

ENGINE

Make	Case/FPT
Model	F2CFE614B Tier 2 certified
Type	4-stroke, turbocharged
Cylinders	6-cylinder in-line
Bore/Stroke	4.61 in x 5.31 in (177 X 135 mm)
Displacement	531 in ³ (8.7 L)
Fuel	#2 Diesel (#1 & 2 mixture permitted for cold temperature) Does not require ultra-low sulfur fuel B5 biodiesel tolerant
Fuel injection	Direct injection (electronic)
Fuel filter	Replaceable, full flow spin-on cartridge
Fuel pump	Bosch CP 3.3
Gradeability	35° fore /aft & side to side
Air filter	2-element dry-type w/warning restriction indicator
Rear-mount cooling module, non-stacked	External independent mounted coolers
Fan – Hydraulic driven	
Style	9 blade puller
Diameter	34.5 in (876 mm)
Water pump	Integral
Engine oil	
Pump	Deep sump plate cooler with pressurized under-piston nozzles
Pump operating angles	
Side-to-side	35°
Fore and aft	35°
Oil filtration	Replaceable, full flow, spin-on cartridge
Engine speeds (rpm)	
Rated speed, full load	2100
Horsepower	
Max Power Range –	
Gross @ Rated	315 hp (235 kW) @ 2100 rpm
Peak Gross	347 hp (259 kW) @ 1800 rpm
Net @ Rated	284 hp (212 kW) @ 2100 rpm
Peak Net	320 hp (239 kW) @ 1800 rpm

NOTE: Gross horsepower and torque per SAE J1995
Net horsepower and torque per SAE J1349

ENGINE (CONTD.)

Torque	
Max Power Range –	
Gross	1183 lb-ft (1604 N-m) @ 1200 rpm
Net	1148 lb-ft (1557 N-m) @ 1200 rpm
Torque rise	
Max Power Range	50%

DRIVETRAIN

Transmission	4F/3R Proportional w/Electronic Control Module torque sensing autoshift/manual shift and modulation
Gears	Helical cut
Torque converter	
Stall ratio	2.511:1
Differential	Open on front and rear axles
Rear axle oscillation	26° total
Front and rear axles	
Differential ratio	4.25
Planetary ratio	6.35
Final axle ratio	27.0
Special application axles (optional)	
Front axle equipped with locking differential	
Rear axle equipped with open differential	
Planetaries	Outboard
4 speed transmission travel speeds	
(mph (km/h) w/26.5 x 25 XHAT tires)	
	Forward Reverse
1st	4.3 (6.9) 4.3 (6.9)
2nd	7.2 (11.6) 7.2 (11.6)
3rd	11.0 (17.7) 15.8 (25.5)
4th	23.3 (37.4) –
NOTE:	Travel speeds at full engine throttle.

Parking brakes
Spring-applied hydraulic release disc on
transmission output shaft

DRIVETRAIN (CONTD.)

Service brakes	Hydraulically actuated, maintenance-free, multiple wet disc w/accumulator to all four wheels
Brake surface area	
Front hub (each)	1144 in ² (.738 m ²)
Rear hub (each)	1144 in ² (.738 m ²)

ELECTRICAL

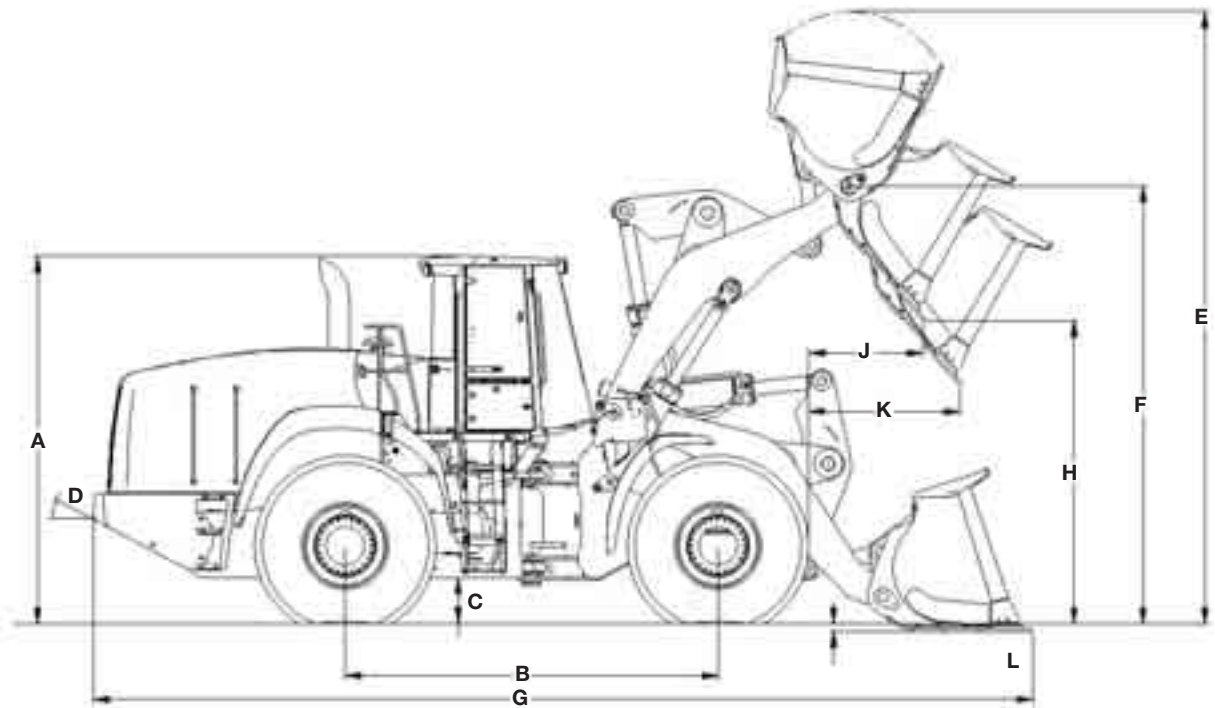
Voltage	24 Volts, negative ground
Alternator	95 amp
Batteries	(2) 12-Volt

HYDRAULICS

Pump (steering/implement)	Closed center pressure/flow compensated
Variable displacement, load-sensing	12.2 in ³ /rev 100.4 gpm @ 2000 rpm (380 L/min @ 2000 rpm)
Loader control valve	Closed-center, sectional 2, 3 or 4-function with pilot control for lift, tilt and auxiliary hydraulics, electromagnetic detents in float, raise and rollback
Loader auxiliary steering	Hydraulic orbital center-pivot articulating w/on-demand oil flow
High pressure standby	
Implement	3650 psi (25 165 kPa)
Steering	3495 psi (24 097 kPa)
Filtration	10-micron, full flow replaceable cartridges on return line, condition indicator light for filter

CYLINDERS

Lift cylinder	
Bore diameter	7.00 in (177.8 mm)
Rod diameter	4.50 in (114.3 mm)
Stroke	34.48 in (875.81 mm)
Dump cylinder	
Bore diameter	8.00 in (203.2 mm)
Rod diameter	5.0 in (127.0 mm)
Stroke	27.35 in (694.7 mm)



DIMENSIONS

A. Height to top of ROPS cab	140.6 in (3573 mm)
B. Wheelbase	139.8 in (3550 mm)
C. Ground clearance	16.9 in (429.5 mm)
D. Angle of departure, rear	26°
Width –	
Overall* w/o bucket	117.7 in (2.99 m)
Centerline tread	88.6 in (2.25 m)
Turning radius* – outside	250.9 in (6.37 m)
Turning angle	
From center	40°
Total angle	80°
Rear axle oscillation, total	26°

NOTE: *Dimensions taken with 26.5R25 Michelin XHA2 tires. Additional dimensions on pages 3 & 4.

WEIGHT ADJUSTMENTS

Select Options	Tipping Load Weight Adjustment	Tipping Load Adjustment Straight	Adjustment 40° Turn
L3 Bias tires 26.5x25 L2 (Goodyear)	-334 kg	-563 kg	-857 kg
L4 Bias tires 26.5x25 L3 (Goodyear)	-129 kg	-86 kg	-252 kg
L5 Bias tires 26.5x25 L4 (Goodyear)	399 kg	591 kg	502 kg
L5 Radial tires 26.5x25 L5 (Goodyear)	593 kg	953 kg	955 kg

NOTE: Unit equipped with Z-Bar loader arms, 6.25 yd³ (4.8 m³) pin on bucket w/bolt-on edge, 26.5R25 Michelin XHA2 tires, ROPS cab with heater/AC, full counterweight, front and rear fenders, full fuel and 175 lb (75 kg) operator. Adjust select options from rated weight.

1121F Z-Bar*

	5.25 yd³ General Purpose Pin On (4.0 m³) Bucket w/Bolt-on Edge	5.25 yd³ General Purpose Pin On (4.0 m³) Bucket w/Teeth Only	6.25 yd³ General Purpose Pin On (4.8 m³) Bucket w/Bolt-on Edge
SAE bucket capacity – struck	4.53 yd ³ (3.46 m ³)	4.33 yd ³ (3.31 m ³)	5.45 yd ³ (4.17 m ³)
SAE bucket capacity – heaped	5.25 yd ³ (4.01 m ³)	5.06 yd ³ (3.87 m ³)	6.25 yd ³ (4.78 m ³)
Bucket width – outside	125.8 in (3195 mm)	125.8 in (3195 mm)	125.8 in (3195 mm)
Bucket weight	4,936 lb (2239 kg)	4,896 lb (2221 kg)	5,322 lb (2414 kg)
E. Operating height – fully raised w/spillguard	234.6 in (5960 mm)	234.6 in (5960 mm)	240.9 in (6120 mm)
F. Hinge pin height – fully raised	174.9 in (4443 mm)	174.9 in (4443 mm)	174.9 in (4442 mm)
G. Overall length – bucket level on ground	353.0 in (8967 mm)	360.2 in (9148 mm)	359.0 in (9113 mm)
Dump angle – fully raised	50°	50°	50°
H. Dump height – fully raised, 45° dump	129.9 in (3299 mm)	125.3 in (3183 mm)	126.0 in (3201 mm)
J. Bucket reach – fully raised, 45° dump	45.5 in (1157 mm)	51.0 in (1296 mm)	50.1 in (1273 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	77.4 in (1965 mm)	80.9 in (2054 mm)	80.3 in (2040 mm)
Operating load – SAE	19,756 lb (8961 kg)	19,910 lb (9031 kg)	19,525 lb (8856 kg)
Maximum material density – SAE	3,767 lb/yd ³ (2235 kg/m ³)	3,935 lb/yd ³ (2335 kg/m ³)	3,123 lb/yd ³ (1853 kg/m ³)
Tipping load – SAE			
Straight	46,627 lb (21 150 kg)	46,980 lb (21 310 kg)	46,184 lb (20 949 kg)
40° turn	39,512 lb (17 923 kg)	39,820 lb (18 062 kg)	39,050 lb (17 713 kg)
Lift capacity –			
Full height	33,106 lb (15 017 kg)	33,086 lb (15 007 kg)	32,745 lb (14 853 kg)
Maximum reach	48,483 lb (21 991 kg)	48,559 lb (22 026 kg)	48,090 lb (21 813 kg)
Ground	58,121 lb (26 363 kg)	58,687 lb (26 620 kg)	56,730 lb (25 732 kg)
Breakout force w/tilt cylinder	56,309 lb (25 542 kg)	60,475 lb (27 431 kg)	49,960 lb (22 661 kg)
Maximum rollback –			
Ground	45°	45°	45°
Carry position	51°	51°	51°
@ Maximum reach	68°	68°	68°
@ Full height	65°	65°	65°
L. Dig depth	4.6 in (118 mm)	4.6 in (118 mm)	4.7 in (118 mm)
Maximum grading angle w/bucket – back dragging	60°	60°	60°
Loader clearance circle	561.8 in (14 271 mm)	565.6 in (14 367 mm)	565.0 in (14 352 mm)

1121F/XR

	5.25 yd³ General Purpose Pin On (4.0 m³) Bucket w/Bolt-on Edge	5.25 yd³ General Purpose Pin On (4.0 m³) Bucket w/Teeth Only	6.25 yd³ General Purpose Pin On (4.8 m³) Bucket w/Bolt-on Edge
E. Operating height – fully raised w/spillguard	251.1 in (6377 mm)	251.1 in (6377 mm)	257.4 in (6537 mm)
F. Hinge pin height – fully raised	191.3 in (4860 mm)	191.3 in (4860 mm)	191.3 in (4860 mm)
G. Overall length – bucket level on ground	369.1 in (9374 mm)	376.2 in (9555 mm)	375.0 in (9526 mm)
Dump angle – fully raised	50°	50°	50°
H. Dump height – fully raised, 45° dump	146.3 in (3717 mm)	141.7 in (3600 mm)	142.5 in (3619 mm)
J. Bucket reach – fully raised, 45° dump	47.2 in (1200 mm)	52.7 in (1338 mm)	51.8 in (1316 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	91.9 in (2335 mm)	95.7 in (2430 mm)	95.1 in (2415 mm)
Operating load – SAE	17,378 lb (7882 kg)	17,506 lb (7941 kg)	17,092 lb (7753 kg)
Maximum material density – SAE	3,313 lb/yd ³ (1966 kg/m ³)	3,460 lb/yd ³ (2053 kg/m ³)	2,734 lb/yd ³ (1622 kg/m ³)
Tipping load – SAE			
Straight	40,997 lb (18 596 kg)	41,298 lb (18 732 kg)	40,386 lb (18 319 kg)
40° turn	34,765 lb (15 765 kg)	35,012 lb (15 881 kg)	34,185 lb (15 506 kg)
Lift capacity –			
Full height	31,654 lb (14 358 kg)	31,651 lb (14 357 kg)	31,281 lb (14,189 kg)
Maximum reach	43,573 lb (19 764 kg)	43,668 lb (19 808 kg)	43,163 lb (19,578 kg)
Ground	48,833 lb (22 150 kg)	49,273 lb (22 350 kg)	47,616 lb (21,598 kg)
Breakout force w/tilt cylinder	56,856 lb (25 790 kg)	61,063 lb (27 698 kg)	50,449 lb (22 883 kg)
Maximum rollback			
Ground	42°	42°	42°
Carry position	49°	49°	49°
@ Maximum reach	66°	66°	66°
@ Full height	66°	66°	66°
L. Dig Depth	4.7 in (118 mm)	4.7 in (118 mm)	4.7 in (119 mm)
Maximum grading angle w/bucket - back dragging	63°	62°	62°
Loader clearance circle	577.3 in (14 663 mm)	581.8 in (14 777 mm)	581.1 in (14 759 mm)

PERFORMANCE DATA

1121F Z-Bar*

6.25 yd³ General Purpose Pin On (4.8 m³) Bucket w/Teeth Only

SAE bucket capacity – struck	5.25 yd ³ (4.01 m ³)
SAE bucket capacity – heaped	6.06 yd ³ (4.63 m ³)
Bucket width – outside	125.8 in (3195 mm)
Bucket weight	5,284 lb (2397 kg)
E. Operating height – fully raised w/spillguard	240.9 in (6120 mm)
F. Hinge pin height – fully raised	174.9 in (4442 mm)
G. Overall length – bucket level on ground	366.1 in (9300 mm)
Dump angle – fully raised	50°
H. Dump height – fully raised, 45° dump	121.5 in (3085 mm)
J. Bucket reach – fully raised, 45° dump	55.6 in (1412 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	83.6 in (2124 mm)
Operating load – SAE	19,668 lb (8921 kg)
Maximum material density – SAE	3,246 lb/yd ³ (1926 kg/m ³)
Tipping load – SAE	
Straight	46,516 lb (21 099 kg)
40° turn	39,336 lb (17 843 kg)
Lift capacity –	
Full height	32,725 lb (14 844 kg)
Maximum reach	48,162 lb (21 846 kg)
Ground	57,254 lb (25 970 kg)
Breakout force w/tilt cylinder	53,243 lb (24 151 kg)
Maximum rollback –	
Ground	45°
Carry position	51°
@ Maximum reach	68°
@ Full height	65°
L. Dig depth	4.7 in (118 mm)
Maximum grading angle w/bucket – back dragging	60°
Loader clearance circle	568.9 in (14 451 mm)

NOTE:

*Z-Bar performance data shown w/standard counterweight.
Performance data unit equipped with 26.5R25 Michelin XHA2 tires, ROPS cab w/heater and A/C, standard counterweight, full fuel and 175 lb (75 kg) operator. Specifications per SAE J732, J1234, J695, J742, and J818.

1121F/XR

6.25 yd³ General Purpose Pin On (4.8 m³) Bucket w/Teeth Only

E. Operating height – fully raised w/spillguard	257.4 in (6537 mm)
F. Hinge pin height – fully raised	191.3 in (4860 mm)
G. Overall length – bucket level on ground	382.2 in (9707 mm)
Dump angle – fully raised	50°
H. Dump height – fully raised, 45° dump	137.9 in (3503 mm)
J. Bucket reach – fully raised, 45° dump	57.3 in (1454 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	98.6 in (2505 mm)
Operating load – SAE	17,214 lb (7808 kg)
Maximum material density – SAE	2,841 lb/yd ³ (1686 kg/m ³)
Tipping load –SAE	
Straight	40,673 lb (18 449 kg)
40° turn	34,428 lb (15 616 kg)
Lift capacity –	
Full height	31,278 lb (14 188 kg)
Maximum reach	43,254 lb (19 620 kg)
Ground	48,023 lb (21 783 kg)
Breakout force w/tilt cylinder	53,765 lb (24 387 kg)
Maximum rollback	
Ground	42°
Carry position	49°
@ Maximum reach	66°
@ Full height	66°
L. Dig Depth	4.7 in (119 mm)
Maximum grading angle w/bucket - back dragging	62°
Loader clearance circle	585.6 in (14 875 mm)

INSTRUMENTATION

Electronic Information Center
Displays/Gauges –
Analog –
Engine coolant temperature
Fuel level
Transmission oil temperature
Hydraulic oil temperature
LCD screen –
Hour meter
Time
FNR indication
Trip computer
Metric/english
Differential lock*
Joystick steering indicator*
Engine speed
Automatic trans indication
DeClutch indication
Fuel consumption
Engine diagnostics
Error reporting
Travel speed
Current gear selection
Engine mode indication
Multiple languages
Transmission diagnostics
DEF (diesel exhaust fluid) gauge
Engine oil temperature
Oil pressure
Coolant temperature
Transmission oil temperature
Transmission sump oil temperature
Hydraulic oil temperature
System voltage
Turbocharger air temperature
Fuel level percentage
Warning prompts
Warning lamps –
Main warning
Low fuel
Turn signals
Four-way flashers
High beam lights
Grid heater*
Low brake pressure
Low steering pressure
Parking brake
Audible/Visual alarms –
Caution alarm -
Parking brake
Coolant temperature
Hydraulic oil temperature
Transmission oil temperature
Air filter
Transmission filter
Hydraulic filter
Alternator
Low fuel
Critical alarm -
Engine oil pressure
Brake pressure
Steering pressure (w/aux steering)*
Coolant temperature
Hydraulic oil temperature
Transmission oil temperature
Backup alarm
Horn

NOTE: *If equipped with option.

OPERATOR ENVIRONMENT

ROPS cab w/ heat and air conditioning
Key start
Articulated power steering w/tilt column
Fully adjustable, suspension seat
2 in (51 mm) retractable seat belt
Foot throttle
Single lever 2-function loader control w/wrist rest
Cup holder
Coat hook
(1) Interior rearview mirror
Storage tray behind seat
Lunch box compartment
Single brake pedal
F/N/R shuttle switch
Glove box
Pressurized air filtering
Anti-glare window strip
Defroster
Side window, partial/fully open
Dome light
Wipers, rear and intermittent front
Windshield washers, front and rear
Rubber floor mat

LOADER

Z-bar loader linkage
Single control for lift and tilt
Positive hold float
Automatic return-to-dig
Automatic height control
Automatic return-to-travel
Brake pedal transmission disconnect
Bucket position indicator on bucket

CYCLE TIME

Raise w/rated bucket load	6.5 sec
Dump w/rated bucket load	1.4 sec
Lower (empty)	
Power down	2.8 sec
Float down	2.6 sec

SERVICE CAPACITIES

Fuel tank	125 gal (473 L)
Hydraulic system	
Total	66.0 gal (250 L)
Reservoir	25.4 gal (134 L)
Transmission	
Service w/filter	48 qt (45.4 L)
Front and rear axle	
Front axle	67.6 qt (64 L)
Rear axle	67.6 qt (64 L)
Engine oil w/filter	28 qt (26.5 L)
Cooling system	15 gal (56.8 L)

OPERATING WEIGHTS

Z-Bar

Unit equipped with ROPS cab with heater and A/C, standard counterweight, 26.5R25 XHA2 tires, 6.25 yd³ (4.8 m³) pin on w/bolt on edge, full fuel, 175 lb (79 kg) operator

59,192 lb (26 849 kg)

XR

Unit equipped with ROPS cab with heater and A/C, full counterweight, 26.5R25 XHA2 tires, 6.25 yd³ (4.8 m³) pin on w/bolt on edge, full fuel, 175 lb (79 kg) operator

60,877 lb (27 613 kg)

STANDARD EQUIPMENT

OPERATOR'S ENVIRONMENT

ROPS/FOPS cab structure
See page 5

ENGINE

Case/FPT F2CFE614B
Tier 2 certified
Selectable work modes
Max power
Auto power
Standard power
Economy power
Auto shutdown (idle reduction device)
Turbocharger
Charge air cooling
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter w/water trap
Dual-element dry-type air cleaner
Hydraulic-driven cooling fan
Liquid-cooled radiator
Rear-mounted cooling module
Common rail electronic fuel injection

LOADER

See page 5

DRIVETRAIN

4-wheel drive
4F/3R Selectable autoshift/manual shift transmission
Electronic Control Module – Programmable, computer controlled proportional shifting with programmable gear selection
Onboard diagnostics
Single lever electronic shift control
F/N/R switch in loader control handle
Downshift button
Torque converter
Outboard planetary axles
Transmission oil cooler
Brake pedal transmission disconnect
Hydraulic wet disc brakes
Spring-applied hydraulic release parking brake
Limp-Home Mode
Greasable rear axle trunnion

HYDRAULICS

Single lever 2-function loader control valve
Low-effort steering
Hydraulic driven fan
(8) Diagnostic quick couplers
Split flange hydraulic connections (1 inch or greater)
Hydraulic oil cooler

ELECTRICAL

95 amp alternator and voltage regulator
Electrical disconnect switch
(2) 900 CCA 12-volt batteries
Electric starter
Front and rear halogen flood lights
(2) Front driving headlights (high/low beam)
(2) Front flood
(2) Rear flood
(2) LED Stop/tail lights
Front and rear turn signal/flash
Key start/stop switch
Centrally located fuse box with all electrical circuits protected

OTHER

Electric hood lift
Front and rear fenders
Standard counterweight
Drawbar hitch
Articulation locking bar
Lift arm locking bar
Lift and tie-down points – front/rear
Backup alarm
Remote drain points
3-piece rims

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Heated cloth-covered air-suspension seat
Sound Shield noise suppression package
Radio, 12V AM/FM with auxiliary input
Radio-ready (12 or 24-volt) with
2 auxiliary power (12-volt) outlets
Cab convenience package
Rotating beacon
Second brake pedal
Joystick steering, w/ extra FNR,
kickdown buttons
External rear view mirrors
Rear view camera with accessory mount
Extra front-facing work lights

DRIVETRAIN

Special application axles with locking front differential
Axle oscillation stops
Cold weather package
Engine block heater
Fuel heater
Hydraulic oil cooler bypass
Low temperature hydraulic oil
Grid heater
Ejector type pre-cleaner
Remote jump start receptacle

HYDRAULICS

Auxiliary hydraulics
Ride Control
Secondary steering
3 or 4-function loader valves with 2 or 3-lever loader control
Variable speed hydraulic reversing fan

LOADER

Extended reach XR
Attachment auxiliary hydraulics
Buckets (see pages 3 & 4)

TIRES

26.5 x 25 L3 Bias
26.5 R25 L3 Radial
26.5 x 25 L5 Bias
26.5 R25 L5 Radial

OTHER

Special paint
Full coverage fenders
Tool box
Fire extinguisher
Side guards for rear frame
License plate brackets, front and rear
12 mph (20 kph) Max speed control
Wheel chocks



INTERNATIONAL

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 

CASE
CONSTRUCTION