

CRAWLER DOZER SPECIFICATIONS

DC150LT-PS, DC150XLT-PS, DC150LGP-PS, DC150LT and DC150LGP



NEW HOLLAND
CONSTRUCTION

ENGINE

Net flywheel power	140 hp (104 kW)
ISO 9249	140 hp (104 kW)
CEE 80/1269	140 hp (104 kW)
SAE J1349	140 hp (104 kW)
Make and model	CUMMINS 6BT5.9
Type	turbocharged, direct injection, 4-cycle diesel
Number of cylinders	6
Bore x stroke	4.0 x 4.7 (102 x 119 mm)
Displacement	360 in ³ (5.9 L)
Governed rpm	2100 rpm
Maximum torque @1600 rpm	443 lbf-ft (600 Nm)
Lubrication	full pressure by gear pump

The machine may be operated up to 8200 ft (2500 m) altitude without derating the engine.

Engine complies with U.S. standards CARB & EPA and with E.U. standard Euromot 1.

ELECTRICAL SYSTEM

Voltage	24V
Battery	2
rating (each)	160 Ah – 650 CCA
type	maintenance free
Starter	6.8kW
Alternator	70A
Master switch for electrical system	

TORQUE CONVERTER

Type	single stage, rotating housing
Torque multiplication	2.33 : 1

TRANSMISSION

Type:	full power shift, countershaft, constant mesh		
Control modulation:	5 modulation valves (2 for direction + 3 for shifting)		
Control:	Touch-shift buttons for upshift, downshift and neutral Rotational direction control for forward and reverse		
Automatic shifting:	Auto Shift (AS) allows the operator to pre-select the 1st speed for forward and 2nd speed for reverse at directional change. Auto kickdown (AL) automatically downshifts the transmission when the engine lugs down to a predetermined RPM level. Both automatic features can be selected through specific buttons.		
Clutches:	multiple disc, hydraulic		
Lubrication:	full pressure		
	Speeds Fwd	mph (km/h)	Speeds Rev mph (km/h)
	1	2.5 (4.1)	1 3.2 (5.2)
	2	4.3 (6.9)	2 5.2 (8.4)
	3	6.2 (10.0)	3 7.5 (12.0)

Control lock-out levers: whenever at least one of the two levers are in the lock (up) position, the transmission is shifted to neutral and the parking brake is engaged.

STEERING AND BRAKING

Power steering version

- Hydrostatic differential steering motor and planetary gear sets drive the left and right tracks at different speeds during turns
- Counter-rotation of tracks in neutral

Clutch/brake steering version

- Oil cooled, multiple-disc steering clutches, hydraulically applied and spring released
- Oil cooled, multiple-disc steering brakes, hydraulically released and spring applied
- Modular assembly

Control

- Low-effort finger tip levers, located on the left armrest, electric/hydraulic proportional control
- Combined steering and braking (clutch/brake steering version)

Brakes-service(Power Steering version)

- Hydraulically released, spring applied, oil cooled multiple disc brake acting on the bevel pinion shaft
- Control: foot pedal, pilot operated
- Service brake also functions as parking brake
- Modular assembly

Brakes-service(Clutch/brake steering version)

- Hydraulically released, spring applied, oil cooled multiple disc brakes
- Control: foot pedal, pilot operated
- Steering brakes also function as service and parking brakes
- Modular assembly

Brakes-parking

- Automatic actuation on service brakes with transmission lockout lever in lock position or when the engine is stopped

FINAL DRIVES

Type	counter shaft, double reduction, modular assembly
Ratio	1 to 10.8
Lubrication	oil bath

UNDERCARRIAGE

- Box section track frames. Oscillating type. Front crossbar pinned.
- Hydraulic track adjusters. Sprockets with bolt-on segments, anti-packing tooth profile
- Step type track bushing with greater diameter at the rolling area
- Outer sprocket guard, front and rear track guards, center track guiding guards
- Disc idlers, track rollers, and carrier rollers, are permanently lubricated and sealed
- Sealed and lubricated track chain, Split master link

UNDERCARRIAGE (continued)

	LT	XLT	LGP
Track rollers (per track)	7	8	8
Carrier rollers (per track)	2	2	2
Number of shoes (per track)	43	48	48
Track chain pitch	6.9 (176mm)	6.9 (176mm)	6.9 (176mm)
Length of track on ground	100 (2550mm)	118 (2985 mm)	118 (2985 mm)
Gauge	75 (1900mm)	75 (1900mm)	84 (2140 mm)
Track oscillation	9.6 (245 mm)	14.2 (360 mm)	14.2 (360 mm)
Track shoe width, standard	22 (550 mm)	22 (550 mm)	32 (800 mm)
Shoe grouser height	2.2 (55mm)	2.2 (55 mm)	2.2 (55 mm)

Track shoe width Ground contact area Ground Pressure

Version: LT

Std Shoe: 22 (550 mm)	4,348 in ² (28,050 cm ²)	7.6 psi (52 kPa)
Optional: 20 (500 mm)	3,953 in ² (25,500 cm ²)	8.3 psi (57 kPa)

Version: XLT

Std Shoe: 22 (550 mm)	5,089 in ² (32,835 cm ²)	6.8 psi (47 kPa)
Optional: 20 (500 mm)	4,627 in ² (29,850 cm ²)	7.4 psi (51 kPa)

Version: LGP

Std Shoe: 32 (800 mm)	7,403 in ² (47,760 cm ²)	4.9 psi (34 kPa)
-----------------------	---	------------------

HYDRAULIC SYSTEM

The Power Steering Version features a closed – center, load sensing system designed for precise and responsive control, and for efficient simultaneous operations. It utilizes a feedback loop from the implement valve to the pump to monitor the hydraulic power. The pump flow is regulated to only what is needed, thus reducing the engine power requirement for the hydraulics, fuel consumption and increasing the machine's production.

Control system (PS: Power Steering version)	pilot operated
Control System (C/B: Clutch/Brake steering version)	mechanical
Pump (PS)	variable displacement piston pump
Pump (C/B)	gear type
Capacity at rated speed (PS)	40 gpm (150 L/min)
Capacity at rated speed (C/B)	32 gpm (120 L/min)
Relief valve pressure:	2755 psi (19 mPa)
Control Valve (PS)	closed center with control lock out device
Number of spools, PAT blade and ripper:	five spools
Number of spools, HSU/HS blade and ripper:	four spools
Actuation (blade)	pilot hydraulic, single lever
Control valve (C/B)	open center, with control lock out device
Actuation (blade)	single lever
Number of spools, blade and ripper	three spools
Dozer circuit	raise, hold, lower, float
Tilt circuit	left, hold, right
Angle circuit (PAT blade)	left, hold, right

Blade lift with quick drop (PS only) and travel limit valves (HS/HSU only)

Six-way (VPAT) Blade:

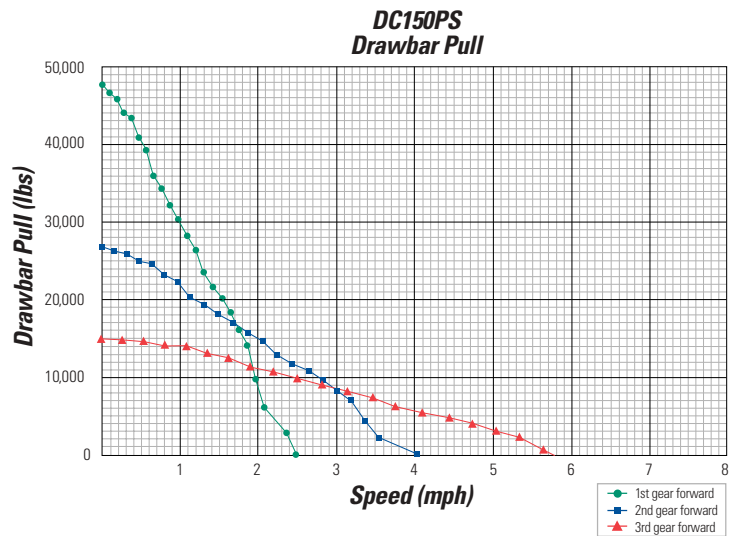
Blade lift	2
Rod x Bore x stroke	2.0 x 3.5 x 32.5 (50 x 90 x 826 mm)
Tilt	1
Rod x Bore x stroke	2.5 x 4.9 x 5.3 (63 x 125 x 135 mm)
Angle	2
Rod x Bore x stroke	2.0 x 3.9 x 20.0 (50 x 100 x 509 mm)

Semi-U (HSU) and Straight (HS) Blades:

Blade lift w/quick drop and travel limit valves	2
Rod x Bore x stroke	1.8 x 3.2 x 46.7 (45 x 80 x 1185 mm)
Tilt	1
Rod x Bore x stroke	2.5 x 4.9 x 5.5 (63 x 125 x 140 mm)

SERVICE CAPACITIES

Engine	Gallons	(Litres)
Lube oil	3.7	14
Coolant	7.4	28
Fuel tank	71.3	270
Torque converter and transmission	8.5	32
Steering and braking, power steering version	24.8	94
Steering and braking, clutch/brake steering version	12.2	46
Final drive (each)	10.0	38
Hydraulic system, power steering version	16.6	63
Hydraulic system, clutch/brake steering version	14.8	56



Hydraulic cylinders, double acting control

DIMENSIONS

Shipping Weight

Includes ROPS cab, blade lift cylinders, blade C-frame, lubricants, coolant and 10% fuel.

	LT with 22 (550 mm) shoes	XLT with 22 (550 mm) shoes	LGP 32 (800 mm)
Without blade or ripper:	29,850 lb. (13,540 kg)	31,700 lb. (14,380 kg)	33,630 lb. (15,255 kg)

Operating Weight

Includes ROPS cab, blade assembly components for blade selected, lubricants, coolant, 100% fuel and operator.

Blade / Track Frame Version:	LT with 22 (550 mm) shoes	XLT with 22 (550 mm) shoes	LGP, with 32 (800 mm) shoes
6-way (VPAT)	32, 880 lb. (14,915 kg)	34,510 lb. (15,655 kg)	36,440 lb. (16,530 kg)
Straight (HS)	32, 900 lb. (14, 924 kg)	N/A	N/A
Semi-U (HSU)	33, 340 lb. (15, 124 kg)	N/A	N/A

Changes to Shipping and Operating Weights

	LT with 22 (550 mm) shoe	XLT with 22 (550 mm) shoes	LGP 32 (800 mm) shoes
Addition for track guard, full	+ 330 lb. (150 kg)	+440 lb. (200 kg)	+440 lb. (200 kg)
Deduct for 20 (500 mm) shoes, 43 links	- 254 lb. (115 kg)	N/A	N/A
Deduct for 20 (500 mm) shoes, 48 links	N/A	- 286 lb. (130 kg)	N/A
Deduct for ROPS canopy instead of ROPS cab	- 660 lb. (300 kg)	- 660 lb. (300 kg)	- 660 lb. (300 kg)
Addition for cab air-conditioning	65 lb. (30 kg)	65 lb. (30 kg)	65 lb. (30 kg)
Addition for rear counterweight	1760 lb. (800 kg)	1760 lb. (800 kg)	1760 lb. (800 kg)
Deduct for clutch/brake steering	1543 lb.(700 kg)	N/A	1543 lb.(700 kg)

Shipping Dimensions

Track shoe width:	LT, XLT with 22 (550 mm) shoes	LT, XLT with 20 (500 mm) shoes	LGP with 32 (800 mm) shoes
Transport width (over shoes):	8 0 (2450 mm)	7 11 (2400 mm)	9 8 (2940 mm)
Transport length with c-frame only:	LT tractor: 14 3 (4350 mm)	XLT tractor: 15 7 (4757 mm)	LGP tractor: 15 7 (4757 mm)

Version- Blade Type	Blade Width Straight	Blade Width Angled	Blade Height	Capacity SAE J1265	Max. Tilt	Max. Pitch	Digging Depth	Max. Lift Above Ground	Overall Length w/ blade**
LT-VPAT*	126 3200mm	115 2910 mm	43 1100 mm	4.12 yd ³ 3.15 m ³	17.7 450 mm	±5°	19.3 490 mm	37 950 mm	16 3 4955 mm
LT-Semi-U (HSU)	125 3180 mm	— —	52 1320 mm	5.4 yd ³ 4.1 m ³	22 550 mm	±12°	19 480 mm	44 1105 mm	16 6 5025 mm
LT-Straight (HS)	125 3180 mm	— —	43 1100 mm	4.0 yd ³ 3.1 m ³	22 550 mm	±10°	16 400 mm	44 1105 mm	15 7 4750 mm
LGP-VPAT*	154 3900 mm	146 3700 mm	42 1060 mm	4.12 yd ³ 3.15 m ³	22 550 mm	±5°	23 590 mm	35 900 mm	17 5 5315mm
XLT-PAT*	126 3200mm	115 2910 mm	43 1100mm	4.12 yd ³ 3.15 m ³	17.7 450 mm	±5°	23 590 mm	35 900 mm	17 5 5315 mm

*Max angulation ±23°

**With ripper raised, add 45" (1148 mm) to overall length for ripper model RP12F (LT/XLT) or 25" (633 mm) for ripper model PR10F (LGP)

RIPPER

Track Frame

Ripper model

Type

Ripping depth

Ripping width

Shank holders

Shanks included

Clearance, under tooth with ripper raised

Clearance, under tool beam with ripper lowered

Hydraulic cylinder - bore x stroke

Overall width

Weight (with three shanks)

LT/XLT

RP12F

Parallelogram

20 (495 mm)

71 (1800 mm)

3

3

18 (460 mm)

7 (170 mm)

4.9 x 15.0 (125 x 380 mm)

80.3 (2040 mm)

3422 lb. (1552 kg)

LGP

RP10F

Parallelogram

14 (356 mm)

67 (1700 mm)

3

3

19 (474 mm)

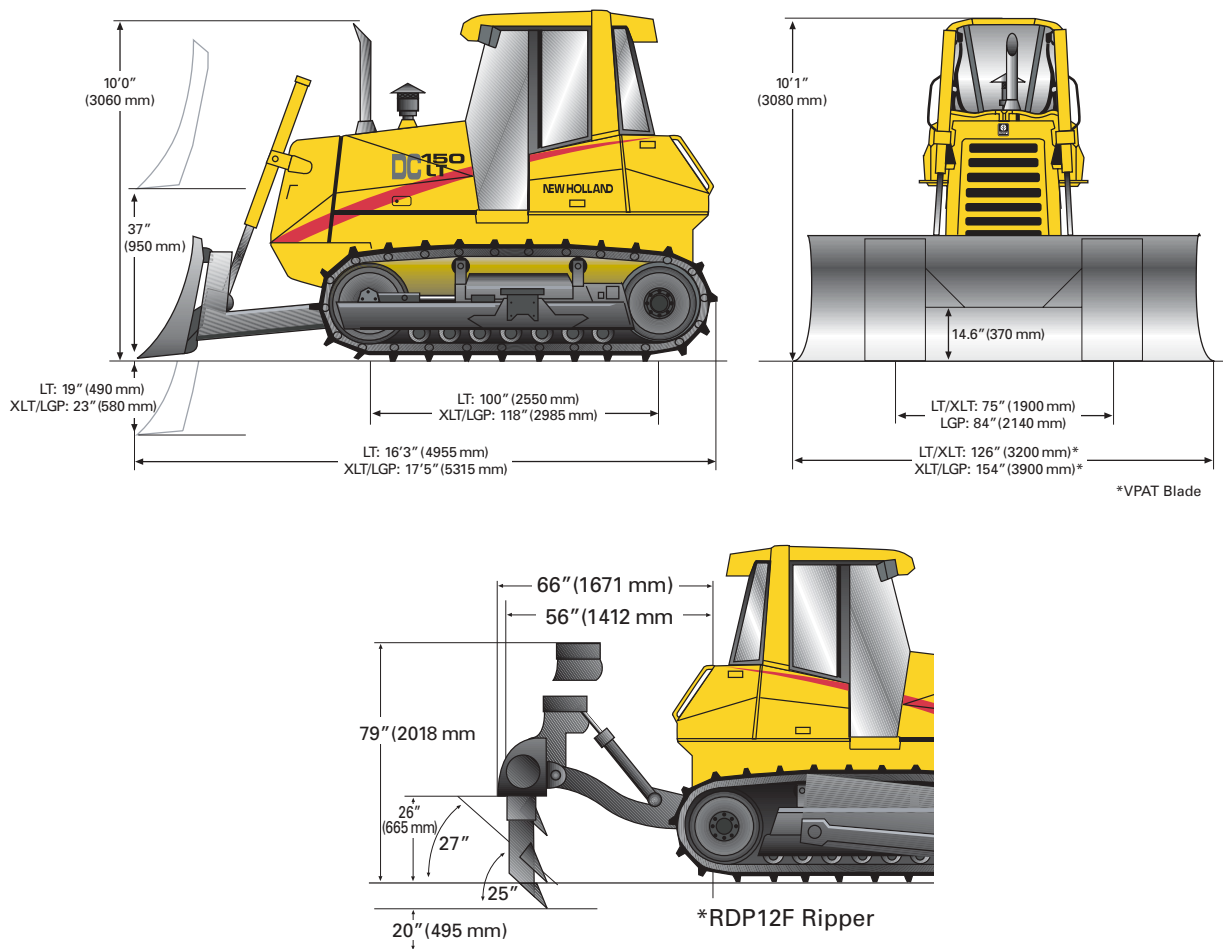
6 (164 mm)

4.7 x 12 (120 x 305 mm)

74.4 (1890 mm)

2579 lb. (1170 kg)

CRAWLER DOZER FEATURES AND BENEFITS



The DC150 dozer maximizes productivity through innovative design features that provide the operator with a very comfortable work environment and the service technician with easy access and diagnostics to speed servicing and increase uptime.

- Luxurious Cab or Canopy for Outstanding Operator Comfort and Productivity**

Both the cab and the canopy feature best-in-class ergonomics, visibility and comfort. The Command Control Pod puts low effort controls literally at the operator's fingertips for faster, easier operation guaranteeing maximum operator comfort and enhanced productivity for the owner. The pod is fully adjustable, allowing optimum placement for virtually any size.

- High Performance Hydraulic System**

Load Sensing Hydraulic System provides smooth and responsive blade function that is proportional to control lever movement. Pilot hydraulic blade control requires little operator effort to achieve outstanding productivity.

- Unparalleled Serviceability**

The wide-opening Service Panels, On-board Diagnostic Pressure Test Panel, On-board Electronic Diagnostic System, Hydraulic Tilt-Over Cab or Canopy and Modular Power-Train Components make routine servicing a breeze and reduce downtime when overhauls or rebuilds are required.

- Wide Track Gauge and Low Center of Gravity**

All New Holland Construction Dozers feature a wide track gauge and low center of gravity for truly outstanding stability and increased operator confidence, particularly when working on slopes.

- Power Steering (Differential Steering)**

Power Steering provides smooth continuous steering control while supplying power to both tracks when turning. It allows straight line dozing even when corner loading the blade such as when side cutting. The system also improves operator comfort by eliminating shocks due to clutch engagement and disengagement.

- Power for Productivity**

140HP six cylinder diesel engine ensure Good Power to Weight Ratio providing excellent pushing power all while giving excellent fuel economy, reliability, and EPA compliant exhaust emissions. The power-to-weight ratio provides excellent pushing power. The engine is matched to a torque converter and power-shift transmission featuring automatic kick-down and automatic shifting to speed the loading and return cycles.

- Low Ground Pressure Version**

Wider track gauge, longer track on the ground, and wider track shoes offer customers lower ground pressure for work in particularly soft ground conditions.

- Blade Options Offer Versatility**

6-way (VPAT: Variable-Pitch Power Angle/Tilt), and Semi-U blades offer customers a choice for either finishing work or production dozing.

STANDARD EQUIPMENT

- Alternator 70 A
- Air cleaner + pre-cleaner
- Back-up alarm
- Batteries (2), maintenance free, 160 Ah, 650 cca each
- Blade: Power Angle Tilt, variable pitch (VPAT) with C-frame, inside mount
- Cab/canopy, hydraulic tilting system
- Cold weather starting aid, electric pre-heat type
- Canopy ROPS, with dash panel anti-vandal cover
- Dashboard Check panel
 - Warning lights:
 - Air cleaner restriction
 - Hydraulic oil filter restriction
 - Brake low pressure
 - Engine oil pressure
 - Transmission oil pressure
 - Engine coolant temperature
 - Transmission oil temperature
 - Low fuel indicator
 - Battery charge
 - Brake lubrication
 - General malfunction
 - Service lights:
 - Front working lights
 - Rear working lights
 - Cab lights (with cab option)
 - Gauges and indicators:
 - Engine coolant temperature gauge
 - Engine RPM

Fuel level gauge
Hourmeter
Auto Shift (AS) and Auto kickdown (AL) modes
Selected speed indicator
Failure code

- Decelerator
- Diagnostic system display and remote pressure test panel
- Drawbar, rigid
- Electrical system, 24 V
- Fan, pusher
- Guards: full bottom guards, track adjusters, sprocket, track guides
- Horn
- Hood side panels, hinged
- Hook, front pull
- Hydraulic track adjuster
- Hydraulic valve
 - PS version with five valve spools for PAT blade and ripper, pilot operated, or PS version with four valve spools for HSU/HS blade and ripper, pilot operated, or C/B version with three valve spools for blade and ripper
- PTO provision
- Radiator Sand Screen
- Single-lever blade control
- Sprockets, segmented
- Suspension seat, with vinyl cover and seat belt
- Track, sealed and lubricated with split master link
- Track guiding guards
- Track shoes, LT/XLT Versions: 22 (550 mm)
- Track shoes, LGP Version: 32 (800 mm)
- Transmission, full power shift, three speeds forward and reverse
- Tool kit

OPTIONAL EQUIPMENT

- Air conditioning
- AM/FM Cassette stereo for ROPS cab
- Blades: 6-Way (VPAT)-complete with C-Frame, mechanical pitch, cylinders
 - Semi-U (HSU)-complete with Equistatic Compensator, push beams and tilt cylinder.
 - Straight blade-(HS) complete with Equistatic Compensator, push beams and cylinders
- Control and piping for rear implement
- Counterweight, rear , 1760 lb. (800kg)
- Fire extinguisher, 2.2 lb. (1 kg)

- Forestry guarding: limb risers, operator compartment screens, severe duty radiator guard, pre-cleaner guard
- Fuel transfer pump
- Ripper RP12F for LT/XLT versions, parallelogram, three shanks
- Ripper RP10F for LT/XLT versions, parallelogram, three shanks
- ROPS cab, with heater, pressurizer, cloth covered suspension seat, seatbelt and pull-down sun visors, front and rear
- Sound suppression, bystander
- Track roller guards, full
- Track shoes for LT and XLT versions, 20" (500 mm)
- Winch, PTO driven

Design, materials and/or specifications are subject to change without notice and without liability therefor. Specifications are applicable to units sold in Canada, the United States, its territories and possessions, and may vary outside these areas.

Visit our website at www.newhollandconstruction.com

© 2002 New Holland Construction



Safety begins with a thorough understanding of the equipment. Always make sure you and your operators read the Operator's Manual before using the equipment. Pay close attention to all safety and operating decals and never operate machinery without all shields, protective devices and structures in place.

61015014 • 30205 • API • Printed in U.S.A



NEW HOLLAND
CONSTRUCTION