# **D5M**Track-Type Tractor





# XL & LGP

Cat® 3116 turbocharged diesel en	gine	
Power shift		A Nowe
Gross horsepower	90 kW	121 HP
Flywheel horsepower	82 kW	110 HP

Operating weight		
XL arrangement		
Power shift	11 700 kg	25,800 lb
LGP arrangement		( 6 U.S.
Power shift	12 600 kg	27,800 lb
Blade capacity	998 7 Pagains	
XL arrangement	2.59 m³	3.37 yd³
LGP arrangement	2.03 m <sup>3</sup>	2.64 yd3

# **D5M Track-Type Tractor**

An outstanding choice for productivity and versatility.

### **Power Train**

Perfectly matched power train. From

the powerful and fuel efficient 3116

DIT engine to the durable power shift transmission, all Caterpillar<sup>∞</sup>

components work together to deliver responsive power when you need it.

pg. 4-5

### Structure

Mainframe is designed and built for durability by using the latest technology in engineering and manufacturing. It provides solid support and perfect alignment for major components. pg. 6

### Undercarriage

The elevated sprocket moves the final drives above the work area, isolating them from ground impacts for long power train component life. Choice of XL and LGP configuration to best match the application. pg. 7



### Operator Station

Ergonomically designed for maximum productivity and comfort. Controls are intuitive, low-effort and easy to reach, viewing area is excellent, instrument panel is easy to read and informative, sound level is reduced and storage space has been increased.

pg. 8-9

# **Optional Finger Tip Control**

✓ Effortless and precise one-hand electronic steering and transmission control with auto shift and autokickdown features to increase operator efficiency and reduce operator fatigue. pg. 10

### **Work Tools**

Variable pitch Power Angle Tilt (VPAT) blade, rippers and other options allow you to customize the D5M to match specific application. pg. 11

### Serviceability

Major modular components are designed for excellent serviceability, and allow fast in-field component exchange. pg. 12

# **Customer Support**

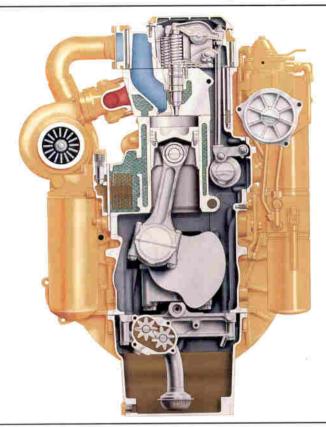
The best parts availability and the best service capability. pg. 13



✓ New feature

# **Power Train**

The Caterpillar 3116 engine, optimally matched with torque converter and power shift transmission, provides an excellent balance between efficiency and power.



Cat 3116 Engine. Caterpillar 3116 engine performs at full-rated net power of 82 kW (110 hp) at 2100 rpm with high torque rise of 36%. High horsepower, combined with high torque rise, give the D5M the ability to doze through tough material. Plus, this engine meets all the latest emission regulations around the world.

**Turbocharging** improves response and performance at low to medium engine speeds.

### **Direct Unit Injection Fuel System**

eliminates external high pressure fuel lines and provides excellent control of injection timing with individually metered, high-pressure, direct-injection of fuel. Result is improved engine response and reliability plus low fuel consumption and emissions.

Resilient engine mounting for quieter operation and less vibration.

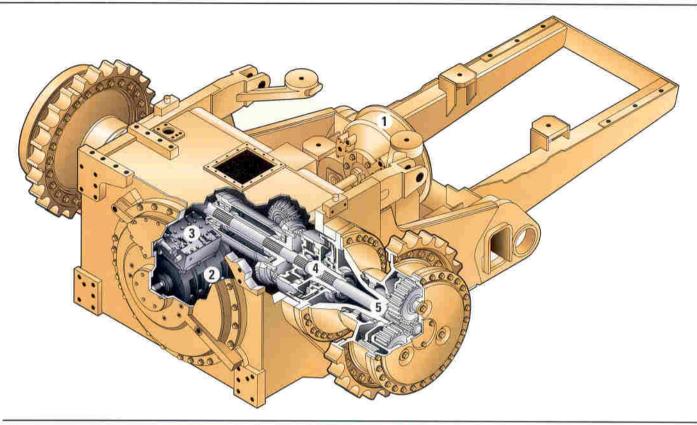
### Long-life design

- One-piece, stress relieved, cast iron cylinder block for increased rigidity.
- High-strength, one-piece cylinder head with replaceable stainless steel intake valve seat and nickel alloy exhaust valve seat.
- Optimized camshaft location, short pushrods and roller followers to reduce flexing.
- Full-length, water-cooled cylinders for maximum heat transfer.
- Large engine oil cooler to maintain optimum engine oil temperature.
- Main and rod bearing surfaces increased for better wear life.
- Two piece articulated piston with forged steel crown for added durability.
- Low-mounted oil pump for quick start-up lubrication.

Easy maintenance. The engine can be rebuilt for a second life. Caterpillar remanufactured parts are available to economically replace many components. Some innovative maintenance features of the 3116 engine:

- Parent-metal cylinder block can be rebored twice and dry-sleeved.
- Connecting rods can be removed through the tops of the cylinders.
- Camshaft followers and pushrods can be easily replaced without removing the camshaft.
- Water pump can be serviced as a unit or rebuilt.

Improved multiple row modular radiator efficiently cools engine for optimum engine performance in tough environments and applications.

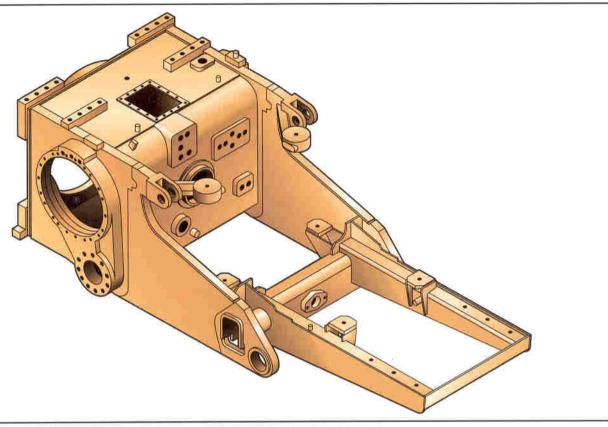


**Drive train components** are matched and balanced to deliver exceptional performance and durability.

- 1 Torque converter responds to changing load conditions by providing torque multiplication for increased drawbar pull while protecting the drive train from shock loads.
- 2 Power shift transmission. Proven planetary design delivers fast, smooth speed changes while distributing loads over multiple gears for long life. Perimeter-mounted clutches provide superior heat dissipation and a large contact area for long service life.
- 3 Electronic Clutch Pressure Control for smooth and automatic shifting features for Finger Tip Control machines.
- 4 Clutches and brakes. Oil-cooled, hydraulically actuated multiple-disc clutches and brakes for smooth, precise turns.
- 5 Final drives. Precision, high load capacity gears and bearings give long-lasting performance and durability.

# Structures

Engineered and manufactured to provide durability in the most demanding work.



High strength steel mainframe. The D5M mainframe absorbs high impact shock loads and twisting forces.

Computer-aided finite element analysis used to evaluate and ensure high durability.

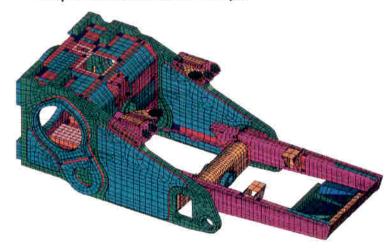
Full scale structural testing analysis to verify and ensure integrity of the mainframe.

**Robotic welding** provides deep penetration and consistency for long life.

**Precision top level machining** for perfect alignment of bores and surfaces.

Pivot shaft and pinned equalizer bar for maintaining track roller frame alignment.

Computer-aided finite element analysis



# Undercarriage

The Caterpillar elevated sprocket undercarriage arrangements are designed for better balance, performance and component life.



Final drives and associated power train components are raised above the work area, isolating them from groundinduced impact loads, as well as implement and roller frame alignment loads, extending power train component life.

Sprocket position keeps sprocket teeth, bushings and final drives away from the abrasive materials and moisture, resulting in longer final drive gear and seal life.

# High flange improved track rollers

(optional) combined with center or full length roller guard attachments greatly improve track guiding for demanding side slope conditions.

### XL arrangement

Forward idler position provides additional track on ground for finish grading applications.

Wider gauge for enhanced side slope stability and wider shoe options when additional flotation is required.

### LGP arrangement

LGP undercarriage is specially designed to work in soft and spongy conditions.

Wide track shoes, long track frame and wider gauge increase track contact area, reduce ground pressure for improved stability and provide excellent flotation in swampy conditions.

### Track shoe options

Caterpillar single-grouser shoes are made from heat-treated, rolled steel for added strength.

 Widths available for XL arrangements:
 560 mm (22") standard:

Provides excellent flotation in most applications.

510 mm (20"):

For use in dryer conditions.

Widths available for LGP arrangements:

760 mm (30") standard:
Provide excellent flotatio

Provide excellent flotation in wet underfoot conditions.

610 mm (24"):

For use in dryer ground conditions.

770 mm (30") self cleaning: Made of cast steel, this shoe reduces material buildup for better traction, especially in spongy applications.

# **Operator Station**

Ergonomically designed for operator's maximum comfort and productivity.





- 1 Operator's station provides excellent viewing area to blade and rear of machine. Optional isolation-mounted cab has reduced vibration and operator sound level below 79 dB(A) for comfortable operation. Standard cab is radio-ready with mounting brackets, AM/FM antenna and speakers.
- 2 The Caterpillar Contour Series Seat is ergonomically designed and fully adjustable for maximum comfort. The seat cushion reduces the pressure on the lower back and thighs while allowing unrestricted arm and leg movement. (Cloth contour series seat is standard with cab; vinyl contour series seat is available for ROPS canopy.)
- 3 Standard clutch and brake lever steering machines have traditional easy-to-reach, low-effort controls providing sure and precise steering and dozer control.

- 4 Optional Finger Tip Control (FTC) equipped machines have intuitive and effortless one hand steering and transmission control providing maximum comfort and productivity.
- 5 Standard instrument panel for the clutch and brake lever steering machine is the traditional Electronic Monitoring System (EMS) with standard gauge group.
- 6 Instrument panel for the Finger Tip Control (FTC) equipped machines is the new Caterpillar Monitoring System (CMS) which includes scroll through digital display for gear selection, engine speed, hour meter, diagnostic codes and other vital information. Also has gauge group displaying fuel level, coolant, power train oil and hydraulic oil temperatures. This system also provides instant feedback on machine systems with three levels of operator alert.

## Other improvements include:

- Storage for lunch box, cup and insulated bottle.
- Adjustable armrests with kneepads.
- Dash-mounted heater for OROPS attachment.
- Storage box to left of operator.
- Vinyl/floor covers enlarged to cover the complete floor area and under seat.

# **Finger Tip Control**

Combines steering, machine direction and gear selection into a control system which can be operated with one hand, for enhanced operator comfort and increased productivity.

Finger Tip Controls are clustered for easy, one-handed operation to the operator's left. They control steering, machine direction and gear selection.

- 1 Electronic Clutch and Brake steering system allows the operator to work more precisely in close areas, around structures, obstacles, grade stakes and other machines. It consists of two small levers which send signals that control the steering valve.
  - Levers require less than 3 pounds of pull to actuate.
  - Steering is accomplished in much the same way as with traditional clutch and brake arrangements but with less time and effort.

Finger Tip Control module can be manually adjusted up and down and fore/aft for maximum comfort. Optional electrical vertical adjustment is available for added convenience.

2 Machine direction is controlled by a pivoting knob which can be actuated by the thumb of the left hand. Rotating the knob up shifts the machine transmission to forward. Rotating the knob down reverses the machine. The middle setting puts the machine transmission in neutral.



3 Gear selection is made by two buttons to the right of the machine direction knob. The top (up-shift) button shifts the machine transmission to the next higher gear while the bottom (down-shift) button shifts to the next lower gear.

Auto shift and auto-kickdown in Finger Tip Control machines include the following features.

■ Auto shift allows the operator to preselect a forward and reverse gear for frequent directional changes. The settings include first-forward to second-reverse (1F → 2R), and second-forward to second-reverse (2F → 2R).

- Auto-kickdown automatically downshifts when the machine detects a significant increase in load.
- Depending on your application, choose from auto shift and autokickdown, auto shift only, autokickdown only, and manual mode.
- 4 Parking brake switch electronically locks Electronic Clutch and Brake steering.

# **Work Tools**

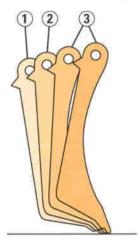
Caterpillar work tools include tailored dozers, rippers and winch.



Variable Pitch Power Angle and Tilt (VPAT) Blade. Manually adjustable blade pitch for optimum performance.

- Blade pitch is changed easily by adjusting 4 bolts and shims.
- Top corners of blade are clipped for better operator visibility. (XL arrangement only).
- Full hydraulic control of lift, dig, angle and tilt functions.
- C-frame is solidly pinned to the main frame for good blade control and elimination of blade motion due to track oscillation.
- Lubrication points located at all pin joints reduce wear.
- C-frame to tractor joint is sealed and lubricated with remote lube for extended service life and quiet operation.
- Angle cylinder bypass valve and additional hardware help reduce stress.
- Line guards help protect angle cylinder lines from sharp objects and abrasive materials.

# Available VPAT blade positions.



- 1 54° position. Maximum blade loads for carry and backfill. Best position for finish grading.
- 2 57.5° position. Good blade loads with increased penetration. Best for general dozing.
- 3 60-62° position. Maximum blade penetration and reduced material retention on blade.

### Rippers

- Rugged radial design for high production ripping.
- Socket beam design means easy servicing.
- Multi-shank ripper includes three shanks.

### Winches - PACCAR PA55

- Standard speed or slow speed with freespool
- Single lever control actuates both clutch and brake functions to improve operator efficiency. A separate lever is used for freespool operation.
- Input clutches on PTO shaft reduce engine horsepower losses, provide fuel efficiency — economy.
- Clutch engagement and brake release are automatically synchronized for smooth operation.
- Winch components can be serviced with winch mounted on tractor.

### Drawbar

- Up sized.
- · Larger jaw opening and pin diameter.
- Able to tow wider range of implements.

# Service

Modular design concept moves Cat® elevated sprocket tractors a generation ahead in simplified service and repair.



Modular design of power train components permits fast removal and installation.

**Pre-testing modular components** before installation or after repair assures high quality.

**Grouped service points** and excellent access to service areas make routine checks fast and convenient.

Quick, easy service access and inspection of daily maintenance items.

Computerized Caterpillar Monitoring
System analyzes critical temperatures
and pressure — gives visual and audible
warning for fast troubleshooting.

Electrical system diagnostic connector enables fast troubleshooting of starting and charging problems.

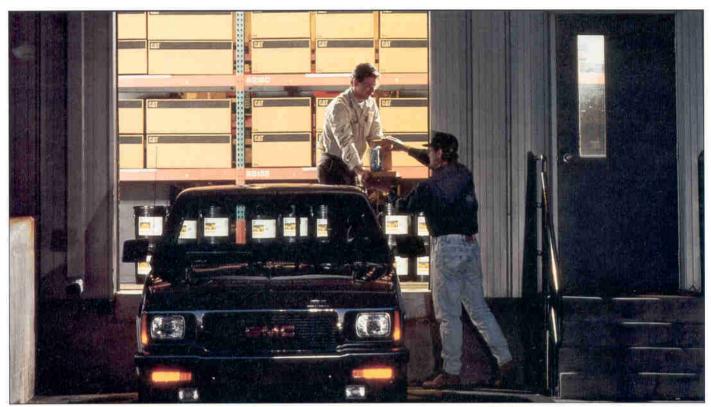
Modular cooling system, with individual core assemblies, provides improved serviceability, reduced replacement costs and improved durability.

Caterpillar Remanufactured dozer hydraulic cylinders and rods, starters, alternators, cylinder heads, short blocks, engines, oil pumps and final drive hubs are available for fast, economical repairs.

Ecology drains provide an environmentally safer method to drain fluids. They are included on the radiator, hydraulic tank and major power train components.

# **Total Customer Support**

Unmatched in the industry!



Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement, to help you get the best return on your investment.

Selection. Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventive maintenance? What is the true cost of lost production? Your Cat dealer can give you precise answers to these questions.

Purchase. Look past initial price.
Consider the financing options available as well as day-to-day operating costs.
This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

**Operation.** Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature and other ideas to help you increase productivity.

Machine management services — Cat dealers help manage equipment investments with:

- Custom Track Service.
- Effective preventive maintenance programs.
- Diagnostic programs like Scheduled
   Oil Sampling and Technical Analysis.
- Information to make the most costeffective repair option decisions.
- Customer meetings, training for operators and mechanics.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

Product support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a world-wide computer network to find in-stock parts to minimize machine down time. Save money with remanufactured parts. You receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

# Engine

Four-stroke cycle, six cylinder 3116 turbocharged diesel engine.

Ratings at 2100 RPM*	kW	НР
Gross power	90	121
Net power	82	110

The following ratings apply at 2100 RPM when tested under the specific standard conditions for the specified standard:

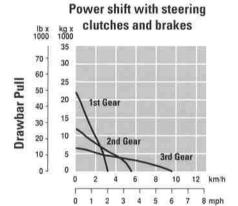
NET POWER	kW	HP	PS
Caterpillar	82	110	
ISO 9249	82	110	
EEC 80/1269	82	110	
SAE J1349	82	110	
DIN 70020	_	_	114

**Dimensions** 

B.11110110110		
Bore	105 mm	4.13 in
Stroke	127 mm	5.0 in
Displacement	6.6 liters	403 cu in

### \*Power rating conditions

- based on standard air conditions of 25°C (77°F) and 99 kPA (29.32 in Hg) dry barometer
- used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]
- 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 2300 m (7500 ft) altitude



Speed

#### **Features**

- direct injection fuel system with individual adjustment-free unit injectors
- 3-ring forged steel crown pistons with aluminum skirts.
- heat resistant sil-chrome steel intake and stellite-faced exhaust valves
- · forged steel connecting rods
- one-piece cylinder head designed with cast intake manifold
- cast cylinder block with oil cooler cavity cast into block
- induction-hardened, forged crankshaft that is dynamically balanced
- direct electric 24-volt starting and charging system
- two 12-volt, 100 amp-hour, 750 CCA, maintenance-free batteries
- 70-amp alternator
- plate-type, water-cooled oil cooler
- vertical-flow, steel-fin, tube-type radiator
- dry-type, radial-seal air cleaner with primary and secondary elements

# **Transmission**

Three-speed planetary autoshift, remotely mounted from engine.

# Speeds with power shift transmission approximate

		km/h	MPH
Forward	1	3.27	2.03
	2	5.81	3.61
	3	9.93	6.17
Reverse	1.	4.01	2.49
	2	7.09	4.41
	3	12.06	7.49

# Weight (approximate)

### Shipping weight

Includes VPAT blade, three-valve hydraulic control, lubricants, coolant, ROPS canopy, track end guiding guards, rigid drawbar, forward warning horn, precleaner, 5% fuel, decelerator and standard shoes.

	X			GP
Power shift	11 450 kg	25,200 lb	12 350 kg	27,200 lb

### Operating weight

Includes above plus operator and full fuel tank.

	XL		XL LGP	
Power shift	11 700 kg	25,800 lb	12 600 kg	27,800 lb

# **Final Drive**

Single reduction final drives.

#### **Features**

- isolated from ground-impact and blade-induced loads
- modular design reduces removal and installation time
- segmented sprocket simplifies replacement

# **Hydraulic Controls**

Load-sensing, variable displacement piston pump.

Pump output at 2200 pump RPM (2100 engine RPM) and maximum pressure 95.0 liters/min 25 gpm

Relief valve setting

XL and LGP 20 685 kPa 3000 psi Control positions

- lift cylinders raise, hold, lower, float
- tilt cylinder left, right, hold
- angle cylinders left, right, hold
- ripper cylinder raise, hold, lower

# Steering and Braking

Choice of Lever Steering or Finger Tip Control System meets SAE J1026 APR90.

### Features — Lever steering

- · hand-lever steering/braking controls
- oil-cooled, hydraulically actuated multiple-disc steering clutches and brakes
- single brake pedal brakes both tracks without disengaging steering clutches
- mechanically actuated, spring applied parking brake

### Features — Finger Tip Control

- Finger Tip Control of transmission and steering clutches and brakes
- oil-cooled, electro-hydraulically actuated multiple-disc steering clutches and brakes
- single brake pedal brakes both tracks without disengaging steering clutches
- electro-hydraulically actuated, spring applied parking brake

# Cab

Caterpillar cab and Rollover Protective Structure (ROPS). ROPS canopy required in U.S.A.

### **Features**

- meets OSHA and MSHA limits for operator and sound exposure with doors and windows closed (according to ANSI/SAE J1166 JUL87)
- ROPS meets the following criteria:
  - SAE J395
  - SAE J1040 APR88
  - ISO 3471-1 1986
  - ISO 3471-1 1994
- also meets the following criteria for Falling Objects Protective Structure:
  - SAE J231 JAN81
  - ISO 3449 1992 Level II

### Note

When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 MAY90, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture. The operator sound pressure level is 77 dB(A) when measured per ISO 6394 and 79 dB(A) when measured per ISO 6396.

# Pivot Shaft and Equalizer Bar

Pivot shaft and pinned equalizer bar oscillation system.

#### **Features**

- pivot shaft transmits ground impact loads directly to main frame
- protects power train components
- pinned equalizer bar keeps track roller frame in proper alignment
- system provides smooth machine underside
- prevents collection of mud and debris

# Heavy Duty Sealed and Lubricated Track

Heavy duty design for superior track life.

### Features

- improved sealability and link rail wear life
- wider bushing strap provides improved bushing retention and resistance to bore stretching and cracking
- wider pin boss and longer pin improves pin-to-link retention
- more rail material increases link and roller system wear life
- extends undercarriage maintenance intervals
- reduces overall undercarriage operating costs
- · extreme service track standard on XL

# Service Refill Capacities

	Liters	Gallons
Fuel tank	218	57.6
Crankcase and filter	26	6.9
Transmission, bevel gear and steering clutch (inc torque converter		
or oil clutch)	105	27.7
Final drive (each side)	6	1.6
Cooling system	46	12
Implement hydraulic system (includes tank)	67	17.7
Hydraulic tank	32	8.5
Recoil spring compartmer (each side)	nts 20	5.3

# Winch

Rugged PA55 winch with freespool.\*

### Features

- hydraulically actuated multiple-disc wet clutch and brake
- single lever control of clutch and brake functions
- · separate lever for freespool operation
- standard or slow speed

Weight	1276 kg	2814 lb
Winch length	1120 mm	44.1"
Winch case width	975 mm	38.4"
Flange diameter	504 mm	19.8"
Drum width	330 mm	13"
Drum diameter	254 mm	10"
Cable size:		
Recommended	16 mm	0.63"
Optional	19 mm	0.75"
Drum capacity:		
Recommended ca	ble 177 m	580'
Optional cable	122 m	400'
Oil capacity	74 L	19.6 gal
Cable/ferrule sizes (0 54 mm X 65		

\*PA55 winch is manufactured for Caterpillar by PACCAR Inc.

# **Track Roller Frame**

Tubular design resists torsional loads.

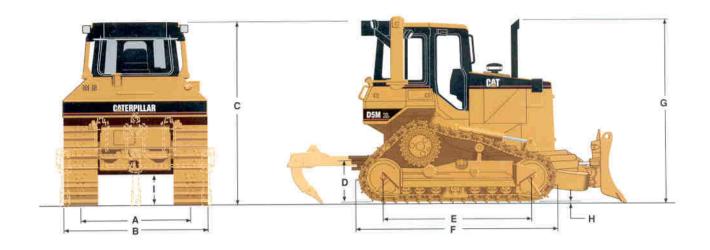
### **Features**

- Lifetime Lubricated rollers and idlers are directly mounted to roller frame
- oscillating roller frames attach to tractor by pivot shaft and pinned equalizer bar
- large pivot bushings operate in an oil reservoir
- equalizer bar saddle connection is low-friction bushing with remote lube line
- recoil system fully sealed and lubricated

	)	iL.	LC	SP .
Oscillation:				
front and rear idlers				
at gauge line (total)	218 mm	8.6"	280 mm	11.0"
at pivot shaft	±2	.6°	±3	I°
Number of rollers (each side)	7	7	3-	7
Number of shoes (each side)	.4	1	4	4
Width of:				
standard shoes	560 mm	22"	760 mm	30"
optional shoes	510 mm	20"	-	
optional shoes	35		610 mm	24"
self-cleaning shoes	73-	-	770 mm	30"
Length of track on ground	2388 mm	94"	2604 mm	103"
Track gauge	1770 mm	70"	2000 mm	79"
Ground contact area with:				
510 mm (20") shoes	2.44 m <sup>2</sup>	3775 in <sup>2</sup>		
560 mm (22") shoes	2.67 m <sup>2</sup>	4146 in <sup>2</sup>		-
610 mm (24") shoes	-		3.18 m <sup>2</sup>	4924 in <sup>2</sup>
760 mm (30") shoes	5		3.96 m <sup>2</sup>	6135 in <sup>2</sup>
self cleaning 770 mm (30") s	hoes –	=1	4.01 m <sup>2</sup>	6216 in <sup>2</sup>
Ground Pressure:				
510 mm (20") shoes	.48 kg/cm <sup>2</sup>	6.83 psi	_	
560 mm (22") shoes	.44 kg/cm <sup>2</sup>	6.22 psi	V.	-
610 mm (24") shoes		->	.40 kg/cm <sup>2</sup>	5.64 psi
760 mm (30") shoes	-	-	.32 kg/cm <sup>2</sup>	4.53 psi
self cleaning 770 mm (30") s	hoes _	-15	.31 kg/cm <sup>2</sup>	4.47 psi

# **Dimensions**

(approximate)



# **Tractor Dimensions**

Tradition Dimensional	х	XL		LGP	
A. Track gauge	1770 mm	70"	2000 mm	79"	
B. Width of tractor	2330 mm	92"	2760 mm	109"	
C. Machine height from tip of grouser with the following	equipment:	-			
ROPS canopy	2999 mm	118"	3043 mm	120"	
ROPS cab	3002 mm	118"	3046 mm	120"	
D. Drawbar height (center of clevis) from					
ground face of shoe	486 mm	19"	537 mm	21"	
E. Length of track on ground	2388 mm	94"	2604 mm	103"	
F. Length of basic tractor (with drawbar)	3544 mm	140"	3730 mm	147"	
With the following attachments, add to basic tractor le	ength:				
Ripper	898 mm	35"	898 mm	35"	
PA55 winch	381 mm	15"	381 mm	15"	
VPAT blade	1011 mm	39"	1402 mm	55"	
G. Height over stack from tip of grouser	3082 mm	121"	3126 mm	123"	
H. Height of grouser	55 mm	2.17"	47 mm	1.85"	
I. Ground clearance from ground face of shoe (per SAE J1234)	385.5 mm	15.2"	437.5 mm	17.2"	

# **Bulldozer Specifications**

	(XL) 5VPAT Blade		(LGP) 5VPAT Blade	
Blade capacity (SAE J1265)	2.59 m <sup>3</sup>	3.37 yd³	2.03 m <sup>3</sup>	2.64 yd3
Blade width (over end bits)*	3077 mm	121"	3360 mm	132"
Blade width (angled 25°)	2789 mm	109.8"	3043 mm	119.8"
Blade height	1109 mm	43.7"	910 mm	35.8"
Digging depth	441 mm	17.4"	491 mm	19.3"
Ground clearance	916 mm	36.1"	923 mm	36.3"
Maximum tilt	460 mm	18.1"	491 mm	19.3"
Weight (without hyd. controls)	1932 kg	4259 lb	2000 kg	4409 lb
Total operating weight (with blade)	11 700 kg	25,800 lb	12 600 kg	27,800 lb

<sup>\*</sup>Special use 5P LGP blade available for applications with 3000 mm (118") transportation width restriction.

# Ripper

Multi-shank design with three curved shanks to match job conditions.

	XL		LGP	
Beam width	1951 mm	76.8"	1951 mm	76.8"
Cross section	165 x 211 mm	6.5 x 8.3"	165 x 211 mm	6.5 x 8.3"
Ground clearance under beam (raised)	895 mm	35.2"	949 mm	37.4"
(Under tip at full raise)	482 mm	19.0"	536 mm	21.1"
Number of pockets (teeth)	3		3.	
Max. penetration	350 mm	13.8"	298 mm	11.7"
Max. pryout force	19 126 kg	42,165 lb	19 260 kg	42,461 lb
Max. penetration force				
(VPAT blade equipped — power shift)	4010 kg	8840 lb	4669 kg	10,293 lb
Weight				
With three teeth	758 kg	1671 lb	758 kg	1671 lb
Each tooth	34 kg	75 lb	34 kg	75 lb

Note: Straight shanks are also available.

# **Standard Equipment**

Standard and optional equipment may vary. Consult your Caterpillar dealer for specifies.

Air cleaner, dry-type, with precleaner

Air cleaner service indicator

Air intake heater

Alternator, 70-amp

Automatic shifting features (Finger

Tip Control models)

Auto-kickdown (auto-downshift)

Auto shift (2R-1F, 2R-2F)

Back up alarm

Blower fan

Brake system, service, parking and

emergency

Canopy, ROPS (regional)

Computerized Caterpillar Monitoring

System on Finger Tip Control models. Electronic monitoring

system on Lever Steering models

Decelerator

Diagnostic connector (Finger Tip

Control models)

Drawbar, rigid

Dual fuel filters

Ecology drains

Electric hour meter

Electric starting, 24-volt direct

Engine, 3116 turbocharged diesel

Engine enclosures, lockable

Front pull device

Fuel gauge

Fuel priming pump

Gauge package, temperature

Coolant

Hydraulic oil (Finger Tip Control

models)

Power train oil

Guards:

Crankcase, normal service

End guiding

Instrument panel (OROPS)

Radiator, hinged

Rear

Horn

Hydraulics, three-valve for VPAT

bulldozer

IMRM radiator

Lifetime Lubricated rollers and idlers

Lockable storage compartment

Mirror, rearview

Muffler

Precleaner

Seat, vinyl suspension, with

adjustable armrests

Seat belt

Segmented sprocket

Single key start

Steering system:

Lever Steering or

Finger Tip Control

Track:

Adjusters, hydraulic

Carrier rollers

Heavy Duty Sealed and Lubricated

Track

with single grouser track shoes

XL — 41-section, 560 mm (22")

extreme service shoes

LGP — 44-section, 760 mm (30")

Center track guiding guards

Two-piece master link

Transmission, power shift

Vandalism protection

Water companies

Water separator

# Optional Equipment Approximate changes in operating weights.

	kg	lb
Air conditioning system	130	287
Armrest, electric adjustable for Finger Tip Control		
Backup alarm	2	5
Bulldozers (se	ee page 9 for	weights)
Cab, ROPS, sound suppressed	571	1256
Fan, reversible	11	24
Guards:		
Crankcase extreme service	63	139
Fuel tank (ROPS cab or canopy)	70	154
Precleaner	7	16
Radiator, heavy duty, hinged grill	20	44
Radiator core protector grid	17	38
Rear screen:		
for ROPS cab	67	148
for use with air conditioner	51	112
for ROPS canopy	5.5	121
Track guiding, center section only (XI	.) 34	75
Track roller, full length	146	321
Heater, dash mounted (for ROPS canopy	34	75
Hydraulic controls:		
Four valve for 5P bulldozer and		
one rear implement	216	475
Lighting system, six lights:		
For use with ROPS cab	16	35
For use with ROPS canopy	16	35

	kg	lb
Precleaner with prescreener	5	11
Ripper, radial with 3 curved teeth*	758	1671
Each tooth	34	74
Sound suppression (European)	65	143
Starting aids		
Ether starting aid	3	7
Heater, engine coolant, choice of 120 or 240 volt		
(dealer installed)	1	2
Heavy duty batteries	42	94
Suspension seat, contour (vinyl for canopy)	10	22
Sweeps, logging for ROPS canopy	132	290
Tool kit (dealer installed)	7	16
Track, pair, Heavy Duty Sealed and Lubricated		
XL arrangement, 41-section:		
510 mm (20") ES/HD	-94	-207
LGP arrangement, 44-section:		
610 mm (24") MS/HD	-294	-648
770 mm (30") self-cleaning/HD	186	410
Track rollers, high flange	15	33
Winch	1161	2560
Winch fairlead		
3 Roller	293	645
4 Roller	320	704

ES = Extreme service shoes, MS = Moderate service shoes, HD = Heavy duty link track, \*Straight teeth available for ripper.