B-SERIES
MOTOR GRADERS

885B SPECIFICATIONS

ENGINE

Brand	FPT
Model	F4HE9687B
Type	Electronic Common Rail fuel System, Water Cooled, 4 Cycle, Direct Injection, Turbocharged and Charge Air Cooled. (EPA TIER 3 certified.)
Cylinders	6, in line
Bore and stroke	104 x 132 mm
Engine displacement	6.7l (6728 cm³)
Horsepower at 2.200 rpm	
Gross (SAE J1995 Gross)	
Low Curve	220 hp (164 kW)*1
High Curve	234 hp (175 kW)*2
Net (SAE J1349)	
Low Curve	205 hp (153 kW)*1
High Curve	219 hp (163 kW)*2
Maximum torque at 1.500 rpm	
Gross (SAE J1995 Gross)	
Low Curve	924 Nm*1
High Curve	984 Nm*2
Net (SAE J1349)	
Low Curve	864 Nm*1
High Curve	924 Nm*2

POWERTRAIN

Rear axle	
Vertical ground clearance	359 mm
Differential	Conventional planetary with 100% electro-hydraulic lock
* Brakes	Disk, bathed in oil
Number of disks per brake	6
Tandem	
Type	Welded Plate (2.204 x 631 x 200.5 mm)
Oscillation	20º in each direction
Command chain pitch	50.8 mm
Thickness of the internal and external side wall	19 mm
Front axle	
Type	High-resistance welded steel
Oscillation	20º in each direction
Wheel lean	15.3º in each direction
Vertical ground clearance	580 mm

* SAE J150 3450 (brake performance)

HYDRAULIC SYSTEM

Type	Closed center, load sensing
Hydraulic pump	Axial piston pump, variable flow, fitted with load sensing system
Rated flow	186 l/min (49 gpm) at 2200 rpm
Control valve	9 sections

TRANSMISSION

Brand	ZF
Model	ZF TC LOCK UP 6WG – 160
Type	Torque converter lockup (also functions as Direct Drive) Powershift, electronic shift change control, automatic and without inching pedal for progressive advancing
Gears	6 forward / 3 reverse
Self-diagnostic system	On board

Speeds - km/h	Forward	Reverse
1st	4.5	4.8
2nd	6.9	11.7
3rd	11.1	27.4
4th	16.9	-
5th	25.9	-
6th	38.8	-

ELECTRICAL SYSTEM

Power	24 V
Alternator	120 A
Batteries	2x100 Ah – low maintenance

STEERING

Type	Hydrostatic
Steering wheel turns (lock to lock)	4.75
Pump capacity at 2.200 rpm	41.8 l/min
Pressure release valve	2200 psi (151 bar) integrated with the priority steering valve
Cylinders	2
Bore	50.8 mm
Stroke	301 mm
Rod diameter	25.4 mm
Supplemental steering	Integrated

SAE J53 e J1511

ARTICULATION

Type	Hydraulically activated (with a lock valve)
Angle	25º to the left/right
Controls	Hydraulic

CAPACITIES

Engine	17.5 l
with a change in filter	18.5 l
Fuel	341 l
Transmission	34 l
with a change in filter	36 l
Engine water cooling system	40 l
Hydraulic oil tank	94.6 l
Total hydraulic system	180 l
Circle turn housing	2.8 l
Tandem case (each)	69 l

Notes: *1 Gears 1st, 2nd F e 1st,2nd R
*2 Gears 3rd, 4th, 5th, 6th F e 3rd R

SPECIFICATIONS

SADDLE

Locking system ____ Two hydraulic cylinders
Saddle positions ____ 5

FRAME

Type ____ Box Section
Front section
Size ____ 254 x 298 mm
Rear section
Size ____ 121 x 299 mm

DRAWBAR

Type ____ "A" frame welded construction with center mounted circle turn motor
Connection with the frame ____ Shim adjustable spherical joint

CIRCLE

Type ____ Welded construction
Maximum ouside diameter ____ 1752.6 mm
Rotation ____ 360º
Speed ____ 1.2 rpm (7.2º/second)
Drive ____ Hydraulic motor
Displacement ____ 0.25 l/turn
Rated hydraulic flow ____ 94.6 l/min (25 gpm)
Nº of supports in phenolic resin ____ 4

BLADE

Type ____ High-carbon steel
Form ____ Involute curve
Width ____ 3658 mm (12 ft) / 3962 mm (13 ft) / 4267 mm (14 ft)
Height (curved profile) ____ 671 mm
Thickness ____ 22 mm
Cutting edge ____ 2, interchangeable
Blade pitch positions
Normal pitch ____ 47º
Minimum pitch ____ 42º
Maximum pitch ____ 87º
Blade side shift
Right ____ 686 mm
Left ____ 533 mm
Maximum bank-cutting angle (left and right) ____ 90º
Ground penetration (max.) ____ 711.2 mm
Lift above ground (max.) ____ 444.5 mm
Blade side shift and pitch ____ Hydraulic type

FRONT SCARIFIER

Cutting width ____ 1168 mm
Teeth ____ 5 (optional, 11)
Spacing between teeth ____ 229 mm (114 mm, optional)
Lift above ground ____ 527 mm
Maximum Penetration ____ 318 mm
Weight ____ 570 kg

REAR RIPPER

Type ____ Parallelogram
Cutting width ____ 2340 mm
Ripper teeth ____ 3 / 5 optional
Scarifier Teeth ____ 5 (9 option)
Lift above ground
Ripper teeth ____ 518 mm
Maximum penetration
Ripper teeth ____ 437 mm
Weight ____ 850 kg

DOZER BLADE

Width ____ 2762 mm
Height ____ 953 mm
Lift above ground ____ 622 mm
Penetration ____ 165 mm
Weight ____ 1165 kg

885B OPERATING WEIGHT

With a 4267 mm blade, operator weigh 75 kg, full tank

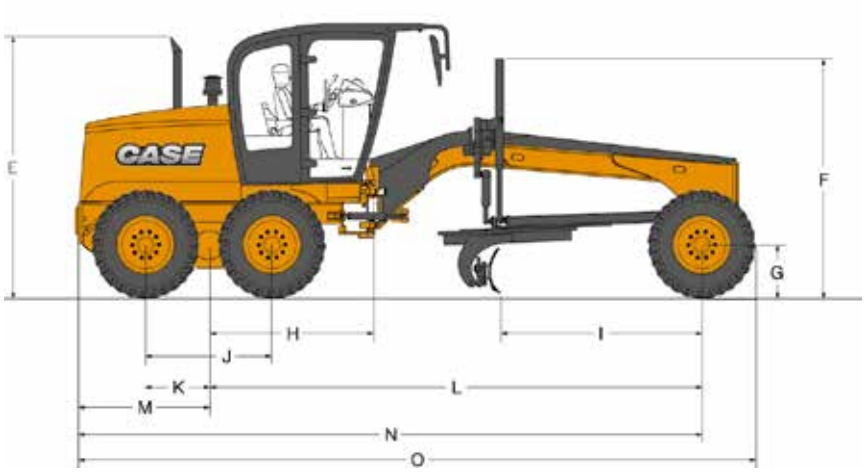
885B VHP	Weight (kg)
Basic machine	**16708**
Basic machine with ripper and front counterweight	**18050**

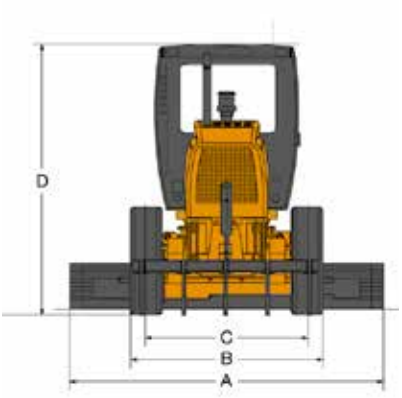
885B ACCESSORIES WEIGHT

885B VHP	Weight (kg)
Front couterweight	**492**
Heavy push plate	**800**
Light push plate	**492**

B-SERIES
MOTOR GRADERS

GENERAL DIMENSIONS





		845B VHP	865B VHP	885B VHP
A	Blade width	3658 mm	3962 mm	4267 mm
B	Tread width	2499 mm	2452 mm	2654 mm
C	Tread gauge	2108 mm	2108 mm	2174 mm
D	Height on top of the cab	3340 mm	3340 mm	3340 mm
E	Height of top of exhaust	3323 mm	3323 mm	3323 mm
F	Height to top of blade lift cylinder	3047 mm	3047 mm	3047 mm
G	Tire static radius	610 mm	610 mm	610 mm
H	Distance between tandem center and the frame articulation pin	1958 mm	1958 mm	1958 mm
I	Distance between the front axle and the blade	2562 mm	2562 mm	2562 mm
J	Distance between the center of the rear tires	1572 mm	1572 mm	1624 mm
K	Distance between tandem center and the wheel	786 mm	786 mm	812 mm
L	Wheelbase	6219 mm	6219 mm	6219 mm
M	Distance between tandem center and the rear part of the equipment	1650 mm	1650 mm	1661 mm
N	Distance between the front wheen axle and the rear part of the equipment	7868 mm	7869 mm	7880 mm
O	Overall length	8554 mm	8534 mm	8534 mm
P	Distance between the rear tires and the ripper	2028 mm	2028 mm	2040 mm
Q	Distance between the front tires and the scarifier	1520 mm	1520 mm	1520 mm
R	Distance between the front tires and the dozer blade	1626 mm	1626 mm	1645 mm
	Turning radius (outside the tires)	7250 mm	7250 mm	7289 mm

All units fitted with 14.0 x 24-12L tires, open ROPS/FOPS cab, standard battery, full fuel tank, operator weighing 75 kg, specifications in accordance with ISO 7134.

STANDARD AND OPTIONS

STANDARD EQUIPMENT

OPERATOR STATION
ROPS/FOPS open cab with:
Adjustable suspension vinyl seat, with a 50.8 mm (2") seatbelt
Adjustable operator console
Pedal accelerator
Manual accelerator
Front windshield wiper with washer
Safety glass
Ceiling light
Internal and external rear-view mirrors
12 V (*) power supply
Automatic master switch
Steps on the right and left sides
(*) Only available in closed cabins

ENGINE 865B
FPT F4HE9687C
Turbocharged, diesel
Dry air filter with primary and secondary safety elements
Air pre-filter with cyclonic dust ejector
80 A alternator
Swing-up hood, diesel

HYDRAULIC SYSTEM
Hydraulic system with load sensor, closed center
9-section control valve
Hydraulic control for all functions:
blade lifting (right and left side), circle turn, side shift of the circle, wheel lean, frame articulation, blade side shift and pitch, front and rear accessories
Diagnostics center with 8 quick couplers
Hydraulic axial piston pump
Hydraulic engine fan

BRAKES
Multidisk oil-bathed service brakes with nitrogen accumulator safety system
Disk parking brake integrated into the transmission with warning light

TIRES
14" 3-pieces rim / 17,25 x 25 - 12L - G2 tubeless

OTHERS
Standard tool kit
Drawbar / Standard circle

AXLES
Conventional differential with brakes on 4 wheels and differential locking with electrohydraulic mechanism (rear axle)

STEERING
Hydrostatic steering with integrated emergency system

INSTRUMENTS
Electronic Information Center
Indicators/gauges:
Tachometer
Direction selected F/N/R
Transmission modes - automatic/manual
Selected gear
Engine cooling temperature
Fuel level
Transmission oil temperature
Hydraulic oil temperature
Hourmeter
Fuel consumption
Engine diagnostics
Transmission diagnostics

INDICATOR LIGHTS:
Low fuel level
Floodlights
High beam
Brake pressure
Main alert
Parking brake

SOUND ALERTS:
Warning alert
Emergency alert
Reversing alert

ELECTRICAL SYSTEM
Lights
Front headlight with direction indicators (2)
Rear brake light and direction indicators (2)
Rear work light on top of the cabin (2)
Front work light on top of the cabin (2)
24 V system (Two 12 V batteries 12 V / 750 CCA)
Electronic system monitoring
Horn
Hourmeter
Reverse alarm

TRANSMISSION
ZF transmission of torque conversion type with lock up (also functions as Direct Drive), Powershift, 6 forward speeds and 3 reverse speeds, automatic gear shift, emergency electrical failure device (Limp-Home)

All ROPS/FOPS cabins are certifi ed in accordance with the SAE J1040 (ROPS) and SAE J231 (FOPS) standards.

OPTIONS

CAB
Closed high cab (fixed front window)
Closed high cab (front flip-down window)
Sunshade(front and rear)

OTHERS
Air conditioner for closed cab
Fire extinguisher
Windshield washer and lower windshield wipers
Rear windshield washer and wipers
Radio
Tandem lock device
Rear fogger

DRAWBAR
Drawbar / Heavy Duty circle

FRONT ATTACHMENT
Dozer Blade
Push plate
5 tooth front scarifier
6 additional teeth for the front ripper
Dozer blade float electrovalve
Front counter weight
Lighting on dozer blade

BLADE
3,658 x 622 x 22 mm blade
3,962 x 671 x 22 mm blade
4,267 x 671 x 22 mm blade
–304.8 mm right blade extension
–304.8 mm left blade extension

REAR ATTACHMENT
Medium ripper with 3 large teeth and 5 small teeth
2 additional large teeth and 4 additional small teeth
Rear pull hook
Support for lifting the machine

WORK LIGHTS
2 work lights behind the blade
2 work lights mounted in front of the moldboard
2 work lights on the front attachment

LOCK/FL OATING/ANTI-SHOCK -MOLDBOARD AND CIRCLE
Moldboard lifting cylinder lock valve
Moldboard float electrovalve (includes the lock valve)
Anti-shock electrovalve with 2 accumulators for the moldboard
Anti-shock electrovalve with 3 accumulators for the moldboard and circle

SEAT / SEATBELT
Extra quality vinyl mechanical suspension seat
Mechanical suspension fabric seat
Pneumatic mechanical suspension fabric seat
(3") 76.5 mm seatbelt

OPTIONAL EXTRAS
Revolving safety light
Luxury toolbox
Toolbox without tools, with support, mounted on the rear frame
Slow movement symbol
Electric pump for filling tires
Support for spare tire

TIRES AND MOUNTED RIMS

TUBELESS TIRES
9" Rim - single piece/14x24 tire-12L-G2
10" Rim - 3 pieces / 14x24 tire - 12L - G2
13" Rim - single piece / 17.5x25 tire - 12L - L2
14" Rim - 3 pieces / 17.5x25 tire - 16L - L3

TIRES WITH TUBES
9" Rim - single piece / 14x24 tire - 12L - G2
10" Rim - 3 pieces / 14x24 tire - 12L - G2

RADIAL TUBELESS TIRES
9" Rim - single piece / 14x24 tire - 12L - L2
XGLA2 RADIAL
10" Rim - 3 piece / 14x24 tire - 12L - L2
XGLA2 RADIAL

RIMS
9" Rim - single piece with valve
10" Rim - 3 pieces with valve
13" Rim - single piece with valve
14" Rim - 3 pieces with valve