623H
Wheel Tractor-Scraper

<table>
<thead>
<tr>
<th>Engine</th>
<th>Scraper Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractor</td>
<td>Heaped Capacity</td>
</tr>
<tr>
<td>Cat® C13 ACERT™</td>
<td>17.6 m³</td>
</tr>
<tr>
<td>Max. Power</td>
<td>23 yd³</td>
</tr>
<tr>
<td>304 kW</td>
<td>Rated Load</td>
</tr>
<tr>
<td>407 hp</td>
<td>25 038 kg</td>
</tr>
<tr>
<td></td>
<td>55,200 lb</td>
</tr>
</tbody>
</table>
623H Features

Economical Hauling System
The wheel tractor-scraper, with its ability to load quickly, haul at high speeds and dump on the go, has the potential to be the most profitable hauling system on the job site. This efficiency can result in fewer machines on the job, reduced operating costs and jobs delivered in a shorter period of time.

Power Train
Caterpillar designed and manufactured power train components deliver the power necessary for fast loading and quick hauls.

Operator Station
Single joystick control of implements, adjustable arm rests, seat, steering column and room to maneuver all reduce fatigue and increase operator comfort and productivity throughout the shift.

Cushion Hitch
The cushion hitch is a Caterpillar proven system for protecting components of the hitch and improving ride quality, dampening loads that might otherwise be carried through the frame to the operator. Cushion hitch offers operators a more comfortable haul portion of the work cycle.

Durability
Cat wheel tractor-scrapers have a history of robust structural design, tested and validated to last in the most rugged loading and hauling conditions.

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Quick loading, high travel speeds and the ability to load and dump on the run yield fast cycle times, allowing Cat Wheel Tractor-Scrapers to consistently deliver high productivity at the lowest cost per ton.
Operator’s Station
Ergonomically designed for all-day comfort, control and productivity.

Ergonomic Layout
The all new H Series operator station is ergonomically designed for total machine control in a comfortable, productive and safe environment. All controls, levers, switches and gauges are positioned to maximize productivity and facilitate a reduction in operator fatigue.

Viewing Area
Designed for excellent all-around visibility and clear sight lines to the job site, the large viewing area offers exceptional visibility to the front of the machine as well as to the cutting edge. The air conditioning unit has been relocated to beneath the cab, allowing the operator enhanced visibility.

Operator Comfort
High productivity from a comfortable, confident operator.

Spacious Cab
With a 21% larger cab, H Series scrapers offer a comfortable working space. The larger cab and wider door make getting in and out of the cab easier. The increased glass area enhances visibility around the machine.

Steering Column
The steering column and pedals have been relocated for more comfortable operation when the seat is angled during machine operation. The telescopic and tilt adjustable steering column maintains a comfortable driving position regardless of operator size.

Standard Comfort Features
The H Series cab is equipped with features designed to maintain operator comfort. Standard comfort features include: coat hook, lunchbox storage platform with strap, air conditioning, heat, and radio-ready.

Seat Options
H Series scrapers use the Cat Comfort Seat with additional travel to allow the operator to position themselves for optimal comfort and productivity. The seat rotates up to 30 degrees to the right for a more comfortable position during loading and 30 degrees to the left to make getting in and out of the cab easier.

For unparalleled ride comfort, H Series scrapers are equipped with the Cat Advanced Ride Management (ARM) seat suspension which uses an active suspension to dampen vibration and minimize end-of-stroke shock loads to the operator.

Integrated Technologies
The optional Sequence Assist and Cat Grade Control automate many repetitive operator tasks.

T-Handle Implement Control Lever
The redesigned control lever puts all of the scraper functions in the palm of the operator’s hand. The low-effort lever and convenient push-button and thumb wheel controls are ergonomically placed for minimum arm movement.
Power Train – Engine
The Cat® C13 ACERT™ engine is built for power, reliability and efficiency.

ACERT Technology
The Cat® C13 ACERT™ engine continues the evolutionary, incremental improvements that provide breakthrough engine technology built on systems and components developed by Caterpillar with proven reliability. The engine is available with either U.S. EPA Tier 3/EU Stage IIIA equivalent emission configurations or U.S. EPA Tier 4 Interim/EU Stage IIIB certified emission configurations to meet the needs of contractors around the world.

Emissions
Machines equipped with engines meeting U.S. EPA Tier 4 Interim/EU Stage IIIB emission standards are equipped with a Cat Clean Emission Module to deliver the performance and efficiency that customers demand while meeting emission requirements. Machines equipped with the U.S. EPA Tier 3/EU Stage IIIA equivalent engines are equipped with a muffler in place of the Cat Clean Emission Module.

Cat Clean Emission Module (CEM)
CEM is an exhaust aftertreatment package consisting of a diesel particulate filter, and control systems. The CEM reduces particulate emissions using passive and active regeneration during normal engine operation.

Cat NOx Reduction System (NRS)
The Cat NOx Reduction System (NRS) captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NOx emissions.

Diesel Particulate Filter Regeneration
Regeneration is the removal of soot from the Diesel Particulate Filter (DPF). The Aftertreatment Regeneration Device (ARD) is used to regenerate the DPF. The DPF traps both particulates and ash, the ash is removed at regular service intervals.
Power Train – Transmission
More power to the ground for greater productivity.

Electronic Transmission
The Cat eight-speed forward one-speed reverse Electronic Clutch Pressure Controlled (ECPC) transmission features enhanced shift control logic with anti-hunt shift strategy for speed continuity, and to ensure constant shift times.

- Tractor gears 1-2 – converter drive for increased torque, gears 3-8 – direct-drive for drive train efficiency.
- Transmission Hold maintains converter drive for maximum rimpull or holds current gear for best control.
- Programmable Top Gear manually sets top gear available (3rd-8th) to match conditions or speed.
- Neutral Coast Inhibitor prevents transmission shifts into neutral while moving.

Smooth Transmission Gear Shifting
The 623H features ECPC Shift Torque Management (STM), with improved Shift Control Logic (SCL) and Part Throttle Shifting (PTS). These features allow smoother shifting and greater acceleration on grades while torque is maintained through the shift changes. SCL also provides automatic shift selection that is more specific to the desired machine operation, and downshifts when needed for maximum acceleration when increased throttle is applied. PTS allows shifting at lower speeds during part throttle operation, resulting in improved part throttle fuel economy, quieter machine operation, and better maneuvering in reduced speed operating conditions.

Brake Performance
The 623H uses hydraulically-actuated wet disc brakes for exceptional brake performance. The standard Cat Engine Brake reduces brake wear and enhances machine control.
Structures
Superior design and construction delivers long term durability.

Cushion Hitch
Electronically actuated with parallelogram-type linkage for exceptional strength, with two nitrogen accumulators (4) using free-floating pistons (8) to deliver a smooth ride for enhanced operator comfort and machine durability.
- controlled oil flow (6) dampens rebound oscillation
- leveling valve (7) applies pressure via an orifice (5) to automatically center the piston in load cylinder (1)
- steel castings are used to eliminate many welded joints and increase strength
- double-kingbolt design (2, 3) withstands high external forces, simplifies installation and removal

Lockout Switch
An operator-selectable lockout switch, located on the joystick, locks the cushion hitch down for improved control of the cutting edge during loading and dumping.

Nitrogen Accumulator
Vertically mounted hydraulic cylinder transfers road shocks to nitrogen accumulators. Nitrogen accumulator absorbs and dampens road shocks, thus preventing the loads from being transmitted to the hitch components or to the operator.

Non-Metallic Fenders and Fuel Tank
The new fuel tank is made of recyclable roto-milled polyethylene and keeps the fuel cleaner with controlled filtration and cleanout access ports. The new capacity of the new fuel tank has been increased, providing operators with 10 plus hour shifts depending on engine load factors.

The new tractor fenders are made of the same highly durable, roto-milled polyethylene. The non-metallic fenders prevent material buildup when operating in sticky materials.
Scraper Bowl
Caterpillar designed and built for rugged performance and reliability.

Redesigned Bowl
The structure of the bowl sidewalls, ejector and floor have been improved for improved durability. New floor door rollers are used for longer life. The bowl uses a low profile design offering low resistance to incoming materials.

Ejection System
The powerful ejection system provides constant spreading control while minimizing carryback material. The floor of the bowl retracts as the ejector moves forward, allowing the operator to precisely control the flow of material.

Cutting Edges and Cat Ground Engaging Tools (GET)
A variety of Ground Engaging Tools (G.E.T.) options are available to optimize the machine for different material types and loading conditions. GET options include standard, serrated, and Abrasion Resistant Material (ARM). Most are reversible to provide long life and reduced operating costs. Contact your Cat dealer to learn more about the best tools for your applications.

Material Application
The 623H is ideal for windrowing, blending material as well as breaking up vegetation in stripping operations.
Elevator
The stronger elevator makes the 623H capable of far more than finish work.

Material Handling
The elevator lifts material off of the cutting edge and carries it to the top of the elevator and then dumps the material into the bowl. Blending the material helps eliminate voids in the bowl for consistent payloads and uneven loading.

Closed Loop Elevator Hydraulic System
The 623H elevator power has been increased by a new variable displacement piston pump and fixed displacement motor in a closed-loop circuit. The increased power enables the operator to take deeper cuts and load in a shorter distance with less elevator stall.

Redesigned Elevator Structures
The 623H elevator and chain life has been improved through structural improvements to the elevator structure. Wear plates are used in place of rollers for reduced chain stretch.

New Elevator Controls
The elevator is engaged with a thumb roller on the joystick. The operator can choose one of seven forward and four reverse speeds to match the speed that best matches the material.

Chain Adjustment
Serviceability is enhanced through a new chain adjustment mechanism. The new scissors-style chain adjuster uses a simple tool to tighten the chain in 2.54 cm (1.0 in) increments.

Elevator Flights
The life of the 15 elevator flights is improved in abrasive materials through the addition of high-strength, wear-resistant steel on the face of each flight.
Integrated Technologies
Technology options to improve operator comfort and increase productivity.

Sequence Assist
Sequence Assist uses integrated software and position-sensing cylinders to automate many of the tasks an operator performs when loading, hauling and dumping. The operator simply sets preferences for bowl and apron height and subsequently pushes a button to ready the machine for loading, then hauling, then dumping, and then the return to cut. The system automatically sets the cushion hitch, bowl height, ejector and elevator. Sequence Assist comes with a convenient load counter for tracking material moved.

With Sequence Assist, up to 14 individual implement and machine commands are replaced by four touches of a button, allowing the operator additional time to prepare for the loading cycle and observation of the job site.

Cat Grade Control
Cat Grade Control is an automatic system that helps you control costs by moving the maximum amount of material with the prime earthmover which often provides the lowest cost per unit of material moved. Using satellite positioning technology, the automatic system ensures cut protection by limiting how deep the scraper will dig. The optional system is available from the factory and fully integrated into the machine and works seamlessly with Sequence Assist.

Additional benefits of Cat Grade Control include putting the site plan in front of the operator for increased efficiency and elimination of rework and using the scraper for site mapping.

Work Area Vision System (WAVS)
Cameras on the machine provide views of the cutting edge, right side and rear. The system enhances safety and provides a new way to see the cutting edge during loading and to see to the rear of the machine when performing push-load or push-pull work with another scraper.
Complete Customer Support
Cat® dealer services help you operate longer with lower costs.

Selection
Make comparisons of the machines you are considering before you buy. Your Cat® dealer can help.

Purchase
Consider the resale value, compare productivity and day-to-day operating costs and fuel consumption.

Operation
For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and trained staff.

Maintenance
Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S·O·S™ and Technical Analysis help you avoid unscheduled repairs.

Replacement
Repair or rebuild? Your Cat dealer can help you evaluate the costs so you can make the right choice.

Product Support
Your local Cat dealership will be with you every step of the way with its unsurpassed worldwide parts support, trained technicians and customer support agreements.

cat.com
For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com
Safety
Safety is an integral part of all machine and system designs.

**Powered Access Ladder**
A new powered access system option significantly reduces the effort required to climb into the cab. The system is a solid, stable angled ladder that folds out from underneath the cab. It is activated from a keypad located behind a service door at ground level. Controls are also located in the cab on a keypad.

The ladder provides a rigid and angled base of support for easier climbing and descent. For added safety, the steps are illuminated by LED lights.

An actuator under the cab operates the step. When not in use, the ladder retracts under the cab. An audible alarm sounds if the machine moves while the ladder is down. If power fails on the machine, the operator can raise or lower the steps manually using a lever inside the cab or outside next to the ladder’s top step.

**Access and Egress**
Handrails and grab irons are provided for safe and secure entrance and exit of the cab as well as for performing daily maintenance.

**Work Area Vision System (WAVS)**
Cameras on the machine provide views of the cutting edge, right side and rear. The system enhances safety and provides a new way to see the cutting edge during loading and to see to the rear of the machine when performing push-load or push-pull work with another scraper.
### Tractor Engine – U.S. EPA Tier 4 Interim/EU Stage IIIB

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Power (All Gears)</td>
<td>304 kW / 407 hp</td>
</tr>
<tr>
<td>Engine Speed</td>
<td>1,700 rpm</td>
</tr>
<tr>
<td>Displacement</td>
<td>12.5 L / 763 in³</td>
</tr>
<tr>
<td>Bore</td>
<td>130 mm / 5.1 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>157 mm / 6.2 in</td>
</tr>
</tbody>
</table>

- Max. power advertised is the max. power available at max. power reference engine speed of 1,700 rpm, measured at the flywheel when the engine is equipped with air cleaner, alternator, and exhaust losses.

### Scraper Bowl

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heaped Capacity</td>
<td>17.6 m³ / 23.0 yd³</td>
</tr>
<tr>
<td>Rated Load</td>
<td>25,038 kg / 55,200 lb</td>
</tr>
<tr>
<td>Struck Capacity</td>
<td>14.4 m³ / 18.8 yd³</td>
</tr>
<tr>
<td>Maximum Depth of Cut</td>
<td>262 mm / 10.3 in</td>
</tr>
<tr>
<td>Width of Cut, Outside Router Bits</td>
<td>3136 mm / 123.5 in</td>
</tr>
<tr>
<td>Maximum Ground Clearance at Cutting Edge</td>
<td>529 mm / 20.8 in</td>
</tr>
<tr>
<td>Thickness of Cutting Edge</td>
<td>22 mm / 0.9 in</td>
</tr>
<tr>
<td>Maximum Hydraulic Penetration Force</td>
<td>590 kN / 132,640 lbf</td>
</tr>
<tr>
<td>Maximum Depth of Spread</td>
<td>465 mm / 18.3 in</td>
</tr>
</tbody>
</table>

### Hydraulics

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl Cylinder Bore</td>
<td>140 mm / 5.5 in</td>
</tr>
<tr>
<td>Bowl Cylinder Stroke</td>
<td>845 mm / 33.3 in</td>
</tr>
<tr>
<td>Bowl Floor Cylinder Bore</td>
<td>130 mm / 5.1 in</td>
</tr>
<tr>
<td>Bowl Floor Stroke</td>
<td>1353 mm / 53.3 in</td>
</tr>
<tr>
<td>Ejector Cylinder Bore</td>
<td>110 mm / 4.3 in</td>
</tr>
<tr>
<td>Ejector Cylinder Stroke</td>
<td>1213 mm / 47.8 in</td>
</tr>
<tr>
<td>Steering Cylinder Bore</td>
<td>127 mm / 5.0 in</td>
</tr>
<tr>
<td>Steering Cylinder Stroke</td>
<td>1128 mm / 44.4 in</td>
</tr>
<tr>
<td>Cushion Hitch Cylinder Bore</td>
<td>140 mm / 5.5 in</td>
</tr>
<tr>
<td>Cushion Hitch Cylinder Stroke</td>
<td>251 mm / 9.9 in</td>
</tr>
<tr>
<td>Steering Circuit Flow</td>
<td>234 L/min / 61.8 gal/min</td>
</tr>
<tr>
<td>Secondary Steering Circuit Flow</td>
<td>39.0 L/min / 10.3 gal/min</td>
</tr>
<tr>
<td>Scraper Circuit Flow</td>
<td>192 L/min / 50.7 gal/min</td>
</tr>
<tr>
<td>Elevator Circuit Flow</td>
<td>257 L/min / 67.9 gal/min</td>
</tr>
<tr>
<td>Cushion Hitch Circuit Flow</td>
<td>40.1 L/min / 10.6 gal/min</td>
</tr>
</tbody>
</table>

### Transmission

<table>
<thead>
<tr>
<th>Gear</th>
<th>Speed (km/h)</th>
<th>Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Forward</td>
<td>5.0 km/h</td>
<td>3.1 mph</td>
</tr>
<tr>
<td>2 Forward</td>
<td>8.9 km/h</td>
<td>5.5 mph</td>
</tr>
<tr>
<td>3 Forward</td>
<td>12.1 km/h</td>
<td>7.5 mph</td>
</tr>
<tr>
<td>4 Forward</td>
<td>16.3 km/h</td>
<td>10.1 mph</td>
</tr>
<tr>
<td>5 Forward</td>
<td>21.9 km/h</td>
<td>13.6 mph</td>
</tr>
<tr>
<td>6 Forward</td>
<td>29.6 km/h</td>
<td>18.4 mph</td>
</tr>
<tr>
<td>7 Forward</td>
<td>39.9 km/h</td>
<td>24.8 mph</td>
</tr>
<tr>
<td>8 Forward</td>
<td>53.9 km/h</td>
<td>33.5 mph</td>
</tr>
<tr>
<td>Reverse</td>
<td>9.2 km/h</td>
<td>5.7 mph</td>
</tr>
</tbody>
</table>

### Steering

- Steering Angle – Right | 85°
- Steering Angle – Left | 82°
Weights

Machines meeting U.S. EPA Tier 4 Interim/ EU Stage IIIB emission standards

Shipping Weight – 39 259 kg 86,259 lb
Operating Weight – 39 937 kg 88,046 lb
Loaded, based on a rated load  64 975 kg 143,245 lb

Machines achieving prior U.S. EPA Tier 3/ EU Stage IIIA emissions levels

Shipping Weight – 39 011 kg 86,004 lb
Operating Weight – 39 689 kg 87,499 lb
Loaded, based on a rated load  64 728 kg 142,701 lb

Service Refill Capacities – Tractor

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
<th>Refill Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Crankcase</td>
<td>33 L</td>
<td>8.75 gal</td>
</tr>
<tr>
<td>Transmission</td>
<td>70 L</td>
<td>18.5 gal</td>
</tr>
<tr>
<td>Differential</td>
<td>173 L</td>
<td>45.8 gal</td>
</tr>
<tr>
<td>Final Drive (per side)</td>
<td>19 L</td>
<td>5.0 gal</td>
</tr>
<tr>
<td>Cooling System</td>
<td>64 L</td>
<td>17.0 gal</td>
</tr>
<tr>
<td>Hydraulic Reservoir</td>
<td>83 L</td>
<td>22.0 gal</td>
</tr>
<tr>
<td>Windshield Washer</td>
<td>5 L</td>
<td>1.3 gal</td>
</tr>
</tbody>
</table>

Service Refill Capacities – Scraper

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
<th>Refill Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Powered Wheel</td>
<td>4 L</td>
<td>1.1 gal</td>
</tr>
<tr>
<td>Fuel Tank</td>
<td>763 L</td>
<td>201.6 gal</td>
</tr>
</tbody>
</table>

Standards

- Steering System meets ISO 5010:2007 for up to a maximum approved operating weight
- Brakes meet ISO 3450:1996 for up to a maximum approved operating weight
- Rollover Protective Structure (ROPS) is certified to a tractor only mass of 18 800 kg (41,447 lb) as tractor portion of tractor-scrappers per Table 1 of ISO 3471:2008. This excludes scraper weight and payload.
- Falling Object Protective Structure (FOPS) meets ISO 3449:2005 Level II
- Seat Belts meet SAE J386 June 1985
- Forward and Reverse Alarms meet ISO 9533:1989
- Optional Information
  - The dynamic operator sound pressure level is 76 dB(A) when “ISO 6396:2008” is used to measure the value for an enclosed cab. The measurement was conducted at 100% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. The cab was properly installed and maintained. 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 the machine is operated with an open operator station for extended periods or in a noisy environment. Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors and windows are open for extended periods or in a noisy environment.
  - The average exterior sound pressure level is 80 dB(A) when the “SAE J88 FEB06 – Constant Speed Moving Test” procedure is used to measure the value for the standard machine. The measurement was conducted under the following conditions: distance of 15 m (49.2 ft) and “the machine moving forward in an intermediate gear ratio.”
  - The exterior sound power level is 113 dB(A) when the value is measured according to the static pressure test procedures and the conditions that are specified in “ISO 6393:2008.”
### Dimensions

All dimensions are approximate.

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<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Width – overall machine</td>
<td>3565</td>
<td>140.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Width – tractor (ladder down)</td>
<td>3688</td>
<td>145.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Width – tractor</td>
<td>3381</td>
<td>133.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Width – rear tire centers</td>
<td>2290</td>
<td>90.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Width – inside bowl</td>
<td>3048</td>
<td>120.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Width – outside rear tires</td>
<td>3165</td>
<td>124.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Height – overall shipping</td>
<td>4037</td>
<td>158.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Height – top of cab</td>
<td>3714</td>
<td>146.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Height – top of elevator</td>
<td>3768</td>
</tr>
<tr>
<td>10</td>
<td>Ground clearance, tractor</td>
<td>557</td>
</tr>
<tr>
<td>11</td>
<td>Front of tractor to front axle</td>
<td>3119</td>
</tr>
<tr>
<td>12</td>
<td>Axle to vertical hitch pin</td>
<td>540</td>
</tr>
<tr>
<td>13</td>
<td>Height – scraper blade maximum</td>
<td>520</td>
</tr>
<tr>
<td>14</td>
<td>Wheelbase</td>
<td>8370</td>
</tr>
<tr>
<td>15</td>
<td>Length – overall machine</td>
<td>13 767</td>
</tr>
<tr>
<td>16</td>
<td>Rear axle to rear of machine</td>
<td>2278</td>
</tr>
</tbody>
</table>
623H Rimpull

GROSS WEIGHT

RIMPULL

TOTAL RESISTANCE
(Grade Plus Rolling)

SPEED

km/h

mph

lb X 1000

kg X 1000

0 20 40 60 80 100 120 140 160

0 10 20 30 40 50 60 70 80

0 10 20 30 40 50 60 70 80

0 5 10 15 20 25 30 35 40 45 50

0 5 10 15 20 25 30
623H Retarding*

* at sea level on high setting
Standard equipment may vary. Consult your Cat dealer for details.

POWER TRAIN

TRACTOR:
- C13 ACERT engine with MEUI
- Cat Engine Brake
- Electric start, 24 Volt
- Air cleaner, dry type with precleaner
- Fan, hydraulic
- Diesel Particulate Filter (DPF) aftertreatment (for engine meeting U.S. EPA Tier 4 Interim/EU Stage IIIB emission standards)
- Ground level engine shutdown
- Radiator, aluminum unit core, 9 fins per inch
- Guard, crankcase
- Muffler (for engines achieving prior U.S. EPA Tier 3/EU Stage IIIA emission levels)
- Starting aid, ether
- Braking system:
  - Primary and Secondary, wet disc, hydraulic
  - Parking, hydraulically-released, spring-applied
- Throttle Lock

SCRAPER:
- C9.3 ACERT engine with high pressure common rail fuel
- Cat Engine Brake
- DPF aftertreatment module (for engine meeting U.S. EPA Tier 4 Interim/EU Stage IIIB emission standards)
- Electric start, 24 volt
- Fan, driveline
- Ground engine shutdown
- Muffler (for engines achieving prior U.S. EPA Tier 3/EU Stage IIIA emission levels)
- Starting aid, ether

Braking system:
- Primary and Secondary, wet disc, hydraulic
- Parking, hydraulically-released, spring-applied
- 4-speed (torque converter drive) transmission, planetary powershift

ELECTRICAL

TRACTOR:
- Alternator, 150 Amp
- Batteries (4), 12 Volt, 1,000 CCA, maintenance free, high output
- Electrical system, 24V
- Lighting system:
  - Headlights, halogen
  - Turn signals with hazard function
  - LED Floodlights, halogen (2), cutting edge (1), bowl (2), side vision (2)

SCRAPER:
- Alarm, backup
- Alternator, 65 Amp
- Batteries (4), 12 Volt, 1,000 CCA, maintenance free, high Output
- Lighting system:
  - Brake lights, LED
  - Turn signals with hazard function, LED

OPERATOR ENVIRONMENT

TRACTOR:
- HVAC system, heat, AC, defrost
- Thermostat control of HVAC system
- Coat hook
- Lunchbox platform with holding strap
- Diagnostic connection (2)
- 12V power ports (2)
- Differential lock (1)
- Dome courtesy light
- Horn, electric
- T-Handle implement control
- Mirror, rearview
- Radio ready, 12V
- ROPS/FOPS cab, pressurized
- Keypad switches
- Safety tab rocker switches
- Parking brake
- Seat belt, static two-piece
- Seat, air suspension, Comfort Series 3, rotates 30 degrees
- Steering wheel, tilt, telescoping, padded
- Storage in dash if WAVS or Cat Grade Control is not equipped
- Windows, right side emergency egress
- Windows, sliding
- Windows, laminated, zipped in
- Windshield wipers, front and rear windows, includes washers
- Door lock

Messenger Display – gauges, warnings include:
- Coolant temp
- Engine oil temp
- Hydraulic oil temp
- DPF temp
- Fuel level
- Park brake
- Implement lockout
- Brake system
- Regeneration required
- Throttle lock
- System voltage
- Secondary steering
- Bail down
- Differential lock
- Apron float
- Transmission hold
- Cushion hitch
- High beam lights
- Action lamp
- Engine speed, rpm
- Gear selection out
- DPF fill levels

FLUIDS

Extended Life Coolant to –37° C (–34° F)

OTHER STANDARD EQUIPMENT

TRACTOR:
- Cushion hitch
- Accumulators (cushion hitch) with Canadian Registration Number (CRN)
- Fast oil change
- Fenders, non metallic
- Heater, engine coolant 120V
- Tow pin, front
- Vandalism locks

SCRAPER:
- Quick drop bowl valve
- Vandalism locks
- Elevator with 15 flights
Optional equipment may vary. Consult your Cat dealer for details.

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<td>Work Area Vision System (WAVS) – three cameras showing</td>
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<td>display in cab</td>
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<td>External steering lock</td>
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<td>Cab precleaner</td>
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<td>Cab rotating beacon</td>
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<td>Air horn</td>
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<td>Fender extension, scraper</td>
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