

MOTOR GRADER
845B VHP

CASE
CONSTRUCTION



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SINCE 1842

MOTOR GRADER

845B VHP

ENGINE

Brand _____ FPT
 Model _____ F4HE9684L
 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 (6.700 cm³)
Horsepower at 2.200 rpm
Gross (SAE J1995 Gross)
 Low Curve _____ 150 hp (112 kW)*1
 High Curve _____ 173 hp (129kW)*2
 Net (SAE J1349) _____ 140 hp (104 kW)
 Low Curve _____ 140 hp (104 kW)*1
 High Curve _____ 163 hp (119kW)*2
Maximum torque at 1.500 rpm
Gross (SAE J1995 Gross)
 Low Curve _____ 659 Nm*1
 High Curve _____ 758 Nm*2
Net (SAE J1349)
 Low Curve _____ 591 Nm*1
 High Curve _____ 678 Nm*2

POWERTRAIN

Rear axle
 Vertical ground clearance _____ 380 mm
 Differential _____ Limited slip
 * Brakes _____ Disk, bathed in oil
 Number of disks per brake _____ 5
Tandem
 Type _____ Welded Plate (2.204 x 631 x 201 mm)
 Oscillation _____ 20° 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 _____ 20° in each direction
 Wheel lean _____ 15,3° in each direction
 Vertical ground clearance _____ 580 mm
 Tires _____ 14 x 24 12L-G2 tubeless
 Rims _____ 9" (single piece)
 * 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 2.200 rpm
 Control valve _____ 9 sections
 Quick couplers for diagnostics _____ 8

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
1 st	4,4	4,6
2 nd	6,8	11,0
3 rd	10,5	25,7
4 th	16,2	-
5 th	24,4	-
6 th	37,6	-

ELECTRICAL SYSTEM

Power _____ 24 V
 Alternator _____ 80 A
 Batteries _____ 2x100 Ah – low maintenance
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
 Monitoring of electronic systems _____

STEERING

Type _____ Hydrostatic
 Steering wheel turns (lock to lock) _____ 4,75
 Pump capacity at 2.200 rpm _____ 37,3 l/min (9,9 gpm)
 Pressure release valve _____ 2.200 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

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

SPECIFICATIONS

ARTICULATION

Type _____ Hydraulically activated (with a lock system)
Angle _____ 25° to the left/right
Controls _____ Hydraulic

CAPACITIES

Engine _____ 17,5 l
with a change in filter _____ 18,5 l
Fuel _____ 341 l
Transmission _____ 25 l
with a change in filter _____ 26 l
Engine water cooling system _____ 40 l
Hydraulic oil tank _____ 90 l
Total hydraulic system _____ 180 l
Circle turn housing _____ 2,8 l
Tandem case (each) _____ 60 l

VARIOUS

Front counterweight _____ Without any frontal attachment and with rear ripper
Saddle _____ 5 positions

FRAME

Type _____ All-welded box
Front section
Size _____ 254 x 298 mm
Weight _____ 153,3 kg/m
Rear section
Size _____ 121 x 299 mm
Weight _____ 78,3 kg/m

DRAWBAR

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

CIRCLE

Type _____ Welded construction
Maximum outside diameter _____ 1.752,6 mm
Rotation _____ 360°
Speed _____ 1,2 rpm (7,2°/second)
Drive _____ Hydraulic
Type _____ Motor reductor
Displacement _____ 0,25 l/turn
Rated hydraulic flow _____ 94,6 l/min (25 gpm)
N° of supports in phenolic resin _____ 4

OPERATING WEIGHT

With a 3.658 mm blade, operator weigh 75 kg, full tank and standard equipment 14.605 kg

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Front axle	4496
Rear axle	10109
Blade load	7645

BLADE

Type _____ High-carbon steel
Form _____ Involute curve
Width _____ 3.658 mm (12')
Height (curved profile) _____ 622 mm
Thickness _____ 22 mm
Cutting edge _____ 2, interchangeable

Blade pitch positions

Normal pitch _____ 47°
Minimum pitch _____ 42°
Maximum pitch _____ 87°

Blade side shift

Right _____ 686 mm
Left _____ 533 mm
Maximum bank-cutting angle (left and right) _____ 90°
Ground penetration (max.) _____ 711,2 mm
Lift above ground (max.) _____ 444,5 mm
Blade side shift and pitch _____ Hydraulic type

SCARIFIER

Type _____ Front mounted
Cutting width _____ 1.168 mm
Teeth _____ 5 (opcionally, 11)
Spacing between teeth _____ 229 mm (114 mm, optional)
Lift above ground _____ 527 mm
Maximum Penetration _____ 318 mm
Weight _____ 570 kg

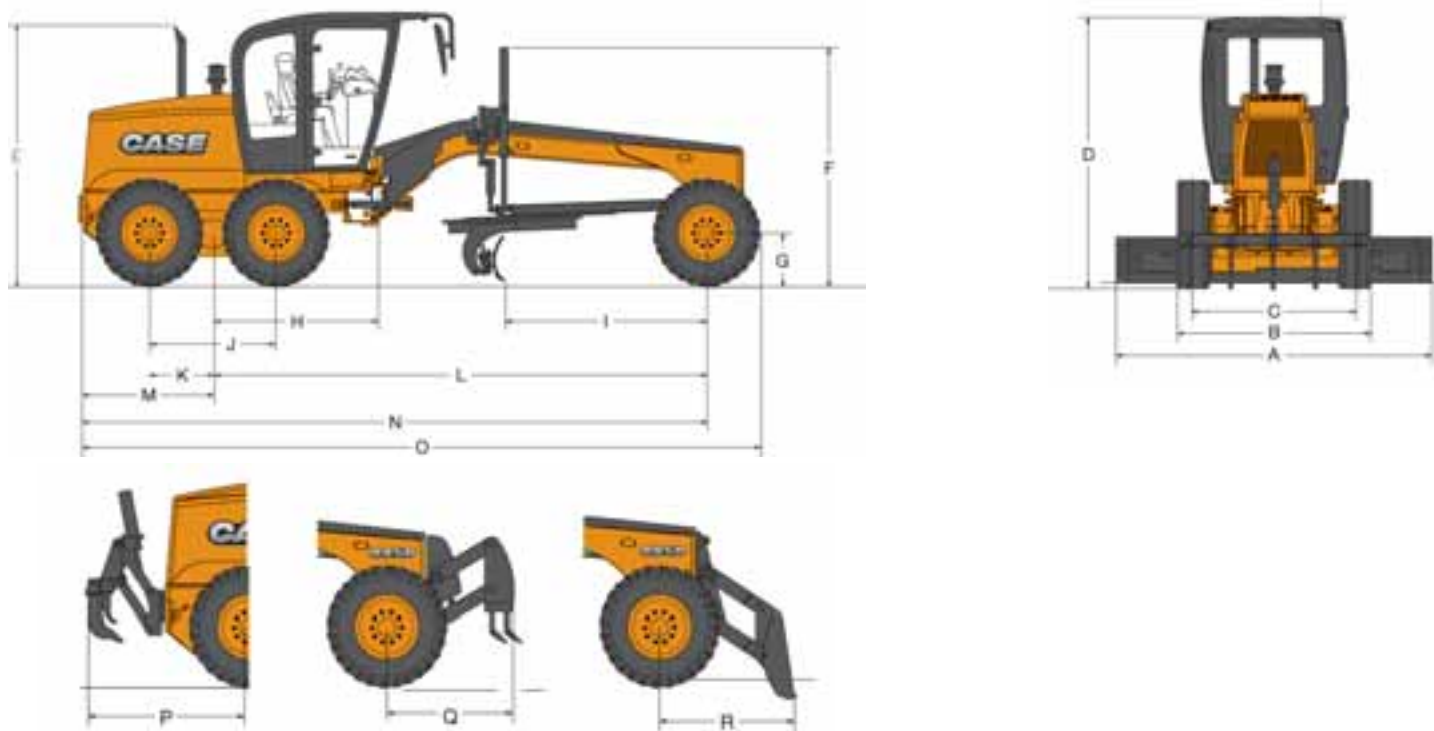
REAR RIPPER

Type _____ Parallelogram
Cutting width _____ 2.185 mm
Ripper teeth _____ 5 small or 3 large + 5 small
Lift above ground _____
Ripper teeth _____ 505 mm
Maximum penetration _____
Ripper teeth _____ 350 mm
Weight _____ 625 kg

DOZER BLADE

Type _____ Front mounted
Width _____ 2.762 mm
Height _____ 953 mm
Lift above ground _____ 622 mm
Penetration _____ 165 mm
Weight _____ 1.165 kg

GENERAL DIMENSIONS 845B VHP



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A	Tread gauge	2.108 mm
B	Tread width	2.499 mm
C	Blade width	3.658 mm
D	Height to top of cab	
	High-profile cab	3.340 mm
	Low-profile cab	3.140 mm
E	Height of top of exhaust	3.323 mm
F	Height to top of blade lift cylinder	3.047 mm
G	Tire static radius	610 mm
H	Distance between tandem center and the frame articulation pin	1.958 mm
I	Distance between the front axle and the blade	2.562 mm
J	Distance between the center of the rear tires	1.572 mm
K	Distance between tandem center and the wheel	786 mm
L	Wheelbase	6.219 mm
M	Distance between tandem center and the rear part of the equipment	1.649 mm
N	Distance between the front when axle and the rear part of the equipment	7.869 mm
O	Overall length	8.554 mm
P	Distance between the rear tires and the ripper	2.028 mm
Q	Distance between the front tires and the ripper	1.520 mm
R	Distance between the front tires and the dozer blade	1.620 mm
	Turning radius (outside the tires)	7.250 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.

NOTE: CASE provides specific outfits for various countries and many optional fittings (OPT). The illustrations on this or other leaflets may relate to standard or optional fittings. Please consult your CASE dealer for any information in this regard and any possible updating on components. CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.