



740 GC

Articulated Truck

Technical Specifications

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

Table of Contents

Specifications	2
Engine	2
Weights	2
Air Conditioning System	2
Body Capacities	2
Transmission	2
Sound Levels	2
Operating Weights	3
Body Plate	3
Body Plate Thickness	3
Service Refill Capacities	3
Body Hoist	3
Standards	3
Dimensions	4
Turning Circle	5
Steering	5
Optimal Loader/Truck Pass Matching	5
Gradeability/Speed/Rimpull	6
Retarding Performance	7
Standard and Optional Equipment	8
Environmental Declaration	10

740 GC Articulated Truck Specifications

Engine

Engine Model	Cat® C15	
Gross Power (SAE J1995:2014)	337 kW	452 hp
Net Power (SAE J1349:2011)	327 kW	439 hp
Engine Power (ISO 14396:2002)	333 kW	447 hp
Bore	137 mm	5.4 in
Stroke	171.5 mm	6.75 in
Displacement	15.2 L	926 in ³

- Advertised power is tested at 1,700 rpm.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, aftertreatment, and fan at minimum speed.
- Net power when the fan is at maximum speed is 327 kW (439 hp) per the SAE reference conditions.
- The C15 engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 5, and Japan 2014 emission standards.
- Diesel exhaust fluid (DEF) used in Cat selective catalytic reduction (SCR) systems must meet the requirements outlined in ISO 22241-1. Requirements are met by many brands of DEF, including those that carry the AdBlue or API certifications.

No Engine Derating Below	3050 m	10,000 ft
Peak Engine Torque Gross (SAE J1995:2014)	2320 N·m	1,711 lbf-ft
Peak Engine Torque Net (SAE J1349:2011)	2264 N·m	1,670 lbf-ft
Peak Engine Torque Speed	1,200 rpm	

Weights

Rated Payload	36.3 tonnes	40 tons
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Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.1 kg (2.4 lb) of refrigerant which has a CO₂ equivalent of 1.716 metric tonnes (1.891 tons).

Body Capacities

Heaped SAE 2:1	22.7 m ³	29.7 yd ³
Struck	17.7 m ³	23.2 yd ³
Tailgate Heaped SAE 2:1	24.5 m ³	32.0 yd ³
Tailgate Struck	18.7 m ³	24.4 yd ³

Transmission

Forward 1	6.4 km/h	4.0 mph
Forward 2	8.5 km/h	5.3 mph
Forward 3	11.5 km/h	7.3 mph
Forward 4	14.8 km/h	9.2 mph
Forward 5	19.7 km/h	12.2 mph
Forward 6	24.0 km/h	14.9 mph
Forward 7	33.1 km/h	20.6 mph
Forward 8	39.8 km/h	24.7 mph
Forward 9	57.5 km/h	35.7 mph
Reverse 1	6.8 km/h	4.2 mph
Reverse 2	15.7 km/h	9.8 mph

Sound Levels

Interior Cab	72 dB(A)
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- The declared dynamic operator sound pressure level is 72 dB(A) when ISO 6396:2008 is used to measure the value for an enclosed cab. The measurement was conducted at 70% of the cooling fan's maximum speed. The sound level may vary at different cooling fan speeds. The measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.
- Hearing protection may be needed when operating with an open operator station and cab or when not properly maintained or with doors/windows open for extended periods or in noisy environments.

740 GC Articulated Truck Specifications

Operating Weights

Front Axle – Empty	19 595 kg	43,200 lb
Center Axle – Empty	6715 kg	14,804 lb
Rear Axle – Empty	6605 kg	14,562 lb
Total – Empty	32 915 kg	72,565 lb
Front Axle – Rated Load	3176 kg	7,002 lb
Center Axle – Rated Load	16 562 kg	36,513 lb
Rear Axle – Rated Load	16 562 kg	36,513 lb
Total – Rated Load	36 300 kg	80,027 lb
Front Axle – Loaded	22 771 kg	50,201 lb
Center Axle – Loaded	23 277 kg	51,317 lb
Rear Axle – Loaded	23 167 kg	51,074 lb
Total – Loaded	69 215 kg	152,593 lb

Body Plate

High strength Brinell HB450 wear resistant steel

Body Plate Thickness

Front Plate	7 mm	0.28 in
Base Plate	13 mm	0.51 in
Side Plates	11 mm	0.43 in

Service Refill Capacities

Fuel Tank	550 L	145.3 gal
Cooling System	90 L	23.7 gal
Brake Cooling Tank	67 L	17.7 gal
Steering/Hoist Hydraulic System	140 L	36.9 gal
Engine Crankcase	52 L	13.7 gal
Transmission/Output Transfer Gear	75 L	19.8 gal
Final Drives (each)	5 L	1.3 gal
Axles (each)	60 L	15.8 gal
Diesel Exhaust Fluid (DEF) Tank	25 L	6.5 gal

Body Hoist

Raise Time	12 Seconds
Lower Time	12 Seconds

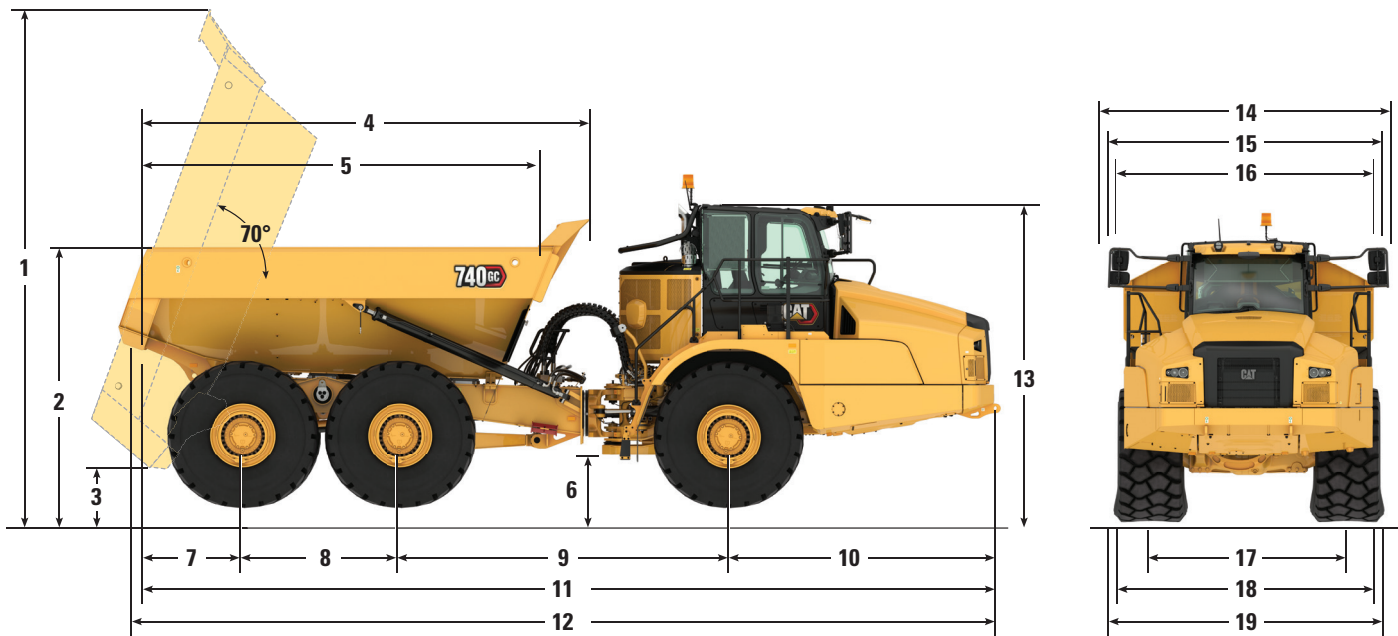
Standards

Brakes	ISO 3450:2011
Cab/Falling Objects Protective Structure (FOPS)	ISO 3449:2005 Level II
Cab/Rollover Protective Structure (ROPS)	ISO 3471:2008
Steering	ISO 5010:2019

740 GC Articulated Truck Specifications

Dimensions

All dimensions are approximate.



	mm	ft/in
1 Body Height Fully Tipped	6685	22'0"
2 Load over Height	3243	10'8"
3 Ground Clearance – Body Fully Tipped	684	2'2"
4 Body Length	5889	19'4"
5 Body Length Inside	5437	17'10"
6 Ground Clearance	588	1'9"
7 Rear Axle Center to Body Rear	1542	5'1"
8 Mid Axle to Rear Axle Center	1966	6'5"
9 Mid Axle to Front Axle (Centers)	4126	13'6"
10 Front Axle Center to Machine Front	3418	11'2"
11 Overall Length	11 065	36'3"
12 Overall Length with Tailgate	11 185	36'8"
13 Height Transport Position	3757	12'3"
14 Overall Width	3801	12'4"
15 Width over Tailgate/Width Including Tailgate	3647	12'0"
16 Body Width	3422	11'2"
17 Track Width	2687	8'9"
18 Width over Tire	3370	11'1"
19 Width over Fenders	3500	11'5"

740 GC Articulated Truck Specifications

Turning Circle

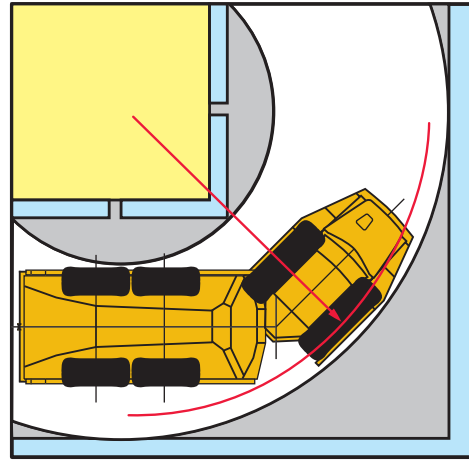
Dimensions are for machines equipped with 29.5 R25 tires.

Turning Dimensions

Steer Angle – From Center Left/Right	45°	
SAE Turning Radius	7698 mm	303 in
Clearance Radius	8395 mm	330 in
Inside Radius	3960 mm	156 in
Aisle Width	5595 mm	220 in

Steering

Lock to Lock 4.75 seconds at 60 rpm



Optimal Loader/Truck Pass Matching

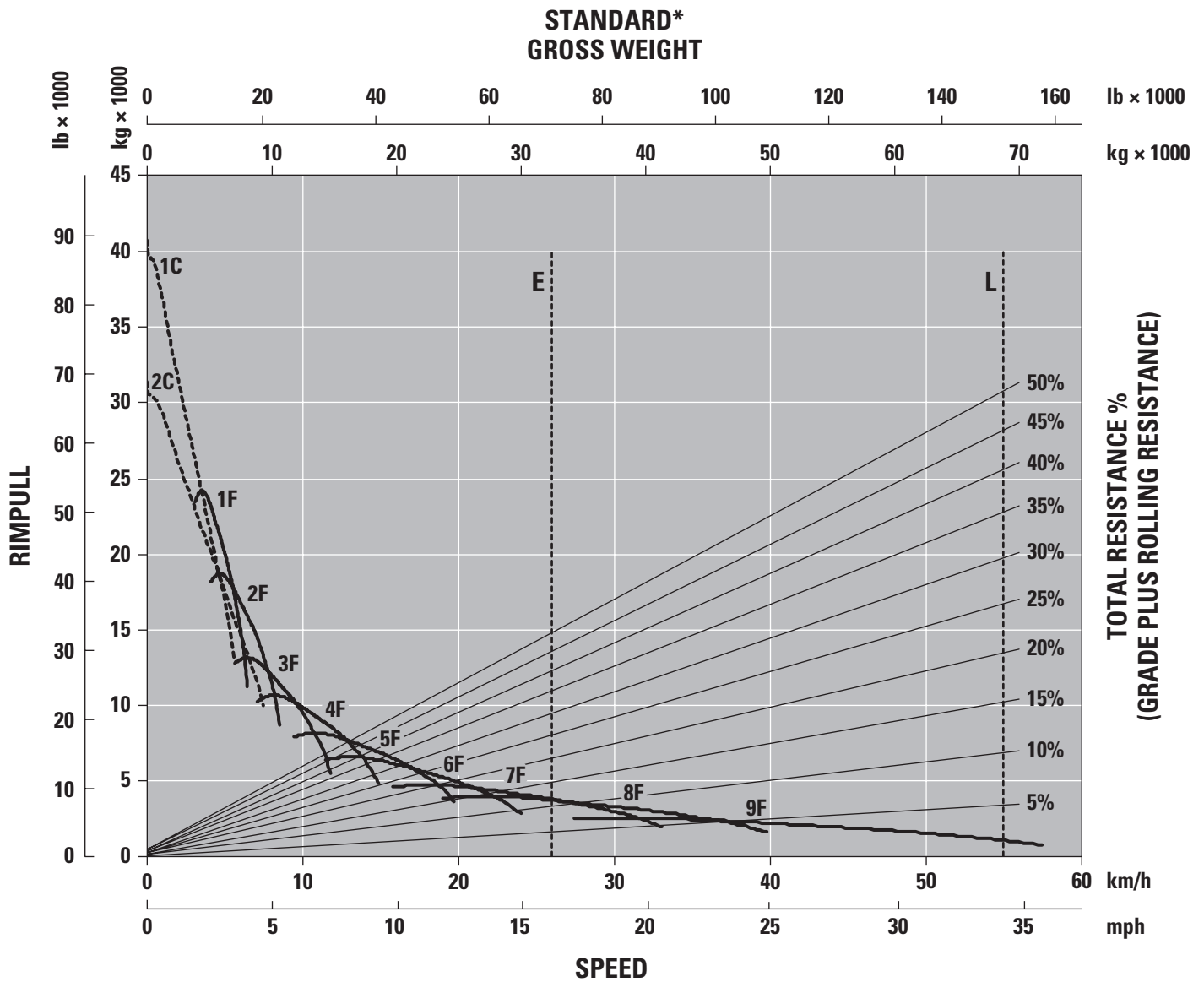
Hydraulic Excavators	374	352	
Passes	3-4	5-6	
Wheel Loaders	972	966	962
Passes	3	4-5	5

An optimum system match gives you a major productivity advantage. The 740 GC is an excellent match for the Cat 374 and 352 Hydraulic Excavators and Cat 972, 966, and 962 Wheel Loaders. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved.

740 GC Articulated Truck Specifications

Gradeability/Speed/Rimpull

To determine performance, read from standard gross weight down to total resistance %. Total resistance equals actual % grade plus 1% for each 10 kg/metric ton (20 lb/ton) of rolling resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to speed. Usable rimpull depends on traction available.



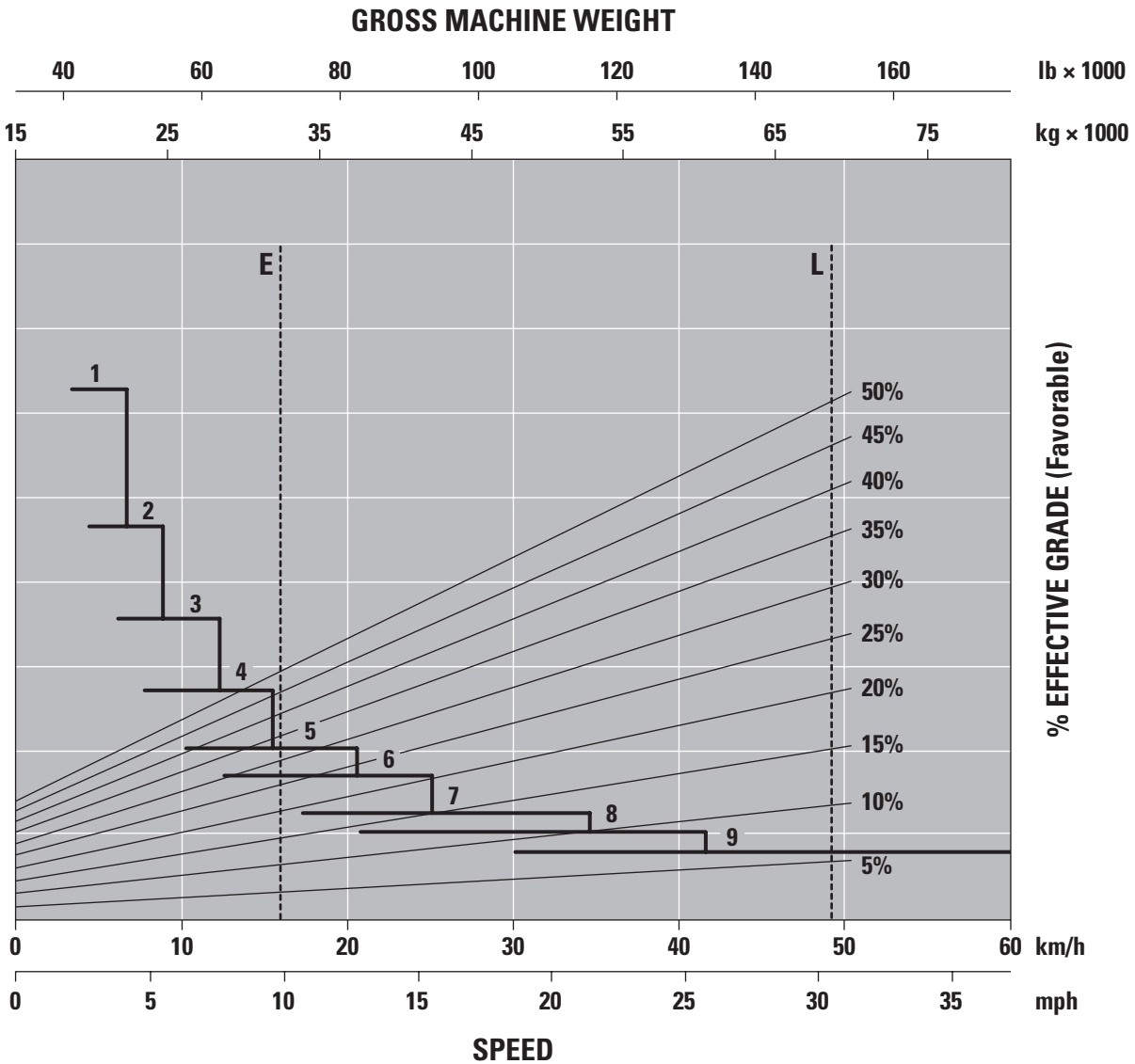
- 1C – 1st Gear (Converter Drive)
- 1F – 1st Gear (Direct Drive)
- 2C – 2nd Gear (Converter Drive)
- 2F – 2nd Gear (Direct Drive)
- 3F – 3rd Gear
- 4F – 4th Gear
- 5F – 5th Gear
- 6F – 6th Gear
- 7F – 7th Gear
- 8F – 8th Gear
- 9F – 9th Gear

- E – Empty 32 915 kg (72,565 lb)
- L – Loaded 69 215 kg (152,593 lb)
- * at sea level

740 GC Articulated Truck Specifications

Retarding Performance

To determine performance, read from gross machine weight down to % effective grade. Effective grade equals actual % favorable grade plus 1% for each 10 kg/metric ton (20 lb/ton) of rolling resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to speed. Retarding effect on these curves represents full application of the retarder.



- 1 – 1st Gear
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear
- 7 – 7th Gear
- 8 – 8th Gear
- 9 – 9th Gear

- E – Empty 32 915 kg (72,565 lb)
- L – Loaded 69 215 kg (152,593 lb)

740 GC Articulated Truck Standard & Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT			TECHNOLOGY		
Air conditioning with R134a refrigerant	✓		Machine security system (MSS)		✓
Adjustable air vents	✓		Cat® Production Measurement payload monitoring system		✓
Combined gear selection and hoist control lever	✓		Cat Detect with Stability Assist	✓	
Glass windows: front, laminated and tinted; sides and rear, toughened and tinted	✓		Product Link™ Elite: PLE641 (cellular)	✓	
Heater and defroster with four-speed fan	✓		Product Link Elite: PLE631E (satellite)		✓
Infrared glass – high ambient cab		✓	ELECTRICAL AND LIGHTING		
Liquid crystal display (LCD): alert indicator, selected gear and direction, speed or auto shift, operation and maintenance manual (OMM), primary steering failure (warning), seat belt warning, secondary steering failure, diesel particulate filter (DPF) regeneration filter, secondary steering energy source engaged, hour meter, retarder active	✓		Batteries (two) maintenance free	✓	
Mirrors: extensive arrangement for improved visibility	✓		Cold weather start attachment		✓
Mirrors, heated motorized		✓	Engine block heater		✓
Machine operation monitoring system: action lamp, engine oil pressure, primary steering system, left and right turn signal, high beam, coolant temperature, tachometer, parking brake, fuel level, transmission oil temperature, brake system, transmission hold, hoist control, hydraulic system, charging system, transmission fault, traction control system, check engine lamp	✓		Ether start		✓
Radio, Bluetooth® stereo system		✓	Electrical system: 24-volt, 10A 24- to 12-volt converter	✓	
Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt	✓		Flashing LED beacon		✓
Seat, heated/cooled		✓	Horn	✓	
Operator seat belt, four-point		✓	Lighting systems: cab interior, two head lamps, two width marker, two reversing, work light/cab access light, two stop/tail lights, front and rear direction indicators	✓	
Secondary steering – electro hydraulic	✓		Main disconnect switch	✓	
Storage: cup holder, flask receptacle (under the secondary seat), under seat storage, door pocket, behind seat storage, coat hook	✓		Remote starting receptacle (cables not included)	✓	
Sun visor	✓		Roof-mounted high intensity discharge (HID) work lights		✓
Tilt and telescopic steering wheel	✓		POWERTRAIN		
Touchscreen display incorporating the rearview camera video feed	✓		Auto shift nine-speed forward and two-speed reverse transmission	✓	
Window blinds		✓	Cat C15 engine	✓	
Windows (tinted) opening both sides	✓		CX38 transmission	✓	
Windshield wiper and washer, two speed, intermittent (front)	✓		Cat Clean Emission Module (CEM) and exhaust aftertreatment package	✓	
Window wiper and washer, two speed (rear)		✓	Differentials: standard with automatic clutched inter- and cross-axle differential locks	✓	
			Dual circuit oil immersed, enclosed brakes – all wheels	✓	
			Retarder: engine compression brake	✓	
			Three axle, six-wheel drive	✓	
			SAFETY		
			Reverse alarm	✓	
			Rearview camera	✓	
			Rollover protective structure/falling objects protective structure (ROPS/FOPS) cab	✓	
			GUARDS		
			Axle	✓	
			Crankcase	✓	
			Front dump body spill guard, integral part of fabricated body	✓	
			Radiator	✓	
			Rear window	✓	

740 GC Articulated Truck Standard & Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OTHER			OTHER (CONTINUED)		
Auto lube installation for automatic greasing of bearings		✓	Mud flaps: wheel arch and body mounted with transportation tiebacks	✓	
Bare chassis (no body) standard wheel base		✓	Scissor tailgate		✓
Bare chassis (no body) long wheel base		✓	Scheduled Oil Sampling (S·O·S SM) sampling valves	✓	
Body liners		✓	Sound suppression (standard in EFTA*)	✓	
Cold weather coolant -51°C (-60°F)		✓	Sound suppression (optional outside EFTA*)		✓
Exhaust heated body		✓	Tires, six 29.5 R25	✓	
Fast fuel fill		✓	Vandalism protection: lockable caps	✓	
Fuel additive – anti-waxing		✓	Wheel chocks		✓

* EFTA countries are EU countries plus Iceland, Norway, Lichtenstein, and Switzerland.

740 GC Articulated Truck 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® C15 engine meets U.S. EPA Tier 4 Final, EU Stage V, Japan 2014 and Korea Tier 5 emission standards.
- 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 (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuelsRefer 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.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.1 kg (2.4 lb) of refrigerant which has a CO₂ equivalent of 1.716 metric tonnes (1.891 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

With cooling fan speed at 70% of maximum value:

Interior Cab (ISO 6396:2008)	72 dB(A)
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- The sound level may vary at different cooling fan speeds. The measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.
- Hearing protection may be needed when operating with an open operator station and cab or when not properly maintained or with doors/windows open for extended periods or in noisy environments.

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 without impacting productivity
 - Innovative air-management systems optimize airflow and enhance power and fuel efficiency
 - Fully automatic retarder control helps prevent engine overspeed and preserves the machine without any operator intervention
 - Cat Stability Assist helps improve machine safety and uptime by increasing awareness of machine stability during operation
 - Cat Production Measurement provides real-time payload weighing which reduces fuel burn and carbon emissions by helping you maximize productivity while improving jobsite efficiency and lowering costs

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.

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