



# 120

## Motor Grader

# Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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# 120 LVR Motor Grader Specifications

## 120 LVR Engine

Engine Model	Cat® C7.1	
Net Engine Power Range ISO 9249	81 - 134 kW	109 - 180 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	1.9 gal
Torque Rise (Non-AWD)	29%	
Torque Rise (AWD)	29%	
Maximum Torque	822N•m	606 lbf-ft
Rated Speed	2,000 rpm	
Number of Cylinders	6	
Idle Speed		
High Idle Speed	2,150 rpm	
Low Idle Speed (1F-8F and 1R-6R)	1,030 rpm	
Maximum Altitude at Full Power		
Non-AWD	3000 m	9,843 ft
AWD	1676 m	5,499 ft

## 120 LVR Powertrain

Forward/Reverse Gears	9 Forward/6 Reverse including finish gear
Transmission	Direct Drive Powershift, Countershift
Air Cleaner	Dry
Brakes	Type System
Service	Dual Circuit Hydraulic
Parking	Spring Apply/Hydraulic Release
Secondary	Dual Circuit Hydraulic

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- See page 12 for Environmental Declarations and Sustainability information.
- Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,000 rpm.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible\* with ULSD blended with the following lower-carbon intensity fuels\*\* up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*\*\*
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

\* While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.

\*\* Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

\*\*\* Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

# 120 LVR Motor Grader Specifications

## 120 LVR Hydraulic System

Type (Implement/Steering/Brake)	Closed - Center
Type (AWD)	Closed - Center
Circuit Type	Parallel Post Compensated
Pump Type	Variable Piston
Pump Output	24 129 kPa at 2,000 rpm
System Flow	0 - 141 L/min 0 - 37 gal/min

## 120 LVR Operating Specifications

Top Speed Forward	48.3 km/h	30.0 mph
Top Speed Reverse	38.1 km/h	23.7 mph
Turning Radius, Outside Front Tires	7.4 m	291.3 in
Steering Range	50°	
Articulation Angle	20°	
Front Wheel Lean	18°	
Total Oscillation	32°	

### Forward

Finish Gear (FG)	3 km/h	1.9 mph
1st	4.1 km/h	2.5 mph
2nd	5.6 km/h	3.5 mph
3rd	8.2 km/h	5.1 mph
4th	11.2 km/h	7.0 mph
5th	17.7 km/h	11.0 mph
6th	24.1 km/h	15.0 mph
7th	33.2 km/h	20.6 mph
8th	48.3 km/h	30.0 mph

### Reverse

1st	3.3 km/h	2.1 mph
2nd	6.1 km/h	3.8 mph
3rd	8.9 km/h	5.5 mph
4th	14.0 km/h	8.7 mph
5th	26.2 km/h	16.3 mph
6th	38.1 km/h	23.7 mph

• Machine speed measured at 2,150 rpm with 14.00R24 radial tires, no slip.

## 120 LVR Net Power - AWD

### Gear

#### Forward

Finish Gear (FG)	81 kW	109 hp
1st	109 kW	146 hp
2nd	114 kW	153 hp
3rd	120 kW	161 hp
4th	122 kW	164 hp
5th	141 kW	189 hp
6th	141 kW	189 hp
7th	141 kW	189 hp
8th	134 kW	180 hp

#### Reverse

1st	109 kW	146 hp
2nd	114 kW	153 hp
3rd-6th	120 kW	161 hp

## 120 LVR Net Power - Non AWD

### Gear

#### Forward

Finish Gear (FG)	81 kW	109 hp
1st	108 kW	145 hp
2nd	111 kW	149 hp
3rd	114 kW	153 hp
4th	122 kW	164 hp
5th	134 kW	180 hp
6th	134 kW	180 hp
7th	134 kW	180 hp
8th	134 kW	180 hp

#### Reverse

1st	108 kW	145 hp
2nd	111 kW	149 hp
3rd-6th	114 kW	153 hp

# 120 LVR Motor Grader Specifications

## 120 LVR Operating Weight

Weight, Typically Equipped – (Non-AWD)	16 831 kg	37,106 lb
Front Axle:	4666 kg	10,287 lb
Rear Axle:	12 165 kg	26,819 lb

## 120 LVR Electrical

Starting System Type	Direct Electric
Standard Duty Battery	
CCA at –18°	900 amp
Volts	12 V
Quantity	2
Heavy Duty Battery	
CCA at –18°	1,125 amp
Volts	12 V
Quantity	2
Extreme Duty Battery	
CCA at –18°	1400 amp
Volts	12 V
Quantity	2
Standard Alternator	145 amps at 24 V
Heavy Duty Alternator	150 amps at 24 V

## 120 LVR Service Refill Capacities

Standard Circle Drive	7 L	1.8 gal
Cooling System	53 L	14.0 gal
Diesel Exhaust Fluid (DEF)	11 L	2.9 gal
Engine Crankcase	18 L	4.8 gal
Fuel Tank	246 L	65.0 gal
Hydraulic System (Non-AWD)	94 L	24.8 gal
Hydraulic System (AWD)	124 L	32.8 gal
Tandem Housing (each)	60 L	15.9 gal
Transmission and Differential	64 L	16.9 gal

# 120 JOY Motor Grader Specifications

## 120 JOY Engine

Engine Model	Cat® C7.1	
Net Engine Power Range ISO 9249	85 - 129 kW	114 - 173 hp
Net Engine Power Range (AWD) ISO 9249	84 - 129 kW	113 - 173 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	1.9 gal
Torque Rise (Tandem)	29%	
Torque Rise (AWD)	28%	
Maximum Torque	822N•m	606 lbf-ft
Rated Speed	2,000 rpm	
Number of Cylinders	6	
Idle Speed		
High Idle Speed	2,150 rpm	
Low Idle Speed (1F-8F and 1R-6R)	1,030 rpm	
Maximum Altitude at Full Power		
Non-AWD	3000 m	9,843 ft
AWD	1676 m	5,499 ft

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- See page 12 for Environmental Declarations and Sustainability information.
- Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,000 rpm.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible\* with ULSD blended with the following lower-carbon intensity fuels\*\* up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*\*\*
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

\* While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.

\*\* Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

\*\*\* Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

## 120 JOY Powertrain

Forward/Reverse Gears	8 Forward/6 Reverse
Transmission	Direct Drive Powershift, Countershaft
High Idle Speed	2,150 rpm
Low Idle Speed	1,030 rpm
Air Cleaner	Dry
Brakes	Type System
Service	Dual Circuit Hydraulic
Parking	Spring Apply/Hydraulic Release
Secondary	Dual Circuit Hydraulic

## 120 JOY Hydraulic System

Type (Implement/Steering/Brake)	Closed - Center
Type (AWD)	Closed - Center
Circuit Type	Parallel Post Compensated
Pump Type	Variable Piston
Pump Output	24 129 kPa at 2,000 rpm
System Flow	0 - 200 L/min 0 - 53 gal/min

# 120 JOY Motor Grader Specifications

## 120 JOY Operating Specifications

Top Speed Forward	48.3 km/h	30 mph
Top Speed Reverse	38.1 km/h	23.7 mph
Turning Radius, Outside Front Tires	7.4 m	291.3 in
Steering Range	50°	
Articulation Angle	20°	
Front Wheel Lean	18°	
Total Oscillation	32°	
Forward		
1st	4.1 km/h	2.5 mph
2nd	5.6 km/h	3.5 mph
3rd	8.2 km/h	5.1 mph
4th	11.2 km/h	7.0 mph
5th	17.7 km/h	11.0 mph
6th	24.1 km/h	15.0 mph
7th	33.2 km/h	20.6 mph
8th	48.3 km/h	30.0 mph
Reverse		
1st	3.3 km/h	2.1 mph
2nd	6.1 km/h	3.8 mph
3rd	8.9 km/h	5.5 mph
4th	14.0 km/h	8.7 mph
5th	26.2 km/h	16.3 mph
6th	38.1 km/h	23.7 mph

Machine speed measured at 2,150 rpm with 14.00R24 radial tires, no slip.

## 120 JOY Net Power - Non AWD

<b>Gear</b>		
Forward		
1st	108 kW	145 hp
2nd	111 kW	149 hp
3rd	114 kW	153 hp
4th	122 kW	164 hp
5th	134 kW	180 hp
6th	134 kW	180 hp
7th	134 kW	180 hp
8th	134 kW	180 hp
Reverse		
1st	108 kW	145 hp
2nd	111 kW	149 hp
3rd-6th	114 kW	153 hp

## 120 JOY Net Power - AWD

<b>Gear</b>		
Forward		
1st	109 kW	146 hp
2nd	114 kW	153 hp
3rd	120 kW	161 hp
4th	122 kW	164 hp
5th	141 kW	189 hp
6th	141 kW	189 hp
7th	141 kW	189 hp
8th	134 kW	180 hp
Reverse		
1st	109 kW	146 hp
2nd	114 kW	153 hp
3rd-6th	120 kW	161 hp

## 120 JOY Operating Weight

Weight, Typically Equipped (AWD)	17 081 kg	37,657 lb
Front Axle:	4846 kg	10,684 lb
Rear Axle:	12 235 kg	26,974 lb

## 120 JOY Electrical

Starting System Type	Direct Electric
Standard Duty Battery	
CCA at -18°	1125 amp
Volts	12 V
Quantity	2
Heavy Duty Battery	
CCA at -18°	1125 amp
Volts	12 V
Quantity	2
Extreme Duty Battery	
CCA at -18°	1400 amp
Volts	12 V
Quantity	2
Standard Alternator	145 amp at 24 V
Heavy Duty Alternator	150 amp at 24 V

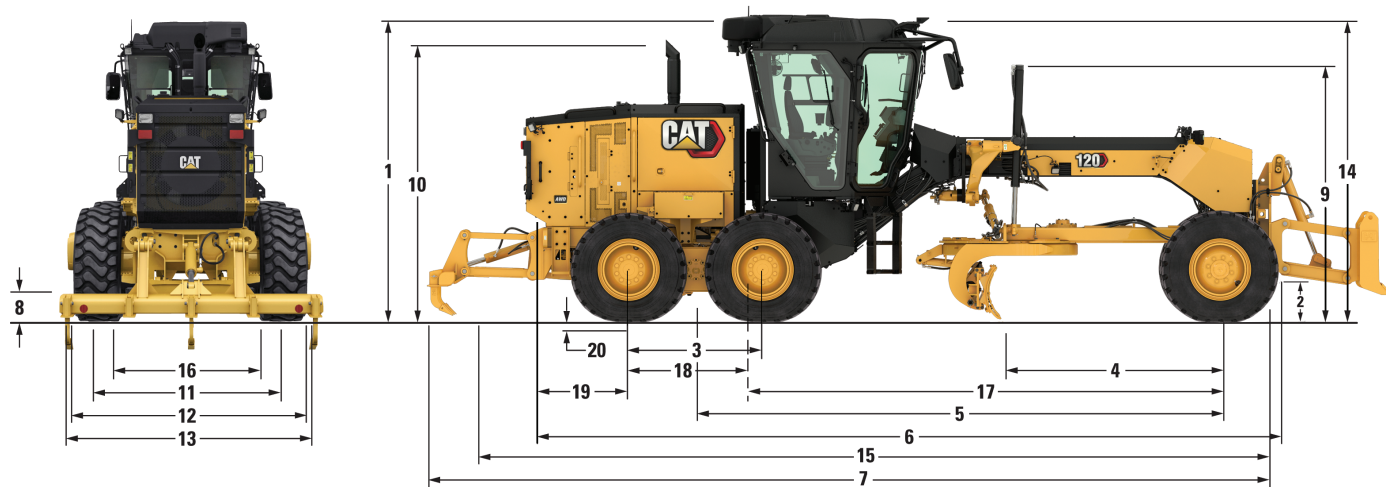
## 120 JOY Service Refill Capacities

Standard Circle Drive	7 L	1.8 gal
Cooling System	52.5 L	13.9 gal
DEF	11 L	2.9 gal
Engine Crankcase	18 L	4.8 gal
Fuel Tank	246 L	65.0 gal
Hydraulic System (Non-AWD)	75 L	19.8 gal
Hydraulic System (AWD)	75 L	19.8 gal
Tandem Housing (each)	60 L	15.9 gal
Transmission and Differential	64 L	16.9 gal

# 120 Motor Grader Specifications

## Dimensions

All data applies to all 120 configurations (Non-AWD, AWD, LVR, and JOY) unless otherwise noted. All dimensions are approximate and may vary dependent on tire selection. Dimensions below are calculated with 14.0R24 tires.



1	Height – Top of Cab	3465 mm	136.4 in
2	Height – Front Axle Center	590 mm	23.2 in
3	Length – Between Tandem Axles	1510 mm	59.4 in
4	Length – Front Axle to Moldboard	2551 mm	100.4 in
5	Length – Front Axle to Mid Tandem	5945 mm	234.1 in
6	Length – Front Tire to Rear of Machine	8534 mm	336 in
7	Length – Push Plate to Ripper	9838 mm	387.3 in
8	Ground Clearance at Rear Axle	349 mm	13.7 in
9	Height to Top of Cylinders	2895 mm	114 in
10	Height to Exhaust Stack	2924 mm	115.1 in
11	Width – Tire Center Lines	2070 mm	81.5 in
12	Width – Outside Rear Tires	2491 mm	98.1 in

13	Width – Outside Front Tires	2495 mm	98.2 in
14	Maximum Height – with Attachments	3440 mm	135.4 in
15	Length – Push Plate to Raised Ripper	9583 mm	377.3 in
16	Width – Inside Rear Tires	1649 mm	64.9 in
17	Length – Front Axle to Articulation Hitch	5284 mm	208 in
18	Length – Rear Axle to Articulation Hitch	660 mm	26 in
19	Length – Rear Axle to Rear of Frame	1726 mm	68 in
20	Height – Tire Deflection at Performance Weight	45 mm	1.8 in

## Optional Tire Arrangements

Rim Size	Wheel Group	Tires
10 x 24	Multi-Piece	13.00-24
10 x 24	Multi-Piece	14.00-24
10 x 24	Multi-Piece	14.00-24
14 x 25	Multi-Piece	14.00R24
14 x 25	Multi-Piece	17.5R25
14 x 25	Multi-Piece	17.5R-25

**Note:** Consult your dealer for individual tire width, size and brand.

# 120 Motor Grader Specifications

## Moldboard

Moldboard (Size)	12 ft Moldboard		14 ft Moldboard	
Height	490 mm	19.3 in	490 mm	19.3 in
Width	3556 mm	12 ft	4166 mm	14 ft
Thickness	22 mm	0.9 in	22 mm	0.9 in
Arc Radius	413 mm	16.3 in	413 mm	16.3 in
Throat Clearance	105 mm	4.1 in	105 mm	4.1 in

## Cutting Edge

Height	152.4 mm	6.0 in	203.2 mm	8.0 in
Width	1750.9 mm	6 ft	2055.7 mm	7 ft
Thickness	15.9 mm	0.6 in	19	0.7 in
Height (Cutting Edges with Moldboard)	3678.8 mm	144.8 in	4288.8 mm	168.9 in
Width (Cutting Edges with Moldboard)	536.8 mm	21.1 in	563.8 mm	22.2 in

## End Bit

Height	511.2 mm	20.1 in	511.2 mm	20.1 in
Width	235 mm	1 ft	12.7 mm	0 ft
Thickness	12.7 mm	0.5 in	4328 mm	170.4 in
Height (Cutting edges with Moldboard)	3718.4 mm	146.4 in	563.8 mm	22.2 in
Width (Cutting edges with Moldboard)	563.8 mm	22.2 in	3718.4 mm	146.4 in

## Drawbar and Circle

### Drawbar

Height	152 mm	6.0 in
Width	76.2 mm	3.0 in
Thickness	12.7 mm	0.5 in
Shoes	6 – with replaceable wear strips	

### Circle

Section	Rolled Ring Forging	
Outside Diameter	1530 mm	60.2 in
Number of Teeth	64	
Rotation	360°	

# 120 Motor Grader Specifications

## Blade Range

Circle Centershift		
Left	656 mm	25.8 in
Right	656 mm	25.8 in
Moldboard Side Shift with 17.5/R25 tires		
Left	512 mm	20.2 in
Right	663 mm	26.1 in
Maximum Shoulder Reach Outside of Tires (12 ft moldboard)		
Left	141 mm	5.6 in
Right	1579 mm	62.2 in
Maximum Shoulder Reach Outside of Tires (14 ft moldboard)		
Left	2020 mm	79.5 in
Right	2177 mm	85.7 in
Maximum Blade Position Angle (both sides)		90°
Maximum Lift Above Ground	410 mm	16.1 in
Maximum Depth of Cut	775 mm	30.5 in
Maximum Blade Tip		
Forward		40°
Rear		5°

## Ripper/Scarifier

Front, V-Shape Carriage		
Working Width	1205 mm	47.4 in
Scarifying Depth, Maximum	467 mm	18.4 in
Scarifier Shank Holders		5/11
Scarifier Shank Holder Spacing	116 mm	4.6 in
Mid, V-Shape Carriage		
Working Width	1781 mm	70.1 in
Scarifying Depth, Maximum	292 mm	11.5 in
Scarifier Shank Holders		5
Scarifier Shank Holder Spacing	116 mm	4.6 in
Mid, Straight Carriage		
Working Width	2486 mm	97.9 in
Scarifying Depth, Maximum	283.8 mm	11.2 in
Scarifier Shank Holders		19
Scarifier Shank Holder Spacing	114.3 mm	4.5 in
Rear		
Ripping Depth, Maximum	288 mm	11.3 in
Ripper Shank Holders		5
Ripper Shank Holder Spacing	533 mm	21.0 in

## Standards

Rollover Protective Structure (ROPS)	ISO 3471:2008
Falling Objects Protective Structure (FOPS)	ISO 3449:2005 Level II
Brakes	ISO 3450:2011
Steering	SO 5010:2019* (LVR) ISO 5010:2019 (JOY)

\*When equipped with optional secondary steering

## Sound Standards

Sound	ISO 6395:2008 ISO 6396:2008
Spectator Sound Level (LVR)	108 dB(A)
Spectator Sound Level (JOY)	105 dB(A)
Operator Sound Level (LVR)	75 dB(A)
Operator Sound Level (JOY)	71 dB(A)

## Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. Refer to the machine labeling for identification of the gas.
- If equipped with R134a (Global Warming Potential = 1430), the system contains 1.6 kg (3.5 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 2.288 metric tonnes (2.521 tons).

# 120 Standard and Optional Equipment

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>POWERTRAIN</b>			<b>GUARDS</b>		
Cat® C7.1 engine	✓		Front fenders <sup>2</sup>		✓
Eco mode	✓		Rear fenders		✓
Extreme duty starter		✓	Front axle guard for all-wheel drive		✓
50° C (122° F) ambient capacity	✓		Transmission		✓
43° C (109° F) ambient capacity – all wheel drive	✓		Cover, under cab platform		✓
All-Wheel Drive (AWD)		✓	<b>ATTACHMENTS</b>		
Differential lock/unlock	✓		Push block		✓
Engine idle shutdown timer	✓		Ripper		✓
Hydraulic demand fan	✓		Scarifier		✓
Reversing fan		✓	Mid-machine scarifier		✓
Biodiesel capability up to B30	✓		Front lift group		✓
Transmission, autoshift <sup>1</sup>	✓		Front blade		✓
<b>MOLDBOARD</b>					
Circle drive slip clutch	✓				
Top adjust drawbar circle moldboard	✓				
Circle saver		✓			
<b>ELECTRICAL</b>					
Sealed alternator	✓				
Reversing lights	✓				
Breaker panel	✓				
1,125 CCA heavy duty batteries	✓				
1,400 CCA extreme duty batteries		✓			
Electric starter	✓				
<b>SAFETY AND SECURITY</b>					
Parking brake	✓				
Back up alarm	✓				
Ground-level fuel fill	✓				
Signaling/warning horn	✓				
Warning beacon		✓			
Rearview mirror	✓				
Rearview camera		✓			
Hydraulic brakes	✓				
Secondary steering system <sup>1</sup>	✓				
Side view mirrors	✓				
<b>SERVICE AND MAINTENANCE</b>					
Ground-level DEF fill	✓				
Grouped location for engine oil and fuel filters	✓				
Extended life coolant	✓				
<b>CAT TECHNOLOGY</b>					
Cat Grade with Digital Blade Slope Meter		✓			
Cat Grade Attachment Ready Option (ARO)		✓			
Cat Grade with Cross Slope		✓			
Stable blade		✓			
Remote services		✓			

<sup>1</sup>Optional on lever machines.

<sup>2</sup>Not available for lever and steering wheel tandem machines.

# 120 Standard and Optional Equipment

## Standard and Optional Equipment *(continued)*

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

	Lever/Steering Wheel		Joystick	
	Standard	Optional	Standard	Optional
<b>CAB</b>				
Vinyl seat	✓		N/A	N/A
Rollover Protective Structure/Falling Objects Protective Structure	✓		✓	
Air suspension adjustable seat	✓		✓	
Leather heated/cooled seat		✓		✓
Seat belt, retractable	✓		✓	
Seat belt, indication		✓	✓	
Heating, ventilation, and air conditioning (HVAC) system		✓	✓	
Defrost fans		✓		✓
Halogen lighting		✓		✓
Cup and bottle holders	✓		✓	
Implement lockout		✓	✓	
Adjustable control console	✓		✓	
Interior lights (dome lamp)	✓		✓	
LED lighting		✓		✓
Entertainment Radio Ready		✓	✓	
Coat hook	✓		✓	
USB/Auxiliary Radio		✓		✓
Joystick controls		N/A	✓	
Communication radio mounting		✓		✓
Steering wheel and lever controls	✓		N/A	
Heated mirrors		✓		✓
Electric throttle control	✓		✓	
Front windshield wiper	✓		✓	
Front windshield wiper (lower)		✓	N/A	N/A
Rear wiper		✓		✓
Rear window screen		✓		✓
Cab storage	✓		✓	
Side window wipers	N/A	N/A		✓
Slider side window		✓		✓

# 120 Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

## Engine

- The Cat® C7.1 engine is available in configurations that meet Korea Stage V, U.S. EPA Tier 4 Final, and EU Stage V emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible\* with ULSD blended with the following lower-carbon intensity fuels\*\* up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*\*\*
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

\* *While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.*

\*\* *Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

\*\*\* *Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).*

## Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas.
  - If equipped with R134a (Global Warming Potential = 1430), the system contains 1.5 kg (3.5 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 2.288 metric tonnes (2.521 tons).

## Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
  - Barium < 0.01%
  - Cadmium < 0.01%
  - Chromium < 0.01%
  - Lead < 0.01%

## Sound Performance

Spectator Sound Level – Non-AWD (ISO 6395:2008)	105 dB(A)
Spectator Sound Level – AWD (ISO 6395:2008)	106 dB(A)
Operator Sound Level – Joystick (ISO 6396:2008)	71 dB(A)
Operator Sound Level – Lever/Steering Wheel (ISO 6396:2008)	75 dB(A)

- The dynamic spectator sound power level measurements are performed according to the dynamic test procedures that are specified in ISO 6395:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed. The machine was equipped with sound suppression system.
- The dynamic operator sound pressure level measurements are performed according to the dynamic test procedures that are specified in ISO 6396:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed, with the cab doors and the cab windows closed. The cab was properly installed and maintained.

## Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

## Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Eco mode minimizes fuel consumption for light applications
  - Engine Idle Shutdown Timer reduces fuel burn, greenhouse gas emissions and unnecessary idle time by shutting down the machine after a pre-set idling period
  - Cat Grade helps reduce fuel burn and greenhouse gas emissions by enabling you to achieve grade faster and more accurately by automating blade actions
  - Cut maintenance costs up to 15% with extended service intervals next generation filters
  - Improve jobsite efficiency with lower operating costs with VisionLink™ insights

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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AEXQ4465-00 (02-2026)  
LVR Build Number 15A  
JOY Build Number 14B  
(Aus-NZ, Colombia, Chile, Europe,  
South Korea, N Am, Türkiye)

