

CASE
CONSTRUCTION



L SERIES CRAWLER DOZERS

1650L XLT | 1650L WT | 1650L LGP



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For residential, commercial, utility, and roads and bridges site prep work, you need a crawler dozer that tackles the toughest challenges. And when you're doing steep slope work, finish grading or heavy dozing for eight or more hours a day, you need a cab that keeps you comfortable. The Case 1650L delivers high-performance power, traction, precision and speed so you can get on and off the job site faster. Add best-in-class service and maintenance features, and you'll see why owning and operating this machine is the smart choice.

Powerful engine

The six-cylinder, 6.7-liter turbocharged Case Tier 3-certified engine delivers an impressive 144 net horsepower, making it a top performer in the industry's 130-160 net horsepower class. The engine is connected to the hydrostatic pumps by a drive shaft, which reduces machine vibration and makes this machine more comfortable to operate.

Electronic fuel injection and a charged air cooler maximize engine power and increase fuel efficiency.

Maximum control

The 1650L can push a full load through a turn without losing control of the load, braking or raising the blade, so you can finish the job faster. The key to this productivity is the high-performance PowerStat hydrostatic drive. Dual path hydrostatics adjust infinitely (up to 6 mph) and provide drawbar pull (up to nearly 62,000 pounds) automatically. Or, select any of the 10 speed increments to suit your own operational speed.

The low-effort joystick puts the operator in complete control. Electronic controls manage speed, direction, straight tracking, power turns, pivot turns and counter rotation.

Tough undercarriage

The undercarriage featured on Case crawler dozers is built rock solid. The pinned equalizer beam suspension keeps this machine smooth at any speed and delivers plenty of stability and traction for work on slopes, stump removal or pushing hard at low speeds. Heavy-duty pins, bushings and rollers provide long-term track life.

Like all Case crawler dozers, the 1650L is available in a wide selection of undercarriage configurations. For precision grading, the XLT configuration is the way to go. Need extra stability and a wider blade for finish grading or slope work? The WT configuration is for you. Or, for applications requiring lower ground pressure, the LGP configuration maximizes flotation. Your Case dealer can help you select the track system that best suits your needs.

The Case Lubricated Track, standard on all units, is sealed and lubricated with an oil reservoir in each pin. For long wear life, pins and bushings are sealed to keep contamination out while maintaining lubrication. In abrasive soil conditions, the Case Extended Life Track (CELT) provides outstanding durability. CELT uses a second, hardened bushing that is free to rotate on the standard bushing, allowing wear to be distributed over the entire circumference of the outer bushing.

1650L XLT





1650L WT



1650L LGP



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Undercarriage configurations

Three track options provide maximum versatility: Extra Long Track (XLT), Wide Track (WT) and Low Ground Pressure (LGP). Various track pads let you customize your specific work conditions. Pads are available in 558, 610, 711, 864 mm widths in closed or open configurations.



Case Tier 3-certified engine

The 1650L crawler dozer features a six-cylinder, 6.7-liter turbocharged Case Tier 3-certified engine that delivers 144 net horsepower. Electronic fuel injection and a charged air cooler add power and increase fuel efficiency.



Hydrostatic drive

The high-performance hydrostatic drive delivers power independently to each track so you can push a full blade through curves and turns.



Adjustable blade pitch

The low-effort blade hydraulics on the Case 1650L feature powerful cylinders able to move the blade with ease and control. The mechanical pitch blade can be set between 50° to 60° to suit dozing applications and ground conditions.



Single-lever control

The single-lever control on the 1650L provides infinitely adjustable direction and speed control for precise and easy operation.





Comfortable cab

The isolation-mounted operator's environment cushions you from noise and vibration. For increased productivity and comfort, chose the cab option with heat, air conditioning and air ride suspension seat.



Superior worksite visibility

The narrow, Advanced Instrumentation Cluster and tapered hood and cowl give the operator a direct line of sight to the cutting edge and the back of the blade.



SAHR parking brake

The 1650L comes standard with a heavy-duty, spring-applied hydraulic release parking brake. Turn the engine off and your unit will stay put.



Easy-tilt operator platform

The exclusive Case tilt up operator platform provides convenient access to power train, electrical and hydraulic systems in less than 10 minutes.



Ground line access panels

Seven "no tools required" ground-line access panels with easy-to-reach daily service checkpoints get your day off to a fast start. Swing-out doors and spin-on filters make routine maintenance easy.

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Operator comfort

To maximize your productivity, the spacious, isolation-mounted operator's compartment cushions your body from noise and vibration and provides excellent visibility to the blade and surrounding work site. With easy-to-read instrumentation, comfortable controls and wide-open visibility, this machine is as productive as it is simple to operate. An optional cab includes a deluxe air suspension seat, and heat and air conditioning for year-round climate controlled comfort.



Best-in-class service and maintenance

At Case, we know the easier it is to perform maintenance on your machine, the more likely it will get done. And maintenance improves reliability and durability of the machine. Daily service and maintenance can be completed quickly, with fluid sight gauges positioned at eye level. Seven "no tools required" ground-line access panels make daily service simple. The quick-disconnect diagnostic test ports make the 1650L as simple to troubleshoot as it is to operate. Should your dozer need service, the easy-tilt system tips the operator platform in less than 10 minutes. Keeping your Case crawler dozer in top running condition requires less effort, so you have more time on the job-making money.



Specifications

Engine

Model _____ Case Family IV 667TA/EDJ Tier III Certified
 Cylinders _____ 6
 Bore/Stroke _____ 104 x 132 mm
 Displacement _____ 6.7 l
 Fuel injection _____ Direct common rail
 Fuel _____ #2 Diesel
 Fuel filter _____ Primary spin-on with in-line strainer
 Air intake _____ Cross-flow
 Cooling _____ Liquid
 Engine speeds (rpm)
 High idle - no load _____ 2300+/-50
 Rated - full load _____ 2200
 Low idle _____ 900-1100
 Horsepower per SAE J1349
 Net _____ 144 (107 kW) @ 2200 rpm
 Gross _____ 156 (116 kW) @ 2200 rpm
 Peak torque @ 1400 rpm
 Net _____ 669 N·m
 Gross _____ 690 N·m
 Engine lubrication
 Pump _____ Deep sump plate cooler with pressurized
 under-piston nozzles
 Pump operating angle ratings
 Side-to-side _____ 45°
 Fore and aft _____ 45°

Engine cooling

Radiator
 Core size area _____ 0.61 m²
 Rows of tubes _____ 4
 Fan
 Diameter _____ 662 mm
 Ratio _____ 1.1:1

Electrical system

Alternator _____ 65 amp
 Voltage _____ 24 volt system
 Battery _____ (2) 12-volt low-maintenance 700 cold-cranking
 amps at 0° F (-18 C)

Powertrain

Dual path hydrostatic
 Pump _____ variable axial piston
 Motor _____ variable bent axis piston
 Maximum drawbar pull* _____ 275.1 kN
 Transmission _____ Single lever control electronic straight tracking
 Oil filter _____ 2 micron, spin-on replaceable
 Travel speeds*
 Forward _____ 0-9.7 km/h
 Reverse _____ 0-9.7 km/h
 *Measured using standard track chain. Increase travel speeds by 4%
 and reduce drawbar pull by 4% with the optional CELT track chain.
 Parking brakes _____ Heavy-duty, spring-applied,
 hydraulic pressure release
 Steering brakes _____ Hydrostatic
 Final drive _____ 2 helical gear reduction to planetary output
 Ratio _____ 61:1

Transmission cooling

Type _____ Oil to air
 Core size _____ 4116 cm²

Hydraulic system

Standard equipment pump
 Pump flow at 2200 rpm at 2830 psi (195 kPa) _____ 132 l/min

Cylinders

Lift cylinder (2)
 Bore diameter _____ 90 mm
 Rod diameter _____ 50 mm
 Stroke _____ 826 mm
 Angle cylinder (2)
 Bore diameter _____ 100 mm
 Rod diameter _____ 50 mm
 Stroke _____ 509 mm
 Tilt cylinder (1)
 Bore diameter _____ 125 mm
 Rod diameter _____ 63 mm
 Stroke _____ 135 mm

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Undercarriage

Track adjustment	Hydraulic
Frame	Oscillating equalizer beam suspension and pivot shaft
Length of track on ground	3.05 m
Track link pitch	
CLT track	190 mm
CELT track	190 mm
Track shoe height	56 mm
Pin diameter	38 mm
Bushing diameter	
CLT track	65 mm
CELT track	86 mm
Track shoes per side	
CLT track	45
CELT track	45
Track rollers per side	8
Carrier rollers per side	2
Track roller rail dia.	203 mm

Operator environment

ROPS canopy
Adjustable armrests
Foot rests
Retractable seat belt, 2 in (51 mm)
Vinyl suspension seat w/back adjustment
Headliner
Floor mat
Mirror
Entire structure tilts for access

Instrumentation

Warning lights:

Air filter
Alternator
Diagnostic fault indicator
Engine coolant temperature
Engine oil pressure
Hydraulic filter
Low fuel level
Park brake engaged
Service soon indicator
Transmission filter
Transmission charge pressure

Gauges:

Battery voltage
Digital hourmeter/tachometer/diagnostic/service reminder
Fuel level
Transmission oil temperature
Transmission speed indicator

Water temperature

Audible warnings:

Engine coolant temperature
Engine oil pressure
Low fuel level
Transmission charge pressure
Transmission/hydraulic temperature

Blade

Blade pitch (adjustable)	50°- 60°
Cutting edge	Reversible and replaceable
Width	200 mm
Thickness	20 mm

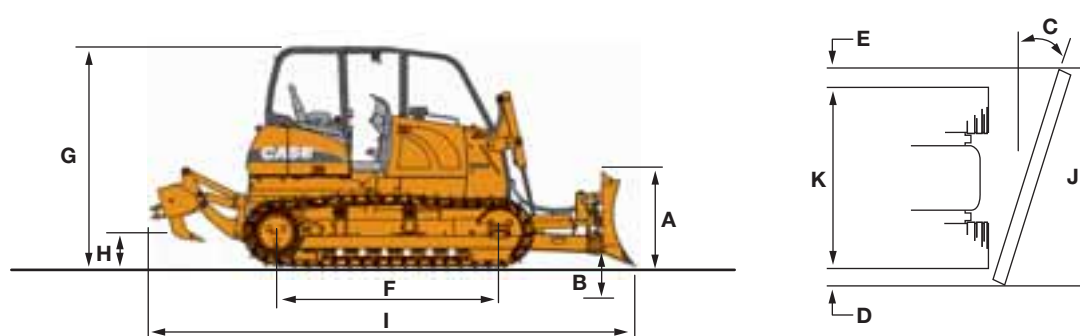
Ripper

Max. penetration	483 mm
Width	1711 mm
Cut width	635 mm
Ground clearance (shanks in top position)	424 mm
Points	Replaceable
Max. number of shanks	5
Tooth spacing with 3 teeth	787 mm
Hydraulic cylinder (double-acting)	
Diameter	102 mm
Stroke	254 mm
Rod	51 mm

Service capacities

Fuel tank	246 l
Engine oil w/filter	15.6 l
Engine oil w/o filter	16.4 l
Engine cooling system	32 l
Cooling system	
Cab w/heater and AC	32.5 l
Hydraulic reservoir	98.4 l
Final drive (per side)	14.2 l
Track rollers (ea.)	0.275 l
Front idlers (ea.)	0.237 l
Carrier rollers (ea.)	0.334 l

General dimensions



	Extra Long Track (XLT)	Wide Track (WT)	Low Ground Pressure (LGP)
BLADES			
Blade width	3.20 m	3.98 m	3.98 m
SAE blade capacity	3.1 m ³	3.1 m ³	3.2 m ³
A Blade height	1181 mm	1000 mm	1000 mm
B Blade depth below ground	490 mm	589 mm	589 mm
C Blade angle both directions	25°	28°	28°
Blade tilt, each end (up to 8.3°)	449 mm	551 mm	551 mm
Blade lift above ground	949 mm	899 mm	899 mm
D Cast reach	393.7 mm	591 mm	515 mm
E Cut reach	-71 mm	86 mm	10 mm
TRACKS			
Track gauge	1.87 m	2.13 m	2.13 m
Max shoe width	610 mm	711 mm	864 mm
F Track on ground	3.04 m	3.04 m	3.04 m
Area of track on ground	3.72 m ²	4.33 m ²	5.26 m ²
Ground pressure	42.8 kPa	38.7 kPa	31.9 kPa
DIMENSIONS			
G Height to top of ROPS	2.99 m	2.99 m	2.99 m
Height to top of cab	2.99 m	2.99 m	2.99 m
H Ground clearance	347 mm	347 mm	347 mm
Length			
I - Blade straight with drawbar	5.66 m	5.66 m	5.66 m
- Blade straight with ripper	6.62 m	6.62 m	6.62 m
Width			
- Blade straight	3.20 m	4.00 m	4.00 m
J Blade angled	2.79 m	3.53 m	3.53 m
K Over track	2.48 m	2.84 m	2.99 m

NOTE: Ground clearance and overall height dimensions are with the grousers fully penetrated. Add 52.5 mm if unit is on solid surface.

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Operating Weight

Operating weight includes ROPS, full fuel tank, 77 kg operator, rear retrieval hitch, track guides, back up alarm, horn and lights

	Weight (kg)
Extra Long Track	15.965
Wide Track	16.640
LGP	17.042

	Weight (kg)
Add-on weights	
Drawbar	66
Ripper (5 shank)	1355
Winch	2500
Cab	930
CELT chain	84

Track and shoe options

Extra Long Track

558 mm	closed grousers and CLT
558 mm	open grousers and CELT
610 mm	closed grousers and CLT
610 mm	open grousers and CELT

Wide Track

558 mm	closed grousers and CLT
558 mm	open grousers and CELT
610 mm	closed grousers and CLT
610 mm	open grousers and CELT
711 mm	closed grousers and CLT
711 mm	open grousers and CELT

Low ground pressure

864 mm	closed grousers and CLT
864 mm	open grousers and CELT

Area of track on ground

Shoe	Area (cm ²)
558 mm	34.093
610 mm	37.204
711 mm	43.027
864 mm	52.695

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1650L	XLT Extra Long Track	WT Wide Track	LGP Low Ground Pressure
Engine	144 net hp (107 kW)	144 net hp (107 kW)	144 net hp (107 kW)
Blade capacity	3.1 m ³	3.1 m ³	3.2 m ³
Blade width	3.2 m	4.0 m	4.0 m
Case Extended Life Track on ground	3.0 m	3.0 m	3.0 m
Biodiesel	B20	B20	B20

You can count on Case

You can count on Case and your Case dealer for full-service solutions-productive equipment, expert advice, flexible financing, genuine Case parts and fast service. We're here to provide you with the ultimate ownership experience.

Case pride

You can take pride in the Case name on your machine. It's backed by more than a century of productivity and performance. Case and your Case dealer are here for you, not only when you buy the machine, but also after you put 1,000 or 10,000 hours on it.

A rich, proud history

Case Construction Equipment's heritage spans more than 165 years. Growing from J.I. Case's innovations with steam-powered machinery in the late 1800s, Case developed road-building equipment that helped create early 20th century streets and highways across the world. By 1912, Case was well on its way to establishing itself as a full-line equipment manufacturer. The company continued to expand its construction equipment business over the next 45 years.

Celebrating a tradition of innovation

In 1957, Case produced the world's first integrated loader/backhoe made and warranted by one manufacturer. Over the decades and into the 21st century, Case has continued to develop a long line of industry firsts and has taken a leadership role in pioneering new products and solutions. Today, Case produces 15 lines of equipment and more than 90 models to meet your toughest construction challenges. Supported by manufacturing and sales in more than 150 countries, Case serves the needs of our customers worldwide.

Customer support

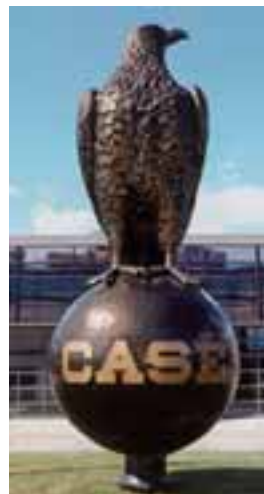
Case equipment is sold and serviced by more than 370 dealers and 900 outlets worldwide. No matter where you work, we're here to support and protect your investment.

To locate a Case dealer or learn more about Case equipment or customer service, go to www.casece.com. For flexible financing options, dependable parts and fast service, your Case dealer is here to meet your needs.

It all adds up. You can count on Case.

Case offers you:

EQUIPMENT | FINANCING | PARTS | AFTER SALES SERVICE



Standard equipment

OPERATOR'S COMPARTMENT

ROPS/FOPS canopy
Vinyl suspension seat w/back adjustment
Retractable seat belt, 51 mm
Adjustable armrests
Foot rests
Tool storage area
Headliner
Floor mat
Entire structure tilts for access

ENGINE

Case Family IV 667TA/EDJ
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter
Dual element radial seal air cleaner
65 amp alternator
(2) 700 CCA 12-volt batteries
Anti-sandblast radiator
Engine side panels

POWERTRAIN

Dual path infinitely variable, single-lever controlled hydrostatic drive with electronic straight tracking & counter-rotation, 4-position forward/reverse ratio control
Final drive - Triple reduction - helical gear/planetary decelerator with hydrostatic drive retardation
Automatic spring applied parking brake

BLADE

50° - 60° variable pitch with integral adjustment tool
Single lever electro hydraulic control for blade lift, angle and tilt

UNDERCARRIAGE

Hydraulic track adjusters
Case Lubricated Track Chain
Permanently lubricated track and carrier rollers and idlers

Track adjuster guard
Track guides (front and rear)

OTHER

Backup alarm
Horn
Anti-vandalism package
Mirror
Pre-cleaner
Lights - 2 front, 1 rear
Rear transmission guard
Front pull hook

Options

OPERATOR'S COMPARTMENT

Cab (w/heater, defroster, A/C, front windshield washer and lights)
ROPS heater
76 mm seat belt
Deluxe air suspension seat

HYDRAULICS

4 spool hydraulic valve for field-installed ripper

REAR MOUNTED EQUIPMENT

Ripper, 5 slot with 5 shanks

BLADES

3.20 m XLT w/610 mm shoes

3.98 m WT w/711 mm shoes
3.98 m LGP w/864 mm shoes

GUARDS

ROPS canopy brush guard
CAB canopy brush guard
Center rockguard

SCREENS

Rear ROPS and cab
Side ROPS
Radiator brush

OTHER

Counterweight, front
Drawbar, short
Drawbar, long

Rear retrieval hitch
Environmental drains
Turbine precleaner
Rear wiper for cab
Tool box for cab
PTO equipment pump for winch drive
Special paint
Case Extended Life Track
Grid heater
Additional lights (2 front, 1 rear) CAB canopy brush guard
Center rockguard

Standard and optional equipment shown can vary by country.



CNH INTERNATIONAL SA

Riva Paradiso, 14
6902 Paradiso
SWITZERLAND



NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Conforms to directive 98/37/CE

