

HITACHI

DASH 3



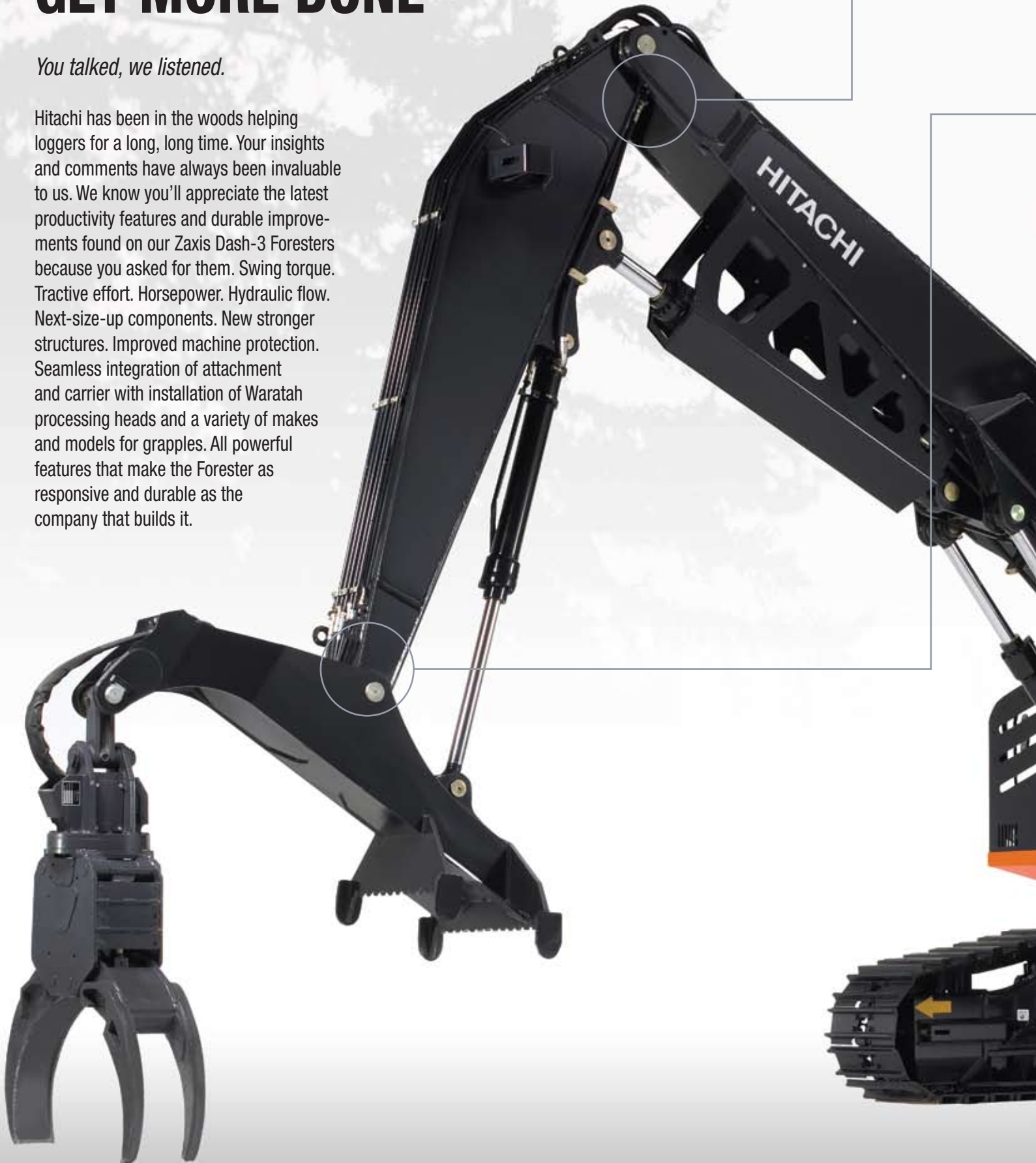
## ZAXIS FORESTER 240-3

- Engine Net Power: 182 hp (136 kW) @ 2,100 rpm
- Road Builder, Processor, Live Heel, Butt & Top, and Power Clam Models

# GET MORE DONE

*You talked, we listened.*

Hitachi has been in the woods helping loggers for a long, long time. Your insights and comments have always been invaluable to us. We know you'll appreciate the latest productivity features and durable improvements found on our Zaxis Dash-3 Foresters because you asked for them. Swing torque. Tractive effort. Horsepower. Hydraulic flow. Next-size-up components. New stronger structures. Improved machine protection. Seamless integration of attachment and carrier with installation of Waratah processing heads and a variety of makes and models for grapples. All powerful features that make the Forester as responsive and durable as the company that builds it.





■ **Robust Booms and Arms:**

New heavy-duty booms and arms are ready to take on all applications, whether it be building roads or processing or handling trees.

■ **Attachments Integration:**

Purpose-built processing fronts and integrated attachments are delivered straight from the factory.

■ **Ease of Service:**

Remote-mounted engine and hydraulic oil filters and dynamic test ports.

■ **Cooling Package Design:**

Laid out side by side with swing-out fuel cooler and condenser to make servicing the system a breeze.

■ **Debris Management:**

External screening, sealed cooler compartment, and optional automatic reversing fan help eliminate the downtime associated with cooling system servicing.

■ **Tier-3-Compliant Isuzu Engines:**

Provide the horsepower required to get the job done while delivering excellent fuel efficiency.

■ **Improved Component Protection:**

Three-piece heavy-duty engine enclosure, new under-house protection system, new hydraulic filter guard and muffler protection, and heavier right rear door all work to keep the machine's valuable components safe from damage.

■ **Robust Upper Frame:**

Strong boom-tower arrangement, thick base plates, after-welding machining in critical areas, and large-diameter swing bearings make these machines extremely durable.

■ **Durable Undercarriage:**

Robust structures; next-size-up components and drive systems; and heavy-duty track chains deliver on both productivity and durability.

## Engine

Manufacturer and Model .....	Isuzu AH-4HK1XYSA-03, water-cooled with direct injection certified to EPA Tier-3 emissions
Cylinders .....	4
Displacement .....	317 cu. in. (5.2 L)
Net Power (ISO9249) .....	182 hp (136 kW) @ 2,100 rpm
Maximum Net Torque .....	499 lb•ft (676 Nm) @ 1,500 rpm
Engine Bore and Stroke .....	4.53 x 4.92 in. (115 x 125 mm)
Aspiration .....	turbocharged, air-to-air charge air cooler
Fuel Filter .....	double filter with water separator, remote mounted
Oil Filter .....	full flow, remote mounted

## Cooling

Designed to match the engine, direct drive fan with reversing option, engine coolant and hydraulic oil coolers are now arranged side by side, external debris protection

Engine Coolant Rating .....-34 °F (-37 °C)

## Powertrain

Two-Speed Propel with Automatic Shift

Travel Speed Low, Maximum Speed .....2.1 mph (3.3 km/h)

Travel Speed High, Maximum Speed .....3.4 mph (5.5 km/h)

### Controls

Pilot Levers, Low Effort

Hydraulic Pilot Controls with Shut-Off Lever

### Brake

Swing Brake Multiple Wet Disc, Spring Applied, Hydraulically Released

Propel Brake, Spring Applied, Hydraulic Release

## Hydraulics

Open Center, Load Sensing

**Main Pumps** .....two variable-displacement pumps

Maximum Rated Flow .....2 x 65.5 gpm (2 x 248 L/m)

**Pilot Pump** .....one gear

Maximum Rated Flow .....8.9 gpm (34 L/m)

System Relief Pressure .....566 psi (3900 kPa)

### System Operating Pressure

Implement Circuits.....4,980 psi (34 336 kPa)

Travel Circuits .....4,980 psi (34 336 kPa)

Swing Circuits .....4,700 psi (32 405 kPa)

Power Boost .....5,260 psi (36 266 kPa)

Pilot Circuits @ 8.9 gpm (34 L/m) .....566 psi (3900 kPa)

Oil Filtration Full-Flow Return with Bypass and One Pilot Oil Filter

## Cylinders

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

	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
Boom (2) .....	4.9 in. (125 mm)	3.5 in. (90 mm)	54.7 in. (1390 mm)
Arm (1).....	5.5 in. (140 mm)	3.9 in. (100 mm)	63.4 in. (1610 mm)
Bucket (1) .....	5.1 in. (130 mm)	3.5 in. (90 mm)	42.3 in. (1075 mm)

## Electrical

Voltage.....24 volt

Number of Batteries .....2 x 12 volt

Reserve Capacity .....440 minutes

Alternator Rating .....80 amp

Optional Alternator Rating .....130 amp

## Undercarriage

Carrier Rollers (per side).....	2
Track Rollers (per side).....	8
Shoes, Double Grousers (per side).....	45
Track Shoe Width, Standard.....	28 in. (700 mm)
Drawbar Pull.....	56,075 lb. (25 435 kg)
Track Adjustment.....	hydraulic
Track Guides.....	full length “ski” type

## Upperstructure

Counterweight, Standard.....	10,633 lb. (4823 kg)
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## Swing Mechanism

Swing Speed.....	12.6 rpm
Swing Torque.....	56,896 lb•ft (77 140 Nm)

## Ground Pressure

28-in. (700 mm) Double-Grouser Shoes.....	7.80 psi (53.8 kPa)
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## Operator Station Monitor

	<i>Indicator Light</i>	<i>Audible Warning</i>	<i>Gauge</i>	<i>Digital Display</i>
Alarm Indicator.....	X			
Alternator, Low Charge.....	X			
Auto-Idle.....	X			
Clock.....			X	
Engine Air Cleaner Restriction.....	X			
Engine Service Required.....	X			
Engine Coolant Temperature.....	X	X	X	
Engine Oil Pressure.....	X	X		
Engine Preheat.....	X			
Engine RPM.....				X
Fault Code Alert.....	X			
Fuel Level.....	X		X	
Hourmeter.....				X
Work Mode Indicator.....	X			

## Serviceability

Hinged, Swing-Out Coolers for easy cleanout, Centralized Lube Banks, and “O” Ring Face Seal Connectors on most hydraulic hoses

### Diagnostics

Machine Information Center (MIC), Computerized In-Cab Monitor Information, and Fluid Sampling Ports

### Fluid Change Interval, Hours

Engine Oil.....	500
Hydraulic Oil.....	5,000

<b>Filters</b> .....	<i>Filtration (microns)</i>	<i>Service Hours</i>	<i>Vertically Mounted</i>
Engine Oil Filter, Remote Mounted.....		500	yes
Fuel Filter, Remote Mounted.....		500	yes
Hydraulic Filter.....		2,000	yes
Return Oil Filter.....	10		

### Sight Gauges

- Hydraulic Reservoir
- Engine-Oil Sampling Valve

## Serviceability *(continued)*

### Refill Capacities

Fuel Tank .....	277 gal. (1050 L)
Cooling System.....	7 gal. (26 L)
Engine Oil with Filter.....	6 gal. (23 L)
Hydraulic Tank .....	64 gal. (243 L)
Hydraulic System.....	74 gal. (280 L)
Swing Drive .....	8.0 qt. (7.6 L)
Propel Gearbox (each).....	9.0 qt. (8.5 L)
Pump Drive Gearbox.....	1.2 qt. (1.1 L)

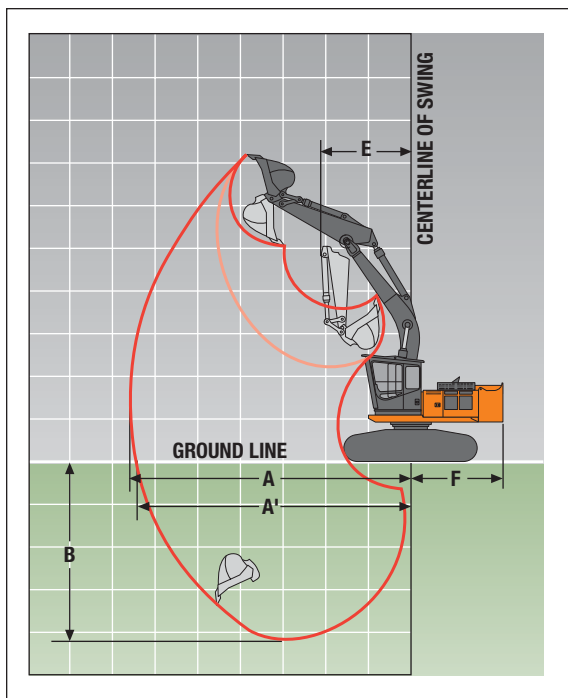
## Operating Weights

With 1818-lb. (840 kg) Full Fuel Tank; 175-lb. (79 kg) Operator; 1.38-cu.-yd. (1.06 m<sup>3</sup>), 42-in. (1065 mm), 2,195-lb. (996 kg) Bucket; 9-ft. 9-in. (2.96 m) Arm; 10,633-lb. (4823 kg) Counterweight; and 28-in. (700 mm) Double-Grouser Shoes  
 SAE Operating Weight .....68,824 lb (31 218 kg)

## Operating Dimensions

*Arm Length 9 ft. 9 in. (2.96 m)*

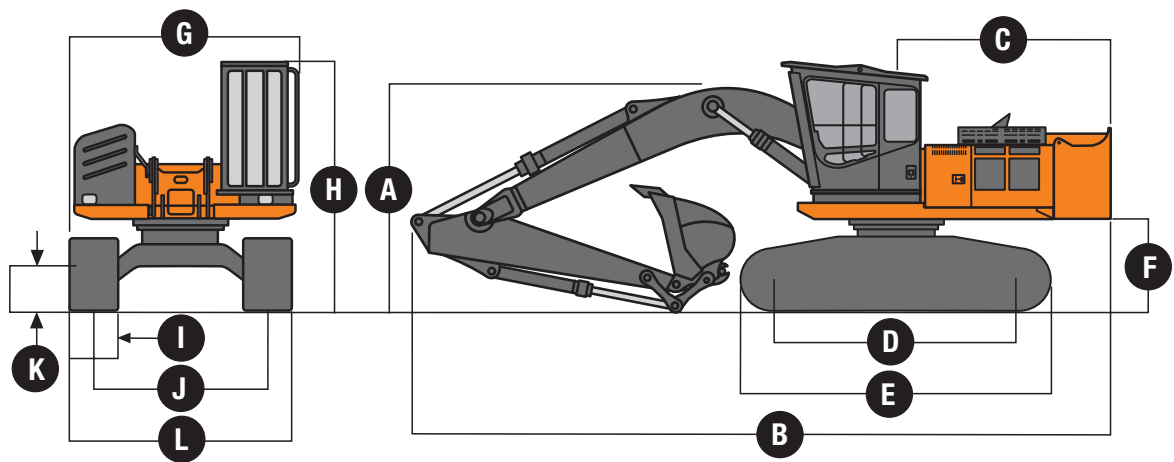
Arm Force with 28-in. (700 mm) Double-Grouser Shoes (with power boost) .....	27,629 lb. (122.9 kN)
Bucket Digging Force with 28-in. (700 mm) Double-Grouser Shoes (with power boost) .....	37,543 lb. (167.0 kN)
Lifting Capacity Over Front at Ground Level 20-ft (6.1 m) Reach (with power boost).....	17,721 lb. (8038 kg)
<b>A</b> Maximum Reach.....	33 ft. 2 in. (10.10 m)
<b>A'</b> Maximum Reach at Ground Level .....	32 ft. 4 in. (9.86 m)
<b>B</b> Maximum Depth .....	20 ft. 4 in. (6.20 m)
<b>C</b> Maximum Height .....	—
<b>D</b> Maximum Level Log Height.....	—
<b>E</b> Minimum Swing Radius .....	10 ft. 5 in. (3.17 m)
<b>F</b> Tail Swing Radius .....	10 ft. 10 in. (3.30 m)



*Machine not exactly as shown.  
 Illustration for dimensioning purposes only.*

## Machine Dimensions

### ZAXIS FORESTER 240-3 ROAD BUILDER



- A Height.....12 ft. 4 in. (3.74 m)
- B Overall Length .....34 ft. 4 in. (10.46 m)
- C Rear-End Length/Swing Radius .....10 ft. 8 in. (3.25 m)
- D Distance Between Idler/Sprocket Centerline.....12 ft. 3 in. (3.73 m)
- E Undercarriage Length .....15 ft. 5 in. (4.69 m)
- F Counterweight Clearance.....4 ft. 7 in. (1.40 m)
- G Maximum Shipping Width.....11 ft. 2 in. (3.39 m)
- H Cab Height (transport).....12 ft. 5 in. (3.77 m)
- I Track Width, Double-Grouser Shoes .....28 in. (0.71 m)
- J Gauge Width.....8 ft. 7 in. (2.62 m)
- K Ground Clearance.....2 ft. 4 in. (0.71 m)
- L Undercarriage Width .....10 ft. 11 in. (3.32 m)

Machine not exactly as shown.  
Illustration for dimensioning purposes only.

## Lift Chart

**Boldface italic** type indicates hydraulic-limited capacities with power boost on; lightface type indicates stability-limited capacities, in lb. (kg).  
Figures do not exceed 87 percent of hydraulic capacity or 75 percent of weight needed to tip machine.

Load Point Height	5 ft. (1.5 m)		10 ft. (3.1 m)		15 ft. (4.6 m)		20 ft. (6.1 m)		25 ft. (7.6 m)		30 ft. (9.1 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 9-ft. 9-in. (2.96 m) Arm, 1.38-cu.-yd (1.06 m³) Bucket, and 28-in. (700 mm) Double-Grouser Shoes</i>												
20 ft. (6.1 m)									<b>8,240</b>	<b>8,240</b>		
									<b>(3738)</b>	<b>(3738)</b>		
15 ft. (4.6 m)							<b>10,540</b>	<b>10,540</b>	<b>9,890</b>	9,020		
							<b>(4781)</b>	<b>(4781)</b>	<b>(4486)</b>	(4091)		
10 ft. (3.1 m)					<b>17,520</b>	<b>17,520</b>	<b>13,050</b>	12,590	<b>11,070</b>	8,630	<b>7,210</b>	6,110
					<b>(7947)</b>	<b>(7947)</b>	<b>(5919)</b>	(5711)	<b>(5021)</b>	(3915)	<b>(3270)</b>	(2771)
5 ft. (1.5 m)					<b>23,160</b>	18,060	<b>15,760</b>	11,720	<b>12,480</b>	8,180	<b>9,210</b>	5,920
					<b>(10 505)</b>	(8192)	<b>(7149)</b>	(5316)	<b>(5661)</b>	(3710)	<b>(4178)</b>	(2685)
Ground Line					<b>25,630</b>	17,210	<b>17,720</b>	11,100	12,590	7,830	<b>9,240</b>	5,750
					<b>(11 626)</b>	(7806)	<b>(8038)</b>	(5035)	(5711)	(3552)	<b>(4191)</b>	(2608)
-5 ft. (-1.5 m)			<b>12,760</b>	<b>12,760</b>	<b>25,650</b>	17,050	17,710	10,820	12,370	7,630		
			<b>(5788)</b>	<b>(5788)</b>	<b>(11 635)</b>	(7734)	(8033)	(4908)	(5611)	(3461)		
-10 ft. (-3.1 m)			<b>19,350</b>	<b>19,350</b>	<b>24,120</b>	17,200	17,710	10,820	12,390	7,650		
			<b>(8777)</b>	<b>(8777)</b>	<b>(10 941)</b>	(7802)	(8033)	(4908)	(5620)	(3470)		
-15 ft. (-4.6 m)			<b>27,600</b>	<b>27,600</b>	<b>20,730</b>	17,630	<b>15,490</b>	11,110				
			<b>(12 519)</b>	<b>(12 519)</b>	<b>(9403)</b>	(7997)	<b>(7026)</b>	(5039)				

## Engine

Manufacturer and Model .....	Isuzu AH-4HK1XYSA-03, water-cooled with direct injection certified to EPA Tier-3 emissions
Cylinders .....	4
Displacement .....	317 cu. in. (5.2 L)
Net Power (ISO9249) .....	182 hp (136 kW) @ 2,100 rpm
Maximum Net Torque .....	499 lb•ft (676 Nm) @ 1,500 rpm
Engine Bore and Stroke .....	4.53 x 4.92 in. (115 x 125 mm)
Aspiration .....	turbocharged, air-to-air charge air cooler
Fuel Filter .....	double filter with water separator, remote mounted
Oil Filter .....	full flow, remote mounted

## Cooling

Designed to match the engine, direct drive fan with reversing option, engine coolant and hydraulic oil coolers are now arranged side by side, external debris protection

Engine Coolant Rating .....-34 °F (-37 °C)

## Powertrain

Two-Speed Propel with Automatic Shift

Travel Speed Low, Maximum Speed .....2.1 mph (3.3 km/h)

Travel Speed High, Maximum Speed .....3.4 mph (5.5 km/h)

### Controls

Pilot Levers, Low Effort

Hydraulic Pilot Controls with Shut-Off Lever

### Brake

Swing Brake Multiple Wet Disc, Spring Applied, Hydraulically Released

Propel Brake, Spring Applied, Hydraulic Release

## Hydraulics

Open Center, Load Sensing

**Main Pumps** .....two variable-displacement pumps

Maximum Rated Flow .....2 x 65.5 gpm (2 x 248 L/m)

**Pilot Pump** .....one gear

Maximum Rated Flow .....8.9 gpm (34 L/m)

System Relief Pressure .....566 psi (3900 kPa)

### System Operating Pressure

Implement Circuits.....4,980 psi (34 336 kPa)

Travel Circuits .....4,980 psi (34 336 kPa)

Swing Circuits .....4,700 psi (32 405 kPa)

Power Boost .....5,260 psi (36 266 kPa)

Pilot Circuits @ 8.9 gpm (34 L/m) .....566 psi (3900 kPa)

Oil Filtration Full-Flow Return with Bypass and One Pilot Oil Filter

## Cylinders

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

	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
Boom (2) .....	4.9 in. (125 mm)	3.5 in. (90 mm)	54.7 in. (1390 mm)
Arm (1).....	5.5 in. (140 mm)	3.9 in. (100 mm)	63.4 in. (1610 mm)

## Electrical

Voltage.....24 volt

Number of Batteries .....2 x 12 volt

Reserve Capacity .....440 minutes

Alternator Rating .....80 amp

Optional Alternator rating .....130 amp



## Undercarriage

Carrier Rollers (per side).....	2
Track Rollers (per side).....	8
Shoes, Double Grousers (per side).....	45
Track Shoe Width, Standard.....	28 in. (700 mm)
Drawbar Pull.....	56,075 lb (25 435 kg)
Track Adjustment.....	hydraulic
Track Guides.....	full length “ski” type

## Upperstructure

Counterweight, Standard.....	10,633 lb. (4823 kg)
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## Swing Mechanism

Swing Speed.....	12.6 rpm
Swing Torque.....	56,896 lb•ft (77 140 Nm)

## Ground Pressure

28-in. (700 mm) Double-Grouser Shoes.....	8.37 psi (57.7 kPa)
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## Operator Station Monitor

	<i>Indicator Light</i>	<i>Audible Warning</i>	<i>Gauge</i>	<i>Digital Display</i>
Alarm Indicator				
Alternator, Low Charge.....	X			
Auto-Idle.....	X			
Clock.....			X	
Engine Air Cleaner Restriction.....	X			
Engine Service Required.....	X			
Engine Coolant Temperature.....	X	X	X	
Engine Oil Pressure.....	X	X		
Engine Preheat.....	X			
Engine RPM.....				X
Fault Code Alert.....	X			
Fuel Level.....	X		X	
Hourmeter.....				X
Work Mode Indicator.....	X			

## Serviceability

Hinged, Swing-Out Coolers for easy cleanout, Centralized Lube Banks, and “O” Ring Face Seal Connectors on most hydraulic hoses

### Diagnostics

Machine Information Center (MIC), Computerized In-Cab Monitor Information, and Fluid Sampling Ports

### Fluid Change Interval, Hours

Engine Oil.....	500
Hydraulic Oil.....	5,000

<b>Filters</b> .....	<i>Filtration (microns)</i>	<i>Service Hours</i>	<i>Vertically Mounted</i>
Engine Oil Filter, Remote Mounted.....		500	yes
Fuel Filter, Remote Mounted.....		500	yes
Hydraulic Filter.....		2,000	yes
Return Oil Filter.....	10		

### Sight Gauges

- Hydraulic Reservoir
- Engine-Oil Sampling Valve

## Serviceability (continued)

### Refill Capacities

Fuel Tank .....	277 gal. (1050 L)
Cooling System.....	8 gal. (30.3 L)
Engine Oil with Filter.....	7 gal. (24.6 L)
Hydraulic Tank .....	64 gal (243 L)
Hydraulic System.....	74 gal. (280 L)
Swing Drive .....	8.0 qt. (7.6 L)
Propel Gearbox (each).....	9.0 qt. (8.5 L)
Pump Drive Gearbox.....	1.2 qt. (1.1 L)

## Operating Weights

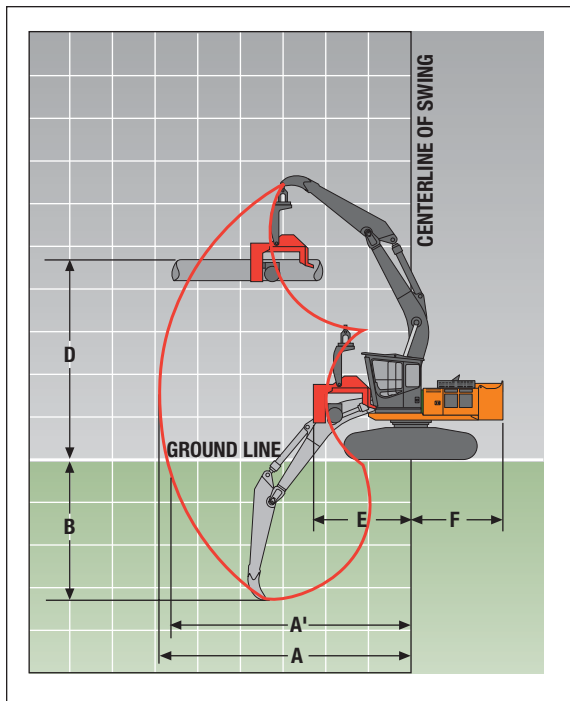
With 1,818-lb. (840 kg) Full Fuel Tank; 175-lb. (79 kg) Operator; 4,800-lb. (2177 kg) Processor Head, 10,633-lb. (4823 kg) Counterweight; and 28-in. (700 mm) Double-Grouser Shoes  
 SAE Operating Weight .....73,833 lb. (33 490 kg)

## Operating Dimensions

*Arm Length 11 ft. 3 in. (3.43 m)*

### Lifting Capacity Over Front at Ground Level

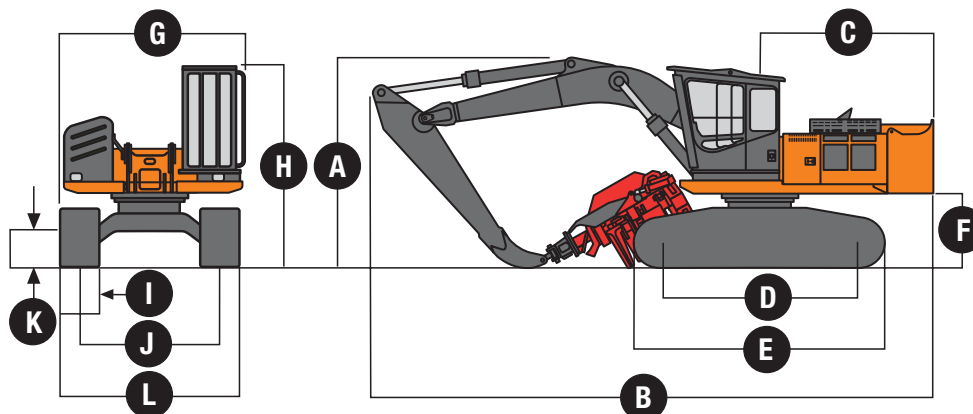
20-ft. (6.1 m) Reach (with power boost).....	14,533 lb. (6592 kg)
<b>A</b> Maximum Reach.....	29 ft. 4 in. (8.94 m)
<b>A'</b> Maximum Reach at Ground Level .....	28 ft. 5 in. (8.66 m)
<b>B</b> Maximum Depth .....	16 ft. 2 in. (4.92 m)
<b>C</b> Maximum Height .....	—
<b>D</b> Maximum Level Log Height.....	23 ft. 3 in. (7.08 m)
<b>E</b> Minimum Swing Radius .....	11 ft. 5 in. (3.47 m)
<b>F</b> Tail Swing Radius .....	10 ft. 10 in. (3.30 m)



*Machine not exactly as shown.  
 Illustration for dimensioning purposes only.*

## Machine Dimensions

### ZAXIS FORESTER 240-3 PROCESSOR



- A Height.....13 ft. 1 in. (3.99 m)
- B Overall Length .....35 ft. 4 in. (10.77 m)
- C Rear-End Length/Swing Radius .....10 ft. 8 in. (3.25 m)
- D Distance Between Idler/Sprocket Centerline.....12 ft. 3 in. (3.73 m)
- E Undercarriage Length .....15 ft. 5 in. (4.69 m)
- F Counterweight Clearance.....4 ft. 7 in. (1.40 m)
- G Maximum Shipping Width.....11 ft. 2 in. (3.39 m)
- H Cab Height (transport).....12 ft. 5 in. (3.77 m)
- I Track Width, Double-Grouser Shoes .....28 in. (0.71 m)
- J Gauge Width.....8 ft. 7 in. (2.62 m)
- K Ground Clearance .....2 ft. 4 in. (0.71 m)
- L Undercarriage Width .....10 ft. 11 in. (3.32 m)

Machine not exactly as shown.  
Illustration for dimensioning purposes only.

## Lift Chart

**Boldface italic** type indicates hydraulic-limited capacities with power boost on; lightface type indicates stability-limited capacities, in lb. (kg).  
Figures do not exceed 87 percent of hydraulic capacity or 75 percent of weight needed to tip machine.

Load Point Height	5 ft. (1.5 m)		10 ft. (3.1 m)		15 ft. (4.6 m)		20 ft. (6.1 m)		25 ft. (7.6 m)		28.6 ft. (8.7 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With Processor Arm, 4,800-lb. (2177 kg) Attachment, and 28-in. (700 mm) Double-Grouser Shoes</i>												
25 ft. (7.6 m)							6,800	6,800				
							<b>(3084)</b>	<b>(3084)</b>				
20 ft. (6.1 m)							<b>7,500</b>	<b>7,500</b>	<b>7,500</b>	<b>7,500</b>		
							<b>(3402)</b>	<b>(3402)</b>	<b>(3402)</b>	<b>(3402)</b>		
15 ft. (4.6 m)			<b>15,700</b>	<b>15,700</b>	<b>11,200</b>	<b>11,200</b>	<b>9,200</b>	<b>9,200</b>	<b>8,300</b>	<b>8,300</b>		
			<b>(7121)</b>	<b>(7121)</b>	<b>(5080)</b>	<b>(5080)</b>	<b>(4173)</b>	<b>(4173)</b>	<b>(3765)</b>	<b>(3765)</b>		
10 ft. (3.1 m)			<b>29,800</b>	<b>29,800</b>	<b>16,300</b>	<b>16,300</b>	<b>11,700</b>	<b>11,700</b>	<b>9,500</b>	<b>9,500</b>		
			<b>(13 517)</b>	<b>(13 517)</b>	<b>(7394)</b>	<b>(7394)</b>	<b>(5307)</b>	<b>(5307)</b>	<b>(4309)</b>	<b>(4309)</b>		
5 ft. (1.5 m)			<b>38,200</b>	<b>38,200</b>	<b>20,800</b>	<b>20,800</b>	<b>14,100</b>	<b>14,100</b>	<b>10,800</b>	10,200	9,100	7,500
			<b>(17 327)</b>	<b>(17 327)</b>	<b>(9435)</b>	<b>(9435)</b>	<b>(6396)</b>	<b>(6396)</b>	<b>(4899)</b>	(4627)	(4128)	(3402)
Ground Line			<b>38,800</b>	<b>38,800</b>	<b>23,200</b>	<b>23,200</b>	<b>15,700</b>	14,700	<b>11,700</b>	9,900		
			<b>(17 600)</b>	<b>(17 600)</b>	<b>(10 523)</b>	<b>(10 523)</b>	<b>(7121)</b>	(6668)	<b>(5307)</b>	(4491)		
-5 ft. (-1.5 m)	<b>66,600</b>	<b>66,600</b>	<b>37,200</b>	<b>37,200</b>	<b>23,600</b>	<b>23,600</b>	<b>16,300</b>	14,500	11,800	9,800		
	<b>(30 210)</b>	<b>(30 210)</b>	<b>(16 874)</b>	<b>(16 874)</b>	<b>(10 705)</b>	<b>(10 705)</b>	<b>(7394)</b>	(6577)	(5352)	(4445)		
-10 ft. (-3.1 m)	<b>61,500</b>	<b>61,500</b>	<b>33,700</b>	<b>33,700</b>	<b>22,200</b>	<b>22,200</b>	<b>15,500</b>	14,500				
	<b>(27 896)</b>	<b>(27 896)</b>	<b>(15 286)</b>	<b>(15 286)</b>	<b>(10 070)</b>	<b>(10 070)</b>	<b>(7031)</b>	(6577)				
-15 ft. (-4.6 m)			<b>27,400</b>	<b>27,400</b>	<b>18,300</b>	<b>18,300</b>						
			<b>(12 429)</b>	<b>(12 429)</b>	<b>(8301)</b>	<b>(8301)</b>						

**Engine**

Manufacturer and Model .....	Isuzu AH-4HK1XYSA-03, water-cooled with direct injection certified to EPA Tier-3 emissions
Cylinders .....	4
Displacement .....	317 cu. in. (5.2 L)
Net Power (ISO9249) .....	182 hp (136 kW) @ 2,100 rpm
Maximum Net Torque.....	499 lb•ft (676 Nm) @ 1,500 rpm
Engine Bore and Stroke.....	4.53 x 4.92 in. (115 x 125 mm)
Aspiration.....	turbocharged, air-to-air charge air cooler
Fuel Filter.....	double filter with water separator, remote mounted
Oil Filter .....	full flow, remote mounted

**Cooling**

Designed to match the engine, direct drive fan with reversing option, engine coolant and hydraulic oil coolers are now arranged side by side, external debris protection  
 Engine Coolant Rating .....-34 °F (-37 °C)

**Powertrain**

Two-Speed Propel with Automatic Shift	
Travel Speed Low, Maximum Speed.....	2.1 mph (3.3 km/h)
Travel Speed High, Maximum Speed .....	3.4 mph (5.5 km/h)

**Controls**

- Pilot Levers, Low Effort
- Hydraulic Pilot Controls with Shut-Off Lever

**Brake**

- Swing Brake Multiple Wet Disc, Spring Applied, Hydraulically Released
- Propel Brake, Spring Applied, Hydraulic Release

**Hydraulics**

Open Center, Load Sensing	
<b>Main Pumps</b> .....	two variable-displacement pumps
Maximum Rated Flow .....	2 x 65.5 gpm (2 x 248 L/m)
<b>Pilot Pump</b> .....	one gear
Maximum Rated Flow .....	8.9 gpm (34 L/m)
System Relief Pressure.....	566 psi (3900 kPa)
<b>System Operating Pressure</b>	
Implement Circuits.....	4,980 psi (34 336 kPa)
Travel Circuits .....	4,980 psi (34 336 kPa)
Swing Circuits .....	4,700 psi (32 405 kPa)
Power Boost.....	5,260 psi (36 266 kPa)
Pilot Circuits @ 8.9 gpm (34 L/m).....	566 psi (3900 kPa)
Oil Filtration Full-Flow Return with Bypass and One Pilot Oil Filter	

**Cylinders**

Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins			
	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
Boom (2) .....	5.5 in. (140 mm)	3.9 in. (100 mm)	52.8 in. (1340 mm)
Arm (1).....	6.7 in. (170 mm)	4.5 in. (115 mm)	68.5 in. (1740 mm)
Heel (1) .....	5.3 in. (135 mm)	3.5 in. (90 mm)	42.1 in. (1070 mm)

**Electrical**

Voltage.....	24 volt
Number of Batteries .....	2 x 12 volt
Reserve Capacity .....	440 minutes
Alternator Rating .....	80 amp
Optional Alternator Rating .....	130 amp

**Undercarriage**

Carrier Rollers (per side).....	2
Track Rollers (per side).....	8
Shoes, Double Grousers (per side).....	45
Track Shoe Width, Standard.....	28 in. (700 mm)
Drawbar Pull.....	56,075 lb. (25 435 kg)
Track Adjustment.....	hydraulic
Track Guides.....	full length “ski” type

**Upperstructure**

Counterweight, Standard.....	11,332 lb. (5140 kg)
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**Swing Mechanism**

Swing Speed.....	10.6 rpm
Swing Torque.....	79,560 lb•ft (107 869 Nm)

**Ground Pressure**

28-in. (700 mm) Double-Grouser Shoes.....	8.82 psi (60.8 kPa)
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**Operator Station Monitor**

	<i>Indicator Light</i>	<i>Audible Warning</i>	<i>Gauge</i>	<i>Digital Display</i>
Alarm Indicator.....	X			
Alternator, Low Charge.....	X			
Auto-Idle.....	X			
Clock.....			X	
Engine Air Cleaner Restriction.....	X			
Engine Service Required.....	X			
Engine Coolant Temperature.....	X	X	X	
Engine Oil Pressure.....	X	X		
Engine Preheat.....	X			
Engine RPM.....				X
Fault Code Alert.....	X			
Fuel Level.....	X		X	
Hourmeter.....				X
Work Mode Indicator.....	X			

**Serviceability**

Hinged, Swing-Out Coolers for easy cleanout, Centralized Lube Banks, and “O” Ring Face Seal Connectors on most hydraulic hoses

**Diagnostics**

Machine Information Center (MIC), Computerized In-Cab Monitor Information, and Fluid Sampling Ports

**Fluid Change Interval, Hours**

Engine Oil.....	500
Hydraulic Oil.....	5,000

<b>Filters</b> .....	<i>Filtration (microns)</i>	<i>Service Hours</i>	<i>Vertically Mounted</i>
Engine Oil Filter, Remote Mounted.....		500	yes
Fuel Filter, Remote Mounted.....		500	yes
Hydraulic Filter.....		2,000	yes
Return Oil Filter.....	10		

**Sight Gauges**

- Hydraulic Reservoir
- Engine-Oil Sampling Valve

## Serviceability *(continued)*

### Refill Capacities

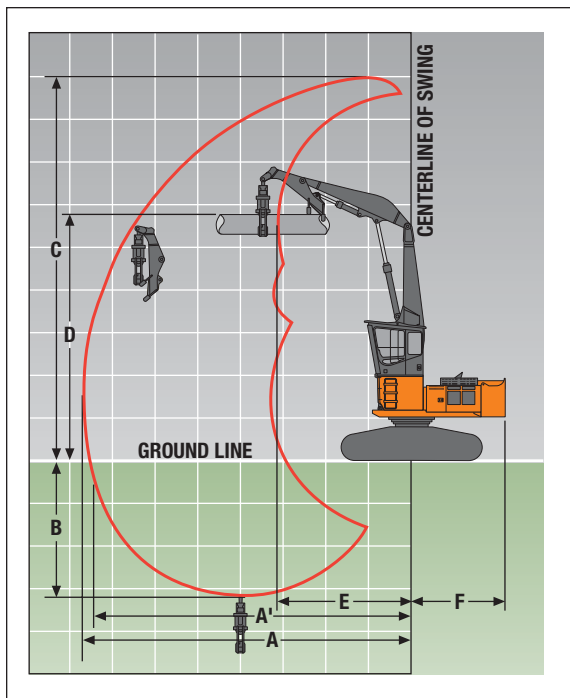
Fuel Tank .....	277 gal. (1050 L)
Cooling System.....	7 gal. (26 L)
Engine Oil with Filter.....	6 gal. (23 L)
Hydraulic Tank .....	64 gal. (243 L)
Hydraulic System.....	82 gal. (310 L)
Swing Drive .....	8.0 qt. (7.6 L)
Propel Gearbox (each).....	9.0 qt. (8.5 L)
Pump Drive Gearbox.....	1.2 qt. (1.1 L)

## Operating Weights

With 1818-lb. (840 kg) Full Fuel Tank; 175-lb (79 kg) Operator; 11,332-lb. (5140 kg) Counterweight; 1,800-lb. (816 kg) Grapple; and 28-in. (700 mm) Double-Grouser Shoes  
 SAE Operating Weight .....77,823 lb. (35 300 kg)

## Operating Dimensions

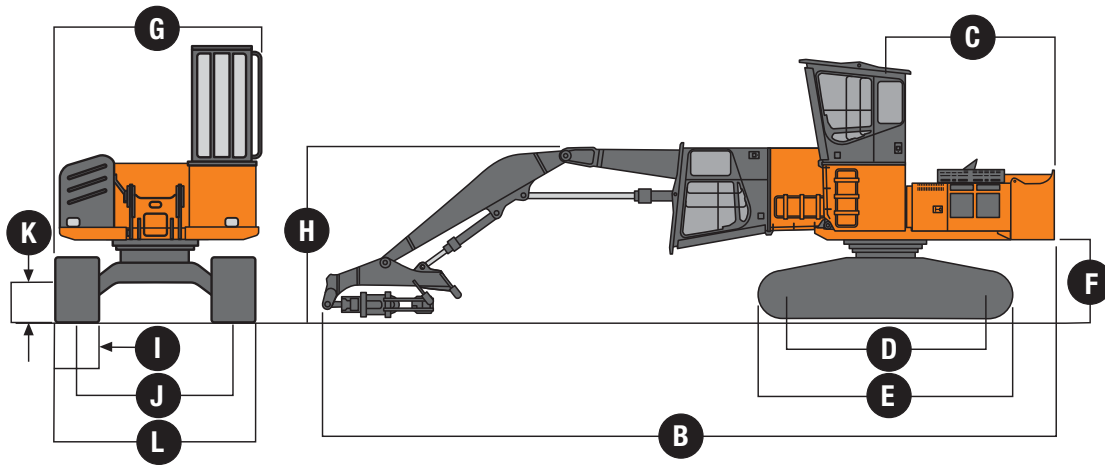
Lifting Capacity Over Front at Ground Level	
20-ft. (6.1 m) Reach (with power boost).....	22,796 lb. (10 340 kg)
<b>A</b> Maximum Reach.....	38 ft. 3 in. (11.67 m)
<b>A'</b> Maximum Reach at Ground Level .....	37 ft. 6 in. (11.43 m)
<b>B</b> Maximum Depth .....	15 ft. 10 in. (4.82 m)
<b>C</b> Maximum Height .....	44 ft. 10 in. (13.67 m)
<b>D</b> Maximum Level Log Height.....	28 ft. 11 in. (8.82 m)
<b>E</b> Minimum Swing Radius .....	15 ft. 8 in. (4.77 m)
<b>F</b> Tail Swing Radius .....	10 ft. 10 in. (3.30 m)



*Machine not exactly as shown.  
 Illustration for dimensioning purposes only.*

## Machine Dimensions

ZAXIS FORESTER 240-3 LIVE HEEL



- A Height.....—
- B Overall Length .....47 ft. (14.32 m)
- C Rear-End Length/Swing Radius .....10 ft. 8 in. (3.25 m)
- D Distance Between Idler/Sprocket Centerline.....12 ft. 3 in. (3.73 m)
- E Undercarriage Length .....15 ft. 5 in. (4.69 m)
- F Counterweight Clearance.....4 ft. 10 in. (1.46 m)
- G Maximum Shipping Width.....11 ft. 9 in. (3.58 m)
- H Cab Height (transport).....11 ft. 6 in. (3.52 m)
- I Track Width, Double-Grouser Shoes .....28 in. (0.71 m)
- J Gauge Width.....9 ft. 2 in. (2.79 m)
- K Ground Clearance.....2 ft. 6 in. (0.76 m)
- L Undercarriage Width .....11 ft. 6 in. (3.49 m)

Machine not exactly as shown.  
Illustration for dimensioning purposes only.

## Lift Chart

**Boldface italic** type indicates hydraulic-limited capacities with power boost on; lightface type indicates stability-limited capacities, in lb. (kg).  
Figures do not exceed 87 percent of hydraulic capacity or 75 percent of weight needed to tip machine.

Load Point Height	15 ft. (4.6 m)		20 ft. (6.1 m)		25 ft. (7.6 m)		30 ft. (9.1 m)		35 ft. (10.7 m)		38.3 ft. (11.7 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 1,800-lb. (812.2 kg) Grapple and 28-in. (700 mm) Double-Grouser Shoes</i>												
40 ft. (12.2 m)	25,300 <b>(11 476)</b>	25,300 <b>(11 476)</b>										
35 ft. (10.7 m)	<b>20,300</b> <i>(9208)</i>	<b>20,300</b> <i>(9208)</i>	<b>17,600</b> <i>(7983)</i>	<b>17,600</b> <i>(7983)</i>	<b>15,600</b> <i>(7076)</i>	12,100 (5489)						
30 ft. (9.1 m)			<b>16,500</b> <i>(7484)</i>	<b>16,500</b> <i>(7484)</i>	<b>14,700</b> <i>(6668)</i>	12,600 (5715)	12,700 (5761)	9,200 (4173)				
25 ft. (7.6 m)			<b>16,600</b> <i>(7530)</i>	<b>16,600</b> <i>(7530)</i>	<b>14,600</b> <i>(6623)</i>	13,000 (5897)	12,200 (5534)	8,700 (3946)				
20 ft. (6.1 m)			<b>17,700</b> <i>(8029)</i>	<b>17,700</b> <i>(8029)</i>	<b>15,100</b> <i>(6849)</i>	12,900 (5851)	12,300 (5579)	8,800 (3992)	9,400 (4264)	6,600 (2994)		
15 ft. (4.6 m)			<b>19,100</b> <i>(8664)</i>	<b>19,100</b> <i>(8664)</i>	<b>16,000</b> <i>(7258)</i>	12,700 (5761)	12,300 (5579)	8,800 (3992)	9,400 (4264)	6,600 (2994)		
10 ft. (3.1 m)			<b>20,400</b> <i>(9253)</i>	18,700 (8482)	16,900 (7666)	12,200 (5534)	12,200 (5534)	8,700 (3946)	9,200 (4173)	6,400 (2903)		
5 ft. (1.5 m)					16,400 (7439)	12,000 (5443)	12,000 (5443)	8,500 (3856)	9,000 (4082)	6,300 (2858)	7,600 (3447)	5,200 (2359)
Ground Line			<b>22,800</b> <i>(10 342)</i>	16,600 (7530)	16,000 (7258)	11,400 (5171)	11,700 (5307)	8,300 (3765)	8,900 (4037)	6,100 (2767)		
-5 ft. (-1.5 m)			<b>20,900</b> <i>(9480)</i>	16,100 (7303)	15,700 (7121)	11,100 (5035)	11,500 (5216)	8,100 (3674)	<b>7,400</b> <i>(3357)</i>	6,100 (2767)		
-10 ft. (-3.1 m)			<b>16,800</b> <i>(7620)</i>	16,100 (7303)	<b>12,800</b> <i>(5806)</i>	11,100 (5035)	<b>8,840</b> <i>(4010)</i>	8,100 (3674)				

**Engine**

Manufacturer and Model .....	Isuzu AH-4HK1XYSA-03, water-cooled with direct injection certified to EPA Tier-3 emissions
Cylinders .....	4
Displacement .....	317 cu. in. (5.2 L)
Net Power (ISO9249) .....	182 hp (136 kW) @ 2,100 rpm
Maximum Net Torque.....	499 lb•ft (676 Nm) @ 1,500 rpm
Engine Bore and Stroke.....	4.53 x 4.92 in. (115 x 125 mm)
Aspiration.....	turbocharged, air-to-air charge air cooler
Fuel Filter.....	double filter with water separator, remote mounted
Oil Filter .....	full flow, remote mounted

**Cooling**

Designed to match the engine, direct drive fan with reversing option, engine coolant and hydraulic oil coolers are now arranged side by side, external debris protection  
 Engine Coolant Rating .....-34 °F (-37 °C)

**Powertrain**

Two-Speed Propel with Automatic Shift	
Travel Speed Low, Maximum Speed.....	2.1 mph (3.3 km/h)
Travel Speed High, Maximum Speed .....	3.4 mph (5.5 km/h)

**Controls**

- Pilot Levers, Low Effort
- Hydraulic Pilot Controls with Shut-Off Lever

**Brake**

- Swing Brake Multiple Wet Disc, Spring Applied, Hydraulically Released
- Propel Brake, Spring Applied, Hydraulic Release

**Hydraulics**

Open Center, Load Sensing	
<b>Main Pumps</b> .....	two variable-displacement pumps
Maximum Rated Flow .....	2 x 65.5 gpm (2 x 248 L/m)
<b>Pilot Pump</b> .....	one gear
Maximum Rated Flow .....	8.9 gpm (34 L/m)
System Relief Pressure.....	566 psi (3900 kPa)
<b>System Operating Pressure</b>	
Implement Circuits.....	4,980 psi (34 336 kPa)
Travel Circuits .....	4,980 psi (34 336 kPa)
Swing Circuits .....	4,700 psi (32 405 kPa)
Power Boost.....	5,260 psi (36 266 kPa)
Pilot Circuits @ 8.9 gpm (34 L/m).....	566 psi (3900 kPa)
Oil Filtration Full-Flow Return with Bypass and One Pilot Oil Filter	

**Cylinders**

Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins			
	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
Boom (2) .....	5.5 in. (140 mm)	3.9 in. (100 mm)	52.8 in. (1340 mm)
Arm (1).....	6.7 in. (170 mm)	4.5 in. (115 mm)	68.5 in. (1740 mm)
Tilt (1) .....	4.5 in. (115 mm)	3.1 in. (80 mm)	41.7 in. (1060 mm)

**Electrical**

Voltage.....	24 volt
Number of Batteries .....	2 x 12 volt
Reserve Capacity .....	440 minutes
Alternator Rating .....	80 amp
Optional Alternator Rating .....	130 amp



**Undercarriage**

Carrier Rollers (per side).....	2
Track Rollers (per side).....	8
Shoes, Double Grousers (per side).....	45
Track Shoe Width, Standard.....	28 in. (700 mm)
Drawbar Pull.....	56,075 lb. (25 435 kg)
Track Adjustment.....	hydraulic
Track Guides.....	full length “ski” type

**Upperstructure**

Counterweight, Standard.....	11,332 lb. (5140 kg)
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**Swing Mechanism**

Swing Speed.....	10.6 rpm
Swing Torque.....	79,560 lb•ft (107 869 Nm)

**Ground Pressure**

28-in. (700 mm) Double-Grouser Shoes.....	8.85 psi (61 kPa)
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**Operator Station Monitor**

	<i>Indicator Light</i>	<i>Audible Warning</i>	<i>Gauge</i>	<i>Digital Display</i>
Alarm Indicator				
Alternator, Low Charge.....	X			
Auto-Idle.....	X			
Clock.....			X	
Engine Air Cleaner Restriction.....	X			
Engine Service Required.....	X			
Engine Coolant Temperature.....	X	X	X	
Engine Oil Pressure.....	X	X		
Engine Preheat.....	X			
Engine RPM.....				X
Fault Code Alert.....	X			
Fuel Level.....	X		X	
Hourmeter.....				X
Work Mode Indicator.....	X			

**Serviceability**

Hinged, Swing-Out Coolers for easy cleanout, Centralized Lube Banks, and “O” Ring Face Seal Connectors on most hydraulic hoses

**Diagnostics**

Machine Information Center (MIC), Computerized In-Cab Monitor Information, and Fluid Sampling Ports

**Fluid Change Interval, Hours**

Engine Oil.....	500
Hydraulic Oil.....	5,000

<b>Filters</b> .....	<i>Filtration (microns)</i>	<i>Service Hours</i>	<i>Vertically Mounted</i>
Engine Oil Filter, Remote Mounted.....		500	yes
Fuel Filter, Remote Mounted.....		500	yes
Hydraulic Filter.....		2,000	yes
Return Oil Filter.....	10		

**Sight Gauges**

- Hydraulic Reservoir
- Engine-Oil Sampling Valve

## Serviceability (continued)

### Refill Capacities

Fuel Tank .....	277 gal. (1050 L)
Cooling System.....	7 gal. (26 L)
Engine Oil with Filter.....	6 gal. (23 L)
Hydraulic Tank .....	64 gal. (243 L)
Hydraulic System.....	82 gal. (310 L)
Swing Drive .....	8.0 qt. (7.6 L)
Propel Gearbox (each).....	9.0 qt. (8.5 L)
Pump Drive Gearbox.....	1.2 qt. (1.1 L)

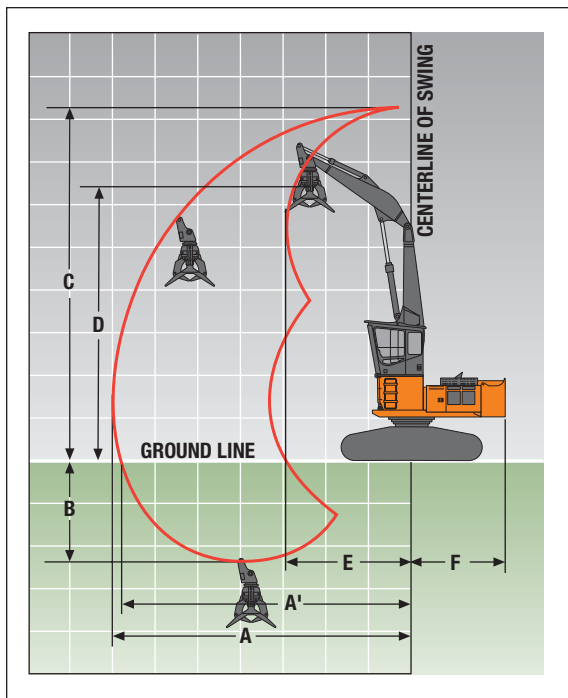
## Operating Weights

With 1818-lb. (840 kg) Full Fuel Tank; 175-lb. (79 kg) Operator; 11,332-lb. (5140 kg) Counterweight; 4,500-lb. (2041 kg) Grapple; and 28-in. (700 mm) Double-Grouser Shoes  
 SAE Operating Weight .....77,978 lb. (35 370 kg)

## Operating Dimensions

### Lifting Capacity Over Front at Ground Level

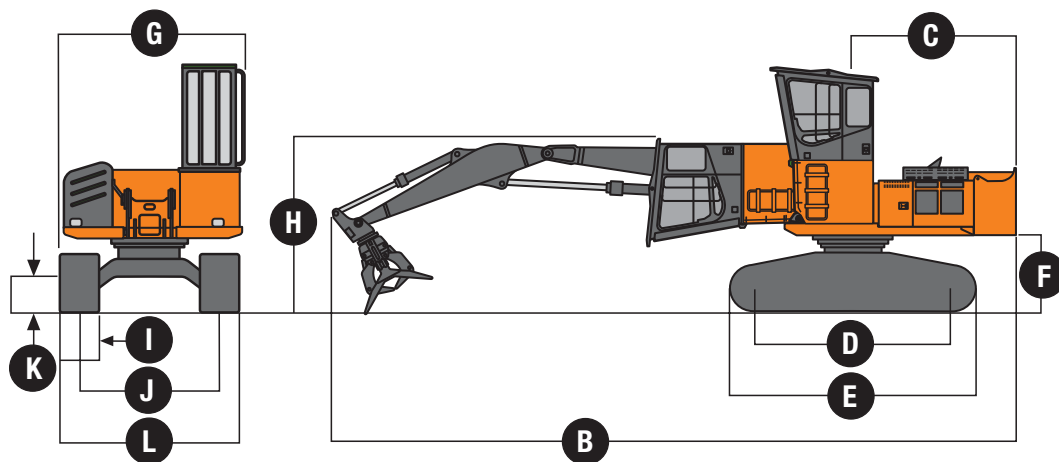
20-ft. (6.1 m) Reach (with power boost).....	21,400 lb. (9707 kg)
<b>A</b> Maximum Reach.....	35 ft. (10.68 m)
<b>A'</b> Maximum Reach at Ground Level .....	34 ft. 3 in. (10.43 m)
<b>B</b> Maximum Depth .....	12 ft. 1 in. (3.68 m)
<b>C</b> Maximum Height .....	41 ft. 10 in. (12.76 m)
<b>D</b> Maximum Level Log Height.....	32 ft. 6 in. (9.91 m)
<b>E</b> Minimum Swing Radius .....	14 ft. 8 in. (4.47 m)
<b>F</b> Tail Swing Radius .....	10 ft. 10 in. (3.30 m)



*Machine not exactly as shown.  
 Illustration for dimensioning purposes only.*

## Machine Dimensions

ZAXIS FORESTER 240-3 BUTT & TOP



- A Height..... —
- B Overall Length .....47 ft. 4 in. (14.44 m)
- C Rear-End Length/Swing Radius .....10 ft. 8 in. (3.25 m)
- D Distance Between Idler/Sprocket Centerline.....12 ft. 3 in. (3.73 m)
- E Undercarriage Length .....15 ft. 5 in. (4.69 m)
- F Counterweight Clearance.....4 ft. 10 in. (1.46 m)
- G Maximum Shipping Width.....11 ft. 9 in. (3.58 m)
- H Cab Height (transport).....11 ft. 6 in. (3.52 m)
- I Track Width, Double-Grouser Shoes .....28 in. (0.71 m)
- J Gauge Width.....9 ft. 2 in. (2.79 m)
- K Ground Clearance.....2 ft. 6 in. (0.76 m)
- L Undercarriage Width .....11 ft. 6 in. (3.49 m)

Machine not exactly as shown.  
Illustration for dimensioning purposes only.

## Lift Chart

**Boldface italic** type indicates hydraulic-limited capacities with power boost on; lightface type indicates stability-limited capacities, in lb. (kg).  
Figures do not exceed 87 percent of hydraulic capacity or 75 percent of weight needed to tip machine.

Load Point Height	10 ft. (3.1 m)		15 ft. (4.6 m)		20 ft. (6.1 m)		25 ft. (7.6 m)		30 ft. (9.1 m)		35 ft. (10.7 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 4,500-lb. (2041 kg) Grapple and 28-in. (700 mm) Double-Grouser Shoes</i>												
40 ft. (12.2 m)	35,600 <b>(16 148)</b>	35,600 <b>(16 148)</b>										
35 ft. (10.7 m)			<b>21,200</b> <i>(9616)</i>	<b>21,200</b> <i>(9616)</i>	<b>18,500</b> <i>(8392)</i>	<b>17,800</b> <i>(8074)</i>						
30 ft. (9.1 m)			<b>19,200</b> <i>(8709)</i>	<b>19,200</b> <i>(8709)</i>	<b>16,600</b> <i>(7530)</i>	<b>16,600</b> <i>(7530)</i>	<b>14,900</b> <i>(6759)</i>	11,700 (5307)				
25 ft. (7.6 m)			<b>19,200</b> <i>(8709)</i>	<b>19,200</b> <i>(8709)</i>	<b>16,500</b> <i>(7484)</i>	<b>16,500</b> <i>(7484)</i>	<b>14,400</b> <i>(6532)</i>	12,000 (5443)	11,300 (5126)	7,800 (3538)		
20 ft. (6.1 m)			<b>21,100</b> <i>(9571)</i>	<b>21,100</b> <i>(9571)</i>	<b>17,400</b> <i>(7893)</i>	<b>17,400</b> <i>(7893)</i>	<b>14,700</b> <i>(6668)</i>	11,800 (5352)	11,400 (5171)	8,000 (3629)		
15 ft. (4.6 m)			<b>24,600</b> <i>(11 158)</i>	<b>24,600</b> <i>(11 158)</i>	<b>19,000</b> <i>(8618)</i>	17,600 (7983)	<b>15,400</b> <i>(6985)</i>	11,500 (5216)	11,300 (5126)	7,800 (3538)		
10 ft. (3.1 m)					<b>20,800</b> <i>(9435)</i>	16,700 (7575)	15,600 (7076)	11,000 (4990)	11,100 (5035)	7,600 (3447)	<b>4,600</b> <i>(2087)</i>	<b>4,600</b> <i>(2087)</i>
5 ft. (1.5 m)					<b>21,900</b> <i>(9934)</i>	15,800 (7167)	15,100 (6849)	10,600 (4808)	10,800 (4899)	7,400 (3357)	<b>4,800</b> <i>(2177)</i>	<b>4,800</b> <i>(2177)</i>
Ground Line			<b>30,200</b> <i>(13 699)</i>	24,800 (11 249)	<b>21,400</b> <i>(9707)</i>	15,200 (6895)	14,800 (6713)	10,200 (4627)	10,700 (4853)	7,200 (3266)	<b>4,700</b> <i>(2132)</i>	<b>4,700</b> <i>(2132)</i>
-5 ft. (-1.5 m)	<b>35,200</b> <i>(15 967)</i>	<b>35,200</b> <i>(15 967)</i>	<b>25,900</b> <i>(11 748)</i>	24,400 (11 068)	<b>18,800</b> <i>(8528)</i>	14,900 (6759)	<b>13,500</b> <i>(6124)</i>	10,100 (4581)	<b>8,600</b> <i>(3901)</i>	7,200 (3266)		
-10 ft. (-3.1 m)			<b>18,700</b> <i>(8482)</i>	<b>18,700</b> <i>(8482)</i>	<b>13,900</b> <i>(6305)</i>	<b>13,900</b> <i>(6305)</i>	<b>9,200</b> <i>(4173)</i>	<b>9,200</b> <i>(4173)</i>				

## Engine

Manufacturer and Model .....	Isuzu AH-4HK1XYSA-03, water-cooled with direct injection certified to EPA Tier-3 emissions
Cylinders .....	4
Displacement .....	317 cu. in. (5.2 L)
Net Power (ISO9249) .....	182 hp (136 kW) @ 2,100 rpm
Maximum Net Torque .....	499 lb•ft (676 Nm) @ 1,500 rpm
Engine Bore and Stroke .....	4.53 x 4.92 in. (115 x 125 mm)
Aspiration .....	turbocharged, air-to-air charge air cooler
Fuel Filter .....	double filter with water separator, remote mounted
Oil Filter .....	full flow, remote mounted

## Cooling

Designed to match the engine, direct drive fan with reversing option, engine coolant and hydraulic oil coolers are now arranged side by side, external debris protection

Engine Coolant Rating .....-34 °F (-37 °C)

## Powertrain

Two-Speed Propel with Automatic Shift

Travel Speed Low, Maximum Speed .....2.1 mph (3.3 km/h)

Travel Speed High, Maximum Speed .....3.4 mph (5.5 km/h)

### Controls

Pilot Levers, Low Effort

Hydraulic Pilot Controls with Shut-Off Lever

### Brake

Swing Brake Multiple Wet Disc, Spring Applied, Hydraulically Released

Propel Brake, Spring Applied, Hydraulic Release

## Hydraulics

Open Center, Load Sensing

**Main Pumps** .....two variable-displacement pumps

Maximum Rated Flow .....2 x 65.5 gpm (2 x 248 L/m)

**Pilot Pump** .....one gear

Maximum Rated Flow .....8.9 gpm (34 L/m)

System Relief Pressure .....566 psi (3900 kPa)

### System Operating Pressure

Implement Circuits.....4,980 psi (34 336 kPa)

Travel Circuits .....4,980 psi (34 336 kPa)

Swing Circuits .....4,700 psi (32 405 kPa)

Power Boost .....5,260 psi (36 266 kPa)

Pilot Circuits @ 8.9 gpm (34 L/m) .....566 psi (3900 kPa)

Oil Filtration Full-Flow Return with Bypass and One Pilot Oil Filter

## Cylinders

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

	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
Boom (2) .....	5.5 in. (140 mm)	3.9 in. (100 mm)	52.8 in. (1340 mm)
Arm (1).....	6.7 in. (170 mm)	4.5 in. (115 mm)	68.5 in. (1740 mm)
Tilt (1) .....	4.5 in. (115 mm)	3.1 in. (80 mm)	41.7 in. (1060 mm)

## Electrical

Voltage.....24 volt

Number of Batteries .....2 x 12 volt

Reserve Capacity .....440 minutes

Alternator Rating .....80 amp

Optional Alternator Rating .....130 amp

## Undercarriage

Carrier Rollers (per side).....	2
Track Rollers (per side).....	8
Shoes, Double Grousers (per side).....	45
Track Shoe Width, Standard.....	28 in. (700 mm)
Drawbar Pull.....	56,075 lb. (25 435 kg)
Track Adjustment.....	hydraulic
Track Guides.....	full length “ski” type

## Upperstructure

Counterweight, Standard.....	11,332 lb. (5140 kg)
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## Swing Mechanism

Swing Speed.....	10.6 rpm
Swing Torque.....	79,560 lb•ft (107 869 Nm)

## Ground Pressure

28-in. (700 mm) Double-Grouser Shoes .....	9.57 psi (66.0 kPa)
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## Operator Station Monitor

	<i>Indicator Light</i>	<i>Audible Warning</i>	<i>Gauge</i>	<i>Digital Display</i>
Alarm Indicator				
Alternator, Low Charge.....	X			
Auto-Idle .....	X			
Clock.....			X	
Engine Air Cleaner Restriction .....	X			
Engine Service Required.....	X			
Engine Coolant Temperature .....	X	X	X	
Engine Oil Pressure.....	X	X		
Engine Preheat.....	X			
Engine RPM .....				X
Fault Code Alert.....	X			
Fuel Level .....	X		X	
Hourmeter.....				X
Work Mode Indicator .....	X			

## Serviceability

Hinged, Swing-Out Coolers for easy cleanout, Centralized Lube Banks, and “O” Ring Face Seal Connectors on most hydraulic hoses

### Diagnostics

Machine Information Center (MIC), Computerized In-Cab Monitor Information, and Fluid Sampling Ports

### Fluid Change Interval, Hours

Engine Oil .....	500
Hydraulic Oil .....	5,000

<b>Filters</b> .....	<i>Filtration (microns)</i>	<i>Service Hours</i>	<i>Vertically Mounted</i>
Engine Oil Filter, Remote Mounted .....		500	yes
Fuel Filter, Remote Mounted .....		500	yes
Hydraulic Filter .....		2,000	yes
Return Oil Filter.....	10		

### Sight Gauges

- Hydraulic Reservoir
- Engine-Oil Sampling Valve

## Serviceability *(continued)*

### Refill Capacities

Fuel Tank .....	277 gal. (1050 L)
Cooling System.....	7 gal. (26 L)
Engine Oil with Filter.....	6 gal. (23 L)
Hydraulic Tank .....	64 gal. (243 L)
Hydraulic System.....	82 gal. (310 L)
Swing Drive .....	8.0 qt. (7.6 L)
Propel Gearbox (each).....	9.0 qt. (8.5 L)
Pump Drive Gearbox.....	1.2 qt. (1.1 L)

## Operating Weights

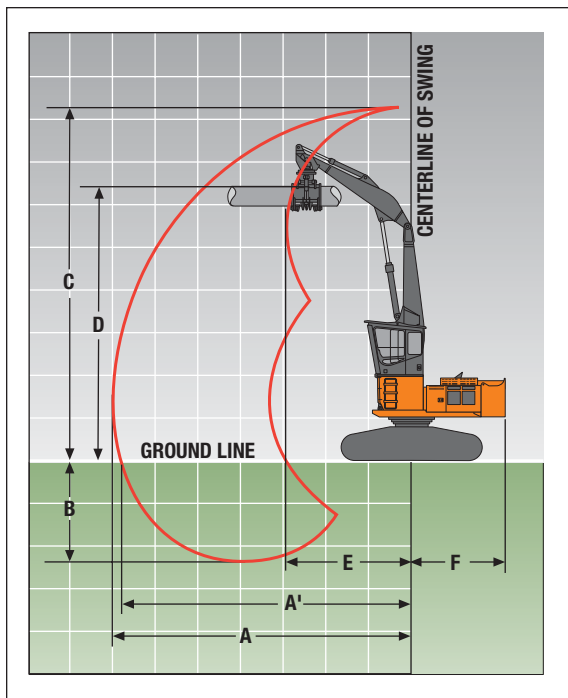
With 1818-lb. (840 kg) Full Fuel Tank; 175-lb. (79 kg) Operator; 11,332-lb. (5140 kg) Counterweight;  
 4,500-lb. (2041 kg) Grapple; and 28-in. (700 mm) Double-Grouser Shoes  
 SAE Operating Weight .....

77,978 lb. (35 370 kg)

## Operating Dimensions

### Lifting Capacity Over Front at Ground Level

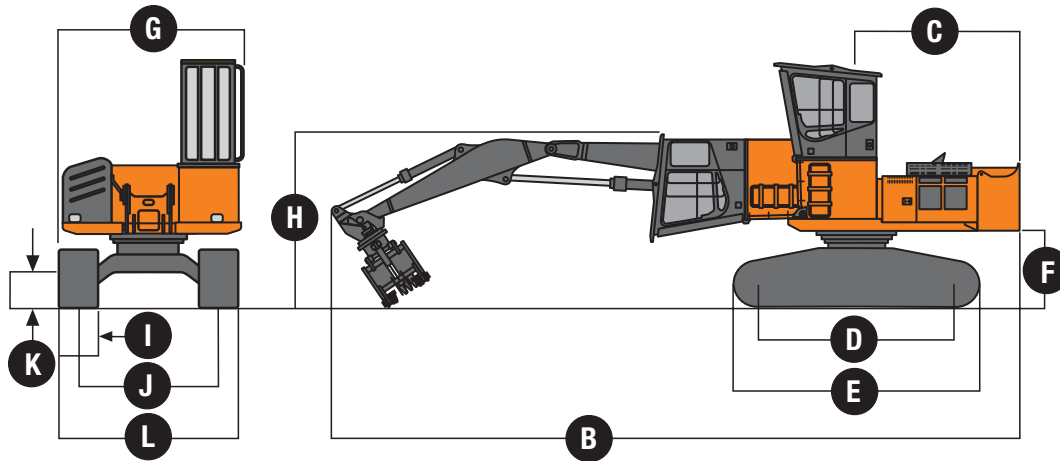
20-ft. (6.1 m) Reach (with power boost).....	21,400 lb. (9707 kg)
<b>A</b> Maximum Reach.....	35 ft. (10.68 m)
<b>A'</b> Maximum Reach at Ground Level .....	34 ft. 3 in. (10.43 m)
<b>B</b> Maximum Depth .....	12 ft. 1 in. (3.68 m)
<b>C</b> Maximum Height .....	41 ft. 10 in. (12.76 m)
<b>D</b> Maximum Level Log Height.....	29 ft. 3 in. (8.91 m)
<b>E</b> Minimum Swing Radius .....	14 ft. 8 in. (4.47 m)
<b>F</b> Tail Swing Radius .....	10 ft. 10 in. (3.30 m)



*Machine not exactly as shown.  
 Illustration for dimensioning purposes only.*

Machine Dimensions

ZAXIS FORESTER 240-3 POWER CLAM



A	Height.....	—
B	Overall Length .....	47 ft. 4 in. (14.44 m)
C	Rear-End Length/Swing Radius .....	10 ft. 8 in. (3.25 m)
D	Distance Between Idler/Sprocket Centerline.....	12 ft. 3 in. (3.73 m)
E	Undercarriage Length .....	15 ft. 5 in. (4.69 m)
F	Counterweight Clearance.....	4 ft. 10 in. (1.46 m)
G	Maximum Shipping Width.....	11 ft. 9 in. (3.58 m)
H	Cab Height (transport).....	11 ft. 6 in. (3.52 m)
I	Track Width, Double-Grouser Shoes .....	28 in. (0.71 m)
J	Gauge Width.....	9 ft. 2 in. (2.79 m)
K	Ground Clearance.....	2 ft. 6 in. (0.76 m)
L	Undercarriage Width .....	11 ft. 6 in. (3.49 m)

*Machine not exactly as shown.  
Illustration for dimensioning purposes only.*

# HITACHI

## Control Owning and Operating Costs

Customer Personal Service (CPS) is part of Hitachi'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 Hitachi and is honored by all Hitachi construction dealers. **Customer Support Advisors (CSAs)** – Hitachi 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.