



CAT[®] 621

PARTIAL WHEEL TRACTOR-SCRAPER

Caterpillar offers partial wheel tractor-scraper power units designed for specialty machines. These tractor-only configurations are available for purchase directly from Caterpillar OEM Solutions. They can be leveraged for a variety of final machines, including water pulls, elevating scrapers, lowboy trailer power units, and more.

BE MORE PRODUCTIVE

- » **The Advanced Productivity Electronic Control System (APECS)** allows the machine to better utilize engine power and torque.
- » Set the desired top speed with **Ground Speed Control**, and the machine will find the gear that works best for the engine and transmission, providing a lower fuel burn in speed reduced areas.
- » **Auto-Stall** assists in quickly bringing the transmission to an operating temperature at start-up when working in colder climates.

EASY TO OPERATE

- » Cat Advanced Ride Management (ARM) seat suspension reduces end stroke movement of the load cylinder for a smoother ride.
- » Engine overspeed protection will automatically engage with no operator input when the machine is in eighth gear. The machine will assist in slowing the machine speed by canceling the throttle command and engaging the engine compression brake.
- » The spacious cab features easy, intuitive controls and excellent visibility.

WORK IN COMFORT

- » Steer with less effort with the newly designed high-pressure steering system.
- » Enjoy interior improvements with a larger, more ergonomic work environment.
- » Intuitive, ergonomic controls with multifunction display keep operators focused on their work.
- » Maintain desired cab temperature with automatic temperature control.

DESIGNED FOR SAFETY

- » Get in and out of the cab easier with the new optional powered access ladder system.
- » Enhance the operator's awareness of site surroundings with the Work Area Vision System (WAVS).
- » Seat belt indicator provides visual and audible alerts when the seat belt is not in use.

SUPPORTED BY THE CAT DEALER NETWORK

- » Full support of Cat dealer and parts network
- » Eligible for Equipment Protection Plans (EPP) & Customer Value Agreements (CVAs)



621 Wheel Tractor-Scraper Technical Specifications (partial machine)

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

Engine

Engine Model	Cat® C13	
Rated Engine Speed	2,000 rpm	
Engine Power (ISO 14396:2002)	304 kW	407 hp

- Meets U.S. EPA Tier 4 Final/EU Stage V emission standards, noncertified and equivalent to U.S. EPA Tier 2, or noncertified and equivalent to U.S. EPA Tier 3/EU Stage IIIA.

Weights – Approximate

Rated Load	26 127 kg	57,610 lb
	26.2 tonnes	28.8 tons

Transmission

Forward 1	5.0 km/h	3.1 mph
Forward 2	8.9 km/h	5.5 mph
Forward 3	12.1 km/h	7.5 mph
Forward 4	16.3 km/h	10.1 mph
Forward 5	21.9 km/h	13.6 mph
Forward 6	29.6 km/h	18.4 mph
Forward 7	39.9 km/h	24.8 mph
Forward 8	53.9 km/h	33.5 mph
Reverse	9.2 km/h	5.7 mph

Service Refill Capacities

Crankcase	37 L	9.7 gal
Transmission System	97 L	25.5 gal
Cooling System	42 L	11 gal
Fuel Tank	818 L	216.1 gal
Hydraulic System	83 L	21.9 gal
Diesel Exhaust Fluid (DEF) Tank*	30.5 L	8.1 gal
Differential	158 L	41.7 gal
Final Drive (Each)	19 L	5 gal
Windshield Washer	5.0 L	1.3 gal

*when equipped

Steering

180° Curb-to-Curb Turning Width	11.8 m	38'7"
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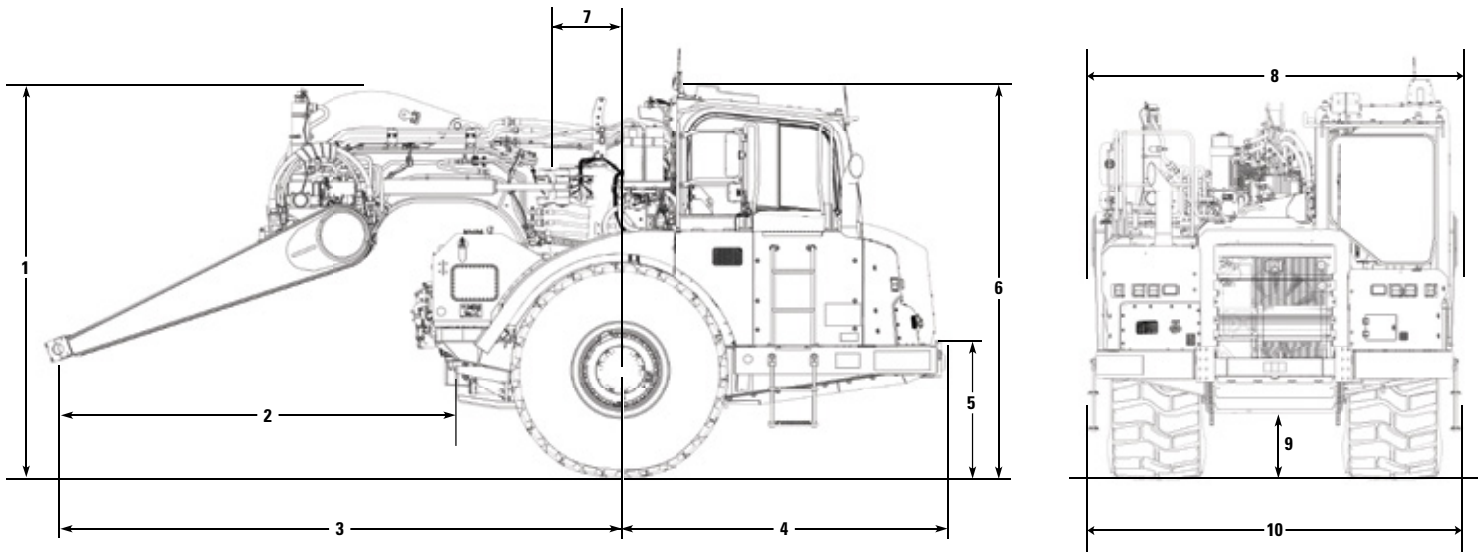
Safety Criteria Compliance Standards

Rollover Protection Structure (ROPS)	ISO 3471:2008 for up to 17 084 kg (37,664 lb)	
Falling Object Protective Structure (FOPS)	ISO 3449:2005 Level II	
Brakes	ISO 3450:2011	
Steering System	ISO 5010:2019*	
Seat Belt	SAE J386:JUN1985	
Reverse Alarm	ISO 9533:2010	
Interior sound pressure level for standard machine	ISO 6396:2008 is 75 dB(A).	

*If equipped with optional secondary steering

- Note: Welding on ROPS or making modifications to the ROPS may void the ROPS certification.
- Please contact Caterpillar OEM Solutions if the application requires welding on the machine frame.

621 Wheel Tractor-Scraper Technical Specifications (partial machine)



Dimensions

1 Overall Machine Height (with gooseneck)	3.6 m	11.8 ft
2 Draft Arm Pivot Point to Rear Tractor Bumper	3.5 m	11.4 ft
3 Centerline of Wheel Hub to Rear Draft Arm Pivot Point	5.2 m	17 ft
4 Front of Tractor to Front Axle	3 m	9.8 ft
5 Height of front bumper attachment pin	1.1 m	3.6 ft
6 Height to Top of Cab	3.7 m	12.1 ft
7 Axle to Vertical Hitch Pin	1.6 m	5.2 ft
8 Width of Draft Arms	3.6 m	11.4 ft
9 Tractor Ground Clearance	0.6 m	1.9 ft
10 Tractor Width	3.1 m	10.1 ft

** These dimensions may vary based on tire size, pressure, and load. All dimensions are for reference only and may change for different machine configurations.

621 Wheel Tractor-Scraper Technical Specifications (partial machine)

Standard and Optional Equipment

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

	Standard	Optional
POWERTRAIN		
Cat® C13 engine with Mechanically Actuated Electronic Unit Injection (MEUI™)	•	
Cat engine brake	•	
Differential lock	•	
Electric start, 24V	•	
Fan, hydraulic	•	
Ground level engine shutdown	•	
Guard, crankcase	•	
Starting aid, ether	•	
Braking system: primary and secondary, wet disc, hydraulic; parking, hydraulic-released, spring-applied	•	
Transmission: 8-speed planetary powershift, Electronic Clutch Pressure Control (ECPC), Advanced Productivity Electronic Control Strategy (APECS) software, programmable top gear selection, transmission hold, transmission guard, ground speed control, machine speed limit	•	

ELECTRICAL		
Alternator, 115 amp	•	
Batteries (4), 12V, 1,000 CCA, maintenance free	•	
Electrical system, 24V	•	
Lighting system: LED low beam, high beam, and work lights	•	
Starting/charging receptacle	•	

OPERATOR ENVIRONMENT		
HVAC powered air precleaner	•	
HVAC system, heat, AC, defrost	•	
Thermostat control of HVAC system	•	
Coat hook	•	
Lunchbox platform with holding strap	•	
Diagnostic connection	•	
Dome courtesy light	•	
Horn, electric	•	
T-handle implement control	•	
Mirror, rearview	•	
Radio ready	•	
Rollover protective structure (ROPS)/falling objects protective structure (FOPS) cab, pressurized	•	

	Standard	Optional
Keypad switches: throttle lock, wipers/washers, hazard lights, retarding level select, work lights on/off, information mode on touchscreen display	•	
Safety tab rocker switches	•	
Seat – Cat advanced ride management (ARM), Cat Comfort Series III, rotates 30 degrees	•	
Seat belt, static two-piece	•	
Steering wheel, tilt, telescoping, padded	•	
Windows, right side emergency egress	•	
Work Area Vision (3) Camera System	•	
254 mm (10 in) touchscreen information display	•	
Windshield wipers, front and rear windows, includes washers	•	

FLUIDS		
Extended life coolant to -37° C (-34° F)	•	

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	Standard	Optional
CAT TECHNOLOGY PRODUCTS		
Product Link™		•
Sequence Assist – Cat Payload	•	
Cat Grade, Cat Payload, Sequence Assist, and Load Assist		•

OTHER EQUIPMENT		
Advanced cushion hitch	•	
Accumulators (cushion hitch and brake) with Canadian registration number (CRN)	•	
Fast oil change (engine)	•	
Fenders, non-metallic	•	
Heater, engine coolant 120V	•	
Tow pin, front	•	

OTHER ATTACHMENTS		
Cab beacon with air horn		•
Fast-fill fuel tank	•	
Kingbolt housing		•
Rear wheel arrangement (set of 2)		•
Scraper draft arm package		•
Steering cylinder group (set of 2)		•
Steering lock – external	•	

STEERING ARRANGEMENTS		
Secondary steering (electrically powered)		•

SERVICE INSTRUCTIONS		
Film arrangement – U.S. (ANSI)		•
Film arrangement – International (ISO)		•

For more information on Cat partial machines, contact OEM Solutions:

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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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AEXJ0144-01 (05-2026)

Build Number: 11A

(Global)

