	, ,
K	Gauge Width	
L	Blade Height	,
	Blade Width	
	Blade Lift Height	15 in. (380 mm)
M	Blade Cut Below Grade	11 in. (280 mm)
N	Blade Lift Angle	27 deg.
	Rear-End Length with Blade	6 ft. 2 in. (1.88 m)
0	Track Width:	
	24-in. (600 mm) Triple Semi-Grouser Shoes	24 in (600 mm)
	18-in. (450 mm) Rubber Crawler Pad	
	18-in. (450 mm) Continuous Rubber Belt	. ,
	Track Height (with triple grouser shoes)	26 in. (650 mm)

Arm Length 6 ft. 11 in. (2.12 m) 20 ft. 11 in. (6.37 m) 9 ft. 3 in. (2.83 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 12-ft. 8-in. (3.72 m) boom, 0.37-cu.-yd. (0.28 m³) 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. All lift capacities are based on SAE J1097.

Load Point	10 ft. (	3.05 m)	15 ft. (4	1.57 m)	20 ft. (6	6.10 m)
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 5-ft. 4-in. (1.62 m) ar	m, either 18-in. (450 mm)	rubber crawler pads or 18	-in. (450 mm) rubber crawl	er belt, and 7-ft. 7-in. (2.	32 m) blade on ground	
10 ft. (3.05 m)	3,821 (1733)	3,821 (1733)	3,265 (1481)	3,163 (1435)		
5 ft. (1.52 m)	6,566 (2978)	5,570 (2527)	4,056 (1840)	2,987 (1355)		
Ground Line	7,676 (3482)	5,286 (2398)	4,709 (2136)	2,842 (1289)		
−5 ft. (−1.52 m)	7,249 (3288)	5,285 (2397)	4,657 (2112)	2,807 (1273)		
-10 ft. (-3.05 m)	5,260 (2386)	5,260 (2386)				
With 6-ft. 11-in. (2.12 m) a	arm, either 18-in. (450 mm,	rubber crawler pads or 1	8-in. (450 mm) rubber craw	vler belt, and 7-ft. 7-in. (2	.32 m) blade on ground	
15 ft. (4.57 m)			2,464 (1118)	2,464 (1118)		
10 ft. (3.05 m)	2,871 (1302)	2,871 (1302)	2,775 (1259)	2,775 (1259)		
5 ft. (1.52 m)	5,593 (2537)	5,593 (2537)	3,656 (1658)	3,006 (1363)	3,073 (1394)	1,838 (834)
Ground Line	7,400 (3357)	5,285 (2397)	4,479 (2032)	2,824 (1281)	2,816 (1277)	1,776 (806)
−5 ft. (−1.52 m)	7,486 (3396)	5,202 (2360)	4,721 (2141)	2,748 (1246)		
–10 ft. (–3.05 m)	6,187 (2806)	5,312 (2409)				
With 5-ft. 4-in. (1.62 m) ar	m, 24-in. (600 mm) triple s	emi-grouser shoes, and 8	R-ft. 1-in. (2.47 m) blade on	ground		
10 ft. (3.05 m)	3,821 (1733)	3,821 (1733)	3,265 (1481)	3,426 (1554)		
5 ft. (1.52 m)	6,566 (2978)	5,714 (2592)	4,056 (1840)	3,070 (1393)		
Ground Line	7,676 (3482)	5,430 (2463)	4,709 (2136)	2,924 (1326)		
−5 ft. (−1.52 m)	7,249 (3288)	5,429 (2463)	4,657 (2112)	2,890 (1311)		
0 11. ( 1.02 111)	7,2 10 (0200)	0, 120 (2 100)	.,00. (==)	=,000 (.0)		

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook; machine equipped with 12-ft. 8-in. (3.72 m) boom, 0.37-cu.-yd. (0.28 m³) 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. All lift capacities are based on SAE J1097.

Load Point	10 ft. (	3.05 m)	15 ft. (4	4.57 m)	20 ft. (6	20 ft. (6.10 m)		
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side		
With 6-ft. 11-in. (2.12 m) a	arm, 24-in. (600 mm) triple	semi-grouser shoes, and	8-ft. 1-in. (2.47 m) blade or	n ground				
15 ft. (4.57 m)			2,464 (1118)	2,464 (1118)				
10 ft. (3.05 m)	2,871 (1302)	2,871 (1302)	2,775 (1259)	2,775 (1259)				
5 ft. (1.52 m)	5,593 (2537)	5,593 (2537)	3,656 (1658)	3,089 (1401)	3,073 (1394)	1,896 (860)		
Ground Line	7,400 (3357)	5,429 (2463)	4,479 (2032)	2,907 (1319)	2,816 (1277)	1,834 (832)		
-5 ft. (-1.52 m)	7,486 (3396)	5,346 (2425)	4,721 (2141)	2,831 (1284)				
-10 ft. (-3.05 m)	6,187 (2806)	5,456 (2475)	. ,					

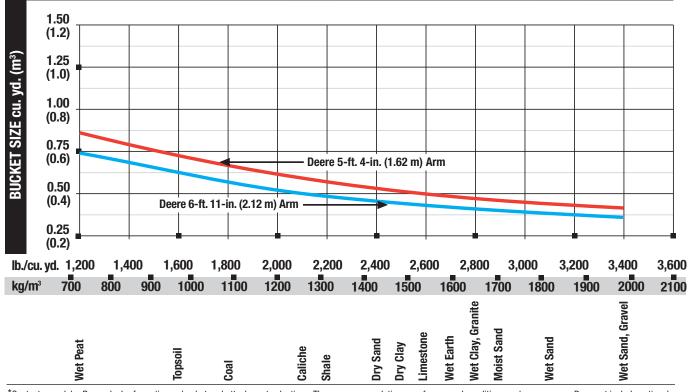
### **Buckets**

A full line of buckets is offered to meet a wide variety of applications. Tooth selection includes either the John Deere Fanggs®, Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth, or the ESCO (Vertalok) Standard, Tiger, Twin Tiger, or Flare tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

Type Bucket		cket idth	Buc Capa		Wei	ight	Buc Dig F		Arm Di	g Force (1.62 m)	Arm Di			ket adius	No. Teeth
	in.	mm	cu. yd.	m³	lb.	kg	lb.	kN	lb.	` kN ´	lb.	`kN ´	in.	mm	
Heavy-Duty	24	610	0.40	0.31	633	287	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	5
	30	762	0.53	0.41	735	333	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	6
	36	914	0.66	0.50	837	380	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	7
Ditching	48	1219	0.64	0.49	727	330	14,344	64.0	8,911	40.0	7,473	33.0	35.69	907	0

<sup>\*</sup>All capacities are SAE heaped ratings.

### **Bucket Selection Guide\***



<sup>\*</sup>Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, 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, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

# Specifications

Engine 85D

Manufacturer and Model . . . . . . . . . . Isuzu 4LE2X

 Displacement
 133 cu. in. (2.2 L)

 Off-Level Capacity
 70% (35 deg.)

Aspiration..... turbocharged with intercooler

### Cooling

Variable-speed fan, directly driven by the engine through a linear clutch; nonreversible

### **Powertrain**

Two-speed propel with automatic shift

Travel Speed (maximum)

### **Hydraulics**

Open center, load sensing

Main Pumps . . . . . . . . . . . . 3 variable-displacement axial piston

 Pilot Pump
 one gear

 Maximum Rated Flow
 5.3 gpm (20 L/m)

 System Relief Pressure
 566 psi (3900 kPa)

**System Operating Pressure** 

 Implement Circuits
 3,771 psi (26 000 kPa)

 Travel Circuits
 4,554 psi (31 400 kPa)

 Swing Circuits
 3,626 psi (25 000 kPa)

Controls......pilot levers, short stroke, low effort; hydraulic pilot controls with shutoff lever

### **Cylinders**

Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins

 Boom (1)
 4.5 in. (115 mm)
 2.6 in. (65 mm)
 34.8 in. (885 mm)

 Arm (1)
 3.7 in. (95 mm)
 2.4 in. (60 mm)
 35.4 in. (900 mm)

 Bucket (1)
 3.3 in. (85 mm)
 2.2 in. (55 mm)
 28.7 in. (730 mm)

### **Electrical**

Batteries2 x 12 voltReserve Capacity100 min.Alternator Rating50 amp

Work Lights . . . . . . halogen (2), one mounted on boom and one on frame

### **Undercarriage**

Track

Adjustment.....hydraulic

Chain . . . . . . sealed and lubricated

### Swing Mechanism 85D

Boom Swing

### **Ground Pressure**

 24-in. (600 mm) Triple Semi-Grouser Shoes
 3.7 psi (26 kPa)

 18-in. (450 mm) Rubber Crawler Pads
 4.9 psi (34 kPa)

 18-in. (450 mm) Rubber Crawler Belt
 4.9 psi (34 kPa)

### Serviceability

### **Refill Capacities**

 Fuel Tank
 35.7 gal. (135 L)

 Cooling System
 2.7 gal. (10.3 L)

 Engine Oil with Filter
 3.2 gal. (12.1 L)

 Hydraulic Tank
 15 gal. (56 L)

 Hydraulic System
 27 gal. (103 L)

 Propel Gearbox (each)
 1.3 qt. (1.2 L)

### **Operating Weights**

With Full Fuel Tank; 175-lb. (79 kg) Operator; 0.53-cu.-yd. (0.41 m³), 30-in. (762 mm),

735-lb. (333 kg) Bucket; 5-ft. 4-in. (1.62 m)

Arm; 3,269-lb. (1483 kg) Counterweight;

and 8-ft. 1-in. (2470 mm) Blade

24-in. (600 mm) Triple Semi-Grouser Shoes. . . 18,821 lb. (8537 kg) 18-in. (450 mm) Rubber Crawler Pads . . . . . . 18,490 lb. (8387 kg)

18-in. (450 mm) Rubber Crawler Belt. . . . . . . 18,530 lb. (8405 kg)

### **Optional Components**

Undercarriage

24-in. (600 mm) Triple Semi-Grouser

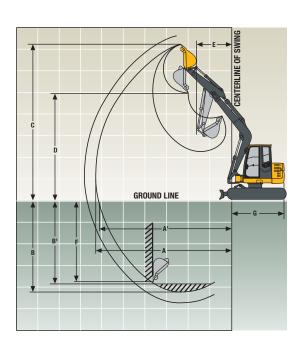
Arm with Bucket Cylinder and Linkage

### **Operating Dimensions**

		Arm Length	Arm Lengtn
		5 ft. 4 in. (1.62 m)	6 ft. 11 in. (2.12 m)
Arm	Force	8,554 lb. (38.1 kN)	7,209 lb. (32.1 kN)
Bucl	ket Digging Force	12,368 lb. (55.0 kN)	12,368 lb. (55.0 kN)
Liftir	ng Capacity Over Front at Ground Level		
	20-ft. (6.1 m) Reach	4,248 lb. (1927 kg)	4,151 lb. (1883 kg)
Α	Maximum Reach	23 ft. 8 in. (7.21 m)	25 ft. 3 in. (7.70 m)
A١	Maximum Reach at Ground Level	23 ft. 2 in. (7.05 m)	24 ft. 9 in. (7.55 m)
В	Maximum Digging Depth	13 ft. 0 in. (3.97 m)	14 ft. 8 in. (4.47 m)
В	Maximum Digging Depth at 8-ft. (2.44 m)		
	Flat Bottom	11 ft. 10 in. (3.60 m)	13 ft. 9 in. (4.18 m)
C	Maximum Cutting Height	22 ft. 4 in. (6.81 m)	23 ft. 7 in. (7.18 m)
D	Maximum Dumping Height	15 ft. 9 in. (4.79 m)	16 ft. 10 in. (5.14 m)
Ε	Minimum Swing Radius	9 ft. 0 in. (2.74 m)	9 ft. 6 in. (2.90 m)
F	Maximum Vertical Wall	11 ft. 4 in. (3.45 m)	13 ft. 3 in. (4.03 m)
G	Tail Swing Radius	4 ft. 3 in. (1.29 m)	4 ft. 11 in. (1.49 m)

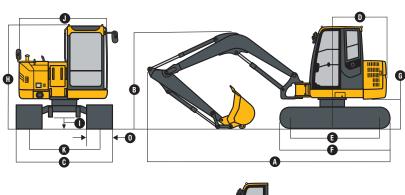
Arm Lanath

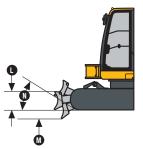
Arm Lanath



Machine	Dimensions	85D

ich	ine Dimensions	85D
		Arm Length
		5 ft. 4 in. (1.62 m)
Α	Overall Length	22 ft. 0 in. (6.70 m)
В	Overall Height	7 ft. 5 in. (2.26 m)
C	Undercarriage Width:	
	24-in. (600 mm) Triple Semi-Grouser	
	Shoes	
	18-in. (450 mm) Rubber Crawler Pad	
_	18-in. (450 mm) Continuous Rubber Belt	
D	Rear-End Length/Swing Radius	, ,
Е	Distance Between Idler/Sprocket Centerline	, ,
F	Undercarriage Length	9 ft. 7 in. (2.92 m)
G	Counterweight Clearance	30 in. (0.76 m)
Н	Cab Height	8 ft. 10 in. (2.69 m)
	Ground Clearance	14 in. (360 mm)
J	Upperstructure Width	7 ft. 7 in. (2.32 m)
K	Gauge Width	6 ft. 2 in. (1.87 m)
L	Blade Height	18 in. (460 mm)
	Blade Width	8 ft. 1 in. (2.47 m)
	Blade Lift Height	15 in. (380 mm)
M	Blade Cut Below Grade	11 in. (280 mm)
N	Blade Lift Angle	27 deg.
	Rear-End Length with Blade	6 ft. 2 in. (1.88 m)
0	Track Width:	
	24-in. (600 mm) Triple Semi-Grouser	
	Shoes	
	18-in. (450 mm) Rubber Crawler Pad	,
	18-in. (450 mm) Continuous Rubber Belt	, ,
	Track Height (with triple grouser shoes)	26 in. (650 mm)





### **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 12-ft. 2-in. (3.67 m) boom, 0.37-cu.-yd. (0.28 m³) 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. All lift capacities are based on SAE J1097.

Arm Length 6 ft. 11 in. (2.12 m) 22 ft. 4 in. (6.81 m)

8 ft. 4 in. (2.55 m)

Load Point	10 ft. (3	3.05 m)	15 ft. (4	4.57 m)	20 ft. (6.10 m)		
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
With 5-ft. 4-in. (1.62 m) arm	n, either 18-in. (450 mm)	rubber crawler pads or	18-in. (450 mm) rubber crawl	er belt, and 7-ft. 7-in. (2.	32 m) blade on ground		
15 ft. (4.57 m)			3,595 (1631)	3,446 (1563)			
10 ft. (3.05 m)			4,176 (1894)	3,311 (1502)	3,525 (1599)	1,978 (897)	
5 ft. (1.52 m)			5,540 (2513)	3,018 (1369)	3,959 (1796)	1,895 (860)	
Ground Line			6,247 (2834)	2,822 (1280)	4,167 (1890)	1,813 (822)	
−5 ft. (−1.52 m)	6,326 (2869)	5,393 (2446)	5,703 (2587)	2,796 (1268)			
With 6-ft. 11-in. (2.12 m) ar	m, either 18-in. (450 mm)	) rubber crawler pads o	r 18-in. (450 mm) rubber crav	vler belt, and 7-ft. 7-in. (2	2.32 m) blade on ground		
10 ft. (3.05 m)			3,604 (1635)	3,429 (1555)	3,304 (1499)	2,069 (938)	
5 ft. (1.52 m)			5,117 (2321)	3,155 (1431)	3,772 (1711)	1,973 (895)	
Ground Line			6,219 (2821)	2,931 (1329)	4,179 (1896)	1,876 (851)	
−5 ft. (−1.52 m)	8,733 (3961)	5,452 (2473)	6,117 (2775)	2,861 (1298)	3,989 (1809)	1,841 (835)	
-10 ft. (-3.05 m)	6,901 (3130)	5,593 (2537)	4,473 (2029)	2,926 (1327)			
With 5-ft. 4-in. (1.62 m) arm	n, 24-in. (600 mm) triple s	semi-grouser shoes, and	d 8-ft. 1-in. (2.47 m) blade on	ground			
15 ft. (4.57 m)			3,595 (1631)	3,534 (1603)			
10 ft. (3.05 m)			4,176 (1894)	3,399 (1542)	3,525 (1599)	2,040 (925)	
5 ft. (1.52 m)			5,540 (2513)	3,106 (1409)	3,959 (1796)	1,957 (888)	
Ground Line			6,247 (2834)	2,910 (1320)	4,167 (1890)	1,875 (850)	
−5 ft. (−1.52 m)	6,326 (2869)	5,545 (2515)	5,703 (2587)	2,884 (1308)			

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook; machine equipped with 12-ft. 2-in. (3.67 m) boom, 0.37-cu.-yd. (0.28 m³) 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. All lift capacities are based on SAE J1097.

Load Point	10 ft. (3	3.05 m)	15 ft. (4	4.57 m)	20 ft. (6.10 m)		
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
With 6-ft. 11-in. (2.12 m) a	rm, 24-in. (600 mm) triple	semi-grouser shoes, and	1 8-ft. 1-in. (2.47 m) blade o	n ground			
10 ft. (3.05 m)			3,604 (1635)	3,441 (1561)	3,304 (1499)	2,077 (942)	
5 ft. (1.52 m)			5,117 (2321)	3,167 (1437)	3,772 (1711)	1,981 (899)	
Ground Line			6,219 (2821)	2,942 (1334)	4,179 (1896)	1,885 (855)	
-5 ft. (-1.52 m)	8,733 (3961)	5,472 (2482)	6,117 (2775)	2,873 (1303)	3,989 (1809)	1,849 (839)	
-10 ft. (-3.05 m)	6,901 (3130)	5,613 (2546)	4,473 (2029)	2,938 (1333)			

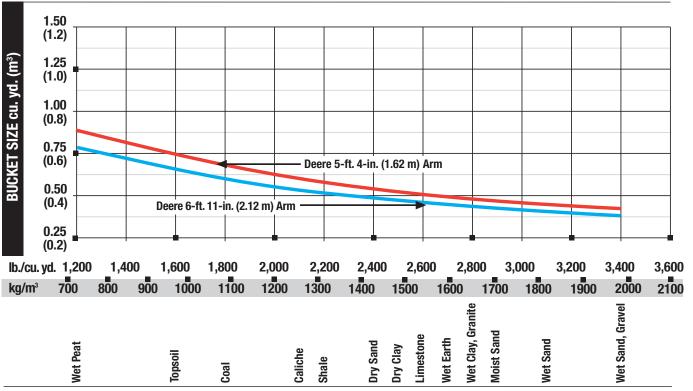
### **Buckets**

A full line of buckets is offered to meet a wide variety of applications. Tooth selection includes either the John Deere Fanggs®, Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth, or the ESCO (Vertalok) Standard, Tiger, Twin Tiger, or Flare tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

Type Bucket		cket idth	Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 5 ft. 4 in. (1.62 m)		Arm Dig Force 6 ft. 11 in. (2.12 m)		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	$m^3$	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
Heavy-Duty	24	610	0.40	0.31	633	287	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	5
	30	762	0.53	0.41	735	333	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	6
	36	914	0.66	0.50	837	380	12,061	54.0	8,491	38.0	7,162	32.0	42.80	1087	7
Ditching	48	1219	0.64	0.49	727	330	14,344	64.0	8,911	40.0	7,473	33.0	35.69	907	0

<sup>\*</sup>All capacities are SAE heaped ratings.

### **Bucket Selection Guide\***



<sup>\*</sup>Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, 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, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

### 75D / 85D EXCAVATORS

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

### 75D 85D Engine

- Meets EPA Interim Tier 4/EU Stage IIIB emissions
- Auto-idle system
- Batteries (two 12 volt), 100-min. reserve capacity
- Coolant recovery tank
- Dual-element dry-type air filter
- Electronic engine control
- Enclosed fan guard (conforms to SAE J1308)
- Engine coolant to -34 deg. F (-37 deg. C)
- Fuel filter with water separator
- Full-flow oil filter
- Turbocharger with charge air cooler
- Muffler, under hood, with vertical curved end exhaust stack
- Radiator, oil cooler, and intercooler with dustprotective net
- Glow-plug start aid
- 500-hour engine oil-change interval
- 70% (35 deg.) off-level capacity
- Isolation mounted
- Engine oil-drain coupler

### **Hydraulic System**

- Reduced-drift valve for boom down, arm in
- Auxiliary hydraulic valve section
- Spring-applied, hydraulically released automatic swing brake
- Auxiliary hydraulic-flow adjustments through monitor
- 5,000-hour hydraulic oil-change interval
- Auxiliary hydraulic lines
- Auxiliary pilot and electric controls
- Hydraulic filter restriction indicator kit
- ▲ Load-lowering control device
- ▲ Single-pedal propel control
- ▲ Control pattern-change valve

### Undercarriage

- Planetary drive with axial piston motors
- Propel motor shields
- Spring-applied, hydraulically released automatic propel brake
- Track guides, front idler
- Two-speed propel with automatic shift
- Upper carrier roller (1)
- Sealed and lubricated track chain
- Triple semi-grouser shoes, 24 in. (600 mm)

### 75D 85D Undercarriage (continued)

- Undercarriage with blade
- A Rubber crawler pads, 18-in. (450 mm)
  - Rubber belt, continuous, 18-in. (450 mm)

### **Upperstructure**

- Counterweight, 3,049 lb. (1383 kg)
  - Counterweight, 3,269 lb. (1483 kg)
- Right- and left-hand mirrors
- Vandal locks with ignition key: Cab door / Engine hood / Fuel cap / Service doors
- Remote-mounted engine oil and fuel filters

### **Front Attachments**

- Centralized lubrication system
- Dirt seals on all bucket pins
  - Less boom and arm
- Oil-impregnated bushings
- Reinforced resin thrust plates
- Tungsten carbide thermal coating on arm-tobucket joint
- ▲ Arm, 5 ft. 4 in. (1.62 m)
- ▲ Arm, 6 ft. 11 in. (2.12 m)
- Attachment quick-couplers
- Buckets: Ditching / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
- Material clamps

### Operator's Station

- Adjustable independent control positions (seatto-pedals)
- AM/FM radio
- Auto climate control/air conditioner, 20,000 Btu/hr. (5.9 kW), with heater and pressurizer
- Built-in operator's manual storage compartment and manual
- Cell-phone power outlet, 12 volt, 60 watt, 5 amp
- Coat hook
- Deluxe suspension cloth seat with 4-in. (100 mm) adjustable armrests
  - Deluxe suspension cloth seat with 3-in. (76 mm) adjustable armrests
- Floor mat
- Front windshield wiper with intermittent speeds
  - Gauges (illuminated): Engine coolant / Fuel
- Horn, electric
- Hour meter, electric
- Hydraulic shutoff lever, all controls

### 75D 85D Operator's Station (continued)

See your John Deere dealer for further information.

- Hydraulic warm-up control
- Interior light
- Large cup holder
- Machine Information Center (MIC)
- Mode selectors (illuminated): Power modes two / Travel modes – two with automatic shift / Work mode – one
  - Multifunction, color LCD monitor with: Diagnostic capability / Multiple-language capabilities / Maintenance tracking / Clock / System monitoring with alarm features: Auto-idle indicator, engine air cleaner restriction indicator light, engine check, engine coolant temperature indicator light with audible alarm, engine oil pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, fault-code alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator, and work-mode indicator
- Motion alarm with cancel switch (conforms to SAE J994)
- Auxiliary hydraulic control switches in right console lever
- SAE two-lever control pattern
- Seat belt, 2 in. (51 mm), retractable
- Tinted glass
- Transparent tinted overhead hatch
- Transparent tinted overhead window
- Hot/cold beverage compartment
- ▲ Seat belt, 3 in. (76 mm), non-retractable
- Monitor system with alarm features: Hydraulic oil filter restriction indicator light
- 24- to 12-volt D.C. radio convertors, 10 amp
- Circulation fan
- Protection screens for cab front, rear, and side
- Window vandal protection covers

### **Electrical**

- 50-amp alternator
- Blade-type multi-fused circuits
- Positive terminal battery covers
- ▲ JDLink™ wireless communication system (available only in U.S. and Canada)

### Lights

 Work lights: Halogen / One mounted on boom / One mounted on frame

### **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.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per IS09249. 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 a unit with standard equipment; 0.53-cu.-yd. (0.41 m²), 30-in. (762 mm), 735-ib. (333 kg) bucket; 24-in. (600 mm) triple semi-grouser shoes; 5-ft. 4-in. (1.62 m) arm; full fuel tank; and 175-ib. (79 kg) operator; a 75D unit with 3,049-ib. (1383 kg) counterweight; and an 85D unit with 3,269-ib. (1483 kg) counterweight.

