# ENGINE

Model	Case F4HFE613W
	Tier 4 Interim Certified
Cylinders	6
Displacement	409 in <sup>3</sup> (6.7 L)
Fuel injection	Direct
Fuel	#2 Diese
Fuel filter	Spin-on w/ in line strainer
Air intake	Cross-flow
Cooling	Liquid
Engine speeds	RPM
High idle – no load	2200 +/- 50
Rated - full load	2000
Low idle	800 +/- 25
Horsepower @ 2000 R	PM – SAE J1349:
Net	214 hp (160 kW)
Gross	231.9 hp (173 kW)
Engine lubrication:	
Engine lubrication: Pump	
	Deep sump plate cooler w/ pressurized
Pump Pump operating angle	w/ pressurized under-piston nozzles
Pump Pump operating angle Side-to-side	w/ pressurized under-piston nozzles ratings: 45°
Pump Pump operating angle	w/ pressurized under-piston nozzles ratings: 45°
Pump Pump operating angle Side-to-side	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or
Pump Pump operating angle Side-to-side Fore and aft	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or
Pump Pump operating angle Side-to-side Fore and aft	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or
Pump Pump operating angle Side-to-side Fore and aft Oil filtration	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or full flow cartridge
Pump Pump operating angle Side-to-side Fore and aft Oil filtration Radiator:	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or full flow cartridge 512 in² (0.33 m²
Pump Pump operating angle Side-to-side Fore and aft Oil filtration Radiator: Core size area	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or full flow cartridge 512 in² (0.33 m²
Pump Pump operating angle Side-to-side Fore and aft Oil filtration Radiator: Core size area Rows of tubes	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or full flow cartridge 512 in² (0.33 m² 2
Pump Pump operating angle Side-to-side Fore and aft Oil filtration Radiator: Core size area Rows of tubes Fan: Type	w/ pressurized under-piston nozzles ratings:
Pump Pump operating angle Side-to-side Fore and aft Oil filtration Radiator: Core size area Rows of tubes Fan: Type	w/ pressurized under-piston nozzles ratings: 45° 35° Replaceable, spin-or full flow cartridge 512 in² (0.33 m² 2 Variable speed/

CONSTRUCTION

## **POWERTRAIN**

Dual path hydro	ostatic:
Pump	Variable axial piston
Motor	Variable bent axis piston
Max. drawbar p	oull* 80,979 lb (360 kN)
Transmission	Single Lever Control electronic straight tracking
Oil filter	4-micron at beta 75, replaceable w/ 100 mesh suction screen
Travel speeds*:	
Forward	5.8 mph (9.3 kph)
Reverse	5.8 mph (9.3 kph)
Parking brakes	Heavy-duty, spring-applied, hydraulic pressure release
Steering brakes	Hydrostatic
Final drive	Double reduction
Ratio	48.75:1

NOTE: \*Measured using standard track chain. Increase travel speeds by 4% and reduce drawbar pull by 4% w/ the optional CELT track chain.

# **POWERTRAIN** (cont.)

Transmission cooling:	
Туре	Tube and fin
Core size	484 in <sup>2</sup> (0.31 m <sup>2</sup> )

#### **ELECTRICAL**

Alternator	120 amp
Batteries	2 x 12-volt, low-maintenance
950 cold-cranking amps @ 0° F (-18° C)	

### **OPERATOR ENVIRONMENT**

Fully enclosed cab; Vinyl suspension seat w/ back adjustment; Retractable 2 in (51 mm) seat belt; Adjustable armrests; Foot rests; Tool storage; Headliner; Floor mat; Seats tilt for access.

#### 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; Fuel level; Digital hour meter/ tachometer/diagnostic/service reminder; 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.

### **OPERATING WEIGHT**

Unit equipped w/ cab, full fuel tank, 170 lb (77 kg) operator, front pull hook, rear retrieval hitch, track guides, Semi-U blade.

, 0	,
Long track	44,547 lb (20 206 kg)
Extra long track	45,398 lb (20 592 kg)
Wide track	46,891 lb (21 269 kg)
Low ground pressure	48,773 lb (22 123 kg)
Add-on weights:	
Drawbar	146 lb (66 kg)
Ripper	2,988 lb (1355 kg)
Cab	1,744 lb (791 kg)
CELT chain - per track:	
24 in (610 mm) – LT	7,015 lb (3182 kg)
24 in (610 mm) – XLT/W	T 7,888 lb (3578 kg)
28 in (711 mm)	8,660 lb (3928 kg)
30 in (762 mm)	9,043 lb (4102 kg)
36 in (914 mm)	10,203 lb (4628 kg)
Center rock guard	675 lb (306 kg)
Sweeps	139 lb (63 kg)

# PRELIMINARY

### HYDRAULICS

Pump flow @ 2200 RPM	@ 2,830 psi (195 bar):
·	40.4 gpm (153 L/min)
Lift cylinder	Two (2)
Bore diameter	4.50 in (114.3 mm)
Rod diameter	2.50 in (63.5 mm)
Stroke	16.88 in (428.8 mm)
Angle cylinder	Two (2)
Bore diameter	4.50 in (114.3 mm)
Rod diameter	2.50 in (63.5 mm)
Stroke	19.79 in (502.7 mm)
Tilt cylinder	One (1)
Bore diameter	5.00 in (127.0 mm)
Rod diameter	2.50 in (63.5 mm)
Stroke	5.84 in (148.3 mm)

### **SERVICE CAPACITY**

Fuel tank	107.0 gal (405.0 L)
Engine oil w/ filter	17.3 qt (16.4 L)
Engine oil w/o filter	16.5 qt (15.6 L)
Engine cooling system	8.0 gal (30.28 L)
Hydraulic reservoir	55.0 gal (210.0 L)
Final drive – per side	26.4 qt (25.0 L)
Track rollers - each	0.29 qt (0.275 L)
Front idlers - each	0.237 qt (0.225 L)
Carrier rollers - each	0.353 qt (0.334 L)
DEF tank	14.0 gal (52.0 L)

#### **OTHER SPECIFICATIONS**

# Undercarriage:

Hydraulic
Pivot shaft and
illating equalizer beam
:
104 in (2.65 m)
129 in (3.28 m)
8 in (203.2 mm)
2.8 in (71.5 mm)
1.75 in (44.5 mm)
2.86 in (72.7 mm)
3.67 in (93.2 mm)
40
45
8
2
8.27 in (210 mm)
5,002 in <sup>2</sup> (32 269 cm <sup>2</sup> )
7,223 in <sup>2</sup> (46 599 cm <sup>2</sup> )
7,741 in <sup>2</sup> (49 941 cm <sup>2</sup> )
9,285 in <sup>2</sup> (59 904 cm <sup>2</sup> )

# **OTHER SPECIFICATIONS** (cont.)

# Track:

Long track:	

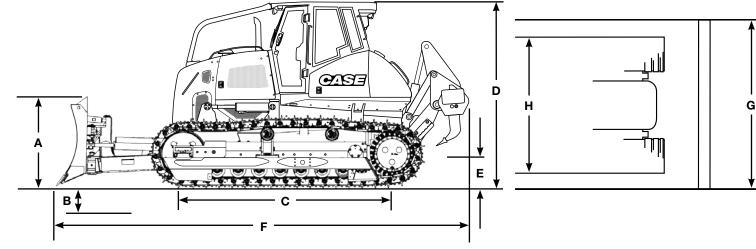
Long track.
24 in (610 mm) closed grousers and CLT
24 in (610 mm) open grousers and CELT
Extra long track:
24 in (610 mm) closed grousers and CLT
24 in (610 mm) open grousers and CELT
28 in (711 mm) closed grousers and CLT
28 in (711 mm) open grousers and CELT

- Wide track and low ground pressure: 30 in (762 mm) closed grousers and CLT 30 in (762 mm) open grousers and CELT 36 in (914 mm) closed grousers and CLT

  - 36 in (914 mm) open grousers and CELT

Blade:	
Variable blade pitch	55° forward 55° rearward
Lift speed – per second	19.3 in (483 mm)
Cutting edge Width Thickness	Reversible, replaceable 10.0 in (254 mm) 0.8 in (20 mm)
Ripper:	
Max. penetration	25.8 in (655 mm)
Width	76.9 in (1953 mm)
Cut width	74.4 in (1890 mm)

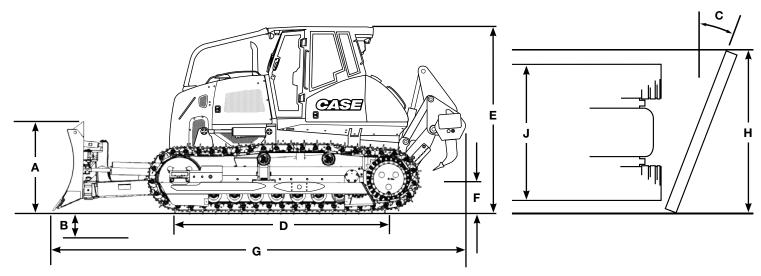
Ripper (continued):	
Max. ground clearance	19.1 in (486 mm)
Max. number of shanks	3
Tooth spacing:	
w/ 3 teeth	37.2 in (945 mm)
Hydraulic cylinder	Double-acting
Diameter	6.14 in (156 mm)
Stroke	23.5 in (597 mm)
Rod	2.75 in (70 mm)



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

#### DIMENSIONS

	Long Track (LT)	Extra Long Track (XLT)	Low Ground Pressure (LGP)
	Semi-U	Semi-U	Straight PT
Blade width	135 in (3422 mm)	135 in (3422 mm)	154 in (3900 mm)
SAE blade capacity	7.29 yd³ (5.57 m³)	7.29 yd³ (5.57 m³)	4.94 yd <sup>3</sup> (3.78 m <sup>3</sup> )
A. Blade height	56 in (1418 mm)	56 in (1418 mm)	44 in (1118 mm)
Blade lift above ground	49 in (1244 mm)	49 in (1244 mm)	45.9 in (1165 mm)
B. Blade depth below ground	23 in (584 mm)	23 in (584 mm)	21.6 in (549 mm)
Blade tilt, each end	17 in (433 mm)	17 in (433 mm)	16.2 in (411 mm)
Track gauge	76 in (1.94 m)	76 in (1.94 m)	89 in (2.26 m)
Maximum shoe width	24 in (609 mm)	28 in (711 mm)	36 in (914 mm)
C. Length of track on ground	104 in (2.65 m)	129 in (3.28 m)	129 in (3.28 m)
Area of track on ground	5,002 in² (3.23 m²)	7,223 in <sup>2</sup> (4.66 m <sup>2</sup> )	9,285 in <sup>2</sup> (5.99 m <sup>2</sup> )
Ground pressure	8.93 psi (0.62 bar)	6.29 psi (0.43 bar)	5.25 psi (0.36 bar)
D. Height to top of cab	10 ft 2 in (3103 mm)	10 ft 2 in (3103 mm)	10 ft 2 in (3103 mm)
Height to top of exhaust	9 ft 5 in (2876 mm)	9 ft 5 in (2876 mm)	9 ft 5 in (2876 mm)
E. Ground clearance	20.7 in (525 mm)	20.7 in (525 mm)	20.7 in (525 mm)
Length:			
Blade straight with drawbar	17 ft 8 in (5387 mm)	17 ft 8 in (5387 mm)	19 ft 4 in (5895 mm)
F. Blade straight with ripper	22 ft 7 in (6870 mm)	22 ft 7 in (6870 mm)	22 ft 11 in (6983 mm)
Width:			
G. Blade straight	11 ft 3 in (3427 mm)	11 ft 3 in (3427 mm)	12 ft 10 in (3901 mm)
H. Over track	8 ft 4 in (2550 mm)	8 ft 4 in (2550 mm)	10 ft 5 in (3175 mm)



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

# **DIMENSIONS - PAT BLADE**

	Long Track (LT) PAT	Extra Long Track (XLT) PAT	Low Ground Pressure (LGP) PAT
Blade width	142 in (3607 mm)	142 in (3607 mm)	160 in (4064 mm)
SAE blade capacity	6.32 yd³ (4.83 m³)	6.32 yd³ (4.83 m³)	7.24 yd³ (5.54 m³)
A. Blade height	54 in (1369 mm)	54 in (1369 mm)	54 in (1369 mm)
Blade lift above ground	44.5 in (1130 mm)	44.5 in (1130 mm)	44.5 in (1130 mm)
B. Blade depth below ground	21.2 in (539 mm)	21.2 in (539 mm)	23.2 in (590 mm)
<b>C.</b> Blade angle both directions	28°	28°	28°
Blade tilt, each end	17.7 in (450 mm)	17.7 in (450 mm)	21.7 in (550 mm)
Track gauge	76 in (1.94 m)	76 in (1.94 m)	89 in (2.26 m)
Maximum shoe width	24 in (609 mm)	28 in (711 mm)	36 in (914 mm)
D. Length of track on ground	104 in (2.65 m)	129 in (3.28 m)	129 in (3.28 m)
Area of track on ground	5,002 in <sup>2</sup> (3.23 m <sup>2</sup> )	7,223 in <sup>2</sup> (4.66 m <sup>2</sup> )	9,285 in <sup>2</sup> (5.99 m <sup>2</sup> )
Ground pressure	8.93 psi (0.62 bar)	6.29 psi (0.43 bar)	5.25 psi (0.36 bar)
E. Height to top of cab	10 ft 2 in (3103 mm)	10 ft 2 in (3103 mm)	10 ft 2 in (3103 mm)
Height to top of exhaust	9 ft 5 in (2876 mm)	9 ft 5 in (2876 mm)	9 ft 5 in (2876 mm)
F. Ground clearance	20.7 in (525 mm)	20.7 in (525 mm)	20.7 in (525 mm)
Length:			· · · · · · · · · · · · · · · · · · ·
Blade straight with drawbar	18 ft 0 in (5491 mm)	19 ft 4 in (5902 mm)	19 ft 4 in (5902 mm)
G. Blade straight with ripper	22 ft 11 in (6974 mm)	24 ft 3 in (7384 mm)	24 ft 3 in (7384 mm)
Width:			
Blade straight	11 ft 10 in (3607 mm)	11 ft 10 in (3607 mm)	13 ft 4 in (4064 mm)
H. Blade angled	10 ft 9 in (3287 mm)	10 ft 9 in (3287 mm)	12 ft 1 in (3690 mm)
J. Over track	8 ft 4 in (2550 mm)	8 ft 4 in (2550 mm)	10 ft 5 in (3175 mm)

# STANDARD EQUIPMENT

#### **OPERATOR ENVIRONMENT**

# See page 1

ENGINE			
F4HFE613W			
Tier 4 Interim Certified			
Automatic fan belt tensioner			
Integral engine oil cooling			
Fuel filter			
Dual element radial seal air cleaner			
120 amp alternator			
(2) 950 CCA 12-volt batteries			
Anti-sandblast radiator			
Engine side panels			

# POWERTRAIN

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

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

Anti-vandalism package Backup alarm Horn Work lights: 2 front 1 rear Master disconnect switch Mirror Pre-cleaner Front pull hook Rear transmission guard

#### **OPTIONAL EQUIPMENT**

# **OPERATOR ENVIRONMENT**

Seat belt - 3 in (76 mm) Deluxe air suspension seat

Rear wiper for cab

# 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 - 3 position with 3 shanks Hydraulic pump with PTO Rear tow hook Drawbar Drawbar with step

#### BLADES

PAT - 142 in (3607 mm) PAT - 160 in (4064 mm) Folding PAT - 160 in (4064 mm) HS Straight (XLT/LT) - 131 in (3334 mm) HS Straight (WT/LGP) - 154 in (3900 mm) Semi-U - 135 in (3422 mm) **GUARDS** CAB canopy brush guard Full length rock guards

#### SCREENS

Cab rear screen

# OTHER

Environmental drains Case Extended Life Track Grid heater Additional work lights Blade guidance ready - Trimble Blade guidance ready - Leica Blade guidance ready - Topcon Rearview mirror Turbine pre-cleaner



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

NOTE: All engines meet current EPA emissions requirements.

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

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CONSTRUCTION

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