

584 / 584HD

Forwarders



Engine

Engine Model	Cat® C7 ACERT™	
Gross Power	204 kW	274 hp

Operating Specifications

Load Capacity – 584	18 000 kg	39,683 lb
Load Capacity – 584HD	20 000 kg	44,092 lb

Operating Weight

584 6WD	20 230 kg	44,600 lb
584HD	23 088 kg	50,900 lb

584/584HD Features

Power Train

The Cat C7 engine with ACERT technology, enlarged cooling capacities, and the hydrostatic drive system give exceptional power, fuel efficiency and control.

Structures

Outstanding durability and service life with rugged and robust front and rear frame structures. Center articulation and oscillation points are designed for long service life.

Hydraulics

The axial piston hydraulic pump delivers quiet efficiency, controllability and durability. High load bearings ensure excellent reliability, and a spring assisted servo piston ensures rapid on-stroke performance.

Loader

Innovative details, durable structure and reliable technology, designed for hard, demanding work.

Operator Station

Spacious purpose built forestry cab with excellent sight lines to the work area. Superb air flow for heating and cooling functions, refined instrumentation and plenty of storage ensures a comfortable, uncluttered working environment.



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The Cat® 584 forwarder meets the demanding requirements of forest harvesting in many variable applications. These structurally superior units provide unbeaten comfort, controllability, and serviceability to get the job done in a safe, productive, and efficient manner.

Power Train

Exceptional power and fuel efficiency

Cat® C7 Engine

The Cat C7 engine with ACERT™ technology gives exceptional power and fuel efficiency. Meets Tier 3, Stage IIIA emission requirements. Tier 3 refers to EPA (U.S) standards. Stage IIIA refers to European standards.

Engines include electronic governing, cold mode start strategy, automatic altitude compensation, electronic diagnostics and fault monitoring.

Modulated Fan Speed

The engine fan speed control is modulated by the IQAN system based on system temperatures to provide fuel savings and precise temperature control.

Hydrostatic Drive System

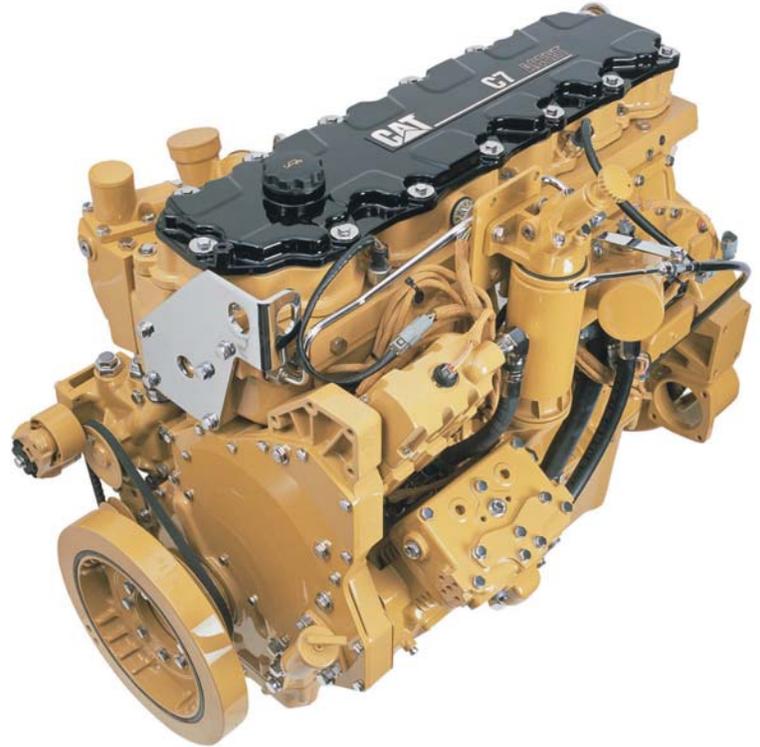
The forestry designed hydrostatic drive system gives exceptional power, efficiency and controllability unequalled in the industry for consistently high performance in all terrain applications.

Exceptional Cooling Capability

Enlarged cooling capacities provide the high heat rejection capability required for long distance hauling and utilizing the high tractive effort capabilities.

Tough Suspension

Leading design geared bogies and rigid front axle (6WD) are utilized for superior strength and maximum serviceability.



Structures

Rugged and robust



Solid Working Platform

Caterpillar design and manufacturing techniques assure outstanding durability and service life.

The front and rear frame structures are manufactured to stand up in the most demanding forest applications.

Oscillation and Articulation

Extreme duty center articulation and oscillation points are designed for long service life.

The cast knuckle articulation includes tapered roller bearings and hardened expander center joint pins.

Loader

Solid, Reliable Control

The forwarder loader is designed for hard, demanding work. Decades of experience can be seen in the innovative details, durable structure and reliable technology. Speed and smoothness are combined to get the work done safely, reliably, and without downtime.





Hydraulics

Balanced hydraulics deliver continuous, reliable and responsive control

Hydraulic Pump Is Powerful, Responsive, Quiet

Designed for continuous, efficient and reliable operation, the forwarders axial piston hydraulic pump meets stringent requirements for noise, efficiency, controllability and durability.

High load bearings are designed to ensure excellent reliability and long life. A spring assisted servo piston ensures rapid on-stroke performance, especially in low standby pressure conditions.

The rigid casing design ensures that all internal forces are well supported. Hydrostatic swash plate balancing together with a rigid support mechanism enhances the power density and reduces noise emissions.

Valves Are Load Sensing, Pressure Compensated

The valve system has proven reliability in forestry applications with its fuel efficient load sensing pressure compensated technology.

The valve has been given excellent simultaneous operating characteristics, which enable several machine functions to be operated responsively at the same time, regardless of the sizes of individual loads.

Each section is designed specifically for the flow and pressure of the function, therefore optimizing machine functionality and fuel efficiency. Ramped and proportional crane functions saves mechanical wear and tear on boom structures. Steering sensors provide feedback through the IQAN control system to cushion stop points of the cylinders.

Operator Station

Efficient, productive and spacious



Maximum Production, Comfortable Work

Spacious purpose built forestry cab with excellent sight lines to the work area. The forward positioned side posts provide maximum visibility for the loader working range. The ventilation system provides superb air flow for heating and cooling functions. Refined instrumentation and plenty of storage areas allow an uncluttered working environment.

State-Of-The-Art Controls

The forwarder utilizes the latest technology with CAN-Bus controlled IQAN, switch panels, and engine control.

The IQAN MDL master control has a 165 mm (6.5 in) transreflective TFT color display which includes excellent on-screen diagnostics. Units are configured for English or metric display.

Low effort ergonomic joy stick controls provide easy effort control of the loader functions. Loader functions are configurable for SAE or Forestry patterns.

Loader control allows input into 3 selectable and adjustable operator interphases, plus a factory default. An automotive style, tuned hydrostatic propel system allows for all types of terrain and load characteristics.

Serviceability

Easy to access, easy to maintain



Tilting Hood Provides Easy Access

A forward tilting front hood assembly together with the side tilting cab design provide full access to the engine, hydrostat, and hydraulic components.

Better Diagnostics, Grouped Service Points

Simplified service and electronic diagnostics help to increase productivity and machine availability. Grouped lubrication points and lines reduce service times.

Easy Fluid Changes

Removable cover plates allow full access for cleaning and service. An electric refill pump to add oil into the hydraulic tank maintains system cleanliness by passing all added oil through the filtering system. A vacuum pump on the hydraulic tank reduces exposure to oil loss during service and repair.

Support

Services to help you lower costs

Before, During and After Your Purchase

Your Cat dealer is ready to assist you with your purchasing decision and everything after. Factory trained dealer technicians service every aspect of your forwarder.

Preventative maintenance agreements are available for repair before failure options.

Scheduled oil sampling programs can be utilized to match your oil samples against Caterpillar set standards.

For more information on Cat products, dealer services and industry solutions, visit us at www.cat.com.



584 and 584HD Forwarders Specifications

Engine

Engine Model	Cat C7 ACERT™	
Gross Power	204 kW	274 hp
Torque	1182 N·m	872 lbf-ft
Displacement	7.2 L	439 in ³

Operating Specifications

Load Capacity		
– 6WD	18 000 kg	39,683 lb
– HD 8WD	20 000 kg	44,092 lb
Tractive Ability		
– 6WD	217 kN	48,784 lb-f
– HD 8WD	234 kN	52,605 lb-f
Low Speed		
– 6WD	7.4 km/h	4.6 mph
– HD 8WD	7.0 km/h	4.4 mph
Maximum Speed		
– 6WD	22.5 km/h	14 mph
– HD 8WD	20.9 km/h	13 mph
Steering Angle	42 Degrees	

Transmission

Transmission	hydrostatic, 2-speed drop box
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Weights

Operating Weight		
– 6WD	20 230 kg	44,600 lb
– HD 8WD	23 088 kg	50,900 lb

Bunk Area

Bunk Area	5.5 m ²	59.3 ft ²
Optional Bunk Area	6.25 m ²	67.3 ft ²
Load Bunks	moveable	

Loader and Grapple

Loader type	Epsilon X120F	
Reach	8.0 m	315 in
Lifting Torque, Gross	159 kN·m	111,975 lbf-ft
Slewing Torque, Gross	45 kN·m	30,240 lbf-ft
Slewing Angle	380 Degrees	
Grapple type	Epsilon FG37	
Grapple type, optional	Epsilon FG43S	
Rotator type	G141	

Hydraulic System

Flow Rate	284 L/min	75 gal/min
Working Pressure – max	21.5 Mpa	3,120 psi

- Flow rate measured at 1,400 rpm

Wheels/Tires

584 6WD	700/70 × 34 (front), 750/55 × 26.5 (rear)
584HD	750/55 × 26.5

- Carrier width is 3279 mm (129.11 in)

Service Refill Capacities

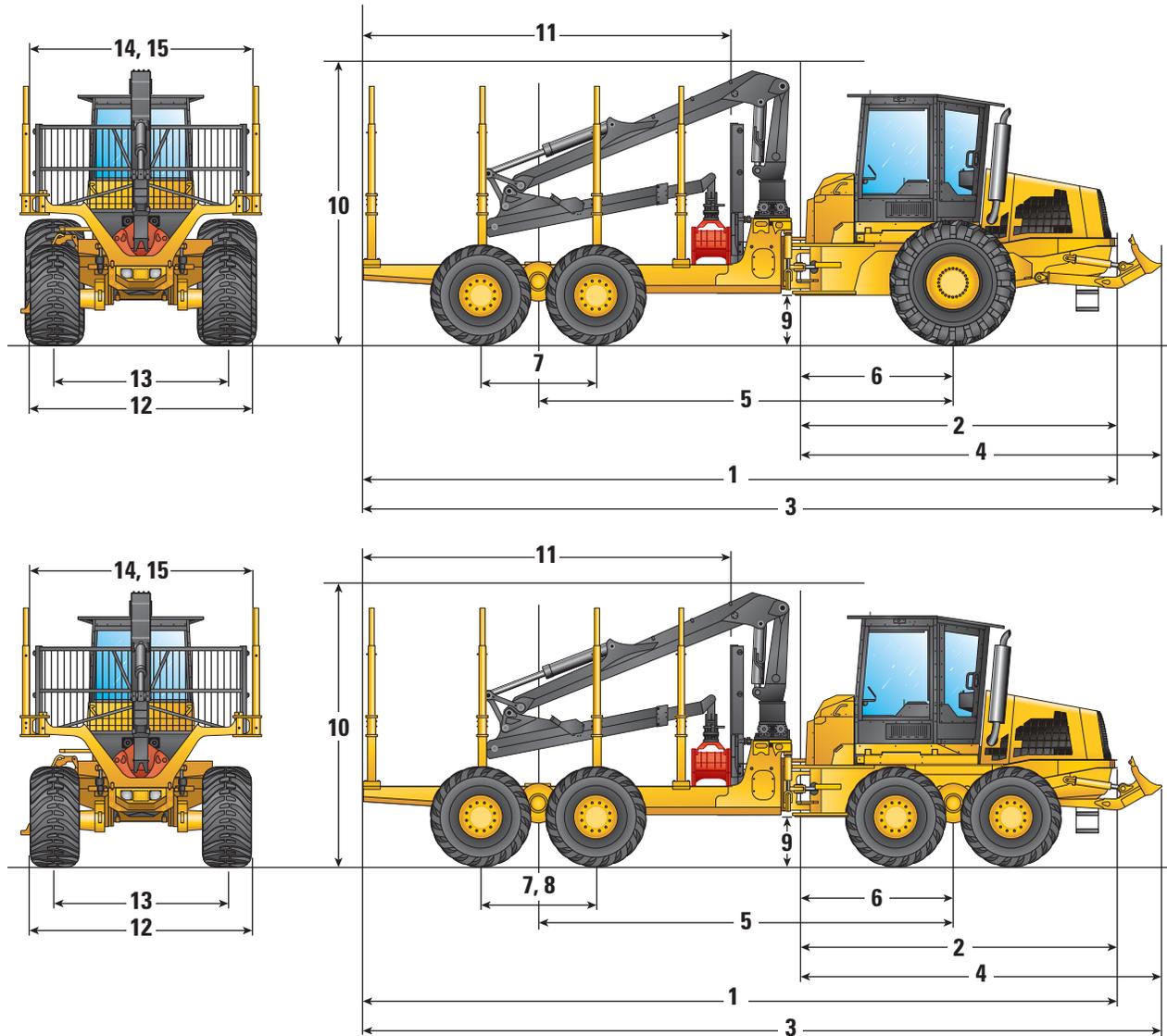
Fuel Tank	255 L	67.3 gal
Hydraulic Fluid Reservoir	174 L	46 gal

Standards

ROPS	ISO 3471:1994, ISO 8082:2003
FOPS	ISO 3449:2005 (LEVEL II), ISO 8083:2006
OPS	ISO 8084:2003, SAE J1084, SEP2002, BC WCB G603, MAR90

Dimensions

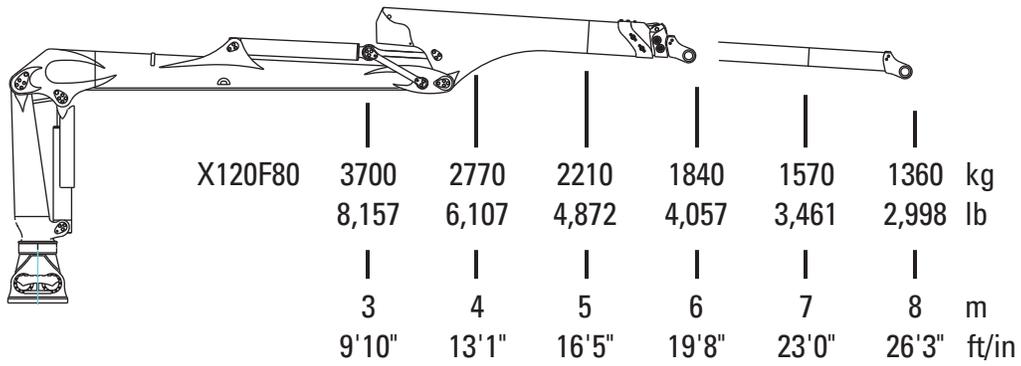
All dimensions are approximate



1 Length – Total	11 085 mm	436.4 in
2 Length – Front to Articulation	4633 mm	182.4 in
3 Length – Total – with Blade	11 755 mm	462.8 in
4 Length – Front to Articulation – with Blade	5304 mm	208.8 in
5 Wheel Base – Total	6096 mm	240.0 in
6 Wheel Base – Front to Articulation	2235 mm	88.0 in
7 Bogie Spread (Center to Center) 584	1690 mm	66.5 in
8 Bogie Spread (Center to Center) 584HD	1690 mm	66.5 in
9 Ground Clearance	692 mm	27.3 in
10 Transport Height	4163 mm	163.9 in
11 Deck Length	5410 mm	213.0 in
12 Width – Outside Rear Tires	3279 mm	129.11 in
13 Width – Tire Center Lines	2530 mm	99.6 in
14 Width – Between Stakes, Standard	2769 mm	109.0 in
15 Width – Between Stakes, Wide	3264 mm	128.5 in

584 and 584HD Forwarders Specifications

Lift Capacities



584/584HD Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

Electrical	Air conditioner/heater with auto temp control	Closed circuit load sensing valves
24V system	Window defroster vents	Hydraulic driven cooling fan
Master disconnect	Horn	Vacuum pump
Circuit breaker protection	2 12V power ports	Electric refill pump
200 Amp Alternator	Dome light	Brake System
2 12V Batteries	Radio ready	Driving brake/work brake
12 cab mounted halogen lights	Cup holder	Parking brake
2 boom mounted halogen lights	Hydraulic step and access platform	Loader
2 rear deck mounted halogen lights	Power Train	Epsilon X120F80 with G141 rotator
IQAN MDL full function control system with on-screen diagnostics, switch panels and engine control	Cat C7 ACERT engine	8.0 m (26.25 ft) reach
Operator Environment	Hydrostatic drive system	Epsilon FG37 grapple
Pressurized ROPS-FOPS-OPS cab	2-speed drop box	Load Deck
Isolation mountings	Rear axle disconnect	5.41 m (17.75 ft) load deck
Electric cab tilt	8.5C drive line components	Shock cushioned head board mounting
Tinted 12.7 mm (½ in) polycarbonate windows	NAF axle modules	Hydraulic extendable head board
Air suspension seat	Hydraulics	Adjustable load stake spacing
	200 cc (12.2 in ³) variable displacement implement pump	Bolt-on tail piece

584/584HD Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Epsilon FG43S grapple	Signal and brake light assemblies	Tire options
Adjustable load bunks 5.5 m ² (59.2 ft ²) to 6.25 m ² (67.3 ft ²)	Front blade	Wheels/Tires
Heated/cooled air suspension seat	Rear tow hitch	650/65 × 26.5, carrier width is 3180 mm (125.19 in)
Window wiper/washer options	HD Front Protection pkg with brush sweeps	Balanced bogies
Window shades	Satellite radio/CD player	
10 cab mounted HID lights	Electric fuel fill pump	
	Cold climate heater warm up system	

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Replaces AEHQ6055-04

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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