140 LVR

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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140 LVR Motor Grader Specifications

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

Engine

Engine Model	Cat® C7.1	
Net Engine Power Range (Tandem)		
ISO 9249: SAE J1349	94-174 Kw	126-233 hp
Net Engine Power Range (AWD)		
ISO 9249: SAE J1349	98-194 Kw	131-260 hp
Bore	105 mm	4.1in
Stroke	135 mm	5.3 in
Displacement	7.01 L	1.9 gal
Torque Rise (Tandem)	29%	
Torque Rise (AWD)	28%	
Maximum Torque (Tandem)	1070 N•m	789.2 lbf-ft
Maximum Torque (AWD)	1159 N•m	854.9 lbf-ft
Derating Altitude (Tandem)	4500 m	14,764 ft
Derating Altitude (AWD)	3000 m	9,843 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)	800 rpm	

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- See page 10 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 2,150 rpm.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or 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.

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

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

Powertrain

Forward/Reverse Gears	9 Forward/6 Reverse including finish gear
Transmission	Direct Drive Powershift
High Idle Speed	2,150 rpm
Low Idle Speed	800 rpm
Air Cleaner	Dry
Brakes	Type System
Service	Dual Circuit Hydraulic
Service, Surface Area – Gross area per machine	23,000 cm^2
Parking	Spring Apply Hydraulic Release
Secondary	Dual Circuit Hydraulic

Hydraulic System

Type (Implement/Steering/Brake)	Closed – Center	
Type (AWD)	Closed – Center	
Circuit Type	Parallel	
Pump Type	Variable Piston	
Pump Output	24,150 kPa at 2,000 rpm	3,503 psi at 2,000 rpm
System Flow for Implements, Steering, and Brake Pump		
100cc (if equipped with reversing fan)	0-200 L/min	0-52.83 gal/min
Maximum System Pressure	25500 kPa	3698 psi
Reservoir Tank Capacity	60 L	15.85 gal
Standby Pressure	5000-6000 kPa	725-870 psi

*Pump output measured at 2,000 rpm rated speed

140 LVR Motor Grader Specifications

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Operating Specifications

Top speed forward	48.3 km/h	30.1 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° Left and Right	
Articulation Angle	20° Left and Right	
Front Wheel Lean	18° Left and Right	
Total Oscillation*	32°	
Forward		
Finish Gear (FG)	3.0 km/h	1.9 mph
1st	4.1 km/h	2.6 mph
2nd	5.6 km/h	3.5 mph
3rd	8.2 km/h	5.1 mph
4th	11.3 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	30.1 mph
Reverse		
1st	3.3 km/h	2.0 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

Operating Weight – U.S. EPA Tier 3/EU Stage IIIA Equivalent

Weight, Typically Equipped, Lever Configuration, Tandem (Non-AWD)	18 748 kg	41,332 lb
Front Axle:	5238 kg	11,548 lb
Rear Axle:	13 510 kg	29,784 lb

Operating Weight – U.S. EPA Tier 4 Final/EU Stage V

Weight, Typically Equipped, Lever Configuration, Tandem (Non-AWD)	19 127 kg	42,168 lb
Front Axle:	5425 kg	11,960 lb
Rear Axle:	13 702 kg	30,208 lb
Weigh, Typically Equipped, Lever Configuration (AWD)	19 631 kg	43,279 lb
Front Axle:	5579 kg	12,300 lb
Rear Axle:	14 052 kg	30,979 lb

* Typically equipped operating weight is calculated with full fuel tank, coolant, lubricants, operator, push block, transmission guard, rear ripper/scarifier, 14.0R24 tires on multi-piece rims, and other equipment.

140 LVR Motor Grader Specifications

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

Electrical

Starting System Type	Direct Electric
Heavy Duty Battery	
CCA at –18°	900 amp
Volts	12V
Quantity	2
Extreme Duty Battery (Standard Weather)	
CCA at –18°	1,125 amp
Volts	12V
Quantity	2
Extreme Duty Battery (Cold Weather Plus)	
CCA at –18°	1,400 amp
Volts	12V
Quantity	2
Basic Alternator	115 amps at 24V
Maximum Alternator	150 amps at 24V
Heavy Duty Alternator	200 amps at 24V

Service Refill Capacities

Standard Circle Drive	7 L	1.8 gal
Optional High Performance Circle	9.5 L	2.5 gal
Cooling System	43 L	11.4 gal
Diesel Exhaust Fluid (DEF) Tank	17 L	4.5 gal
Engine Crankcase	20 L	5.3 gal
Fuel Tank	371 L	98.0 gal
Hydraulic System	60 L	15.9 gal
Tandem Housing (each)	70 L	18.5 gal
Transmission and Differential	68 L	18.0 gal

Moldboard

Moldboard (Size)	**12 ft Moldboard**		**14 ft Moldboard**		**14 ft Plus Moldboard**	
Height	609.5 mm	24.0 in	609.5 mm	2.0 ft	686 mm	27.0 in
Width	3.7 m	12.1 ft	4.3 m	14.1 in	4.3 m	14.1 in
Thickness	22 mm	0.9 in	22 mm	0.9 in	25 mm	1.0 in
Arc Radius	413 mm	16.3 in	413 mm	16.3 in	413 mm	16.3 in
Throat Clearance	125 mm	4.9 in	117 mm	4.6 in	83 mm	3.3 in
Cutting Edge						
Height	152.4 mm	6.0 in	203.2 mm	8.0 in	203.2 mm	8.0 in
Width	1.8 m	5.9 ft	2.1 m	6.9 ft	2.1 m	6.9 in
Thickness	15.9 mm	0.6 in	19 mm	0.7 in	19 mm	0.7 in
Height (Cutting Edges with Moldboard)	535.3 mm	21.1 in	563 mm	22.2 in	563 mm	22.2 in
Width (Cutting Edges with Moldboard)	3.7 m	12.1 ft	4.3 m	14.1 ft	4.3 m	14.1 ft
End Bit						
Height	449.2 mm	17.7 in	449.2 mm	17.7 in	511.2 mm	20.1 in
Width	152.4 mm	6.0 in	152.4 mm	6.0 in	235 mm	9.3 in
Thickness	15.9 mm	0.6 in	15.9 mm	0.6 in	12.5 mm	0.5 in
Height (Cutting edges with Moldboard)	553.6 mm	21.8 in	553.6 mm	21.8 in	577.2 mm	22.7 in
Width (Cutting edges with Moldboard)	3.7 m	12.1 ft	3.7 mm	12.1 ft	4.3 mm	14.1 ft

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

Drawbar and Circle

Range of Motion	Standard
Circle Drive	360° of Blade Rotation
Link Bar	7 Positions to adjust the drawbar circle moldboard range of motion
Drawbar Shoes	4 with replaceable wear strips

Standard Circle and Drawbar

Circle		
Section	Rolled Ring Forging	
Outside Diameter	1530 mm	60.2 in
Number of Teeth	64	
Rotation	360º when equipped with Cat Grade	

Drawbar		
Height	152.4 mm	6.0 in
Width	76.2 mm	3.0 in
Thickness	12.7 mm	0.5 in
Shoes	6 - with replaceable wear strips	
Bearing	N/A	

High Performance Circle and Drawbar

Circle		
Section	Welded Ring	
Outside Diameter	1202 mm	47.3 in
Number of Teeth	110	
Rotation	Right 70º	Left 70º

Drawbar		
Height	9.5 L	2.5 gal
Width	43 L	11.4 gal
Thickness	17 L	4.5 gal
Shoes	N/A	
Bearing	320 Hex Bearing	

140 LVR Motor Grader Specifications

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

BLADE RANGE (NON-AWD)

	STANDARD		TOP ADJUST		HIGH PERFORMANCE CIRCLE	
Circle centershift with 14 ft moldboard						
Left	724 mm	28.5 in	724 mm	28.5 in	724 mm	28.5 in
Right	740 mm	29.1 in	740 mm	29.1 in	740 mm	29.1 in
Moldboard side shift with 17.5/R25 MX12 tires						
Left	821 mm	32.3 in	958 mm	37.7 in	958 mm	37.7 in
Right	947 mm	37.3 in	815 mm	32.1 in	815 mm	32.1 in
Maximum shoulder reach outside tires (12 ft moldboard)						
Left	1830 mm	72.0 in	1973 mm	77.7 in	1973 mm	77.7 in
Right	1948 mm	76.7 in	1797 mm	70.7 in	1797 mm	70.7 in
Maximum shoulder reach outside of tires (14 ft moldboard)						
Right	2496 mm	98.3 in	2632 mm	103.6 in	2632 mm	103.6 in
Left	2612 mm	102.8 ft	2482 mm	97.7 in	2482 mm	97.7 in
Maximum blade position angle (both sides)			104° (L) / 101.7° (R)			
Maximum lift above ground	447 mm	17.6 in	436 mm	17.2 in	436 mm	17.2 in
Maximum depth of cut	640 mm	25.2 in	640 mm	25.2 in	640 mm	25.2 in
Maximum blade tip						
Forward	50°		50°		50°	
Rear	5°		5°		5°	

BLADE RANGE (AWD)

	STANDARD		TOP ADJUST		HIGH PERFORMANCE CIRCLE	
Circle centershift with 14 ft moldboard						
Left	724 mm	28.5 in	724 mm	28.5 in	724 mm	28.5 in
Right	740 mm	29.1 in	740 mm	29.1 in	740 mm	29.1 in
Moldboard side shift with 17.5/R25 MX12 tires						
Left	821 mm	32.3 in	958 mm	37.7 in	958 mm	37.7 in
Right	947 mm	37.3 in	815 mm	32.1 in	815 mm	32.1 in
Maximum shoulder reach outside tires (12 ft moldboard)						
Left	1759 mm	69.3 in	1902 mm	74.9 in	1902 mm	74.9 in
Right	1877 mm	73.9 in	1726 mm	68.0 in	1726 mm	68.0 in
Maximum shoulder reach outside of tires (14 ft moldboard)						
Right	2425 mm	95.5 in	2561 mm	100.8 in	2561 mm	100.8 in
Left	2541 mm	100.0 in	2411 mm	94.9 in	2411 mm	94.9 in
Maximum blade position angle (both sides)			104° (L) / 101.7° (R)			
Maximum lift above ground	447 mm	17.6 in	436 mm	17.2 in	436 mm	17.2 in
Maximum depth of cut	640 mm	25.2 in	640 mm	25.2 in	640 mm	25.2 in
Maximum blade tip						
Forward	50°		50°		50°	
Rear	5°		5°		5°	

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

Standards

Cab Rollover Protective Structure (ROPS)	ISO 3471:2008
Cab Fallover Protective Structure (FOPS)	ISO 3449:2005, Level II
Brakes	ISO 3450:2011; AIS-143:2018
Steering	ISO 5010:2019*

*When equipped with optional secondary steering.

Sound Standards

Sound	ISO 6395:2008 ISO 6396:2008
Spectator Sound Level	105 dB(A)
Operator Sound Level – Lever/ Steering Wheel	69 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. The machine was equipped with sound suppression system.

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_2 equivalent of 2.288 metric tonnes (2.521 tons).

Rear Ripper/Scarifer

Ripping Depth Maximum	424 mm	16.7 in
Ripper Shank Holder	5	
Ripper Shank Holder Spacing		
Minimum	523.4 mm	20.6 in
Maximum	543.3 mm	21.4 in
Scarifier Depth Maximum	264 mm	10.4 in
Scarifier Shank Holders	9	
Scarifier Shank Spacing		
Minimum	255.7 mm	10.1 in
Maximum	277.7 mm	10.9 in
Penetration Force		
Non-AWD	84.6 kN	19018.8 lbf
AWD	84.6 kN	19018.8 lbf
Pryout Force		
Non-AWD	104 kN	23380. lbf
AWD	121.4 kN	27291.8 lbf
Machine Length Increase, Beam Raised	649.2 mm	25.6 in

Scarifier

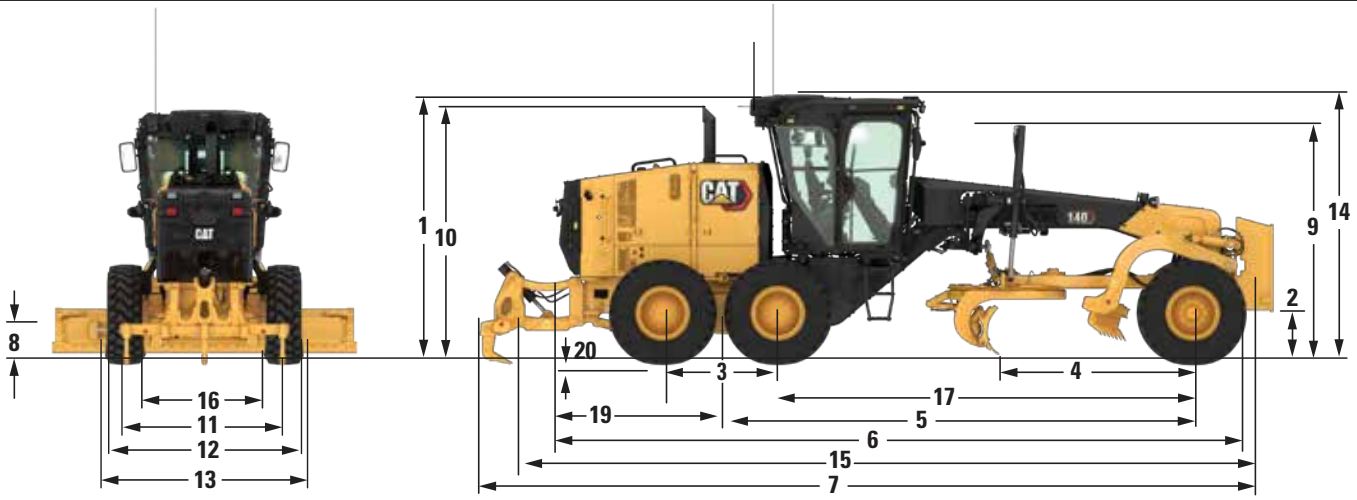
Front Scarifier, V-Shape		
Working Width	1205 mm	47.4 in
Scarifying Depth, Maximum	467 mm	18.4 in
Scarifier Shank Holders	5 / 11	
Scarifier Shank Holder Spacing	116 mm	4.6 in
Mid-Machine Scarifier, V-Shape Carriage		
Working Width	1781 mm	70.1 in
Scarifying Depth, Maximum	292 mm	11.5 in
Scarifier Shank Holders	13	
Scarifier Shank Holder Spacing	116 mm	4.6 in
Mid-Machine Scarifier, 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

140 LVR Motor Grader Specifications

All data applies to 140 LVR Non-AWD and AWD unless otherwise noted.

Dimensions

All dimensions are approximate and may vary dependent on tire selection. Dimensions below are calculated with 14.0R24 tires.



1	Height – Top of Cab	3454 mm	136.0 in
2	Height		
	Front Axle Center	612 mm	24.1 in
3	Length – Between Tandem Axles	1498 mm	59.0 in
4	Length		
	Front Axle to Moldboard	2564 mm	100.9 in
5	Length		
	Front Axle to Rear Axle	6136 mm	241.6 in
6	Length		
	Front Tire to Rear of Machine (Non AWD)	8911 mm	350.8 in
7	Length – Push Plate to Ripper	10297 mm	405.4 in
8	Ground Clearance at Rear Axle	333 mm	13.1 in
9	Height to Top of Cylinders	3044 mm	119.8 in
10	Height to Exhaust Stack	3313 mm	130.4 in
11	Width – Rear Tire Center Lines	2087 mm	82.2 in
12	Width – Outside Rear Tires	2532 mm	99.7 in

13	Width – Outside Front Tires		
	LVR Configuration, Tandem – Non-AWD	2521 mm	99.3 in
	LVR Configuration, AWD	2667 mm	105.0 in
14	Maximum Height With Attachments		
	LVR Configuration	2521 mm	99.3 in
15	Length – Push Plate to Raised Ripper	9963 mm	392.2 in
16	Width – Inside Rear Tires	1642 mm	64.6 in
17	Length		
	Front Axle to Articulation Hitch	5292 mm	208.3 in
18	Length – Rear Axle to Articulation Hitch	844 mm	33.2 in
19	Length – Rear Axle to Rear of Machine	2099 mm	82.6 in
20	Height – Tire Deflection at Performance Weight	64.5 mm	2.5 in

Optional Tire Arrangements

Rim Size	Wheel Group	Tires
9 × 24	Single-Piece	14.00-24
10 × 24	Multi-Piece	14.00-24
14 × 25	Multi-Piece	17.5R25

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

Standard and Optional Equipment

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

	Standard	Optional
OPERATOR ENVIRONMENT		
"B" pillar mirrors		✓
Adjustable steering wheel/lever controls	✓	
Air suspension seat		✓
AM/FM/Bluetooth®/WB radio		✓
Auxiliary heaters		✓
Base cab	✓	
Cab storage	✓	
CB radio ready		✓
Cell phone holder	✓	
Coat hook	✓	
Cup holder	✓	
Defrost fans		✓
Differential lock, manual	✓	
Digital blade slope meter		✓
Dome interior light	✓	
Electric throttle control	✓	
Entertainment radio ready		✓
Heated and ventilated premium seat		✓
Heating/cooling cab system	✓	
Information display screen	✓	
Lower front wipers		✓
Rear sun shades		✓
ROPS/FOPS	✓	
Satellite radio		✓
Seat belt	✓	
Vinyl seat	✓	
Wipers, front	✓	
Wipers, rear		✓
SAFETY		
Back-up alarm	✓	
Grab rails	✓	
Horn	✓	
Hydraulic brakes	✓	
Hydraulic system - integrated dead engine implement lower	✓	
Hydraulic system - integrated work port pressure relief	✓	
License plate bracket		✓
Manual lock out		✓
Operator Presence System	✓	
Parking brake	✓	
Rearview camera		✓
Rearview mirror	✓	
Secondary steering system		✓
Tandem toolbox	✓	
Tandem walkways	✓	
Warning beacon mounts		✓
Integrated hazard lights		✓
Sound suppression		✓

	Standard	Optional
POWERTRAIN		
Cat® C7.1	✓	
Eco mode	✓	
Reversing fan		✓
Transmission with Autoshift		✓
High-speed engine oil drain		✓
Ecology drain	✓	
Cold weather package		✓
Cold weather package plus		✓
Engine idle shutdown	✓	
Shifter with upshift/downshift rocker	✓	
All-Wheel Drive (AWD)		✓
DRAWBAR CIRCLE MOLDBOARD		
12 ft moldboard	✓	
14 ft moldboard		✓
Blade lift accumulators		✓
High Performance Circle		✓
Circle drive slip clutch	✓	
Circle saver (top adjust circle only)		✓
Standard circle	✓	
Top adjust circle		✓
ELECTRICAL		
150A alternator	✓	
Reversing lights	✓	
Breaker panel	✓	
900 CCA (Tier 3)	✓	
1,125 CCA heavy duty batteries (Tier 4 Final / Stage V)	✓	
LED lights	✓	
Low light and high light bars		✓
Snow wing LED lights		✓
SERVICE AND MAINTENANCE		
Ground-level DEF and Fuel Fill	✓	
Grouped location for engine oil and fuel filters	✓	
Extended life coolant	✓	
Next generation fluid filters	✓	
Engine service light		✓
Remote flash	✓	
PM alerts	✓	

140 LVR Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

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

	Standard	Optional
GUARDS		
Fender		✓
Cover, under cab platform		✓
Steering Cylinder Guards (AWD only)		✓
VERSATILITY		
Towing hitch		✓
L3 tires		✓
TIRES		
14-24		✓
17.5-25		✓
14.0R24		✓
17.5R25		✓
550/65R25		✓
ATTACHMENTS		
Lift Groups		✓
Counterweight		✓
Push block		✓
Mid-Machine Scarifier (MMS)		✓
Rear Ripper/Scarifier		✓
Moldboards		✓
Front Blade		✓
Snow Wings		✓
V-Plow		✓
Straight Plow		✓
Brooms		✓
One-way plow		✓
Angling plow		✓
U-V plow		✓
Trip edge plow		✓
Grader Bits2		✓

	Standard	Optional
TECHNOLOGY		
Attachment Ready Option (ARO)		✓
Cat® Grade 3D		✓
Cross Slope Assist		✓
RTK corrections radios for Cat Grade with 3D mastless		✓
Stable Blade		✓
VisionLink™		✓
Cameras		✓
Tire pressure monitoring system (TPMS)		✓

140 LVR 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 U.S. EPA Tier 4 Final and EU Stage V emission standards or Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA emission standard.
- Cat U.S. EPA Tier 4 Final and EU Stage V 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
- Cat engines meeting Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA are compatible* with diesel fuel blended with the following lower-carbon intensity fuels*** up to:
  - ✓ 100% 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).*
***** 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. 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_2 equivalent of 2.71 metric tonnes (2.674 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 (ISO 6395:2008) 105 dB(A)

Operator Sound Level (ISO 6396:2008) 69 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 a 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. The machine was equipped with sound suppression system.

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 contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Eco mode minimizes fuel consumption for light application.
  - Engine Idle Shutdown Timer reduces fuel burn, greenhouse gas emissions and unnecessary idle time by shutting down the machine after a preset 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 with extended service intervals next generation filters.
  - Improve jobsite efficiency with lower operating costs with VisionLink™ insights.

Recycling

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	81.95%
Iron	11.90%
Nonferrous Metal	1.45%
Mixed Metal	0.04%
Mixed Metal and Nonmetal	2.47%
Plastic	0.51%
Rubber	0.07%
Mixed Nonmetallic	0.44%
Fluid	0.28%
Other	0.56%
Uncategorized	0.33%
Total	100%

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance end-of-life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused, or both.

  All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

  Because of variations of product configurations, the following value in the table may vary.

Recyclability – 98%

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

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

AEXQ4476-00 (10-2025)
Build Number: 16A
(Global)