# D5K

Track-Type Tractor

### **CATERPILLAR®**



Cat® Cat C4.4 ACERT Diesel Engine		
Net power (SAE J1349)	71.6 kW	96 hp
Weights		
Operating weight – XL	9408 kg	20,741 lb
Operating weight – LGP	9683 ka	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<sup>TM</sup> 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 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**

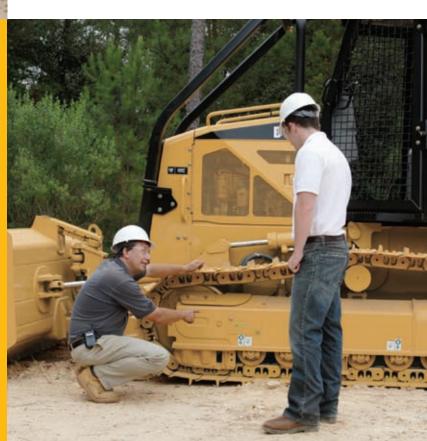
An optional Machine Security System (MSS) that utilizes a programmable key system that deters theft, vandalism and unauthorized usage. MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters.

### **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 <sup>3</sup>	269 in <sup>3</sup>
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  – XI.	9408 kg	20,741 lb
Operating weight	9683 kg	21,347 lb

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

<b>Transmission</b>		
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 tandemstyle 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	

<b>Hydraulic</b>	<b>Controls</b>
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Pump output	73.5 L/min	19.4 gal/min
Relief valve setting	20,600 kPa	2 988 nsi

- 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:

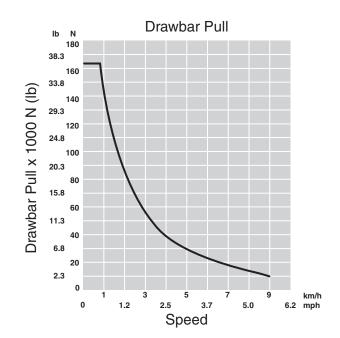
- Double-reduction planetary gear set.
- Mounted independently of track frames to isolate them from machine weight and ground-induced shock loads.

### **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.

### **Drawbar**



### **D5K Track-Type Tractor Specifications**

Undoroarriago		
Undercarriage		
Number of rollers (each side)	7	
	40	
Number of shoes (each side) – SALT	40	
(Sealed and		
Lubricated Track)		
Undercarriage		
Number of	36	
shoes (each side)	30	
- SystemOne		
Undercarriage		
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	2310 mm	91 in
ground – XL	2310 IIIII	91 III
Length of track on	2310 mm	91 in
ground – LGP		
Track gauge – XL	1600 mm	63 in
Track gauge – LGP	1750 mm	69 in
Track gauge – LGP	1860 mm	73.2 in
with 770 mm		
(30 in) shoes		
Ground contact area  – XL	23 562 cm <sup>2</sup>	3,652 in <sup>2</sup>
Ground contact area	30 492 cm <sup>2</sup>	4,726 in <sup>2</sup>
– LGP		,
Ground contact area	35,574 cm <sup>2</sup>	5,514 in <sup>2</sup>
- LGP with 770 mm		
(30 in) shoes		
Ground pressure	39.1 kPa	5.67 psi
– XL		
Ground pressure	31.1 kPa	4.52 psi
– LGP		
Ground pressure –	27.1 kPa	3.93 psi
LGP with 770 mm		•
(30 in) shoes		
. Undraulia traals ad		

- 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

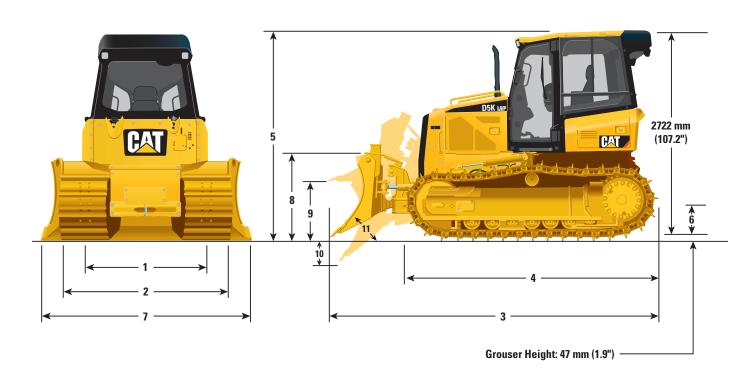
Ripper		
Type	Parallelogram	
Number of shanks	3	
Maximum digging depth	337.5 mm	13.3 in
Maximum reach at ground line	555 mm	21.9 in
Maximum ground clearance under tip	448 mm	17.6 in
Overall width	1710 mm	67.3 in
Height	165 mm	6.5 in
Weight	554 kg	1,222 lb

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	<b>52</b> ° to <b>58</b> °	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 m³ (2.86 yd³)	2.09 m³ (2.73 yd³)	2.34 m³ (3.06 yd³)

### **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•S<sup>SM</sup> ports (engine, power train

and hydraulics)

ANTIFREEZE

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

### **D5K Optional Equipment**

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<sup>TM</sup> TRACK PAIRS, LGP

• Track, 660 mm (26 in) MS SystemOne<sup>TM</sup>

• Track, 760 mm (30 in) MS SystemOne<sup>TM</sup>

OPERATOR ENVIRONMENT

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

neater 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

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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

### Notes

### **D5K Track-Type Tractor**

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at <a href="https://www.cat.com">www.cat.com</a>

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Materials and specifications are subject to change without notice. Featured machines may include additional equipment. See your Caterpillar dealer for available options.

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