

# D6N

## Track-Type Tractor



### Engine

Engine Model	Cat® 3126B DITAAC	
Flywheel Power	108 kW	145 hp

### Operating Weights

DS – XL Arrangement	15 885 kg	35,020 lb
DS – LGP Arrangement	17 722 kg	39,070 lb
FTC – XL Arrangement	15 586 kg	34,361 lb
FTC – LGP Arrangement	17 383 kg	38,322 lb

### Blade Capacity

XL – VPAT Arrangement	3.18 m <sup>3</sup>	4.16 yd <sup>3</sup>
XL – SU Arrangement	4.28 m <sup>3</sup>	5.6 yd <sup>3</sup>
LGP – VPAT Arrangement	3.16 m <sup>3</sup>	4.13 yd <sup>3</sup>

# D6N Track-Type Tractor

*Excellent response and control with Differential Steering deliver productivity and versatility for any job.*

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## Engine

- ✓ The Caterpillar® 3126B engine features an electronic direct injection fuel system to maximize performance and provide the power you need to maximize production. The 3126B meets EPA Tier 2, EU Stage II, and Japan MOC Step 2 engine exhaust emission regulations. **pg. 4**

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## Undercarriage

- ✓ Exclusively for Caterpillar machines, SystemOne™ Undercarriage extends undercarriage system life, improves reliability, and reduces owning and operating costs. The elevated sprocket undercarriage arrangements are designed for optimized balance and performance in fine grading to heavy dozing applications. **pg. 13**

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## Drive Train

Rugged, durable and reliable components deliver smooth, responsive power and lasting reliability. The Auto-shift and Auto-kickdown features enhance operator comfort. **pg. 5**

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## Differential Steering

- ✓ This dependable system maintains power to both tracks while turning. Simultaneous control of speed, direction and steering with the tiller bar controller delivers maximum production. **pg. 6**

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## Work Tools

Caterpillar offers a variety blade designs and other work tools to tackle virtually any job quickly and efficiently. **pg. 14**

*Engineered to excel on the most demanding work sites. Combining power, rugged components and superior balance, the versatile D6N is designed for tough working conditions. It keeps material moving with the reliability and durability you expect from Caterpillar machines.*



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### Operator Station

- ✓ State-of-the-art operator station has reduced sound levels, low cab vibrations and good visibility. Pilot hydraulic controls reduces effort for blade and ripper controls, reducing operator fatigue. **pg. 8**

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### AccuGrade® Laser and GPS Machine Control Guidance Systems

- ✓ Helping to revolutionize the way you move dirt, the AccuGrade Laser and GPS system can be easily installed on the AccuGrade Ready Option (ARO) equipped machine. **pg. 10**

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### Structure

- ✓ Steel castings and heavy steel plates are welded to insure a rigid one-piece case and frame structure. Bolted soft mounted cab supports reduce sound level and vibration. Fuel tank rubber isolation mounts eliminate vibration and reduce stress. **pg. 12**

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### Serviceability

- ✓ The time between PM service intervals has been increased allowing more up-time. All major components, filters, and lube points are easily accessible and modular in design. The updated EMS III machine monitoring system has increased diagnostic capabilities. **pg. 16**

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### Total Customer Support

Your Cat Dealer offers a wide range of services that can be set up with a Customer Support Agreement. The dealer can customize a plan for you, from PM service to total machine maintenance, allowing you to optimize your return on investment. **pg. 17**



✓ *New Feature*

# Engine

The Caterpillar electronic 3126B DITAAC engine meets worldwide exhaust emission requirements for EPA Tier 2, EU Stage II, and Japan MOC Step 2 engine exhaust emission regulations and offers excellent performance levels.

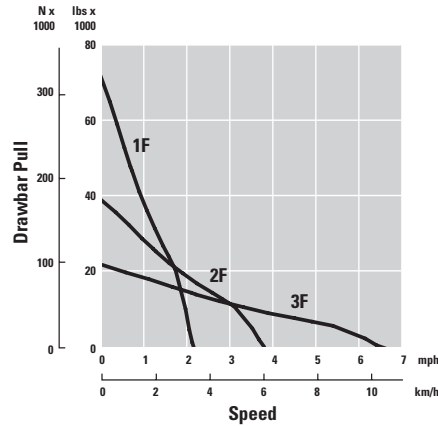


**Cat 3126B Engine.** The Cat 3126B engine is designed for easy maintenance and can be rebuilt for additional service lives. With the HEUI™ fuel system, injection pressure is independent of engine speed and provides maximum fuel delivery efficiency with low emissions.

Equipped with an electronic air inlet heater, the 3126B warms the air in the air inlet manifold, for easier starting and reduces white smoke on cold starts. Machines will automatically activate the timed air inlet heater prior to engine startup.

### Turbocharged and Aftercooled.

A well-matched turbocharger and air-to-air aftercooler results in higher power while keeping rpm steady and exhaust temperatures low.



D6N Drawbar Pull

**Torque Rise.** The direct injected electronic fuel system provides a controlled fuel delivery increase as the engine lugs back from rated speed. This results in increased horsepower above rated power. A combination of increased torque rise and maximum horsepower improves response, provides greater drawbar pull and faster dozing cycles.

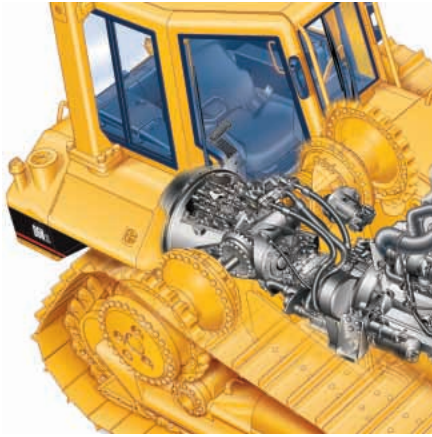
- 70% torque rise.

**3126B Engine Features.** Major features include:

- Large displacement electronic engine with lower exhaust emissions and improved cold start capability.
- Power train to engine link with electronic controlled throttle shifting.
- Poly-Vee serpentine engine fan belt with auto tension feature eliminates the traditional three to four belt system.
- Oil and engine filter change intervals up to 500 hours after break-in.
- ATAAC cooling system.
- Aluminum bar plate radiator provides excellent cooling capability.

## Drive Train

*Rugged, durable and reliable components deliver smooth, responsive power and lasting reliability.*



**Torque Converter.** The D6N single-stage torque converter efficiently responds to changing load conditions by providing torque multiplication, therefore increasing drawbar pull. It provides protection to the drive train components by preventing shock loads from heavy dozing applications. The torque converter is efficiently matched to the power train components and provides the superior performance you need.

**Auto-Shift/Auto-Kickdown.** Auto-shift allows the operator to pre-select a forward and reverse gear for easy, efficient directional changes.

Auto-shift settings include:

- First forward to second reverse.
- Second forward to second reverse.
- Second forward to first reverse.

Auto-kickdown allows the transmission to automatically downshift when significant load increases are detected.

**Transmission.** The proven planetary powershift transmission features three speeds forward and three speeds reverse and utilizes large diameter, high capacity, oil cooled clutches. To maximize the life of the transmission, the planetary design distributes loads and stresses over multiple gears.

- Controlled throttle shifting regulates engine speed during high-energy directional shifts for smoother operation and longer component life.
- The transmission and bevel gear set are modular by design, and easily slide into the machine's rear case, even with the ripper installed.
- Forced oil flow lubricates and cools clutch packs to provide maximum clutch life.
- Load compensating shifting provides smooth engagement of the clutches under loaded conditions.

**Steering Clutch and Brakes.** Oil cooled, hydraulically actuated, large diameter plates and clutch discs provide higher torque capacity and increased service life.



**Elevated Final Drive.** Final drives are isolated from ground and work tool induced impact loads for extended power train life.

**Steering and Transmission Controls.** The D6N offers both Differential Steering and Finger Tip Controls for steering. Both systems deliver the control the operators need for all applications. Soft touch buttons located on the steering controls shift the electronically controlled transmission.

**Electronic Clutch Pressure Control.** The D6N has an additional transmission shifting feature for added performance and operator comfort – the Electronic Clutch Pressure Control (ECPC). This unique feature provides smoother shifting by regulating and modulating the individual clutches based on current operating conditions.

## Differential Steering

*A D6N equipped with Differential Steering maintains power to both tracks while turning. Operators have control of machine speed, direction and steering with the tiller bar controller, while maximizing production.*



**Tiller Bar Control System.** The tiller bar control system allows for simultaneous comfortable, one-handed steering, direction and transmission control.

- The differential steering tiller bar has easy touch shift buttons for upshifts and downshifts.
- The tiller bar is easily pushed forward to steer the tractor to the left and pulled backwards to steer the tractor to the right.
- The farther the tiller bar is moved, the tighter the turn.
- To change machine direction, operators rotate the tiller bar clockwise for forward or counterclockwise for reverse. Neutral transmission position is in the middle between the two.
- Low tiller bar efforts assure operator comfort during long shifts.

### **Power Turn with Differential Steering.**

With differential steering, large blade loads can be smoothly maneuvered throughout the turn. The operator maintains precise control on slopes, around buildings, bridge abutments, trees or other obstacles.

- Differential Steering has the ability to work in tight areas by providing a “Best in Class” tight turning radius.
- Steering modulation is finely tuned for precise control in all turning applications.
- Regardless of ground conditions, steering is consistent because power is maintained to both tracks during operation.

**Differential Steering System.** A planetary differential turns the machine by speeding up one track and slowing the other while maintaining full power to both. The differential steering system consists of:

- Three planetary gear sets.
- A dedicated variable-displacement hydraulic pump.
- A bi-directional, fixed-displacement steering motor.
- Heavy-duty steering drive gears.
- Two planetary gear sets (steering and drive) make up the dual differential.
- A third planetary gear set, the equalizing planetary, resides in the main case and provides a maximum 4.0 km/h (2.49 mph) speed difference between tracks.

**Operation.** When moving straight ahead, power flows through the transmission pinion and bevel gear into the dual differential, transmitting equal, uninterrupted power to each final drive. While turning, power is shifted to the outboard track speeding it up. The inboard track slows down to accommodate a tighter turning radius. Forward ground speed remains the same throughout the turn.



**1) Operator Station.** State-of-the-art operator station has reduced sound levels, lower cab vibration, and increased glass area.

**2) Steering Control.** Differential Steering Tiller Bar control system and the optional Finger Tip Control (FTC) steering system provide simultaneous one-handed steering and transmission control.

**3) Differential Steering Motor.** Bi-directional hydraulic steering motor activates the dual differential, which changes the speed of individual tracks. Slowing one track and increasing the speed of the other track achieves a smooth power turn.

**4) Power Shift Transmission.** Proven planetary design provides fast smooth speed changes while distributing loads over multiple gears for long life.

**5) Final Drive.** Caterpillar elevated final drives provide isolation from ground or work tool impact loads, extending service life.

**6) Brake Assembly.** Oil cooled large diameter brake disc provide long service life.

**7) Engine.** Caterpillar 3126B HEUI engine meets worldwide engine exhaust emission regulations.

**8) Radiator.** Aluminum bar plate radiator provides excellent heat transfer.

**9) Torque Converter.** Efficient torque converter provides torque multiplication for increased drawbar pull and protects the drive train from shock loads.

## Operator Station

*State-of-the-art operator station has reduced sound levels, low cab vibrations and excellent visibility. The (optional) Caterpillar comfort series air suspension seat helps reduce operator fatigue. Cab and air conditioning are standard.*



**Cab.** The design is spacious and comfortable to promote shift-long productivity. Large glass window and door panels allow for excellent visibility to the blade, rear and sides of the machine. Door and window seal design allows for a fully pressurized low dust cab. Acoustic headliner material, and sound suppression foam panels reduce sound levels to 79 dB(A) according to the dynamic test procedure and conditions that are specified in ISO 6394:1998.

Individual windshield wiper controls are located in the front section of the headliner. The cooling system is incorporated into the cab structure providing good visibility to the rear of the machine.



### **Cat C500 Comfort Suspension Seat.**

Caterpillar C500 Comfort Series Air Suspended Seat is ergonomically designed to support the operator in various site conditions (optional).

- Seat is fully adjustable for maximum operator comfort, support and reduced operator fatigue.
- Seat cushion reduces pressure on the lower back and thighs while allowing unrestricted arm and leg movement.
- A standard lumbar adjustment provides lower back comfort.





**Dash.** The instrument panel, with easy to read analog gauges and warning lamps, keeps the operator aware of any potential problems. All gauges and readouts are easily visible in direct sunlight. HVAC controls and vents are conveniently located on the dash to provide climate control for the operator. Auto-shift and Auto-kickdown controls are located within easy reach. Footpads keep the operator stable and comfortable while working on slopes.

**Electronic Monitoring System (EMS III).** EMS III provides the operator instant feedback on machine conditions and records performance data to help diagnose problems. It has flashable memory allowing system upgrades, as new technology and software become available. This system is compatible with Cat ET and CMS service tools.

EMS includes the following gauges and readouts:

- Fuel level gauge
- Hydraulic oil temperature gauge
- Engine coolant temperature gauge
- Power train oil temperature gauge
- Engine oil pressure indicator
- Engine speed digital readout
- Transmission gear indicator
- Hour meter
- Odometer



**Optional Finger Tip Control (FTC).**

Located to the operator's left, finger tip controls provide one-handed operation. They control steering, machine direction and gear selection.

- Finger tip levers allow operators to work with precision in close areas.
- Push buttons control three speed forward/reverse gear selection.

**Throttle Rocker Switch.** A rocker switch control activates high or low idle with a touch of the finger. A decelerator pedal gives the operator full control of engine speed when the rocker switch is in the high idle position.



**Work Tool Controls.** Low effort pilot operated hydraulic controls make the D6N easy to operate and provide sure, precise blade control with less operator fatigue. Ergonomically shaped blade and ripper controls provide increased operator comfort during long shifts.

# AccuGrade Laser and GPS Machine Control Guidance Systems

*Advanced Laser and GPS technology improves operator accuracy, increases production and lowers operating costs.*

## AccuGrade Ready Option (ARO).

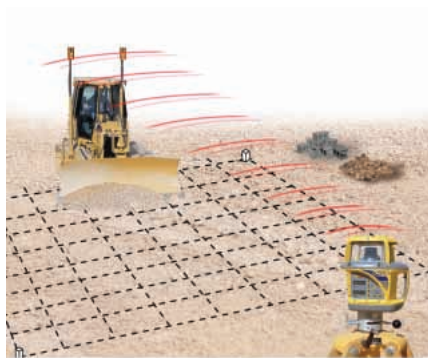
The AccuGrade Ready Option (ARO) provides a factory installed on-board platform for the AccuGrade Laser System or the AccuGrade GPS installation. All of the changes required to the electrical system, hydraulic system, blade, and cab are incorporated into the ARO. Mounting brackets added on the blade allow easy installation of the masts. Mounting brackets in the cab secure the in-cab display. Plug-in points inside the cab and on the front of the machine make it easy to install electronic components.

**Advantages.** Current earthmoving and fine grading processes are labor intensive, dependent on manpower and instruments. Maintaining consistent grade between stakes is challenging, even for experienced operators. The AccuGrade Laser and GPS Machine Control and Guidance Systems reduce labor requirements and help operators work to the design plan by accurately cutting, filling and reducing material cost.

## Automatic Blade Control Feature.

Automatic control of the blade's lift and/or tilt, provides consistent accuracy with higher productivity by reducing blade control demands on the operator. Based on correction signals, a hydraulic control valve automatically raises or lowers the blade to maintain the correct edge elevation.

**Applications.** The AccuGrade Laser and the GPS systems are designed for a wide range of construction earthmoving applications requiring tight tolerances and high productivity rates. Choosing whether to use a Laser or GPS system depends on the job site requirements.



## AccuGrade Laser Grade Control

**System.** The laser system is ideal for fine grading sites with flat, single slope or dual slope surfaces such as industrial, commercial and residential building sites.

## Laser System Components:

**1) Laser Transmitter.** An off-board laser transmitter (sold separately) emits a thin beam of light that rotates 360°, creating a grade reference over the work area.

**2) Laser Receivers.** Digital laser receivers mounted on telescopic masts above the blade's cutting edge detect the laser beam. During grade set-up, with the cutting edge placed at finish elevation, the electric mast automatically positions the laser receiver to within 1.5 mm (0.06 in) of the center of the laser beam. As the blade moves above or below finish grade elevation during the grading process, correction information is sent to the in-cab display. One receiver is required for single dimension control (lift) and two receivers are required for two-dimensional control (lift and tilt).

**3) Electric Masts.** Blade mounted telescopic masts are electrically adjustable from inside the cab. They position the receivers above the cab for unobstructed laser reception.

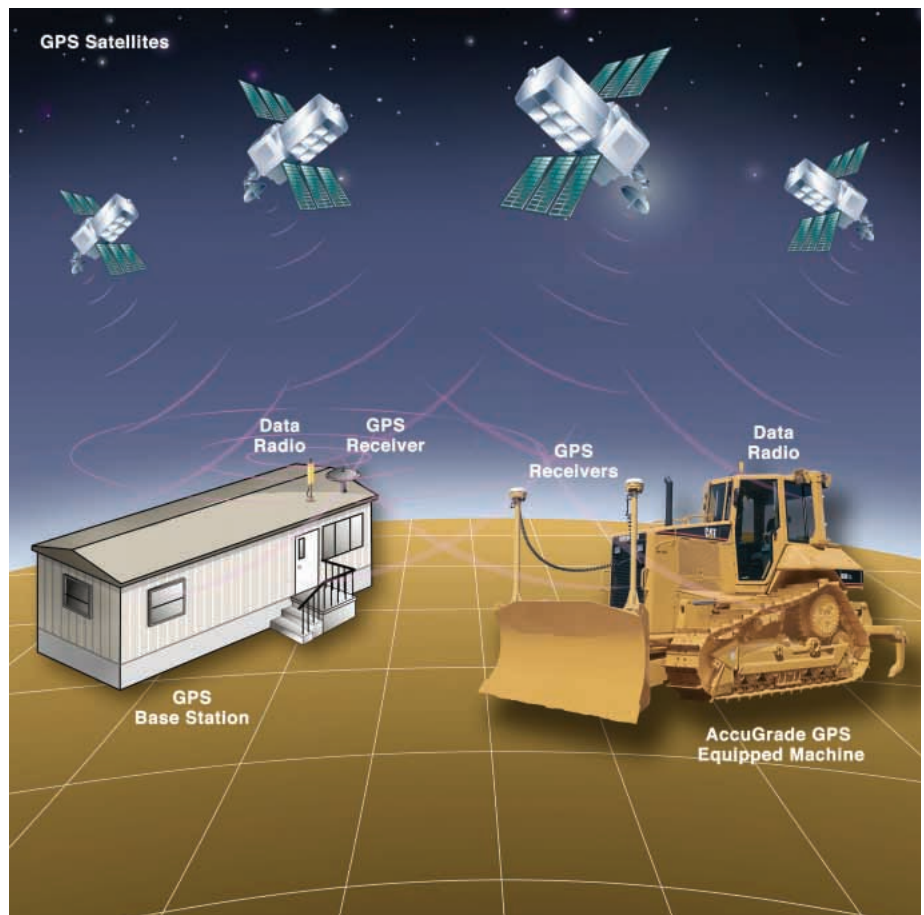
**4) Laser In-Cab Display.** The in-cab display with easy to read grade indicator and backlit elevation display shows the operator all AccuGrade system information. The in-cab display arrows show the blade's position relative to grade and indicate cut or fill requirements of the work area. Push button operation allows the operator to easily switch from manual mode for rough grading to automatic mode for fine grading.

**AccuGrade GPS Control System.** The AccuGrade Global Positioning System (GPS) is the best solution when the construction site involves contours, rather than single or dual slope planes. A GPS system compares the blade position to a three-dimensional computerized job site plan and signals the operator or hydraulic system to raise or lower the blade to achieve the design requirements.

**GPS System Components:**

**GPS Base Station.** An off-board GPS base station uses Real Time Kinematic (RTK) to provide a repeatable highly accurate reference for the mobile machines. One base station can support an unlimited number of machines at the specific jobsite.

**GPS Receivers.** Two GPS receivers are mounted on the blade. The rugged GPS receiver combines a dual frequency GPS receiver and antenna in a single portable housing. The CAN based architecture of the system allows easy installation and removal of the components. They receive position signals from the Global Positioning System and a correction from the base station to determine the precise location of the blade. This information is communicated to the in-cab display.



**GPS In-Cab Display.** The in-cab display provides real-time operating information to the operator. Designed for simple operation, the 140 mm (5.5 in) color LCD daylight readable display with keypad allows operators to easily interface with the system. Settings and views can be easily configured according to operator preference. The display is designed for reliable performance in extreme operating conditions including shock, dust and moisture.

**Weatherproof Design.** All AccuGrade components are designed for dependable performance in harsh environments.

**Support.** Caterpillar AccuGrade Laser and GPS systems are available at your local Caterpillar Dealer.

## Structure

*Engineered and built to give solid support in the most demanding applications. Designed to last throughout the extended service life of the D6N.*



**Frame and Castings.** The D6N case and frames are built to absorb high impact shock loads and torsional forces. Castings are strategically located within the frame to add additional strength. Caterpillar uses robotic welding techniques in the assembly of the case and frames. This ensures quality and reliability throughout the structure.

- High strength steel mainframe resists impact shock loads.
- Computer-aided finite element analysis is used to evaluate and ensure durability.
- Full scale structural testing to test integrity of the structures.
- 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 to maintain track roller frame alignment.

**Equalizer Bar.** The pinned equalizer bar gives the roller frames the ability to oscillate up or down to better match ground contours while providing maximum traction and operator comfort.



**Roll Over Protection.** N-Series cab supports have been stiffened. Stiffer cab supports result in lower noise and vibration in the cab, providing the operator increased comfort.



### Quality and Reliability.

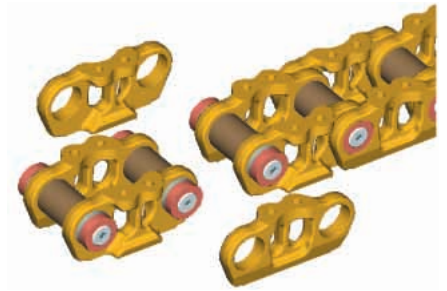
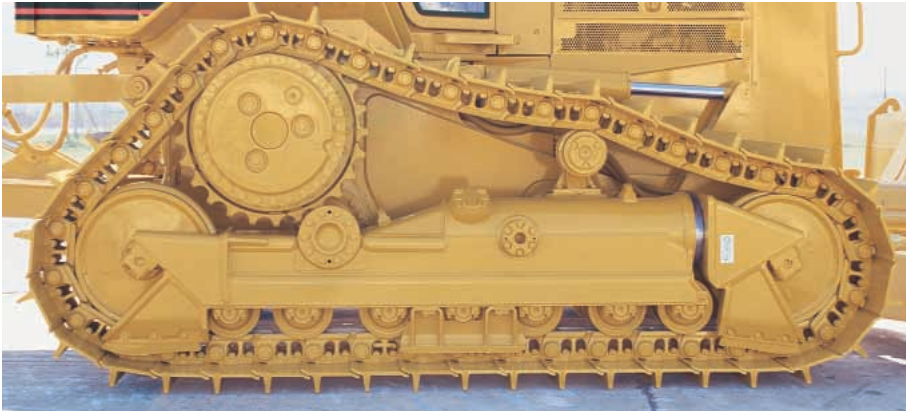
- Doubled 4 mm (0.16 in) sheet metal on the side service access panels and rear guard.
- Stamped, rounded sheet metal corners add strength.
- Rubber isolation mounted fuel tank eliminates tank vibration and reduces potential stress fractures.
- Heavy-duty reinforced radiator guard is now standard.
- Heavy-duty rear guard for ripper.
- Clipped seals provide protection from dust and moisture for rear enclosure, door openings, and between ROPS post and rear enclosure.

**Styling.** Rounded machine shapes offers excellent visibility, accessibility and serviceability.

- Durable, heavy steel door panel covers.
- Pre-cleaner is below the hood for good visibility.
- Engine enclosure is tapered as it reaches the cab.
- Large amounts of glass area in cab.
- Controls are ergonomic for easier operation and better efficiency.

## Undercarriage

*The Caterpillar elevated sprocket undercarriage arrangements are designed for optimized balance and performance in fine grading to heavy dozing applications. Rugged design and proven structural manufacturing assure outstanding durability.*



### SystemOne™ Undercarriage.

Exclusively for Caterpillar machines the design extends system life and reduces operating costs.

- Track joint cartridge controls end-play and critical characteristics of sealed joint for improved reliability.
- Rotating bushing eliminates the need to turn bushings and reduces costly downtime.
- Taller roller flanges and link rails improve track guiding and eliminate pin end damage.
- Center tread idler eliminates idler link scalloping.
- May be used in any application.

### Elevated Final Drive.

- Isolates final drives from ground and work tool induced impact loads for extended power train life.
- Keeps sprocket teeth, bushings and final drives away from abrasive materials and moisture.
- Caterpillar uses single reduction planetary final drives in the D6N providing long-lasting performance and durability.

### Undercarriage Arrangements.

#### XL (Extra Long) arrangement

- Forward idler position provides more track on the ground and to the front of the tractor. It provides optimal balance, superior traction and blade control for finish grading.
- Long roller frame provides good flotation in soft underfoot conditions.

#### LGP (Low Ground Pressure) arrangement

- Specially designed to work in soft and spongy conditions.
- Wide track shoes, long track frames and a wider gauge increase track contact area and reduce ground pressure for excellent flotation.

**Complete Guarding.** Caterpillar undercarriages are designed with full length guarding on top of the track roller frame. This prevents abrasive materials from falling down on moving parts.

**Roller Frames.** Roller frames are tubular, to resist bending and twisting.

- Roller frames attach to the tractor by a pivot shaft and pinned equalizer bar.

**Recoil System.** The recoil system is superior because it is protected from the elements and maintained in a sealed, oil-filled cavity for years of reliable service.

**Oscillating Undercarriage.** The pinned equalizer bar is saddle-mounted beneath the mainframe, allowing the roller frames and track to oscillate. The oscillation provides a steady working platform and smooth ride for the operator.

## Work Tools

*Cat Work Tools and Ground Engaging Tools (G.E.T.) are designed to provide strength and flexibility to match the machine to the job, maximizing performance.*



**Caterpillar Blades.** With superior moldboard and 4-cell structure design, Cat bulldozer blades hold up to the toughest job conditions. Our high-tensile strength blades resist torsional bending and deflection in tough applications.

- High-tensile strength, Cat DH-2™ steel, cutting edges resist bending.
- DH-3™ steel end bits maximize service life.

**Variable Pitch Power Angle and Tilt Blade (VPAT).** The VPAT blade gives the operator the ability to hydraulically adjust the blade lift, angle and tilt from the operator's station.

- Manually adjustable blade pitch for optimum performance.
- Top corners of the blade are clipped for better operator viewing area. (XL arrangement only).

- C-Frame is solidly pinned to the mainframe for good blade control and eliminates blade motion due to track oscillation or side forces.
- C-Frame to tractor joint is sealed and lubricated with remote lines for extended service life and quiet operation.
- Large C-Frame tower bearings have been added to improve durability.
- Lubrication points are located at all pin joints to reduce wear.

### VPAT Positions.

- 54° – maximum blade loads and best finish grading.
- 57.5° – good blade loads and general dozing.
- 60-62° – maximum blade penetration and reduced material retention on blade.



**Semi-Universal Blade (XL Arrangement Only).** Built for tough applications where penetration and blade side loading are important. The design of the SU blade makes it excellent for aggressive dirt penetration and loading materials. The blade wings are designed for superior load retention.

**Foldable Blade (D6N LGP Arrangement Only).** Designed to conform with the 3 m (9.8 ft) width transport limit without blade removal. Allows a 0.30 m (1 ft) section on both ends of the blade to fold into transport position.



**Multi-Shank Ripper.** The multi-shank parallelgram ripper lets you choose one, two or three shanks depending on job conditions.

- Curved or straight ripper shanks are available.
- Excellent chassis durability in severe drawbar applications.

**Drawbar.** The D6N can be equipped with a drawbar for pulling work tools such as:

- Disks
- Compactors
- Chopper wheels
- Retrieval of other equipment



**Winch.**

- Single joystick electronically controls both clutch and brake functions to improve operator efficiency.
- Input clutches on PTO shaft reduce engine horsepower loss for fuel efficiency.
- Clutch engagement and brake release are automatically synchronized for smooth operation.
- Winch components can be serviced with winch mounted on tractor.

Check with your Caterpillar Dealer for details.

**Forestry Sweeps.** In forestry and land clearing applications where limbs and debris can damage a machine, optional sweeps are available for the N-Series. Sweeps help to shield critical components on the tractor such as hydraulic lines, exhaust stacks, cab windows and lights from damage.

**Rear Counterweight.** Rear counterweights are available through Custom Products and can be used to help the machine's balance in severe applications such as backing up slopes or heavy angle dozing.

## Serviceability

*Modular design moves Caterpillar a generation ahead in simplifying service and maintenance.*

**Built-in Serviceability.** Less service time means more working time. Major components are designed as modules and most can be removed without disturbing or removing other components.

**Diagnostic Connector.** Diagnostic connector allows Caterpillar dealers to quickly troubleshoot the D6N or access stored data with the use of Electronic Technician (Cat ET).



**Product Link.** This option allows the customer or dealer to obtain machine diagnostics and location from their offices. Product Link provides updates on service meter hours, machine condition and machine location, as well as integrated mapping/route planning.



### Electronic Monitoring System.

The D6N features a flexible monitoring system that is easily upgraded by flashing software rather than replacing the module, reducing parts cost. As technology changes and new electronics and software become available, the monitoring system will allow the machine to be easily updated.

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

**Modular Cooling System.** Individual radiator core modules are easily serviced without major component removal.



**Easy Engine Maintenance.** Many parts can be rebuilt and are available as remanufactured components.

- Parent-metal block can be rebored twice and dry-sleeved.
- Connecting rods can be removed through cylinder tops.
- Camshaft followers and push rods can be replaced without removing camshaft.
- Extended oil and engine filter change intervals up to 500 hours.

### Accessibility.

- Hinged engine doors to increase engine and service access.
- Remote-mounted filters located within easy reach during PM service.
- Air pre-cleaner filter condition monitor located in the cab for high visibility.
- Redesigned fuel tank for easier internal cleaning.
- Fast fuel tank provision added (attachment).
- Larger service panel doors.
- Diagnostic test ports added for quick troubleshooting.



## Total Customer Support

*Your Cat Dealer offers a wide range of services that can be set up with a Customer Support Agreement. The dealer can customize a plan for you, from PM service to total machine maintenance, allowing you to optimize your return on investment.*

**Product Support.** Your Cat Dealer offers a wide range of services that can be set up under a Customer Support Agreement (CSA) when you purchase your equipment. The dealer will help you choose a plan that can cover everything from the machine and attachment selection to replacement. This will help you get the best return on your investment.

**Remanufactured Components.** Save money with remanufactured parts. You receive the same warranty and reliability as new products at a cost savings of 40 to 70 percent.

**Service Capability.** Whether in the dealer's fully equipped shop or in the field, you will get trained service technicians using the latest technology and tools.

**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 answers to these questions.

**Purchase.** 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.



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

**Maintenance.** More and more equipment buyers are planning for effective maintenance before buying equipment. Choose from your dealer's wide range of maintenance services at the time of your purchase. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling and Technical Analysis help avoid unscheduled repairs.

## Engine

Engine Model	Cat 3126B DITAAC	
Net Power – Caterpillar	108 kW	145 hp
Net Power – ISO 9249	108 kW	145 hp
Net Power – SAE J1349	107 kW	143 hp
Net Power – EU 80/1269	108 kW	145 hp
Bore	110 mm	4.33 in
Stroke	127 mm	5 in
Displacement	7.2 L	439 in <sup>3</sup>

- Engine Ratings at 2200 rpm.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 4600 m (15,100 ft) altitude, beyond 4600 m (15,100 ft) automatic derating occurs.

## Transmission

1 Forward	3.3 kph	2.1 mph
2 Forward	5.9 kph	3.6 mph
3 Forward	10.1 kph	6.3 mph
1 Reverse	4 kph	2.5 mph
2 Reverse	7 kph	4.3 mph
3 Reverse	12 kph	7.4 mph
1 Forward – Drawbar Pull	316 kN	71,000 lb
2 Forward – Drawbar Pull	172 kN	38,800 lb
3 Forward – Drawbar Pull	96 kN	21,500 lb

## Service Refill Capacities

Fuel Tank	299 L	79 gal
Cooling System	40.7 L	10.75 gal
Final Drives (each)	7 L	1.8 gal
Hydraulic Tank	29.5 L	7.8 gal

## Weights

Operating Weight Power Shift FTC – XL	15 586 kg	34,361 lb
Operating Weight Power Shift FTC – LGP	17 383 kg	38,322 lb
Operating Weight XL – DS	15 885 kg	35,020 lb
Operating Weight LGP – DS	17 722 kg	39,070 lb
Shipping Weight FTC – XL	15 287 kg	33,703 lb
Shipping Weight XL – DS	15 586 kg	34,362 lb
Shipping Weight FTC – LGP	17 084 kg	37,665 lb
Shipping Weight LGP – DS	17 423 kg	38,412 lb

- Operating Weight: Includes EROPS, A/C, lights VPAT dozer, transmission, drawbar, engine enclosure, 3-valve hydraulics, 100% fuel, and C500 Comfort Seat and operator.
- Shipping Weight: Includes EROPS, A/C, lights VPAT dozer, transmission, drawbar, engine enclosure, 3-valve hydraulics, 5% fuel, and C500 Comfort Seat.

## Undercarriage

Width of Shoe – XL	610 mm	24 in
Width of Shoe – LGP	860 mm	34 in
Shoes/Side – XL	40	
Shoes/Side – LGP	46	
Track Gauge – XL	1890 mm	74 in
Track Gauge – LGP	2160 mm	85 in
Track on Ground – XL	2550 mm	100 in
Track on Ground – LGP	3102 mm	122 in
Ground Contact Area – XL	3.11 m <sup>2</sup>	4822 in <sup>2</sup>
Ground Contact Area – LGP	5.34 m <sup>2</sup>	8269 in <sup>2</sup>
Ground Pressure – XL FTC	49.9 kPa	7.24 psi
Ground Pressure – LGP FTC	32.4 kPa	4.7 psi
Ground Pressure – XL DS	50.8 kPa	7.37 psi
Ground Pressure – LGP DS	33 kPa	4.79 psi
Track Rollers/Side – XL	7	
Track Rollers/Side – LGP	8	

## Blades

Blade Type	VPAT, SU	
XL SU – Blade Capacity	4.28 m <sup>3</sup>	5.6 yd <sup>3</sup>
XL SU – Blade Width	3190 mm	10.46 ft
XL VPAT – Blade Capacity	3.18 m <sup>3</sup>	4.16 yd <sup>3</sup>
XL VPAT – Blade Width	3272 mm	10.73 ft
LGP VPAT – Blade Capacity	3.16 m <sup>3</sup>	4.13 yd <sup>3</sup>
LGP VPAT – Blade Width	4080 mm	13.4 ft

## Ripper

Type	Fixed Parallelogram	
Number of Pockets	3	
Overall Beam Width	2202 mm	86.7 in
Beam Cross Section	216 × 254 mm	8.5 × 10.0 in
Maximum Penetration – XL	473.5 mm	18.6 in
Maximum Penetration – LGP	359.5 mm	14.2 in
Each Additional Shank	78 kg	172 lb

## Winch

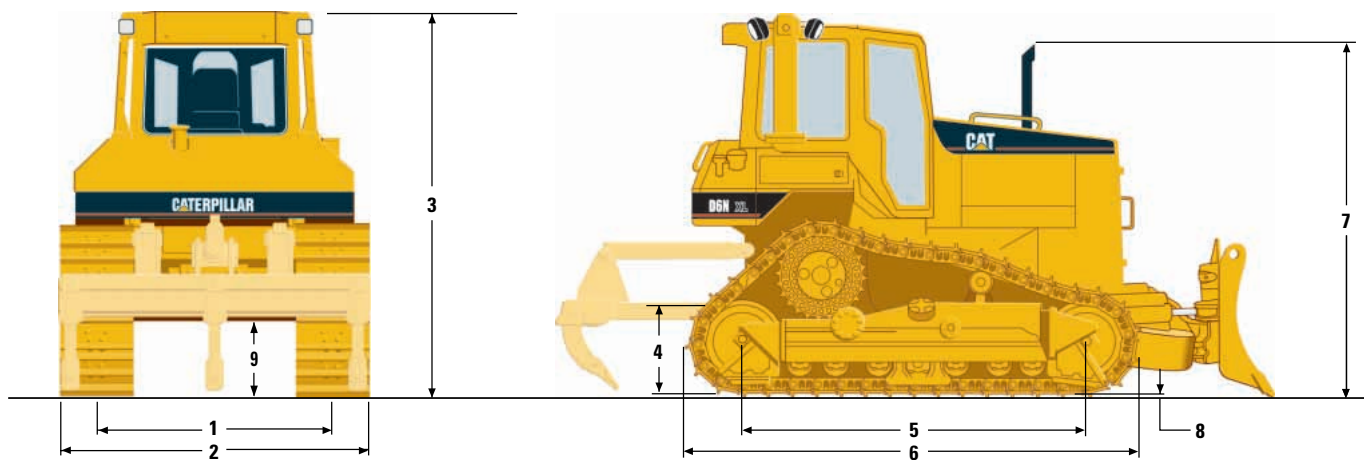
Winch Model	PA55	
Weight*	1276.5 kg	2814 lb
Oil Capacity	74 L	19.55 gal
Winch and Bracket Length	1145 mm	45.1 in
Winch Case Width	975 mm	38.4 in
Drum Diameter	254 mm	10 in
Drum Width	315 mm	12.4 in
Flange Diameter	504 mm	19.8 in
Recommended Cable Size	19 mm	0.75 in
Optional Cable Size	22 mm	0.87 in
Drum Capacity – Recommended Cable	122 m	400 ft
Drum Capacity – Optional Cable	88 m	289 ft
Cable Ferrule Sizes – Outside Diameter	54 mm	2.13 in
Cable Ferrule Sizes – Length	65 mm	2.56 in

\* Weight: Includes pump, operator controls, oil, mounting brackets and spacers.

## Standards

- ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria SAE J397 OCT95, SAE J1040 MAY94, ISO 3164 1995 and ISO 3471-1994.
- FOPS (Falling Object Protective Structure) meets SAE J231 JAN81 and ISO 3449-1992 Level II.
- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 and ISO 6396 is 79 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- The exterior sound pressure level for the standard machine measured at a distance of 15 meters according to the test procedures specified in SAE J88 JUN86, mid-gear-moving operation, is 82 dB(A) and 109 dB(A) for ISO 6395.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.
- Brakes meet the standard SAE J/ISO 10265 MARCH99.

## Dimensions (approximate)



### Tractor Dimensions

	XL		LGP	
<b>1</b> Track gauge	1890 mm	74 in	2160 mm	85 in
<b>2</b> Width of tractor	With the following attachments:			
Standard shoes without blade	2492 mm	98 in	3022 mm	119 in
840 mm (33 in) shoes without blade	—	—	3000 mm	118 in
Standard shoes with VPAT blade angled 25°	2960 mm	117 in	3700 mm	146 in
<b>3</b> Machine height from tip of grouser:	With the following equipment			
ROPS canopy	3022 mm	119 in	3136 mm	123 in
ROPS cab	3083 mm	121 in	3197 mm	126 in
<b>4</b> Drawbar height (center of clevis)	From ground face of shoes			
	595 mm	23.4 in	710 mm	27.9 in
<b>5</b> Length of track on ground	2550 mm	100 in	3102 mm	122 in
<b>6</b> Length of basic tractor (with drawbar)	3740 mm	147 in	4149 mm	163 in
With the following attachments, add to basic tractor length:	—			
Ripper	1026 mm	41 in	1026 mm	41 in
PA55 winch	381 mm	15 in	381 mm	15 in
VPAT blades, straight	1057 mm	42 in	1244 mm	49 in
VPAT blade, angled 25°	1787 mm	70 in	2125 mm	84 in
SU blade	1176 mm	46 in	—	—
<b>7</b> Height over stack from tip of grouser	2886 mm	114 in	3000 mm	118 in
<b>8</b> Height of grouser	57 mm	2.2 in	57 mm	2.2 in
<b>9</b> Ground clearance from ground face of shoe (per SAE J1234)	424 mm	16.7 in	538 mm	21.2 in

## Bulldozer Specifications

		(XL) 6 VPAT Blade	(XL) 6SU Blade	(LGP) 6 VPAT Blade
Blade capacity (SAE J1265)	m <sup>3</sup>	3.18	4.28	3.16
	yd <sup>3</sup>	4.16	5.6	4.13
Blade width (over end bits)	mm	3272	3190	4080
	in	129	125.6	160.6
Blade height	mm	1195	1244	1025
	in	47	49	40.4
Digging depth	mm	538	520	433
	in	21.1	20.5	17.0
Ground clearance	mm	822	983	1024
	in	33	38.7	40.3
Maximum tilt	mm	497	665	598
	in	20	26.2	23.5
Weight (without hyd. controls)	kg	2372	2427	2819
	lb	5229	5351	6215

## Ripper Specifications

		XL	LGP
Beam width	mm	2202	2202
	in	86.7	86.7
Cross section	mm	216 × 254	216 × 254
	in	8.5 × 10	8.5 × 10
Ground clearance under beam (raised)	mm	1090	1205
	in	42.9	47.4
Under tip at full raise	mm	391.7	505.7
	in	15.4	19.9
Number of pockets (teeth)	in	3	3
Maximum penetration	mm	473.5	359.5
	in	18.6	14.2
Maximum pryout force	kg	126 000	126 000
	lb	28,350	28,350
Maximum penetration force (VPAT blade equipped power shift)	kg	60 230	71 980
	lb	13,550	16,195
<b>Weight:</b>			
With three teeth	kg	1406	1406
	lb	3100	3100
Each tooth	kg	78	78
	lb	172	172

## Standard Equipment

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

### ELECTRICAL

- 10-amp/12-volt converter
- 70-amp alternator
- Back-up alarm
- Diagnostic connector
- Horn
- Hour meter
- Integrated front lights
- Odometer

### OPERATOR ENVIRONMENT

- Coat hook
- Cup holder
- Electronic Monitoring System (EMS III)
- Electronic travel speed and gear limiter
- Engine air cleaner service indicator in the cab
- Engine RPM display/gear display
- Foot pegs for slope work
- Four gauge cluster
- FTC control for Clutch and Brake steering or Cat tiller bar for D/S
- Hydraulic Pilot Control
- Mirror, rearview
- Power points, two 12-volt
- Pre-start coolant level monitoring system
- Product Link ready
- Radio ready, 12-volt
- ROPS/FOPS cab with integrated A/C
- Seat belt, retractable 76 mm (3 in)
- Storage and literature compartments
- Transmission shift points selection function on dash

### POWER TRAIN

- 3126B HEUI Caterpillar diesel engine with 24-volt starter
- Air-to-air aftercooler
- Auto-dust ejector with under hood air filter and pre-screener
- Automatic down-shift and kickdown transmission control
- Controlled throttle shifting
- Coolant, extended life
- Coolant sampling port
- Decelerating function
- Fan, blower
- Fuel/water separator
- High efficiency Aluminum Cooling Package
- Load compensated shifting
- Selectable shift points
- Single poly-vee belt with automatic belt tensioner
- Steering system: Clutch and Brake with FTC or optional Differential Steering system
- Three-speed planetary transmission with torque converter

### UNDERCARRIAGE

- Adjuster, hydraulic track
- Carrier rollers
- Guards, end track guiding
- Heavy-duty sealed and lubricated tracks
- Idlers, lifetime lubricated
- Rollers, lifetime lubricated track
- Wider tread and taller flange idler profile

### OTHER STANDARD EQUIPMENT

- 4600 meter altitude operation capability without derating
- Centralized remote mounted pressure taps for easy access and diagnostics
- Crankcase guard
- Ecology drains
- Extended service intervals (500 hours)
- Front pull device
- Hinged engine doors
- Hinged radiator grill
- Implement oil filter
- Keyed lockable enclosures
- Load sensing hydraulics
- Rigid drawbar
- S•O•S<sup>SM</sup> taps for engine, transmission and implement fluids
- Three valve hydraulics for VPAT dozer
- Transmission remote pressure taps

## Optional Equipment (with approximate change in operating weight)

*Optional equipment may vary. For specific tractor applications, additional guarding may be required. Consult your Caterpillar dealer for specifics.*

	kg	lb
Air conditioner less off	-51.4	-113.3
Alternator, brushless	0.34	0.7
ARO (Laser/GPS)	65	143.2
Bulldozers – See Bulldozer Specifications chart for weights		
Canopy	-230	-507
Heater, dash mounted for OROPS	18.5	40.8
Fan, reversible	3.7	8.2
Fan Group demand	3	6.6
Fast fill fuel tank	7	15.4
Lighting system, 4 lights	18.2	40.1
Rotating beacon	3.3	7.3
Sound suppression (for cab)	18	39.7
Product Link	4	8.8
Machine Security System (MSS)	2.5	5.5
<b>Guards:</b>		
Crankcase, heavy duty	80	176.4
Fuel tank (for cab or canopy)	72	158.7
Guard, rear, heavy duty	5	11.0
Guiding Track XL/MS	167	368.2
Guiding Track LGP/MS	73	160.9
Guiding Guarding Track XL/HD	250	551.1
Guiding Guarding Track LGP/HD	198	436.5
Radiator, heavy duty, hinged grill	30	66.1
Sand blast grid	18	39.7
<b>Screens and Sweeps:</b>		
Rear screen for EROPS cab	81	178.6
Rear screen for OROPS canopy	53	116.8
Sun screen	5	11.0
Sweeps EROPS	133.1	293.4
Sweeps OROPS	143.2	315.7
<b>Hydraulics and Ripper:</b>		
Three valve for SU blade (XL) and ripper (valve itself)	0	0
Four valve for bulldozer and ripper (valve itself)	15	33.0
Ripper, parallelogram (with three straight teeth)	1406	3099.6
Each optional curved tooth, replacing straight tooth	9	19.8

ES: Extreme Service shoes, MS: Moderate Service shoes  
HD: Heavy-Duty link track

	kg	lb
<b>Seat:</b>		
Air suspended C500 comfort series, cloth (for cab only)	52.4	115.5
C500 comfort series, cloth, mechanical suspended (for cab only)	53.6	118.2
C500 comfort series, vinyl, mechanical suspended	53.6	118.2
Low back, vinyl	48.7	107.4
<b>Starting aids:</b>		
Electric fuel priming pump	0	0
Engine coolant heater (dealer installed)	1	2.2
Heavy-duty batteries	45	99.2
<b>Track, pair, heavy-duty sealed and lubricated:</b>		
<b>XL arrangement, 40-sections:</b>		
560 mm (22 in) MS/HD	-180	-396.8
560 mm (22 in) ES/HD	60	132.3
610 mm (24 in) ES/HD	160	352.7
<b>LGP arrangement, 46-sections:</b>		
710 mm (28 in) MS/HD	-370	-815.7
860 mm (34 in) self cleaning/HD	180	396.8
<b>SystemOne Undercarriage:</b>		
XL	153	337.3
LGP	161	354.9
<b>Track, pair, SystemOne:</b>		
<b>XL arrangement, 40-sections:</b>		
560 mm (22 in) ES/HD	60	132.3
610 mm (24 in) MS	-80	-176.4
610 mm (24 in) ES	160	352.7
<b>LGP arrangement, 46-sections:</b>		
860 mm (34 in) MS	0	0
<b>Winch and fairleads:</b>		
Winch (standard or low speed)	1276.5	2814.2
Fairlead, 3 rollers	290	639.3
Fairlead, 4 rollers	320	705.5

# D6N Track-Type Tractor

AEHQ5498-03 (10-04)

Replaces AEHQ5498-02 (8-04)

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