# **PRODUCT SPECIFICATIONS FOR 908**



# **ENGINE**

Torque - SAE J1995

Maximum Gross Power	74.7 HP
Engine Model	Cat C2.8*
Maximum Engine Speed	2550 rpm
Maximum Gross Power - Rated Engine Speed	2400 r/min
Maximum Gross Power - SAE J1995	74.7 HP
Maximum Gross Power - ISO 14396	74.3 HP
Maximum Gross Power - ISO 14396 (metric)	75.3 mhp
Rated Net Power - Rated Engine Speed	2400 r/min
Rated Net Power - SAE J1349	72.7 HP
Rated Net Power - ISO 9249	72.1 HP
Rated Net Power - 2,400 rpm - ISO 9249 (metric)	73.1 mhp
Maximum Gross	222 lb/ft

Maximum Gross Torque - ISO 14396	221 lb/ft
Maximum Net Torque - SAE J1349	218 lb/ft
Maximum Net Torque - ISO 9249	217 lb/ft
Displacement	171 in³
Bore	3.54 in
Stroke	4.33 in
Note	Advertised power is tested per the specified standard in effect at the time of manufacture
Note (1)	Net power advertised is the power available at the flywheel.
Note (2)	*Two Cat C2.8 engine emission options are available: 1) Meets U.S. EPA Tier 4 Final, EU Stage V. 2) U.S. EPA Tier 3 and EU Stage IIIA equivalent. Tier 3 engine specs are 0.3 kW/0.4 hp more gross power (SAE J1995), 0.2 kW/0.3 hp on net power (SAE J1349) and 1 N·m/0.7 lb-ft higher on gross torque (SAE J1995).
Note (3)	#Maximum gross and net torque measured at 1,600 rpm.

# **WEIGHTS**

Operating Weight	14617 lb	

# **BUCKETS**

Bucket Capacities	0.75-1.55 m³ (1.0-2 yd³)
Bucket Capacities - General Purpose	0.80-1.35 m³ (1.0-1.7 yd³)
Multi-Purpose	0.75-1.1 m³ (1.0-1.4 yd³)

Bucket Capacities - Light Material	1.25-1.55 m³ (1.6-2 yd³)
Note	Bucket selection must be made with an understanding of the material density and application to ensure machine stability is maintained within the tipping loads stated per model and configuration.
Note (1)	Bucket capacities stated include BOCE, in line with ISO 7546.

## **SERVICE REFILL CAPACITIES**

Fuel Tank	24 Gal
Cooling System	3.2 Gal
Engine Crankcase	2.3 Gal
Axles - Front Center Differential	2.3 Gal
Axles - Rear Center Differential	2.3 Gal
Hydraulic System - Including Tank	18.6 Gal
Hydraulic Tank	11.8 Gal
Transmission	0.6 Gal
Note	No Diesel Exhaust Fluid (DEF) fluid needed on this size engine.

## **AXLES**

Front	Fixed (standard), Locking Differential (optional)
Rear	Fixed (standard), Locking Differential (optional)
Note	Oscillation of ±11 degrees via hitch between front and rear frames.

## **STEERING**

Maximum Flow - Steering Pump	12.3 gal/min
Maximum Working Pressure - Steering Pump	3336 psi
Steering Cycle Times – (full left to full right) – at High Idle	2.8 s
Number of Steering Wheel Turns - Full Left to Full Right or Full Right to Full Left	3.25 turns or 4.00 turns

# **TRANSMISSION**

Forward and Reverse - Speed Range Creep#	6 mile/h
Forward and Reverse - Speed Range 1*	6 mile/h
Forward and Reverse - Speed Range 2** - High Speed	10.5 mile/h
Forward and Reverse - Speed Range 2** - Standard	12 mile/h
Forward and Reverse - Speed Range 3***	25 mile/h
Note	#Factory default shown, can be adjusted to any speed up to 19 km/h (12 mph).
Note (1)	*Creep function not available in this gear or above.
Note (2)	**Max speed dependent on model and configuration (standard vs. high speed transmission).
Note (3)	***Reverse is 30 km/h (19 mph).

## **TIRES**

Tire Size - Standard	*405/70 R20 SPT9
Tire Size - Optional	405/70 R20 Powerloads

Tire Size - Optional (1)	400/70 R20 XMCL/Bibload
Tire Size - Optional (2)	360/80 R20 TRI 2
Tire Size - Optional	40X14-20 TL, SM/TR
Note	*This tire has been used for all dimension, stability and performance data.
Note (1)	Other tire choices are available. Contact your Cat dealer for details.
Note (2)	Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

# **CAB**

ROPS	ISO 3471:2008
FOPS	ISO 3449:2005 Level II
Note (1)	Canopy and cab, Rollover Protective Structures (ROPS) are available worldwide. Canopy not available in EU.

# **LOADER HYDRAULIC SYSTEM**

Main Relief - 1st Auxiliary (3rd slice)	3408 psi
Main Relief - 1st Auxiliary (3rd slice) - Standard Flow*	24 gal/min
Main Relief - 1st Auxiliary (3rd slice) - High Flow*	33 gal/min
Main Relief - 2nd Auxiliary (4th slice)	3408 psi
Main Relief - 2nd Auxiliary (4th slice) - Flow	12 gal/min

Hydraulic Cycle Time - Rackback	2.5 s
Hydraulic Cycle Time - Lift	5.8 s
Hydraulic Cycle Time - Dump	1.8 s
Hydraulic Cycle Time - Float Down	3.6 s
Note	* Maximum flow stated, actual flow delta could be 6% from data shown. Also adjustable from 20% to 100% of maximum flow through display.

## **DIMENSIONS - WITH HPL-V COUPLER - APPROXIMATE#**

DIMENSIONS - M	VIIH HPL-V COUPLER - APPROXIMATE#
Height: Ground to Cab**	8.75 ft
Height: Ground to Beacon**	9.33 ft
Height: Ground Axle Center**	1.67 ft
Height: Ground Clearance**	1 ft
Length: Overall*	18.17 ft
Length: Rear Axle to Bumper	4.5 ft
Length: Hitch to Front Axle	3.5 ft
Length: Wheel Base	7.08 ft
Clearance: Bucket at 45° *	8.58 ft

Clearance: Load over Height**	9.75 ft
Clearance: Level Bucket**	10.5 ft
Height: Bucket Pin**	11.17 ft
Height: Overall**	14.17 ft
Reach: Bucket at 45°	2.33 ft
Carry Height: Bucket Pin	1.17 ft
Dig Depth**	0.33 ft
Width: Bucket	6.75 ft
Width: Tread Center	5.08 ft
Turning Radius: Over Bucket	14.75 ft
Width: Over Tires	6.67 ft
Turning Radius: Outside of Tires	13.17 ft
Turning Radius: Inside of Tires	6.5 ft
Rack Angle at Full Lift	53°
Dump Angle at Full Lift	45°
Rack Angle at Carry	51°

Departure Angle - Degrees	30°
Articulation Angle - Degrees	39°
Operating Weight: Bucket^	14633 lb
Tipping Load - Straight - ISO 1 <b>¢</b> 397-1	10626 lb
Tipping Load - Full Turn - ISO 14397-1†	8895 lb
Operating Weight: Carriage and Tines	14252 lb
Tipping Load - Straight†	10626 lb
80% of Tip: Firm and Level EN474-3††	5815 lb
Note (1)	*Vary with bucket
Note (2)	**Vary with tire
Note (3)	^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), 1.15 m3 (1.5 yd3) general purpose bucket.
Note (4)	^^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), class III carriage, 1220 mm (4 ft) tines (500 mm [20 in] load center).
Note (5)	†Full compliance to ISO 14397-1 (2007) Sections 1 thru 6 (fork 500 mm [20 in] load center), which requires 2% verification between calculation and testing.
Note (6)	††Full compliance to EN474-3 and SAE J1197.

Note (7)	#HPL-A weight, tipping and rated loads are within 1% of the HPL-V.
Note (8)	Dimensions listed are for a machine configured with standard cab, heater, 20 km/h (12 mph), standard guarding, 80 kg (176 lb) operator, full fluids, SPT9 405/70 R20 tires and 1.15 m3 (1.5 yd3) general purpose bucket with bolt-on cutting edge or a class III fork carriage and tines, (tire supplier variability can impact dimensions by 2%).
Note (9)	Note: Goodyear POWERLOAD® tires can add up to approximately 140 kg (305 lb) to the full turn tip load and reduce vertical height by approximately 25 mm (1 in) compared to SPT9
Length: Front Axle to	3.92 ft

Front of Coupler

# **DIMENSIONS - WITH SSL COUPLER - APPROXIMATE**

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Height - Ground to Cab	8.75 ft
Height: Ground to Beacon**	9.33 ft
Height: Ground Axle Center**	1.67 ft
Height - Ground Clearance	1 ft
Length - Overall with Bucket	18.67 ft
Length: Rear Axle to Bumper	4.5 ft
Length: Hitch to Front Axle	3.5 ft
Length - Wheel Base	7.08 ft
Clearance - Bucket at 45°	8.25 ft

Clearance: Load over Height**	9.75 ft
Clearance - Level Bucket	10.5 ft
Height - Bucket Pin	11.17 ft
Height: Overall**	14.42 ft
Reach - Bucket at 45°	2.67 ft
Carry Height: Bucket Pin	1.25 ft
Dig Depth	0.45 ft
Width - Bucket	6.75 ft
Width - Tread Center	5.08 ft
Turning Radius - Over Bucket	15.08 ft
Width - Over Tires	6.67 ft
Turning Radius: Outside of Tires	13.17 ft
Turning Radius - Inside Tire	6.67 ft
Rack Angle at Full Lift	50°
Dump Angle at Full Lift	48°
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Rack Angle at Carry

54°

Departure Angle - Degrees	30°
Articulation Angle - Degrees	39°
Operating Weight: Bucket^	14752 lb
Tipping Load – Straight – ISO 1 <b>¢</b> 397-1	9581 lb
Tipping Load – Full Turn – ISO 14397-1†	8141 lb
Operating Weight: Carriage and Tines	14391 lb
Tipping Load - Straight†	9753 lb
80% of Tip: Firm and Level EN474-3††	5438 lb
Note (1)	*Vary with bucket
Note (2)	**Vary with tire
Note (3)	^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), 1.15 m3 (1.5 yd3) general purpose bucket.
Note (4)	^^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), class III carriage, 1220 mm (4 ft) tines (500 mm [20 in] load center).
Note (5)	†Full compliance to ISO 14397-1 (2007) Sections 1 thru 6 (fork 500 mm [20 in] load center), which requires 2% verification between calculation and testing.
Note (6)	††Full compliance to EN474-3 and SAE J1197.

Note (7)	#HPL-A weight, tipping and rated loads are within 1% of the HPL-V.
Note (8)	Dimensions listed are for a machine configured with standard cab, heater, 20 km/h (12 mph), standard guarding, 80 kg (176 lb) operator, full fluids, SPT9 405/70 R20 tires and 1.15 m3 (1.5 yd3) general purpose bucket with bolt-on cutting edge or a class III fork carriage and tines, (tire supplier variability can impact dimensions by 2%).
Note (9)	Note: Goodyear POWERLOAD® tires can add up to approximately 140 kg (305 lb) to the full turn tip load and reduce vertical height by approximately 25 mm (1 in) compared to SPT9
Tipping Load - Full Turn - ISO 14397-1†	6800 lb
Length: Front Axle to Front of Coupler	4.75 ft

# DIMENSIONS - HIGH LIFT - WITH HPL-V COUPLER - APPROXIMATE#

Height: Ground to Cab**	8.75 ft
Height: Ground to Beacon**	9.33 ft
Height: Ground Axle Center**	1.67 ft
Height: Ground Clearance**	1 ft
Length: Overall*	19.67 ft
Length: Rear Axle to Bumper	4.5 ft
Length: Hitch to Front Axle	3.5 ft

Length: Wheel Base	7.08 ft
Clearance: Bucket at 45° *	10.92 ft
Clearance: Load over Height**	10.75 ft
Clearance: Level Bucket**	12.08 ft
Height: Bucket Pin**	12.75 ft
Height: Overall**	15.67 ft
Reach: Bucket at 45°	3.25 ft
Carry Height: Bucket Pin	1.17 ft
Dig Depth**	0.33 ft
Width: Bucket	6.75 ft
Width: Tread Center	5.08 ft
Turning Radius: Over Bucket	15.83 ft
Width: Over Tires	6.67 ft
Turning Radius: Outside of Tires	13.17 ft
Turning Radius: Inside of Tires	6.5 ft
Rack Angle at Full Lift	69°

Dump Angle at Full Lift	40°
Rack Angle at Carry	48°
Departure Angle - Degrees	30°
Articulation Angle - Degrees	39°
Operating Weight: Bucket^	14848 lb
Tipping Load - Straight - ISO 1 <b>4</b> 397-1	9187 lb
Tipping Load - Full Turn - ISO 14397-1†	7645 lb
Operating Weight: Carriage and Tines	14542 lb
Tipping Load - Straight†	9187 lb
80% of Tip: Firm and Level EN474-3††	4706 lb
Note (1)	*Vary with bucket
Note (2)	**Vary with tire
Note (3)	^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), 1.15 m3 (1.5 yd3) general purpose bucket.
Note (4)	^^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), class III carriage, 1220 mm (4 ft) tines (500 mm [20 in] load center).

Note (5)	†Full compliance to ISO 14397-1 (2007) Sections 1 thru 6 (fork 500 mm [20 in] load center), which requires 2% verification between calculation and testing.
Note (6)	††Full compliance to EN474-3 and SAE J1197.
Note (7)	#HPL-A weight, tipping and rated loads are within 1% of the HPL-V.
Note (8)	Dimensions listed are for a machine configured with standard cab, heater, 20 km/h (12 mph), standard guarding, 80 kg (176 lb) operator, full fluids, SPT9 405/70 R20 tires and 1.15 m3 (1.5 yd3) general purpose bucket with bolt-on cutting edge or a class III fork carriage and tines, (tire supplier variability can impact dimensions by 2%).
Note (9)	Note: Goodyear POWERLOAD® tires can add up to approximately 140 kg (305 lb) to the full turn tip load and reduce vertical height by approximately 25 mm (1 in) compared to SPT9

# **DIMENSIONS - HIGH LIFT - WITH SSL COUPLER - APPROXIMATE**

Height: Ground to Cab**	8.75 ft
Height: Ground to Beacon**	9.33 ft
Height: Ground Axle Center**	1.67 ft
Height: Ground Clearance**	1 ft
Length: Overall*	20.17 ft
Length: Rear Axle to Bumper	4.5 ft
Length: Hitch to Front Axle	3.5 ft
Length: Wheel Base	7.08 ft

Clearance: Bucket at 45° *	10.42 ft
Clearance: Load over Height**	10.75 ft
Clearance: Level Bucket**	12.08 ft
Height: Bucket Pin**	12.75 ft
Height: Overall**	15.92 ft
Reach: Bucket at 45° *	3.42 ft
Carry Height: Bucket Pin	1.25 ft
Dig Depth**	0.42 ft
Width: Bucket	6.75 ft
Width: Tread Center	5.08 ft
Turning Radius: Over Bucket	16.17 ft
Width: Over Tires	6.67 ft
Turning Radius: Outside of Tires	13.17 ft
Turning Radius: Inside of Tires	6.5 ft
Rack Angle at Full Lift	66°

Dump Angle at Full Lift	40°
Rack Angle at Carry	42°
Departure Angle - Degrees	30°
Articulation Angle - Degrees	39°
Operating Weight: Bucket^	15070 lb
Tipping Load - Straight - ISO 1 <b>¢</b> 397-1	8385 lb
Tipping Load - Full Turn - ISO 14397-1†	6943 lb
Operating Weight: Carriage and Tines	14714 lb
Tipping Load - Straight†	8385 lb
80% of Tip: Firm and Level EN474-3††	4375 lb
Note (1)	*Vary with bucket
Note (2)	**Vary with tire
Note (3)	^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), 1.15 m3 (1.5 yd3) general purpose bucket.
Note (4)	^^Horizontal Pin Lock Coupler (HPL-V) or Vertical Pin Coupler (SSL), class III carriage, 1220 mm (4 ft) tines (500 mm [20 in] load center).

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Note (8)	Dimensions listed are for a machine configured with standard cab, heater, 20 km/h (12 mph), standard guarding, 80 kg (176 lb) operator, full fluids, SPT9 405/70 R20 tires and 1.15 m3 (1.5 yd3) general purpose bucket with bolt-on cutting edge or a class III fork carriage and tines, (tire supplier variability can impact dimensions by 2%).
Note (9)	Note: Goodyear POWERLOAD® tires can add up to approximately 140 kg (305 lb) to the full turn tip load and reduce vertical height by approximately 25 mm (1 in) compared to SPT9

## SUSTAINABILITY

Recyclability 93%

## 908 STANDARD EQUIPMENT

### **POWER TRAIN**

Emissions compliant, two options (Dependent on regional regulations.)

- U.S. EPA Tier 4 Final and EU Stage V
- U.S. EPA Tier 3 and EU Stage IIIA equivalent

Cat C2.8 engine

- Diesel particulate filter (Fit for Life) or muffler (Dependent on regional regulations.)
- Fuel, diesel, ultra low or low Sulphur (Dependent on regional regulations.)
- Hydrostatic transmission, two speed, with inching function, "shift on the go"
- Power train mode, hystat

Air cleaner, two stage filter, with in cab audio/visual indicator on display

Axles, heavy duty, frame mounted with outboard planetary reduction

Closed circuit breather

Coolant, extended life, -36° C (-33° F)

Drive shaft, sealed for life, universal joints

Engine, auto idle shutdown, hibernation mode

Engine oil, ECO drain tap and hose

Fuel pump, priming (manual)/water separator/drain

## **HYDRAULICS**

Hydraulic pilot shut off switch, in cab Electro-hydraulic, fully proportional controls Dead engine lower, lift valve, manual

Demand cooling fan, hydraulically drive

Coupler/pin on attachment ready

Caterpillar HYDO™ Advanced 10 hydraulic oil

Hystat displacement pump, infinitely variable

Implement valve, pressure compensated

Joystick, single lever, single auxiliary roller

Multi-function lift and tilt with loader arm float

Motor, single drive with dedicated implement and steering pumps

#### **ELECTRICAL**

Alternator, 100 amp sealed
Battery, heavy duty, 12V, 90Ah and 1,000 CCA
Battery disconnect switch
Cab mounted fuse panel
Lights, rear stop and turn, LED
Lights, roading, front halogen
Service (Electronic Technician™)
Product Link™

#### OPERATOR ENVIRONMENT

ROPS/FOPS certified canopy/cab

- 12V power outlets, interior/exterior
- Pedals, raised, foot, brake/inching, accelerator
- Lever, parking brake
- Cup holders (2)
- CB radio clip, phone holder
- Door release, internal (left and right)
- Hook, large, coat and hard hat
- Floormat, heavy duty, easy clean
- Mirrors, (2) external breakaway, (1) internal
- Operator station on isolation mounts
- Steering wheel, spinner knob, horn in center
- Seat belt, orange, retractable, 51 mm (2 in)
- Storage, personal (trays [3], seat pocket)
- Steering column, tilt adjusted
- Column mounted multi function control: lights, roading, wipers, self cancelling turn signals
- Quick coupler switch, in cab

Display, analog and digital

- Gauges (2), hydraulic oil, engine coolant
- Digital with soft touch buttons fuel level, speed range, speedometer, service hour meter,
   service/maintenance information, hydraulic and power train performance and aggressiveness settings,
   security passcode (multiple languages)

Joystick, seat mounted, standard multifunction

- FNR, auxiliary roller, speed range select, continuous flow, differential lock, horn
- Arm rest, padded right, multiple position vertical height

Seat, manual height adjustment, (cab) fabric with adjustable left arm rest, (canopy) vinyl

#### cap

- Doors (2), fixed glass
- Wipers, front and rear, full front coverage
- Windshield, front single piece
- Window, rear heated
- Radio ready, speakers and wiring
- Air vents, (4) screen, (7) directional
- Heating, mechanical control unit
- Sun visor, solid, front full width
- Interior light (incandescent)

#### **OTHER**

Fenders, front and rear

Ground level easy access daily service points

Loader arm safety brace

Lockable main and side engine enclosures

Lockable, fuel cap, HVAC filters, nose cone

Machine lifting/tie down points

Paint, Electro-Coat primer, gloss topcoat

Recovery hitch with pin

Scheduled Oil Sampling (S·O·S<sup>SM</sup>) ports, engine oil and hydraulic oil

## 908 OPTIONAL EQUIPMENT

#### **POWER TRAIN**

Antifreeze, extended life coolant, -50° C (-58° F)

Cold start - jacket water heater, bypass valve

Creep and throttle lock function

Fuel pump, priming, electric (Dependent on regional regulations.)

40 km/h (25 mph) hydrostatic transmission, 3-speed, "shift on the go", secondary steering and boosted brakes

Power train mode, utility (includes keypad)

## **ELECTRICAL**

Lighting packages, multiple; front, rear, engine bay (LED or HAL)

Push to start

Work tool wiring harness, (3) in cab switches

## **HYDRAULICS**

Auxiliary flow, single standard (3) valve, single high flow (3) valve, dual high flow (4) valve

Caterpillar Bio HYDO Advanced hydraulic oil

Connect under pressure and case drain

Ride Control or load check valves\*

Reversing fan

Quick disconnect auxiliary hydraulics

## **OPERATOR STATION**

Air Conditioning, automatic temperature control (ATC)

Doors, sliding windows (left and right)

Interior light, door activated

Joystick, FNR, twin auxiliary roller, differential lock, horn

Joystick, seat mounted, multifunction

Mirrors (2) electronically adjustable, heated external, plus lower parabolic mirror

Phone holder, spring loaded

Radio, FM or digital audio broadcast

Seat belt options, multiple

Seat packages; deluxe or premium

Secondary display, front or rear view camera

Soft touch keypad options, 8 or 16 button

Storage, lockable box or lockable cooled box

Sun visor, rear perforated

USB ports (2), interior

#### **OTHER**

Couplers, vertical (SSL), horizontal (HPL-V, HPL-A) Rotary sensors (snubbing, kickouts, parallel) High lift option