



TIER II CERTIFIED

650K LT/WT/LGP Series 2 Crawler Dozer

ENGINE

Model..... Case Family III
445T/M2 diesel, Tier II certified

Cylinders..... 4

Bore/Stroke 4.1" x 5.2"
(104 x 132 mm)

Displacement..... 274 in³ (4.5 L)

Fuel injection..... Direct

Fuel #2 Diesel

Fuel filter..... Spin-on with
in-line strainer

Air intake Cross-flow

Cooling Liquid

Engine speeds (rpm)

High idle - no load 2220±50

Rated - full load..... 2000

Low idle..... 800-1050

Horsepower per SAE J1349

Net 74.8 (55.8 kW) @ 2000 rpm

Gross..... 80 (59.7 kW) @ 2000 rpm

Peak torque @ 1400 rpm

Net 262 lb·ft (355 N·m)

Gross..... 265 lb·ft (360 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°

Oil filtration ... Replaceable, spin-on
full-flow cartridge

ENGINE COOLING

Radiator -

Core size area..... 486 in² (0.31 m²)

Rows of tubes 6

Fan -

Diameter 21.6" (550 mm)

Ratio 0.875:1

ELECTRICAL SYSTEM

Alternator..... 65 amp
95 amp w/A/C

Battery 12-volt low-maintenance
650 cold-cranking amps
@ 0° F (-18 C)

POWERTRAIN

Dual path hydrostatic

Pump - variable axial piston

Motor - variable bent axis piston

Maximum drawbar pull* ... 42,000 lb
(186.8 kN)

Transmission.... Single lever control -
electronic straight tracking

Oil filter 2 micron, spin-on
replaceable

Travel speeds* -

Forward 0-6 mph (0-9.7 km/h)

Reverse 0-6 mph (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..... 62:1

TRANSMISSION COOLING

Type Oil to water

Core size 185.5 in² (1197 cm²)

HYDRAULIC SYSTEM

Standard equipment pump

Pump flow @ 2000 rpm
@ 3000 psi (209 kPa).....20.8 gpm
(78.7 L/min)

Max. system pressure.... 3025±75 psi
.....(20 855±515 kPa)

CYLINDERS

Lift cylinder (2)

Bore diameter..... 3.50" (89 mm)

Rod diameter 1.75" (44.5 mm)

Stroke 15.5" (394 mm)

Angle cylinder (2)

Bore diameter..... 3.50" (89 mm)

Rod diameter 1.75" (44.5 mm)

Stroke 15.5" (394 mm)

Tilt cylinder (1)

Bore diameter..... 3.50" (89 mm)

Rod diameter 1.75" (44.5 mm)

Stroke 5.80" (144 mm)

UNDERCARRIAGE

Track adjustment Hydraulic

Frame Rigid suspension

Length of track
on ground (CLT).... 88" (2230 mm)

Track link pitch..... 6.73" (171 mm)

Track shoe height..... 2.06" (52 mm)

Pin diameter 1.32" (33 mm)

Bushing diameter -

CLT track 2.24" (57 mm)

CELT track..... 3.0" (76 mm)

Bolt diameter 0.625" (16 mm)

Track shoes per side 38

Track rollers per side 6

Carrier rollers per side 1

Track roller rail dia. ... 6.1" (155 mm)

TRACK ON GROUND

| Shoe | Area - in ² (cm ²) |
|--------------|---|
| 16" (406 mm) | 2810 (18 129) |
| 20" (508 mm) | 3864 (24 929) |
| 25" (635 mm) | 4390 (28 323) |

TRACK

LONG TRACK

16" (406 mm) closed grousers and CLT

16" (406 mm) open grousers and CELT

WIDE TRACK

16" (406 mm) closed grousers and CLT

16" (406 mm) open grousers and CELT

20" (508 mm) closed grousers and CLT

20" (508mm) open grousers and CELT

LGP

25" (635 mm) closed grousers and CLT

25" (635 mm) open grousers and CELT

OPERATOR ENVIRONMENT

ROPS canopy
Single lever control for speed,
steering and direction
Forward/reverse speed ration
selector
Adjustable armrests
Foot rests
Retractable seat belt, 2" (51 mm)
Vinyl suspension seat
w/back adjustment
Rear view mirror

INSTRUMENTATION

Warning lights:
Air filter
Alternator
Engine oil pressure
Hi range
Hydraulic filter
Transmission filter
Transmission pressure
Gauges:
Battery voltage
Fuel level
Hourmeter
Tachometer
Transmission oil temperature
Water temperature
Audible warnings:
Engine oil pressure
Transmission pressure

BLADE

Variable blade pitch..... 52° forward
60° rearward
Lift speed (per second) ... 18" (457 mm)
Cutting edge Reversible and
replaceable
Width..... 8.0" (203 mm)
Thickness 0.75" (19 mm)

RIPPER

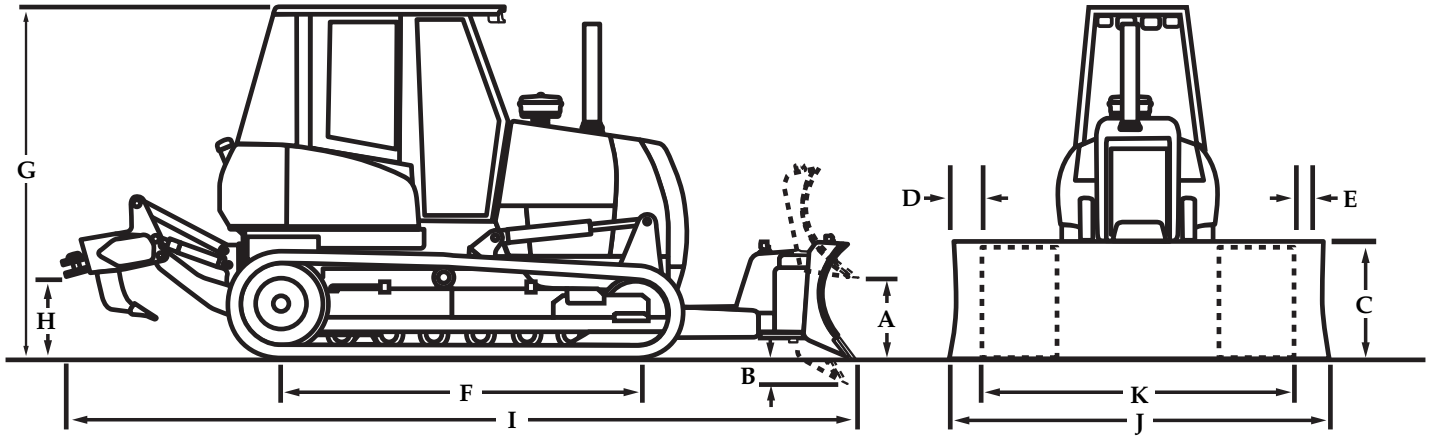
Max. penetration..... 14" (356 mm)
Width 72.4" (1839 mm)
Cut width 70.1" (1780 mm)
Max. ground clearance..... 17.3"
(439 mm)
Points Replaceable
Max. number of shanks 5
Tooth spacing –
with 5 teeth..... 17.8" (452 mm)
with 3 teeth..... 34" (864 mm)
Hydraulic cylinder (double-acting)
Diameter 3.25" (82.6 mm)
Stroke 8.4" (213 mm)
Rod 1.75" (44.5 mm)

SERVICE CAPACITIES

Fuel tank..... 50 gal (189.3 L)
Engine oil w/filter 14.4 qt (13.6 L)
Engine oil w/o filter. 13.5 qt (12.8 L)
Engine cooling system 20 qt (18.9 L)
Hydraulic reservoir ... 20 gal (75.7 L)
Final drive (per side) ... 15 qt (14.2 L)
Track rollers (ea.)..... 0.19 qt (0.18 L)
Front idlers (ea.)..... 0.42 qt (0.40 L)
Carrier rollers (ea.).... 0.25 qt (0.24 L)

OPERATING WEIGHTS

Unit equipped with ROPS, full fuel
tank, 170 lb (77 kg) operator,
drawbar, side shield, track guides,
backup alarm, horn and lights.
Long Track 18,200 lb (8244 kg)
Wide Track 18,900 lb (8591 kg)
LGP..... 19,400 lb (8813 kg)
Add-on weights –
Drawbar..... 85 lb (38 kg)
Ripper (3 shank)..... 1,400 lb (646 kg)
Winch..... 1,200 lb (545 kg)
Front counterweight ... 880 lb (399 kg)
Cab 930 lb (422 kg)
ROPS heater 70 lb (32 kg)
CELT chain 115 lb (52 kg)
Center rockguard 160 lb (72 kg)
Sweeps 100 lb (47 kg)
Dual batteries..... 60 lb (29 kg)



DIMENSIONS

| | Long Track (LT) | Wide Track (WT) | Low Ground Pressure (LGP) |
|-----------------------------------|---|---|---|
| BLADES | | | |
| Blade width | 98" (2489 mm) | 110" (2794 mm) | 120" (3048 mm) |
| SAE blade capacity | 2.0 yd ³ (1.53 m ³) | 2.32 yd ³ (1.77 m ³) | 2.52 yd ³ (1.93 m ³) |
| A. Blade lift above ground | 34.4" (874 mm) | 34.4" (874 mm) | 34.4" (874 mm) |
| B. Blade depth below ground | 19" (483 mm) | 19" (483 mm) | 19" (483 mm) |
| Blade angle both directions | 25° | 25° | 25° |
| Blade tilt, each end (up to 8.3°) | 14.2" (361 mm) | 15.9" (404 mm) | 17.3" (439 mm) |
| C. Blade height | 36" (914 mm) | 36" (914 mm) | 36" (914 mm) |
| D. Cast reach | 14.5" (368 mm) | 12.9" (328 mm) | 17.4" (442 mm) |
| E. Cut reach | 1.4" (36 mm) | 0.0" (0 mm) | 6.3" (152 mm) |
| TRACKS | | | |
| Track gauge | 57" (1.45 m) | 67" (1.70 m) | 67" (1.70 m) |
| Shoe width | 16" (406 mm) | 20" (508 mm) | 25" (635 mm) |
| F. Track on ground (CELT) | 89" (2.26 m) | 89" (2.26 m) | 89" (2.26 m) |
| Area of track on ground | 2810 in ² (1.81 m ²) | 3560 in ² (2.25 m ²) | 4390 in ² (2.83 m ²) |
| Ground pressure | 6.5 psi (44.6 kPa) | 5.3 psi (36.7 kPa) | 4.4 psi (30.5 kPa) |
| DIMENSIONS | | | |
| G. Height to top of ROPS | 109.2" (2773 mm) | 109.2" (2773 mm) | 109.2" (2773 mm) |
| Height to top of cab | 109.2" (2773 mm) | 109.2" (2773 mm) | 109.2" (2773 mm) |
| with air conditioning | 109.8" (2788 mm) | 109.8" (2788 mm) | 109.8" (2788 mm) |
| H. Ground clearance w/drawbar | 15.1" (383 mm) | 15.1" (383 mm) | 15.1" (383 mm) |
| I. Length – | | | |
| Blade straight with drawbar | 168" (4276 mm) | 168" (4276 mm) | 168" (4276 mm) |
| Blade straight with ripper | 201" (5101 mm) | 201" (5101 mm) | 201" (5101 mm) |
| J. Width – | | | |
| Blade straight | 110" (2794 mm) | 120" (3048 mm) | 124" (3150 mm) |
| Blade angled | 91" (2308 mm) | 102" (2585 mm) | 114" (2907 mm) |
| K. Over track | 73" (1854 mm) | 89" (2261 mm) | 92" (2337 mm) |

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

Isolation mounted ROPS/FOPS canopy with headliner and floor mat
Vinyl suspension seat w/back adjustment & adjustable armrests
Retractable seat belt, 2" (51 mm)
Foot rests

ENGINE

Case 445T/M2 diesel
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter
Dual element radial seal air cleaner
65 amp alternator
650 CCA 12-volt battery
Anti-sandblast radiator
Engine side panels
Anti-freeze to -34°F
Pusher fan

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

52° - 60° variable pitch with integral adjustment tool
Single lever control for blade lift, angle and tilt

UNDERCARRIAGE

Easy clean track covers
Hydraulic track adjusters
Case Lubricated Track Chain

UNDERCARRIAGE (continued)

Permanently lubricated track and carrier rollers
Track adjuster guard
Track guides (front and rear)

OTHER

Backup alarm
Horn
Anti-vandalism package
Mirror
Pre-cleaner
Operator's manual enclosure
Master disconnect switch
Front pull hook
Hand throttle
Decelerator
Final drive seal guard
O-ring face seal hydraulic fittings
Vertical spin-on hydraulic & filters

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Cab (w/heater, 25,598 BTU (7.5 kW)/hr air conditioner, defroster, front windshield washer and 2F-1R lights)
3" (76 mm) seat belt
Deluxe air suspension seat

HYDRAULICS

4 spool hydraulic valve for field-installed ripper

REAR MOUNTED EQUIPMENT

Ripper, parallelogram 5 slot with 3 shanks

BLADES

98" (2.5 m) or 104" (2.6 m) LT w/16" (406 mm) shoes
110" (2.8 m) WT w/20" (508 mm) shoes
120" (3.05 m) WT w/20" (508 mm) shoes
124" (3.2 m) LGP w/25" (635 mm) shoes

GUARDS

Sweeps
Center rockguard

SCREENS

Rear ROPS and cab
Side ROPS
Radiator brush

OTHER

Lights – halogen, 4 front, 2 rear for cab or ROPS
Counterweight, front
Retrieval hitch
Drawbar
Sprocket, relieved (LT w/CLT only)
Special paint
Dual 12V battery
Fan, reversible
Case Extended Life Track
Cold start aid
Turbo precleaner
Winch drive
Tool box for ROPS

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

NOTE: All engines meet current EPA emissions requirements.

IMPORTANT: CNH America LLC reserves the right to change these specifications without notice and without incurring any obligation relating to such change. CNH America LLC does not warrant the safety or reliability of attachments from other manufacturers.

Case is a registered trademark of CNH America LLC. Any trademarks referred to herein, in association with goods and/or services of companies other than CNH America LLC, are the property of those respective companies.



www.casece.com

 CASE IS A BRAND OF CNH, A GLOBAL LEADER FOR CONSTRUCTION EQUIPMENT, AGRICULTURAL EQUIPMENT AND FINANCIAL SERVICES.