

# D4K

Track-Type Tractor

**CATERPILLAR®**



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**Cat® Cat C4.4 ACERT Diesel Engine**

Net power (SAE J1349)	62.6 kW	84 hp
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**Weights**

Operating weight – XL	8147 kg	17,961 lb
Operating weight – LGP	8501 kg	18,742 lb



# D4K Features

## Comfortable Cab

*Spacious cab and air suspension seat keep you comfortable all day.*

## Seat-Mounted Controls

*Intuitive seat-mounted controls improve operator performance and reduce fatigue.*

## SystemOne™ Undercarriage

*See a dramatic reduction in tractor owning and operating costs with the state-of-the-art SystemOne undercarriage.*

## AccuGrade™ Systems

*Revolutionary grade control systems improve accuracy and increase productivity – with less effort.*



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The Cat® D4K Track-Type Tractor delivers superior performance and comfort while reducing your operating costs. The large spacious cab provides a comfortable work area. Intuitive seat-mounted controls are easy to use for greater job accuracy and efficiency. The innovative SystemOne undercarriage reduces maintenance time and costs – significantly impacting your bottom line. The AccuGrade Laser and GPS Systems help you get to grade faster, with fewer passes and less manpower. From the first cut to finish grade, the D4K sets the standard.

# Operator Station

Superior comfort keeps you productive, all day long.

The operator station is designed to keep operators comfortable, relaxed and productive throughout the long work shift. The D4K features:

- Standard air conditioning with cab option.
- Spacious cab with generous leg room.
- Fully adjustable air suspension seat with a heated seat option for cold climates.
- Wide door openings for getting in and out of the cab easily.
- Clear view to the blade corners and bottom cutting edge, especially important in fine grading, working against foundations and curbing.
- Operator sound level has been lowered inside the cab 4 dB(A) to an industry leading 80 dB(A) –ANSI/SAE J1166 OCT 98. This provides a quiet, comfortable working environment reducing operator fatigue and increasing their productivity.

## Seat-Mounted Joystick Controls

For optimum comfort and precise control, the D4K features ergonomically designed seat-mounted controls. Seat-mounted controls isolate vibrations from the operator, and provide independent seat and controls adjustment. Individual wrist pads and armrests can be adjusted independently for optimum comfort.

## Monitoring Package

Easy to read display provides vital system information. Buttons below the display allow the operator to select parameters for forward/reverse speed, blade response, steering response and decel pedal operation modes.

## Dozer Blade Control

Ergonomic joystick is easy to use and reduces operator fatigue. The intuitive control makes operating the tractor easy for both new and experienced operators. The new handle shape conforms to your hand for precise blade raise and tilt control with less operator fatigue. A thumb roller controls the blade angle and requires less effort than other competitive machines. A blade shake button on top of the handle provides momentary quick tilt movement to easily remove material from the blade.

## Combined Decel/Brake Pedal

Decel pedal serves combined function as engine speed control and brake. Depressing pedal through bottom of travel detent applies brake. Pedal mode can also be changed to control transmission speed with selection buttons on the display panel.





# Hydrostatic Transmission Control

Seat-mounted controls improve productivity.



## Speed and Direction Control

Speed, direction and steering are all controlled with a single, easy to use joystick for less effort and lower fatigue so you can get more done. The joystick controls direction and has three simple detented positions for travel – forward, reverse and neutral.

With the machine in motion, simply move the joystick in the direction you wish to move the machine. The more the joystick is moved to the right or left, the tighter the turn. Regardless of ground conditions, steering is consistent and predictable.

## Infinitely Variable Speed Control

The speed control thumb wheel mounted on the joystick is used to infinitely increase and decrease speed, letting the operator select the optimum speed for ground and job conditions. It also eliminates power interruption when changing speeds. A speed recall button on the joystick is used to select pre-determined speed settings.

## Maneuverability

The power turn feature lets you handle large loads around corners or through hard spots. Power turn capability improves mobility in soft underfoot conditions and is very effective on side slopes. Counter-rotation provides easy, quick maneuvering in tight areas or congested job sites.

## Engine

ACERT™ technology reduces emissions, increases performance.

The Cat® C4.4 is a 4.4 L (269 in<sup>3</sup>) displacement, four cylinder, inline configured engine equipped with a Caterpillar common rail fuel system. It uses ACERT™ Technology, a series of Caterpillar engineered innovations that provide advanced electronic control, precision fuel delivery and refined air management, resulting in outstanding performance and lower emissions. It meets the U.S. EPA Tier 3, EU Stage IIIA and Japan MOC Step 3 emissions standards.

The C4.4 delivers increased horsepower, outstanding durability, reliability and improved response to change in loads, delivering power when you need it. The engine is more compact, allowing the cab to sit more forward – this improves machine balance and provides greater operator comfort. The engine and transmission control systems are integrated to optimize performance and fuel efficiency.



# Undercarriage

## Lower owning and operating costs.

Undercarriage is a significant portion of a tractor's owning and operating costs. Caterpillar offers two different undercarriage choices for lowest owning and operating costs for your application needs. A sealed and lubricated track (SALT) undercarriage is standard; SystemOne™ undercarriage is available as an option. Full length guarding on top of the track roller frame prevents abrasive material from falling down on moving parts.

Machine balance is the key to good grading performance. Greater track length and a stable platform lead to optimum balance, allowing you to complete jobs easier and quicker with the D4K than with competitive machines.

### SystemOne Undercarriage

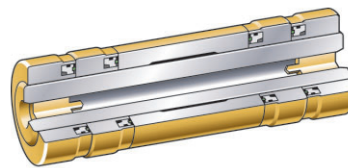
With the revolutionary SystemOne undercarriage option, undercarriage maintenance time and costs are greatly reduced, lowering your costs and helping your bottom line. This innovative system uses a rotating bushing design which increases bushing life and eliminates the need for bushing turns. The rotating bushing combined with long wear life sprockets and center tread idler, increases the life and dependability of the entire system. Ideal for virtually any application or underfoot condition, the SystemOne undercarriage also features significantly less vibration for a better, more comfortable ride.

### Sealed and Lubricated Track (SALT) Undercarriage

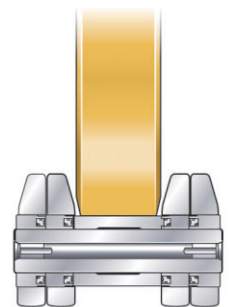
The standard sealed and lubricated track (SALT) undercarriage is built for long life in rugged conditions. Segmented sprockets are easy to replace and less expensive than replacing the complete sprocket hub.

### Choice of Track Frame Configurations

Track frames are available in extra long (XL) or low ground pressure (LGP) configurations. XL undercarriage provides increased ground contact area and flotation, superior balance and excellent finish grading. In addition, the LGP version also features a wider track shoe, increasing ground contact area for optimum flotation and stability on sloping and finish grading jobs.



*SystemOne Cartridge*



*SystemOne Center Tread Idler*



# AccuGrade™ Systems

## Grade with increased accuracy.

Caterpillar is revolutionizing the way to move material with new technology solutions for earthmoving machines – solutions that provide greater accuracy, higher productivity, lower operating costs and greater profits. The AccuGrade System is designed and integrated into the machine and hydraulic systems to create an automated blade control system that allows operators to grade with increased accuracy. The system uses machine-mounted sensors to calculate precise blade slope and elevation information.

### AccuGrade Laser

AccuGrade Laser uses a laser transmitter and receiver for precise grade control. A laser transmitter on the worksite creates a constant grade reference over the work area. A digital laser receiver mounted on the machine captures the laser signal. The system calculates the blade adjustments necessary to achieve grade, makes automatic elevation adjustments typically performed by the operator and provides automatic blade control. The operator simply steers the machine. Automated blade control lets you achieve grade faster and in fewer passes, reducing the need for traditional survey stakes or grade checkers. The system also calculates cut/fill requirements for manual blade control. Work is completed faster, more accurately and with less manpower. AccuGrade Laser is well suited for flat work such as concrete pads and driveways.

### AccuGrade GPS

AccuGrade GPS computes the machine positioning information and compares the position of the blade relative to the design plan. Information is provided to the operator via an in-cab display showing blade elevation, necessary cut/fill to achieve grade, blade position on the design surface and a graphical view of the design plan with machine location. AccuGrade GPS puts all the information the operator needs to complete the job in the cab for a greater level of control. Vertical and horizontal guidance tools visually guide the operator to the desired grade. Automated features allow the hydraulic system to automatically control blade adjustments to move the blade to grade. The operator simply uses the light bars to guide the machine for consistent, accurate grades and slopes, increasing productivity with less fatigue. AccuGrade GPS is best used for cut and contour jobs.

### AccuGrade Monitor

Caterpillar is the first to integrate this system and its monitor into the machine's dash for easy viewing during operation. The AccuGrade monitor is conveniently located, allowing the operator to view system information while keeping a straight line of sight to the blade corners.



*AccuGrade Laser Display*



*AccuGrade GPS Display*



# Blade and Attachments

Cat work tools can handle tough dozing applications.

## VPAT Blade

The VPAT blade is specifically designed for finish grading, backfilling ditches, cutting V ditches, windrowing, fill spreading, medium land clearing and heavy dozing. Built for rugged strength and durability, this 6-way blade allows for adjustable angle, tilt and pitch. Visibility to the blade corners and cutting edge is improved. This is especially critical when working near curbs and foundation structures.

## Parallelogram Ripper

The aggressive parallelogram ripper lets you do more productive ripper work. The parallel linkage design provides better penetration and maneuverability in tight working areas.

## Forestry Options

An easier way to work in the woods. The D4K is available with the following features to aid in forestry applications:

- Forestry blade, featuring additional guarding to protect the tractor from debris and to provide increased productivity.
- Cat hydrostatic winch, featuring excellent line pull at any speed and infinitely variable drum speed.
- 360 degree guarding, for added protection of the cab.
- Heavy-duty rear tank guard.



## Hydrostatic Winch

Infinitely variable speed control.

The Cat hydrostatic winch offers outstanding control of the load with infinitely variable modulation of speed and pull. Mechanical winches force the operator to choose the gear ratio of the winch. The Cat hydrostatic winch eliminates this compromise by providing the speed of a standard winch and the pull of a low speed winch, all in one package. The result is:

- Excellent line pull at any speed
- Infinitely variable drum speed
- Lower operator effort
- Unmatched load control





# Serviceability

Easy access and minimal maintenance requirements keep your machine on the job.



## Easy Access

Long service intervals and easy maintenance keep the machine up and running and lower your owning and operating costs. A large, hinged door on the left side of the engine compartment provides easy access to all regular engine maintenance points, including engine fuel filters and water separator, the engine oil filter, the engine oil dipstick and filler, the fuel priming pump and the engine air pre-cleaner and filters. Grouped pressure taps allow for quick testing and troubleshooting of the hydraulic system. The hydraulic filters are all located in the left rear service compartment and are accessible from ground level.

## Product Link

The optional Product Link system simplifies equipment fleet tracking. Using satellite or cellular technology, the system automatically reports information such as location, machine hours, active and logged service codes and security alarms.

## Machine Security System

An optional Machine Security System (MSS) that utilizes a programmable key system that deters theft, vandalism and unauthorized usage. MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters.

# Customer Support

Unmatched support makes the difference.

**Your Cat dealer is ready to assist you with your purchase decision and everything after.**

- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine, so you can make the right choice.
- For more information on Cat products, dealer services and industry solutions, visit us at [www.cat.com](http://www.cat.com).





# D4K Track-Type Tractor Specifications

## Engine

Engine model	CAT C4.4 ACERT	
Power – Gross	68.5 kW	92 hp
Power – Net	62.6 kW	84 hp
Displacement	4400 cm <sup>3</sup>	269 in <sup>3</sup>
Caterpillar	62.6 kW	84 hp
ISO 9249	62.6 kW	84 hp
EEC 80/1269	62.6 kW	84 hp
SAE J1349	62.6 kW	84 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in

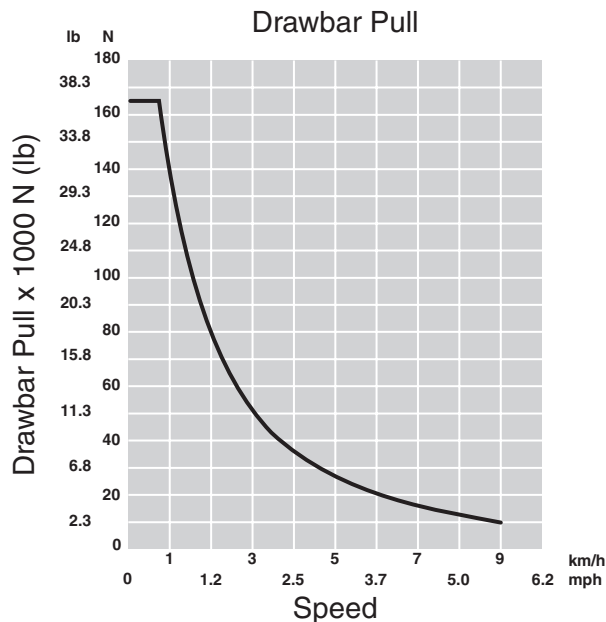
- Ratings at 1,900 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 3000 m (9,843 ft) altitude.

## Weights

Operating weight – XL	8147 kg	17,961 lb
Operating weight – LGP	8501 kg	18,742 lb

- Operating with dozer blade, canopy ROPS, back-up alarm, operator, coolant, lubricants and full fuel tank.

## Drawbar



## Transmission

Drive pumps	2	
Track motors	2	
Relief valve settings	47 650 kPa 6,911 psi	
Maximum travel speed – forward	9 km/h	5.6 mph
Maximum travel speed – reverse	10 km/h	6.2 mph

- Dual-path, closed loop hydrostatic drive provides infinitely variable speeds from 0-9 km/h (0-5.6 mph) forward and 0-10 km/h (0-6.2 mph) reverse.
- Full-flow filtering of hydrostatic charge system oil.
- Drive pumps: two variable-displacement, slipper-axial piston pumps mounted tandem-style to engine flywheel housing.
- Track motors: two variable-displacement, link-type piston motors.

## Service Refill Capacities

Fuel tank	195 L	51.5 gal
Crankcase and filter	11 L	2.91 gal
Final drives, XL (each side)	10 L	2.6 gal
Final drives, LGP (each side)	10 L	2.6 gal
Cooling system	22.4 L	5.92 gal
Transmission/hydraulic tank	59.5 L	15.7 gal

## Hydraulic Controls

Pump output	73.5 L/min	19.4 gal/min
Relief valve setting	20 600 kPa	2,988 psi

- Pump output ratings at 2,150 rpm and 6895 kPa (1,000 psi).
- Control positions:
  - Lift cylinders – raise, hold, lower, float.
  - Tilt cylinders – left, hold, right.
  - Angle cylinders – left, hold, right.
  - Ripper cylinders – raise, hold, lower.

## Final Drive

Features:

- Double-reduction planetary gear set.
- Mounted independently of track frames to isolate them from machine weight and ground-induced shock loads.

## Steering and Braking

Features:

- Full powerturn.
- Counterrotation.
- Single lever steering, speed and direction control.
- Hydrostatic (dynamic) braking through machine drive system using transmission control lever, center brake pedal or decel pedal.



# D4K Track-Type Tractor Specifications

## Undercarriage

Number of rollers (each side)	7	
Number of shoes (each side) – SALT (Sealed and Lubricated Track) Undercarriage	43	
Number of shoes (each side) – SystemOne Undercarriage	38	
Shoe width – XL	460 mm	18 in
Shoe width – LGP	635 mm	25 in
Length of track on ground – XL	2248 mm	89 in
Length of track on ground – LGP	2248 mm	89 in
Track gauge – XL	1550 mm	61 in
Track gauge – LGP	1725 mm	68 in
Ground contact area – XL	20 682 cm <sup>2</sup>	3,206 in <sup>2</sup>
Ground contact area – LGP	28 550 cm <sup>2</sup>	4,425 in <sup>2</sup>
Ground pressure – XL	38.6 kPa	5.6 psi
Ground pressure – LGP	29.2 kPa	4.24 psi

- Hydraulic track adjusters.
- Box section track roller frames.
- Bolt-on rear track guiding guards.
- Full length recoil guarding with sprocket guards and wipers.
- Serrated, two-piece split master link (SALT).
- Single-grouser shoes.
- Segmented sprocket (SALT).
- Sealed and lubricated rollers and idlers.

## Standards

ROPS	SAE J397-OCT95, SAE J1040-MAY94, ISO 3471-94, ISO 3164-95
FOPS	SAE J231-JAN81, ISO 3449-92

## Ripper

Type	Parallelogram	
Number of shanks	3	
Maximum digging depth	337.5 mm	13.3 in
Maximum reach at ground line	596 mm	23.5 in
Maximum ground clearance under tip	448 mm	17.6 in
Overall width	1710 mm	67.3 in
Height	165 mm	6.5 in
Weight	554 kg	1,222 lb

## Winch

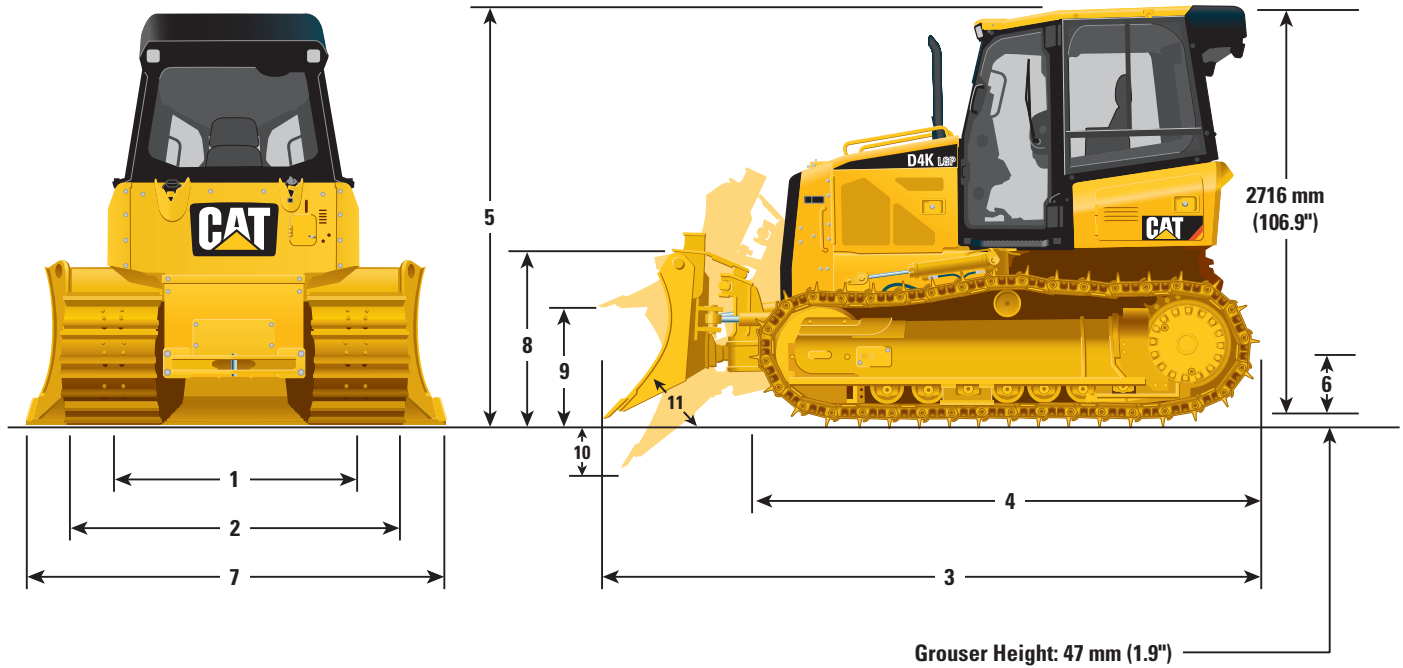
Weight	610 kg	1,345 lb
Winch drive	Hydrostatic	
Control	Hydraulic	
Speed	Variable	
Winch length	705 mm	27.76 in
Overall width	741 mm	29.2 in
Drum diameter	254 mm	10 in
Drum width	274 mm	10.8 in
Throat clearance	171.5 mm	6.75 in
Rope diameter – recommended	16 mm	0.63 in
Rope diameter – optional	19 mm	0.75 in
Drum capacity – recommended cable	113 m	371 ft
Drum capacity – optional cable	78 m	256 ft
Maximum line pull – bare drum	18 144 kg	40,000 lb
Maximum line pull – full drum	11 340 kg	25,000 lb
Maximum line speed – bare drum	40 m/min	131 ft/min
Maximum line speed – full drum	63 m/min	207 ft/min

- Infinitely variable line speed and line pull from 0 to maximum.
- Power in/power out, brake off, free spool (standard equipment).
- Single lever, low effort hydraulic control.
- Precise load control and speed modulation.
- Integral mounted drawbar.
- 3 roller fairlead available. Kit available to add a 4th roller.



## Dimensions

All dimensions are approximate.



	XL	LGP
1 Track gauge	1550 mm (61")	1725 mm (67.9")
2 Width of tractor (std shoes, no blade)	2010 mm (79.1")	2360 mm (92.9")
3 Overall length (w/blade)	4274 mm (168.3")	4266 mm (168")
4 Length of basic tractor (w/o blade)	3275 mm (128.9")	3275 mm (128.9")
5 Tractor height	2763 mm (108.8")	2763 mm (108.8")
6 Ground clearance	332 mm (13")	332 mm (13")

BLADE	XL	Intermediate	LGP
7 Blade width	2782 mm (109.5")	2921 mm (115")	3149 mm (123.9")
8 Blade height	1010 mm (39.8")	860 mm (33.9")	910 mm (35.8")
9 Blade lift height	743 mm (29.3")	743 mm (29.3")	708 mm (27.9")
10 Digging depth	573 mm (22.5")	590 mm (23.2")	590 mm (23.2")
11 Blade cutting edge angle, adjustable	52° to 58°	52° to 58°	52° to 58°
Maximum tilt	387 mm (15.2")	448 mm (17.6")	438 mm (17.2")
Maximum angle (either side)	25°	25°	25°
Blade width at maximum angle	2542 mm (100.1")	2669 mm (105.1")	2874 mm (113.1")
Blade capacity (SAE)	1.98 m <sup>3</sup> (2.59 yd <sup>3</sup> )	1.50 m <sup>3</sup> (1.96 yd <sup>3</sup> )	1.85 m <sup>3</sup> (2.42 yd <sup>3</sup> )



# D4K Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for details.

## ELECTRICAL

Horn  
Backup alarm  
Diagnostic connector  
Heavy duty 750 CCA batteries  
Alternator, 12V, 120 Amp, heavy duty brushless  
12V Starter

## OPERATOR ENVIRONMENT

ROPS/FOPS cab with sliding side windows and air conditioning  
Cat C500 comfort cloth air suspended seat with adjustable armrests  
76 mm (3 inch) retractable seat belt  
Adjustable seat-mounted, electro-hydraulic controls  
Foot rests  
Compact Instrument Cluster including:  
• Gauges for engine coolant temperature, hydraulic oil temperature and fuel level  
• 12 indicators  
• Digital display (ground speed, engine RPM, hour meter)  
Rotary throttle switch

Travel speed limiter  
Independent forward/reverse speed settings  
Single pedal combining deceleration and braking functions  
Rearview mirror  
12V power port  
Coat hook  
Storage compartment  
Cup holder  
Heavy duty rubber floor mat  
Windshield washers and wipers, front and rear

## POWER TRAIN

Caterpillar C4.4 ACERT diesel engine, turbocharged  
Aluminum bar plate cooling system (radiator, power train)  
Blower fan  
Air cleaner with precleaner, automatic dust ejection and under-hood intake  
Fuel priming pump with integrated fuel/water separator  
Dual path, closed-loop hydrostatic transmission  
Under-hood muffler

## HYDRAULICS

Hydraulics, 3 valve

## UNDERCARRIAGE

SALT Undercarriage  
Lifetime lubricated track rollers (7) and idlers  
Carrier rollers  
Tracks, 43 sections:  
• XL configuration 457 mm (18 in)  
• LGP configuration 635 mm (25 in)  
Hydraulic track adjusters

## OTHER STANDARD EQUIPMENT

C-Frame, VPAT, hydraulic cylinders and lines  
Fuel tank  
Heavy duty crankcase guard  
Lockable engine enclosures  
Idler guards  
Radiator guard and grill  
Front pull device  
Rigid drawbar  
S•O•S<sup>SM</sup> ports (engine, power train and hydraulics)

## ANTIFREEZE

Extended life coolant, -37° C (-35° F)

Optional equipment may vary. Consult your Caterpillar dealer for details.

## ELECTRICAL

Integrated two front halogen lights, one rear halogen light  
Integrated four front halogen lights, two rear halogen lights

## POWER TRAIN

Drive auxiliary  
Installation, winch

## UNDERCARRIAGE

### TRACK PAIRS, XL

- Track, 457 mm (18 in) MS SystemOne™

### TRACK PAIRS, LGP

- Track, 635 mm (25 in) MS SystemOne™

## OPERATOR ENVIRONMENT

Cab  
Cab, polycarbonate windows, 360 degree guarding protection  
Seat, cloth, air suspension, heated  
Radio, AM/FM, CD player

## HYDRAULICS

Hydraulics, 4 valve for use with ripper  
Hydraulics, 4 valve for use with winch

## GUARDS

Guard, rear, heavy duty  
Grill, radiator, heavy duty  
Guard, track guiding, center  
Guard, track guiding, full length  
Screen, rear, cab  
Screen, side, cab  
Screen, rear, canopy  
Screen, front and sides, canopy  
Sweeps, front  
Sweeps, rear

## BLADES

VPAT XL blade  
VPAT LGP blade  
VPAT Intermediate blade

## REAR ATTACHMENTS

Drawbar, towing  
Mounting, winch  
Ripper, parallelogram, includes three shanks and teeth

## REAR ATTACHMENT CONTROL

Control, ripper  
Control, winch  
Control, ripper and winch

## MACHINE CONTROL AND GUIDANCE

Installation, AccuGrade ready

## STARTING AIDS

Heater, engine, coolant, 120V  
Starting aid, ether

## OTHER ATTACHMENTS

Enclosure, sound suppression  
Machine Security System  
Caterpillar Product Link 321  
Caterpillar Product Link 121

## ANTIFREEZE

Coolant, ext. life, -50° C (-58° F)

## FIELD INSTALLED ATTACHMENT

Winch, hydrostatic









# D4K Track-Type Tractor

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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AEHQ5889 (09-2007)  
Replaces AEHQ5556

