

CRAWLER DOZER

CASE

CONSTRUCTION

SINCE 1842.

2050M

ENGINE

| | |
|--------------------------------|---|
| Brand | FPT |
| Model | F4HFA613N*E006 |
| Type | Turbo charged, water cooled. 4-stroke cycle diesel engine. Electronic fuel injection with crank case shield, Tier 2 certified |
| Cylinders | 6 |
| Bore and stroke | 4.09 x 5.2 in (104 x 132 mm) |
| Displacement | 408.85 in ³ (6,7 l) |
| Direct injection | Common Rail |
| Fuel | Diesel |
| Fuel filter | Spin-on w/ in-line strainer |
| Cooling System | Liquid |
| Engine rotations - rpm | |
| High - neutral without load | 2,200 +/- 50 |
| Nominal - full load | 2,200 |
| Low idle | 800 +/- 25 |
| Power @ 2,000 rpm - ISO 14396 | |
| Gross (SAE J1349) | 232 hp (173 kW) |
| Net (SAE J1349) | 214 hp (160 kW) |
| Torque @ 1,500 rpm - ISO 14396 | |
| Gross | 798 lbf.ft (1,082 Nm) |
| Net | 740 lbf.ft (1,004 Nm) |
| Engine lubrication | |
| Pump | Deep sump plate cooler w/ pressurized under-piston nozzles |
| Operating angle | |
| Sideways | 35° |
| Longitudinal | 45° |
| Oil filter | Replaceable, spin-on full-flow cartridge |
| Radiator | |
| Fins per inch | 10 |
| Fan propeller | Diameter 27.6 in (700 mm) |

POWER TRAIN

| | |
|-------------------------|--|
| Dual path hydrostatic: | |
| Pump | Variable axial piston |
| Motor | Variable bent axis piston |
| Maximum traction force* | 81,000 lbf (360 kN) |
| Transmission | Single lever control – electronic straight tracking |
| Oil filter | Replaceable cartridge with filtering up to 4 micron with a 100 mesh suction screen |
| Displacement speeds | |
| Forward | 6.1 mph (9.8 km/h) |
| Reverse | 6.1 mph (9.8 km/h) |
| Parking brake | SAHR (Applied through spring actuation, released hydraulically) |
| Directional brakes | Hydrostatic |
| Final command | 2 helical gear reductions and a planetary reduction |
| Reduction ratio | 48.75:1 |
| Transmission cooling | |
| Type | Tube and fin |
| Core area | 512 in ² (0.33 m ²) |

ELECTRICAL SYSTEM

| | |
|------------|--|
| Alternator | 120 A |
| Batteries | 2x 12V in series, maintenance free 1,200 CCA @ 80°F |
| Voltage | 24 V |

HYDRAULIC SYSTEM

| | |
|-------------------------------|------------------------|
| Pump flow @ 2,200 rpm | |
| in 3,626 psi (25 MPa) | 47.4 gpm (179.5 l/min) |
| Lifting cylinders - PAT | 2 |
| Diameter of the cylinder | 4.5 in (114.3 mm) |
| Diameter of the cylinder rod | 2.5 in (63.5 mm) |
| Stroke | 1 ft 5 in (428.8 mm) |
| Blade angling cylinders - PAT | 2 |
| Diameter of the cylinder | 4.5 in (114.3 mm) |
| Diameter of the cylinder rod | 2.5 in (63.5 mm) |
| Stroke | 1 ft 7.8 in (502.7 mm) |
| Inclination cylinder - PAT | 1 |
| Diameter of the cylinder | 5 in (127 mm) |
| Diameter of the cylinder rod | 2.5 in (63.5 mm) |
| Stroke | 5.8 in (148.3 mm) |
| Lift cylinder – Bulldozer | |
| With Rephasing valve | 2 |
| Bore diameter | 3.8 in (95.3 mm) |
| Rod diameter | 2.3 in (57.2 mm) |
| Stroke | 2 ft 11.7 in (906 mm) |
| Tilt cylinder – Bulldozer | 1 |
| Bore diameter | 4.5 in (114.3 mm) |
| Rod diameter | 2.5 in (63.5 mm) |
| Stroke | 3.9 in (98.9 mm) |

OPERATOR COMPARTMENT

Cab

Fully enclosed ROPS cab
 Single lever control for speed, steering and direction
 Cloth air suspension seat w/ back adjustment
 Retractable 3 in (76,2 mm) seat belt
 Adjustable armrest
 Two foot rest
 Rearview mirror
 Two door windshield wipers
 Dome light
 12-volt accessory outlet
 Headliner
 Floor mat

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

Indicators

Battery voltage
 Fuel level
 Digital hour meter
 Tachometer
 Diagnostic
 Service reminder
 Transmission oil temperature
 Transmission speed indicator
 Cooling fluid temperature

Audible warnings

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

SERVICE CAPACITIES

| | |
|---------------------------|---------------------|
| Fuel Tank | 107.0 gal (405.0 L) |
| Engine oil with filter | 17.3 qt (16.4 L) |
| Engine oil without filter | 16.5 qt (15.6 L) |
| Cooling system | 10.0 gal (38.0 L) |
| Hydraulic tank | 60.0 gal (227.0 L) |
| Final drive on each side | 26.4 qt (25.0 L) |
| Each lower roller | 0.38 qt (0.356 L) |
| Each idler | 0.35 qt (0.330 L) |
| Each upper roller | 0.33 qt (0.310 L) |

OPERATING WEIGHT

Unit equipped w/ cab, full fuel and hydraulic tanks, 170 lb (77 kg) operator, SALT chain, front pull hook, rear retrieval hitch, track guides, backup alarm, horn, lights, track shoe and blade.

| | |
|------------------|-----------------------|
| Extra long track | 45,406 lb (20 599 kg) |
| LGP | 48,764 lb (22 115 kg) |

Add-on weights:

| | |
|----------------|---------------------|
| Drawbar | 146 lb (66 kg) |
| Ripper 3 Shank | 4,262 lb (1 933 kg) |

OTHER SPECIFICATIONS

Undercarriage

| | |
|------------------------------------|---|
| Adjustment of tracks | Hydraulic |
| Frame | Pivot shaft and oscillating equalizer beam suspension |
| Length of the tracks on the ground | 128 in (3.25 m) |
| Track link pitch | 8 in (203.2 mm) |
| Shoe grouser height | 3.1 in (78.5 mm) |
| Track pin diameter | 1.75 in (44.5 mm) |
| Bushing diameter | |
| SALT HD track | 2.87 in (72.9 mm) |
| Number of shoes | 45 |
| Rollers | |
| Lower (each side) | 8 |
| Upper (each side) | 2 |
| Lower diameter of the rollers | 8.94 in (227 mm) |
| Upper diameter of the rollers | 7.38 in (187.5 mm) |

Track on ground

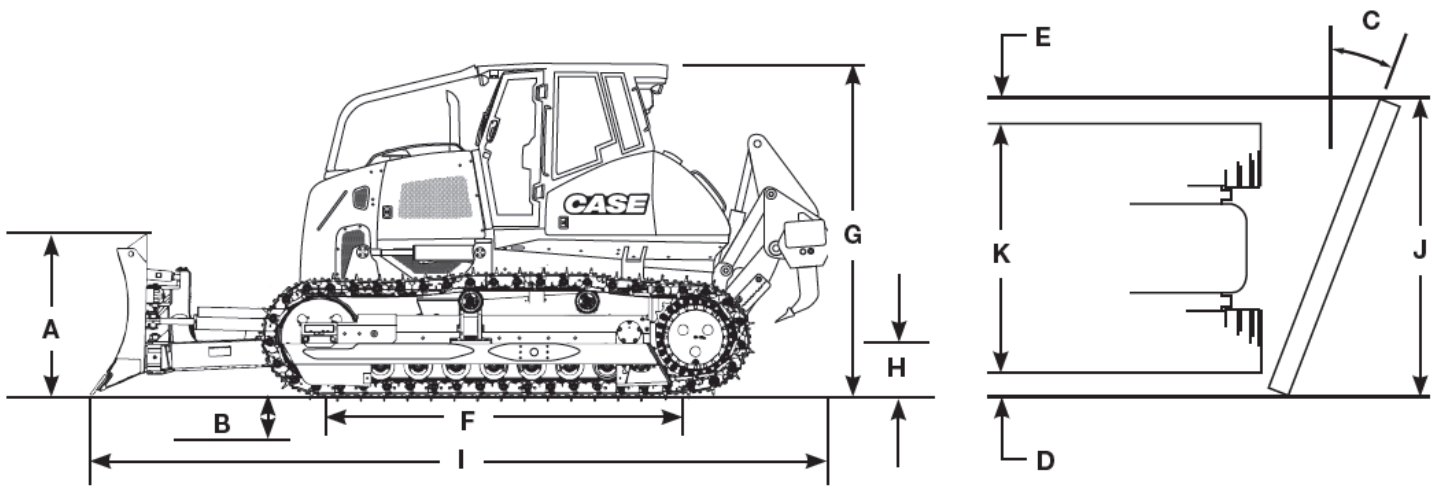
| | |
|----------------|---|
| Shoe area: | |
| 24 in (610 mm) | 5,093 in ² (32 856 cm ²) |
| 24 in (610 mm) | 6,038 in ² (38 952 cm ²) |
| 28 in (710 mm) | 7,144 in ² (46 093 cm ²) |
| 30 in (750 mm) | 7,547 in ² (48 690 cm ²) |
| 36 in (905 mm) | 9,107 in ² (58 753 cm ²) |

Blade

| | |
|--|------------------------|
| Variable blade pitch | 55° a 60° |
| Lifting speed | 19 in/sec (483 mm/seg) |
| Reversible and replaceable blade - PAT | |
| Width | 10 in (254 mm) |
| Thickness | 0.8 in (20 mm) |
| Reversible and replaceable blade - Bulldozer | |
| Width | 8 in (200mm) |
| Thickness | 0.8 in (20 mm) |

RIPPER

| | |
|----------------------------------|--------------------|
| Maximum penetration | 19.3 in (491 mm) |
| Width | 85 in (2 159 mm) |
| Cut width | 74.3 in (1 887 mm) |
| Maximum ground clearance | 22.7 in (577 mm) |
| Maximum number of teeth | 3 |
| Tooth spacing with 3 teeth | 37.2 in (945 mm) |
| Double-acting hydraulic cylinder | |
| Diameter | 5.25 in (133 mm) |
| Stroke | 23.5 in (597 mm) |
| Rod diameter | 2.75 in (70 mm) |



Line drawings are for illustrative purpose only and may not be exact representation of unit.

DIMENSIONS

| | Extra Long Track (XLT) with Semi-U | Extra Long Track (XLT) with PAT | Low Ground Pressure (LGP) with Straight PT | Low Ground Pressure (LGP) with PAT | Low Ground Pressure (LGP) with Semi-U |
|--|--|--|--|--|--|
| Blade width | 135 in (3 429 mm) | 142 in (3 607 mm) | 154 in (3 900 mm) | 157.5 in (4 064 mm) | 157 in (3 988 mm) |
| SAE blade capacity | 7.29 yd ³ (5.57 m ³) | 6.32 yd ³ (4.83 m ³) | 4.94 yd ³ (3.78 m ³) | 7.12 yd ³ (5.54 m ³) | 7.98 yd ³ (6.10 m ³) |
| Blade height | 56 in (1 425 mm) | 53.9 in (1 369 mm) | 44 in (1 108 mm) | 53.9 in (1 369 mm) | 53 in (1 349 mm) |
| A. Blade lift above ground | 48.7 in (1 238 mm) | 43.8 in (1 112 mm) | 46 in (1 167 mm) | 43.8 in (1 112 mm) | 48.4 in (1 228 mm) |
| B. Blade depth below ground | 21.5 in (547 mm) | 19.2 in (487 mm) | 20.0 in (508 mm) | 19.2 in (487 mm) | 21.6 in (548 mm) |
| C. Blade angle both directions | - | 25° | - | 25° | - |
| D. Cast reach | 17.4 in (442 mm) | 22.9 in (581 mm) | 14.5 in (367 mm) | 17.6 in (448 mm) | 16.2 in (411 mm) |
| E. Cut reach | 17.4 in (442 mm) | 5.8 in (148 mm) | 14.5 in (367 mm) | 0.5 in (12 mm) | 16.2 in (411 mm) |
| Blade tilt, each end | 15.7 in (400 mm) | 17.7 in (450 mm) | 15.7 in (400 mm) | 21.7 in (550 mm) | 15.7 in (400 mm) |
| Track gauge | 76.4 in (1.94 m) | 76.4 in (1.94 m) | 89 in (2.26 m) | 89 in (2.26 m) | 89 in (2.26 m) |
| Maximum shoe width | 24 in (600 mm) | 24 in (600 mm) | 36 in (905 mm) | 36 in (905 mm) | 36 in (905 mm) |
| F. Length of track on ground | 128 in (3.25 m) | 128 in (3.25 m) | 128 in (3.25 m) | 128 in (3.25 m) | 128 in (3.25 m) |
| Area of track on ground | 7,038 in ² (3.89 m ²) | 7,038 in ² (3.89 m ²) | 9,107 in ² (5.88 m ²) | 9,107 in ² (5.88 m ²) | 9,107 in ² (5.88 m ²) |
| Ground pressure | 7.52 psi (0.51 bar) | 7.52 psi (0.51 bar) | 5.35 psi (0.36 bar) | 5.35 psi (0.36 bar) | 5.35 psi (0.36 bar) |
| G. Height to top of ROPS cab | 10 ft 3 in (3 150 mm) | 10 ft 3 in (3 150 mm) | 10 ft 3 in (3 150 mm) | 10 ft 3 in (3 150 mm) | 10 ft 3 in (3 150 mm) |
| Height to top of exhaust | 9 ft 5 in (2 867 mm) | 9 ft 5 in (2 867 mm) | 9 ft 5 in (2 867 mm) | 9 ft 5 in (2 867 mm) | 9 ft 5 in (2 867 mm) |
| H. Ground clearance | 16.1 in (408.2 mm) | 16.1 in (408.2 mm) | 16.1 in (408.2 mm) | 16.1 in (408.2 mm) | 16.1 in (408.2 mm) |
| Length: Blade straight with drawbar | 19 ft 6 in (5 980 mm) | 19 ft 7 in (5 964 mm) | 19 ft 6 in (5 980 mm) | 19 ft 7 in (5 964 mm) | 19 ft 6 in (5 980 mm) |
| I. Blade straight with ripper | 24 ft 1 in (7 353 mm) | 24 ft 1 in (7 337 mm) | 24 ft 1 in (7 353 mm) | 24 ft 1 in (7 337 mm) | 24 ft 1 in (7 353 mm) |
| Width: Blade straight | 11 ft 3 in (3 423 mm) | 11 ft 10 in (3 607 mm) | 12 ft 10 in (3 900 mm) | 13 ft 1 in (4 001 mm) | 13 ft 1 in (3 988 mm) |
| J. Blade angled | 11 ft 3 in (3 423 mm) | 10 ft 9 in (3 269 mm) | 2 ft 10 in (3 900 mm) | 11 ft 11 in (3 626 mm) | 13 ft 1 in (3 988 mm) |
| K. Over track | 8 ft 4 in (2 541 mm) | 8 ft 4 in (2 541 mm) | 10 ft 4 in (3 166 mm) | 10 ft 4 in (3 166 mm) | 10 ft 4 in (3 166 mm) |

NOTE: Ground clearance and overall height dimensions are with the grousers fully penetrated. Add 2.19 in (56 mm) if unit is on solid surface.

STANDARD EQUIPMENT

Operator environment

See page 2

Engine

FPT F4HFA613N*E006

Tier 2 certified

V-Shape Cooling package with hydraulic-driven reversing fan

Integral engine oil cooling

Fuel filter

Dual element radial seal air cleaner

120 amp alternator

(2) 950 CCA 12-volt batteries

Engine side panels

Power Train

Dual path infinitely variable, single-lever controlled hydrostatic drive, with electronic straight tracking and counter-rotation

Final drive: Triple reduction; helical gear planetary decelerator with hydrostatic drive retardation

Automatic spring-applied parking brake

Blade

55° – 60° variable pitch

Single lever electro-hydraulic control for blade lift, angle and tilt

Undercarriage

Hydraulic track adjusters

SALT HD track chain

Permanently lubricated track and carrier rollers

Track adjuster guard

Track guides – front and rear

Robust Smooth One Piece Track Frames with

Easy Clean-out.

Others

Anti-vandalism package

Backup alarm

Horn

Work lights

2 frontal

1 rear

Ground Level Master disconnect switch

Mirror

Pre-cleaner

Front pull hook

OPTIONAL EQUIPMENT

Operator environment

Cab air quality system

Rear wiper for cab

Radio

Bluetooth, WeatherBand, Satellite Radio

Hydraulics

4-spool hydraulic valve for field-installed ripper

3-spool hydraulic valve without plugs for field-installed ripper

3-spool hydraulic valve with plugs

Rear mounted equipment

Ripper – 2 position with 3 shanks

Rear tow hook

Drawbar

Drawbar with step

Blades

PAT – 142 in (3 607 mm) High Visibility Blade 48 in height

PAT – 142 in (3 607 mm) 54 in height

PAT – 157.5 in (4 000.5 mm) 54 in height

Folding PAT – 160 in (4 064 mm)

HS Straight (WT/LGP) – 154 in (3 900 mm)

Semi-U – 135 in (3 422 mm)

Larger Bull Dozer LGP Semi-U Blade – 157 in (3 988 mm)

HS Straight (XLT) – 131 in (3 334 mm)

Guards

CAB canopy brush guard

Full length rock guards

Waste Handler Guarding Package

Screens

Cab rear screen

Precision

Universal Blade Guidance Ready Compatible with Leica, Trimble, and Topcon Systems from the Factory

Blade guidance ready – Trimble

Blade guidance ready – Leica

Blade guidance ready – Topcon

SiteControl CoPilot powered by Leica

Others

Environmental drains

Case Ultra Life Track

Cold start – grid heater

Additional work lights

Rearview implement mirror

HEPA Turbine pre-cleaner



Fleet monitoring and management system by satellite or cel phone tracking.

CASE Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold. The specifications, descriptions, and illustrative materials contained here reflect correctly the data known up to the publication date, but are subject to changes with no previous notice. The illustrations may include optional equipment and accessories and may not include all standard equipment.

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