

550H LT/WT/LGP Crawler Dozer



ENGINE

Model Case 4-390 or 4T-390
 Cylinders 4
 Bore/Stroke 4.02" x 4.72"
 (102 x 120 mm)
 Displacement 239 in³ (3.9 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 2420±50
 Rated - full load 2200
 Low idle 800-1050
 Horsepower per SAE J1349
 Naturally aspirated –
 Net 67 (50 kW) @ 2200 rpm
 Gross 75 (56 kW) @ 2200 rpm
 Turbocharged –
 Net 70 (52 kW) @ 2200 rpm
 Gross 80 (65 kW) @ 2200 rpm
 Peak torque –
 Naturally aspirated @ 1600 rpm –
 Net 181 lb-ft (245 N·m)
 Gross 191 lb-ft (259 N·m)
 Turbocharged @ 1500 rpm –
 Net 220 lb-ft (298 N·m)
 Gross 229 lb-ft (309 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 408 in² (0.26 m²)
 Rows of tubes 5
 Fan –
 Diameter 17.7" (450 mm)
 Ratio 1.35:1

POWERTRAIN

Torque converter Single-stage
 Diameter 11.5" (292 mm)
 Stall ratio 2.34
 Drawbar pull* –
 Naturally aspirated –
 1st 22,080 lb (98.2 kN)
 2nd 15,873 lb (70.6 kN)
 3rd 12,619 lb (56.1 kN)
 4th 9,000 lb (40.0 kN)
 Turbocharged –
 1st 23,496 lb (106.5 kN)
 2nd 16,900 lb (75.2 kN)
 3rd 13,442 lb (59.8 kN)
 4th 9,596 lb (42.7 kN)
 Transmission ... Case constant-mesh
 modulated transmission
 Oil filter 10 micron, spin-on
 replaceable
 Gear ratios (fwd/rev) –
 1st 68.2/62.1
 2nd 49.5/45.0
 3rd 39.7/36.1
 4th 28.8/26.2
 Travel speeds* –
 Forward mph (km/h)
 1st 2.5 (4.0)
 2nd 3.4 (5.5)
 3rd 4.2 (6.8)
 4th 5.8 (9.3)
 Reverse mph (km/h)
 1st 2.7 (4.3)
 2nd 3.7 (5.9)
 3rd 4.6 (7.4)
 4th 6.4 (10.3)
 * 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
 Brakes Foot-operated,
 low-effort power
 Final drive Spur and bull gear
 single reduction

HYDRAULIC SYSTEM

Standard equipment pump
 Pump flow @ 2200 rpm
 @ 2500 psi (172 kPa) 21.9 gpm
 (82.9 L/min)

CYLINDERS

Lift cylinder (2)
 Bore diameter 3.0" (76 mm)
 Rod diameter 1.75" (44.5 mm)
 Stroke 22.63" (575 mm)
 Angle cylinder (2)
 Bore diameter 3.0" (76 mm)
 Rod diameter 1.75" (44.5 mm)
 Stroke 14.1" (358 mm)
 Tilt cylinder (1)
 Bore diameter 3.50" (89 mm)
 Rod diameter 1.75" (44.5 mm)
 Stroke 5.40" (137 mm)

UNDERCARRIAGE

Track adjustment Hydraulic
 Frame Rigid suspension
 Length of track on ground ... 78" (1.98 m)
 Track link pitch –
 Steel 6.29" (160 mm)
 Rubber 6.46" (164 mm)
 Track shoe height –
 Steel 2.06" (52 mm)
 Rubber 1.97" (50 mm)
 Pin diameter 1.13" (28.7 mm)
 Bushing diameter 2.0" (51 mm)
 Bolt diameter 0.562" (14.2 mm)
 Track shoes per side 37
 Track rollers per side 6
 Carrier rollers per side 1
 Track roller rail dia. ... 6.1" (155 mm)

ELECTRICAL SYSTEM

Alternator 65 amp
 Battery 12-volt low-maintenance
 700 cold-cranking amps
 @ 0° F (-18 C)

OPERATOR ENVIRONMENT

ROPS canopy
"U" pattern forward/reverse lever
Adjustable armrests
Foot rests
Retractable seat belt, 2" (51 mm)
Vinyl suspension seat
w/back adjustment
Tool storage area

BLADE

Blade pitch 55° forward
60° rearward
Lift speed (per second) 22.5"
(0.57 m)
Cutting edge Reversible and
replaceable
Width 8.0" (203 mm)
Thickness 0.625" (16 mm)

SERVICE CAPACITIES

Fuel tank 30.5 gal (115.5 L)
Engine oil w/filter 11 qt (10.4 L)
Engine oil w/o filter 10 qt (9.5 L)
Engine cooling system . 16.5 qt (15.6 L)
Hydraulic reservoir ... 10.3 gal (39 L)
Final drive (per side) 6.0 qt (5.7 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)

INSTRUMENTATION

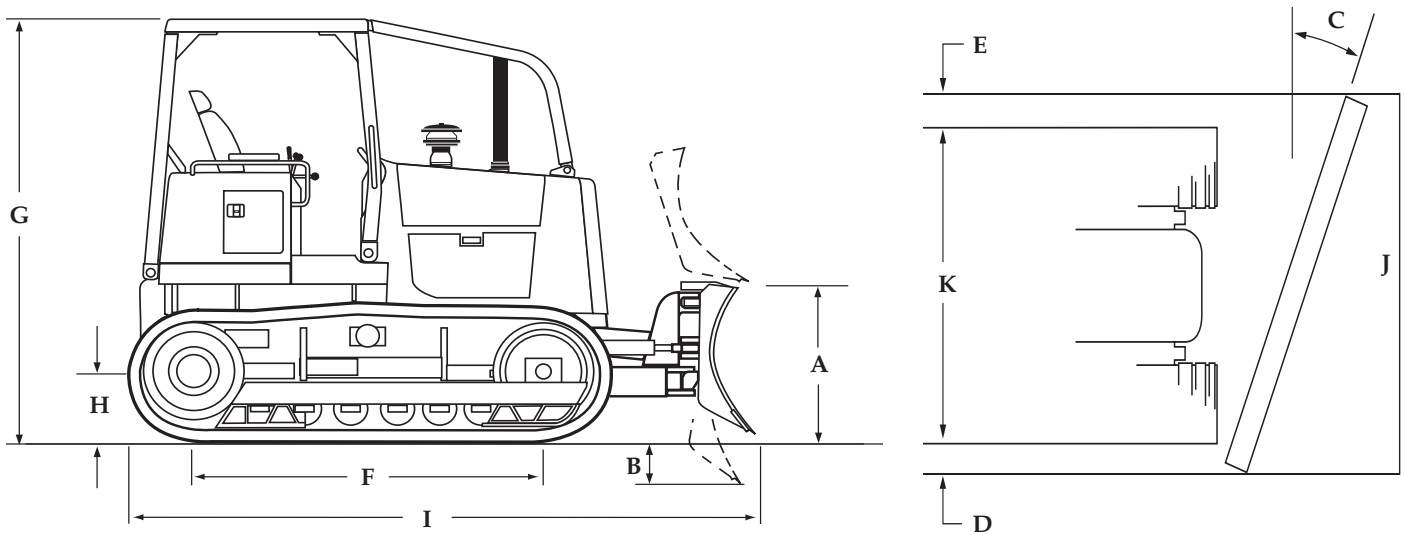
Warning lights:
Air filter
Alternator
Engine oil pressure
Hydraulic filter
Transmission filter
Transmission pressure
Gauges:
Battery voltage
Fuel level
Hourmeter
Tachometer
Transmission oil temperature
Water temperature
Audible warnings:
Engine oil pressure
Transmission pressure

RIPPER

Max. penetration 15" (381 mm)
Width 72.4" (1839 mm)
Cut width 70.1" (1780 mm)
Ground clearance (at carry) 12.3"
(312 mm)
Points Replaceable
Max. number of shanks 5
Tooth spacing –
with 5 teeth 17" (432 mm)
with 3 teeth 34" (864 mm)
Hydraulic cylinder (double-acting)
Diameter 3.0" (76 mm)
Stroke 10.5" (267 mm)
Rod 1.5" (38 mm)

OPERATING WEIGHTS

Unit equipped with ROPS, full fuel
tank, 170 lb (77 kg) operator, draw-
bar, side shield, track guides, backup
alarm, horn and lights.
Long Track* 14,317 lb (6494 kg)
Wide Track 14,600 (6622 kg)
LGP 14,960 lb (6786 kg)
*Includes 500 lb (226 kg) rear counterweight.
Add-on weights –
Drawbar 30 lb (14 kg)
Ripper (3 shank) 1,270 lb (576 kg)
Winch 1,111 lb (504 kg)
Front counterweight ... 950 lb (431 kg)
Rear counterweight .. 500 lb (226 kg)
ROPS heater 70 lb (32 kg)
CELT chain 124 lb (56 kg)
Rubber track -574 lb (- 260 kg)



DIMENSIONS

	Long Track (LT)	Wide Track (WT)	Low Ground Pressure (LGP)
BLADES			
Blade width	96" (2.44 m)	110" (2.79 m)	110" (2.79 m)
SAE blade capacity	1.65 yd ³ (1.26 m ³)	1.9 yd ³ (1.45 m ³)	1.9 yd ³ (1.45 m ³)
A. Blade lift above ground	34" (864 mm)	34" (864 mm)	34" (864 mm)
B. Blade depth below ground	19.5" (495 mm)	19.5" (495 mm)	19.5" (495 mm)
C. Blade angle both directions	25°	25°	25°
Blade tilt, each end (up to 8.3°)	14" (356 mm)	16" (406 mm)	16" (406 mm)
Blade height	33" (838 mm)	33" (838 mm)	33" (838 mm)
D. Cast reach	15.2" (386 mm)	14.1" (358 mm)	11.1" (282 mm)
E. Cut reach	2.8" (71 mm)	1.6" (41 mm)	-1.3" (-33 mm)
TRACKS			
Track gauge	53" (1.35 m)	64" (1.63 m)	64" (1.63 m)
Shoe width	16" (406 mm)	20" (508 mm)	26" (660 mm)
F. Track on ground	78" (1.98 m)	78" (1.98 m)	78" (1.98 m)
Area of track on ground	2496 in ² (1.61 m ²)	3120 in ² (2.01 m ²)	4056 in ² (2.62 m ²)
Ground pressure	5.7 psi (39.3 kPa)	4.6 psi (31.7 kPa)	3.7 psi (25.5 kPa)
DIMENSIONS			
G. Height to top of ROPS	8'5.8" (2.58 m)	8'5.8" (2.58 m)	8'6.6" (2.61 m)
H. Ground clearance w/drawbar	13.9" (353 mm)	13.9" (353 mm)	13.9" (353 mm)
Turning clearance circle, brake turn	20'6" (6.25 m)	20'6" (6.25 m)	20'6" (6.25 m)
Turning clearance circle, power turn	31'9" (9.7 m)	31'9" (9.7 m)	31'9" (9.7 m)
Length –			
I. Blade straight with drawbar	13'0.3" (3.97 m)	13'0.3" (3.97 m)	13'0.3" (3.97 m)
Blade straight with ripper	14'7.7" (4.46 m)	16'8" (5.08 m)	16'8" (5.08 m)
Blade angled with drawbar	14'7.2" (4.45 m)	14'10" (4.52 m)	14'10" (4.52 m)
Width –			
J. Blade straight	96" (2.44 m)	110" (2.79 m)	110" (2.79 m)
Blade angled	7'5" (2.26 m)	99.7" (2.53 m)	99.7" (2.53 m)
K. Over track	69" (1.75 m)	84" (2.13 m)	90" (2.29 m)

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS canopy
Vinyl suspension seat w/back adjustment
Retractable seat belt, 2" (51 mm)
Adjustable armrests
Foot rests
Tool storage area

ENGINE

Case 4-390 diesel – or –
Case 4T-390 turbocharged diesel
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter
Dual element air cleaner
65 amp alternator
700 CCA 12-volt battery
Engine side panels

POWERTRAIN

4F/4R modulated 2 speed
Powershift transmission
Automatic spring-applied parking brake
Oil-cooled power disc brakes

HYDRAULICS

Hydraulic tube guard

BLADE

2 position mechanical pitch adjustment
Single lever control for blade lift, angle and tilt

UNDERCARRIAGE

Hydraulic track adjusters
Case Lubricated Track Chain
Permanently lubricated track and carrier rollers
Track adjuster guard
Track guides (front and rear)

OTHER

Backup alarm
Horn
Anti-vandalism package
Mirror
Pre-cleaner
Lights - 2 front, 2 rear
Rear counterweight (LT only)

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS heater
3" (76 mm) seat belt
Deluxe air suspension seat
Decelerator
In-line shift pattern
ROPS headliner

HYDRAULICS

4 spool hydraulic valve for field-installed ripper

REAR MOUNTED EQUIPMENT

Ripper, 5 slot with 3 shanks

BLADES

96" (2.44 m) LT
110" (2.79 m) WT, LGP

GUARDS

Sweeps
Center rockguard
Final drive bottom
Final drive seal
Rear transmission (for WT and LGP)

SCREENS

Rear ROPS
Side ROPS
Radiator brush

OTHER

Counterweight, front
Counterweight, rear
Drawbar
Sprocket, relieved (LT w/ CLT only)
Special paint
Front pull hook
Muffler, spark arresting
Fan, reversible
Anti-sandblast radiator
Case Extended Life Track
Leg cushion pads
Cold start aid

TRACK

LONG TRACK

16" (406 mm) rubber track
16" (406 mm) closed grousers and sealed 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" (508 mm) open grousers and CELT

LGP

25" (635 mm) closed grousers and CLT
25" (635 mm) open grousers and CELT

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

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

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CASE CORPORATION
700 STATE STREET
RACINE, WI 53404 U.S.A.

CASE CANADA CORPORATION
3350 SOUTH SERVICE ROAD
BURLINGTON, ON L7N 3M6 CANADA



Visit Case Corporation on the Web at:
<http://www.casecorp.com>
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