

# Cat® 548/548 LL

Forest Machines

The 548 and 548 LL feature ultimate machine efficiency coupled with enhanced performance. Cat® components, purpose built upper and lower frames, and application specific linkage configurations increase machine up time and lower machine operating costs.

#### **Efficiency**

- Engine, hydraulics, and work tool integration are optimized to minimize power losses and increase overall machine efficiency
- Steady state high idle speed and U.S. EPA Tier 4 Final technology reduce fuel consumption
- Larger hydraulic pumps allow engine to operate at lower rpms with increased performance to maximize efficiency
- Component layout and back-to-back main hydraulic control valve reduce oil flow restrictions and aid in greater fuel economy
- Machine designed for integration and optimization with Cat grapples
- Powerful, multi-functioning hydraulics, combined with strong machine performance ensure work tools function quickly and smoothly to complete work faster

### **Performance**

- Cat 152 kW (204 hp) C7.1 ACERT™ Tier 4 Final engine with increased horsepower maintains maximum performance under load
- Strong hydraulic horsepower for efficient implement performance and greater productivity
- An increase in swing torque of 19 percent on General Forestry models and 18 percent on Log Loader models, provides added power to move trees, which enables more efficiency and productivity
- Heavy lift mode features increased lift capacity to handle larger payloads with improved control
- 989 L (261 gal) counterweight fuel tank for extended machine operation and maximum uptime
- Machine width and track length designed for stability in varied logging applications

# **Application Versatility**

- Boom arrangements and hydraulic systems for specific applications enable more effective road building, loading, processing, shoveling, or millyard stacking
- New track options meet shovel logging and low ground pressure application requirements
- Ground saw hydraulics are available for log loader applications
- Two premium rear entry cab choices, available on the Log Loader, include a 1219 mm (48 in) or a 1829 mm (72 in) cab forward riser
- Purpose built processor cab option that includes 19 mm (0.75 in) front windows

# **Reliability and Durability**

- Variable pitch, reversing cooling fan maintains optimum fluid temperature in heavy duty forestry applications
- Cooling capability increased 12 percent for trouble-free operation
- Purpose built upper frame, high-wide carbody, robust linkage configurations, and heavy-duty enclosures are reinforced with thick doubler plates, extra gussets, and other reinforcements for structural integrity in severe applications
- Large, 216 mm (8.5 in) pitch (336 HEX), grease lubricated tracks, provide excellent life in variable forestry working conditions
- Validated and proven excavator technologies ensure overall machine reliability

# Serviceability

- One-piece engine hood design, with two opening angles, allows easy access to engine and cooling compartments
- Side-by-side engine and hydraulic coolers are easy to access for cleaning, while reduced cooling fins per inch allows better debris flow-through and reduced clogging potential
- 0.56 m³ (19.8 ft³) of storage space at ground level, provides ready access to tools, equipment, and supplies that operators use daily

## **Operator Comfort and Technology**

- Premium fit and finishes to maximize operator experience
- Fully adjustable, air ride cab seat that includes heating and cooling capability for comfort and reduced operator fatigue
- · LED lights increase visibility
- Rear entry cab option provides improved access on a fully lit platform through the use of a key FOB
- Rear entry cab window design improves visibility for shovel logging and other applications
- Rear entry cab includes a new innovative cab lock down system that minimizes transport time and improves uptime
- Tool control software as standard equipment for swapping and selecting tools guickly and efficiently
- Cat Product Link™ allows for remote location of a machine and enables tracking of fuel consumption and other events



# Cat® 548/548 LL Forest Machines

Engine			
Engine Model	Cat C7.1	Cat C7.1 ACERT	
Gross Power at 1,800 rpm	152 kW	204 hp	
Engine Speed			
Operation	1,600	1,600 rpm	
Travel	1,800	1,800 rpm	
Displacement	7.01 L	428 in <sup>3</sup>	
Number of Cylinders	6	6	

Weights		
Estimated Operating Weight without Attachment		
548 (General Forestry, Processor)	35 354 kg	77,942 lb
548 LL (Log Loader, U/U)	38 153 kg	84,113 lb

Operating Specifications			
Maximum Speed (turtle)	2.6 km/h	1.6 mph	
Maximum Speed (rabbit)	4.8 km/h	3.0 mph	
Maximum Drawbar Pull	313 kN	70,320 lbf	
Swing Torque – 548 (GF)	87.4 kN⋅m	64,441 lbf-ft	
Swing Torque – 548 LL	99.9 kN∙m	73,677 lbf-ft	
Maximum Swing Speed – 548 (GF)	9.3	9.3 rpm	
Maximum Swing Speed – 548 LL	9.3	9.3 rpm	

Hydraulic System		
Main Pumps Maximum Flow (per pump)	226 L/min	59.7 gal/min
Main Pumps Maximum Flow (both pumps)	452 L/min	119.4 gal/min
Maximum System Pressure		
Implements	35 000 kPa	5,076 psi
Travel	35 000 kPa	5,076 psi
Swing – 548 (GF)	30 500 kPa	4,424 psi
Swing – 548 LL	34 000 kPa	4,931 psi
Heavy Lift Mode	38 000 kPa	5,511 psi
Auxiliary Pump – U/U and O/U (548 LL)		
Maximum Flow	48 L/min	12.8 gal/min
Maximum Pressure	10 335 kPa	1,499 psi
Auxiliary Pump — Reach w/Rotate (548)/ Power Clam/Bnt (548 LL)		
Pump Drive Gear Ratio	1.28:1	
Maximum Flow	129 L/min	34.1 gal/min
Maximum Pressure	10 335 kPa	1,499 psi

Service Refill Capacities		
Fuel Tank – CWT	989.3 L	261.4 gal
DEF Tank	46.0 L	12.2 gal
Engine Crankcase	24.0 L	6.3 gal
Cooling System	30.0 L	7.9 gal
Final Drive – Each	11.0 L	2.9 gal
Hydraulic Tank	175.0 L	46.2 gal
Hydraulic System – Total	285.0 L	75.3 gal
Swing Drive	9.0 L	2.4 gal

Undercarriage		
Undercarriage Pitch	215.9 mm	8.5 in
Track Gauge	2809 mm	110.6 in
Track Length	5035 mm	198.2 in
Ground Clearance	774 mm	30.5 in

Dimensions		
General Forestry – 548 Processor (boom stretched out)		
Height of Tilted Side Entry Cab	3479 mm	137.0 in
Boom Height	3745 mm	147.4 in
Overall Height	4166 mm	164.0 in
Overall Length (Reach)	12 592 mm	495.7 in
Tail Swing Radius	3501 mm	137.8 in
Distance Between Idler and Sprocket Centerline	4019 mm	158.2 in
Track Length	5035 mm	198.2 in
Ground Clearance	774 mm	30.5 in
Track Gauge	2809 mm	110.6 in
Width with 700 mm (28 in) Shoes	3509 mm	138.1 in
Log Loader – 548 LL Under/Under (boom stretched out)		
Height of Tilted Side Entry Cab	3479 mm	137.0 in
Boom Height	2864 mm	112.8 in
Overall Height	4928 mm	194.0 in
Overall Length (U/U)	15 143 mm	596.2 in
Tail Swing Radius	3501 mm	137.8 in
Distance Between Idler and Sprocket Centerline	4019 mm	158.2 in
Track Length	5035 mm	198.2 in
Ground Clearance	774 mm	30.5 in
Track Gauge	2809 mm	110.6 in
Width with 700 mm (28 in) Shoes	3509 mm	138.1 in

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

© 2018 Caterpillar All rights reserved

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

