

D5K

Track-Type Tractor

CATERPILLAR®



Cat® Cat C4.4 ACERT Diesel Engine

Net power (SAE J1349)	71.6 kW	96 hp
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Weights

Operating weight – XL	9408 kg	20,741 lb
Operating weight – LGP	9683 kg	21,347 lb

D5K 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® D5K 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 D5K 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 D5K 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 D5K 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 in³) 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 D5K 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. As an additional choice, the LGP undercarriage on the D5K is available with 762 mm (30 in) shoes.



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 D5K 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.



D5K Track-Type Tractor Specifications

Engine

Engine model	CAT C4.4 ACERT	
Power – Gross	74.5 kW	100 hp
Power – Net	71.6 kW	96 hp
Displacement	4400 cm ³	269 in ³
Caterpillar	71.6 kW	96 hp
ISO 9249	71.6 kW	96 hp
EEC 80/1269	71.6 kW	96 hp
SAE J1349	71.6 kW	96 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in

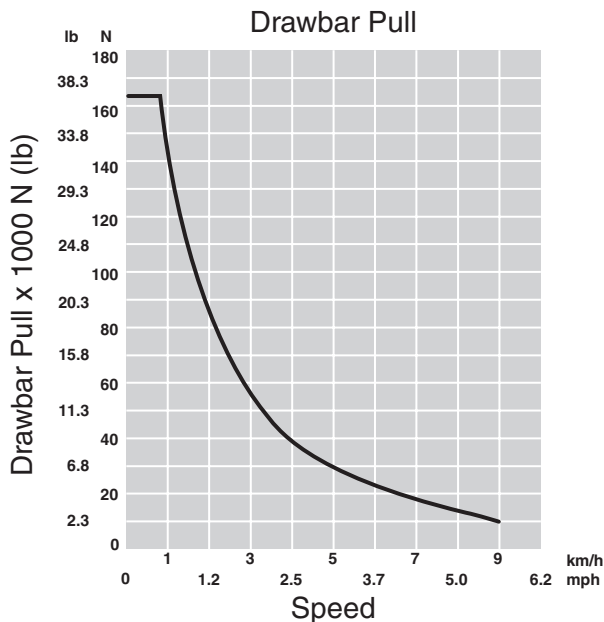
- Ratings at 1,900 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 3000 m (9,843 ft) altitude.

Weights

Operating weight – XL	9408 kg	20,741 lb
Operating weight – LGP	9683 kg	21,347 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
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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.

D5K Track-Type Tractor Specifications

Undercarriage

Number of rollers (each side)	7	
Number of shoes (each side) – SALT (Sealed and Lubricated Track) Undercarriage	40	
Number of shoes (each side) – SystemOne Undercarriage	36	
Shoe width – XL	510 mm	20 in
Shoe width – LGP	770 mm	30 in
Shoe width – LGP	660 mm	26 in
Length of track on ground – XL	2310 mm	91 in
Length of track on ground – LGP	2310 mm	91 in
Track gauge – XL	1600 mm	63 in
Track gauge – LGP	1750 mm	69 in
Track gauge – LGP with 770 mm (30 in) shoes	1860 mm	73.2 in
Ground contact area – XL	23 562 cm ²	3,652 in ²
Ground contact area – LGP	30 492 cm ²	4,726 in ²
Ground contact area – LGP with 770 mm (30 in) shoes	35,574 cm ²	5,514 in ²
Ground pressure – XL	39.1 kPa	5.67 psi
Ground pressure – LGP	31.1 kPa	4.52 psi
Ground pressure – LGP with 770 mm (30 in) shoes	27.1 kPa	3.93 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	555 mm 21.9 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

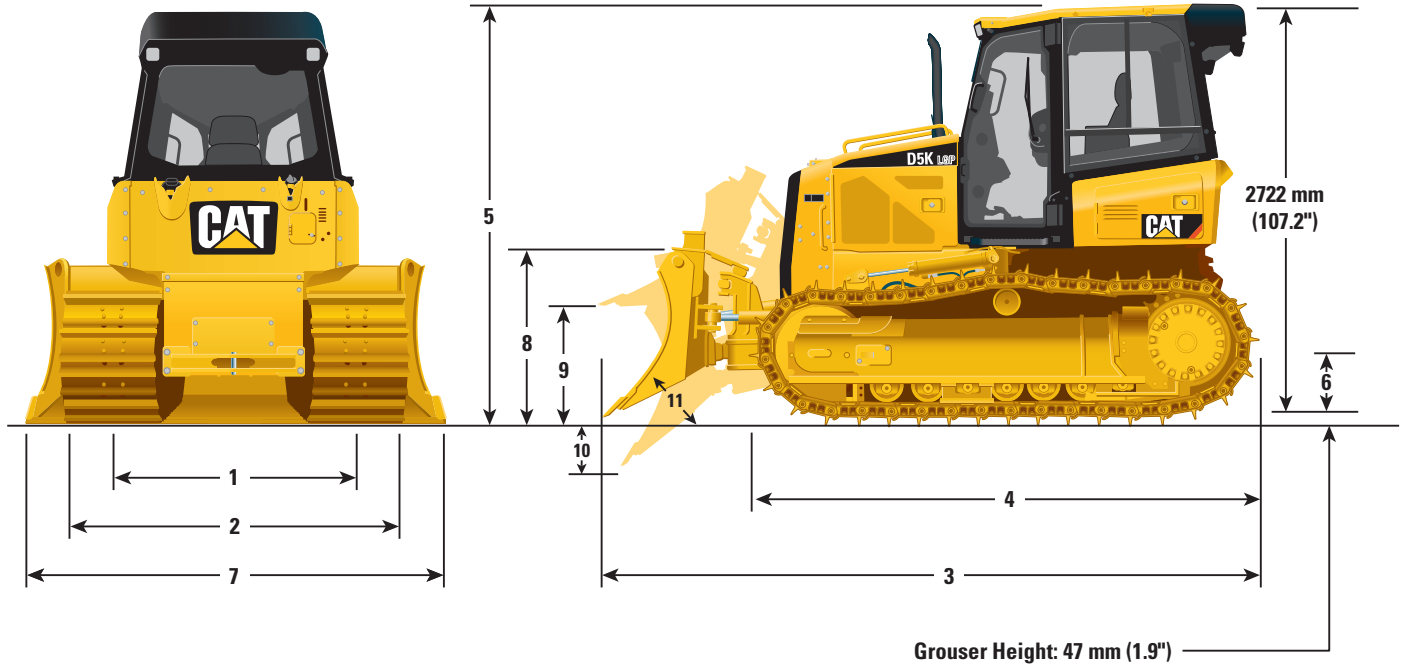
Winch

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	LGP with 770 mm (30") shoes
1 Track gauge	1600 mm (63")	1750 mm (68.9")	1860 mm (73.2")
2 Width of tractor (std shoes, no blade)	2110 mm (83.1")	2410 mm (94.9")	2630 mm (103.5")
3 Overall length (w/blade)	4321 mm (170.1")	4294 mm (169.1")	4294 mm (169.1")
4 Length of basic tractor (w/o blade)	3265 mm (128.5")	3265 mm (128.5")	3265 mm (128.5")
5 Tractor height	2769 mm (109")	2769 mm (109")	2769 mm (109")
6 Ground clearance	332 mm (13")	332 mm (13")	332 mm (13")

BLADE	XL	Intermediate	LGP
7 Blade width	2782 mm (109.5")	2921 mm (115")	3220 mm (126.7")
8 Blade height	1073 mm (42.2")	1010 mm (39.8")	1010 mm (39.8")
9 Blade lift height	767 mm (30.2")	767 mm (30.2")	767 mm (30.2")
10 Digging depth	586 mm (23.1")	572 mm (22.5")	572 mm (22.5")
11 Blade cutting edge angle, adjustable	52° to 58°	52° to 58°	52° to 58°
Maximum tilt	402 mm (15.8")	448 mm (17.6")	448 mm (17.6")
Maximum angle (either side)	25°	25°	25°
Blade width at maximum angle	2636 mm (103.8")	2669 mm (105.1")	2940 mm (115.8")
Blade capacity (SAE)	2.19 m ³ (2.86 yd ³)	2.09 m ³ (2.73 yd ³)	2.34 m ³ (3.06 yd ³)

D5K Standard Equipment

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

ELECTRICAL

Horn
Backup alarm
Diagnostic connector
Heavy duty 900 CCA batteries
Alternator, 12V, 120 Amp, heavy duty brushless
12V Starter

OPERATOR ENVIRONMENT

ROPS/FOPS canopy with heater
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, 40 sections:
• XL configuration 510 mm (20 in)
• LGP configuration 660 mm (26 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•SSM 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, 510 mm (20 in) MS SystemOne™

TRACK PAIRS, LGP

- Track, 660 mm (26 in) MS SystemOne™
- Track, 760 mm (30 in) MS SystemOne™

OPERATOR ENVIRONMENT

ROPS/FOPS cab with sliding side windows, heater and air conditioning
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

D5K Track-Type Tractor

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